

**TECHNICAL MANUAL**

**OPERATOR'S MANUAL**  
**FOR**  
**FORCE PROVIDER FOOD SERVICE EQUIPMENT**

**CABINET, FOOD WARMING: NSN 7310-01-229-2155**

**DISPENSER, BEVERAGE, MECHANICALLY COOLED: NSN 7310-01-386-5951**

**DISPENSER, BEVERAGE, MECHANICALLY COOLED: NSN 7310-01-428-4082**

**DISPENSER, BEVERAGE, MECHANICALLY COOLED: NSN 7310-01-504-4061**

**GRIDDLE, LARGE: NSN 7310-01-034-6041**

**ICE MAKING MACHINE, CUBE: NSN 4110-00-837-6442**

**KETTLE, STEAM: NSN 7310-01-364-6312**

**KETTLE, STEAM: NSN 7310-01-374-8676**

**MEAT SLICING MACHINE: NSN 7320-01-097-3163**

**MEAT SLICING MACHINE: NSN 7320-01-454-0871**

**MIXING MACHINE, FOOD, ELECTRIC: NSN 7320-00-205-2776**

**OVEN, BAKING & ROASTING: NSN 7310-01-420-6851**

**OVEN, BAKING & ROASTING: NSN 7310-01-420-7103**

**PAN, FRYING AND BRAISING, ELECTRIC: NSN 7310-00-758-8564**

**POPCORN MACHINE: NSN 7310-01-302-1173**

**REFRIGERATOR, 20 CUBIC FOOT: NSN 4110-01-412-3996**

**REFRIGERATOR, 2 SECTION: NSN 4110-01-412-8896**

**REFRIGERATOR, 3 SECTION: NSN 4110-01-471-3543**

**STEAM KETTLE, TABLETOP: NSN 7310-01-374-9972**

**STEAM TABLE: NSN 7310-00-205-1557**

**TOASTER, ELECTRIC: NSN 7310-01-287-5313**

**TOASTER, ELECTRIC: NSN 7310-01-382-3014**

**TOASTER, ELECTRIC: NSN 7310-01-391-2051**

**URN, COFFEE, SINGLE: NSN 7310-01-374-5832**

DISTRIBUTION STATEMENT A – Approved for public release; distribution is unlimited.

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**HEADQUARTERS, DEPARTMENT OF THE ARMY**  
**15 May 2005**



## WARNING SUMMARY

This warning summary contains general safety warnings and hazardous materials warnings that must be understood and applied during operation of this equipment. Failure to observe these precautions could result in serious injury or death to personnel. Also included are explanations of safety and hazardous materials icons used within this technical manual.

### EXPLANATION OF SAFETY WARNING ICONS



**BIOLOGICAL** - abstract symbol bug shows that a material may contain bacteria or viruses that present a danger to life or health.



**ELECTRICAL** - electrical wire to arm with electricity symbol running through human body shows that shock hazard is present.



**HEAVY OBJECT** - human figure stooping over heavy object shows physical injury potential from improper lifting technique.



**HEAVY PARTS** - heavy object pinning human figure against wall shows that heavy, moving parts present a danger to life or limb.



**HOT AREA** - hand over object radiating heat shows that part is hot and can burn.



**MOVING PARTS** - hand with fingers caught between rollers shows that the moving parts of the equipment present a danger to life or limb.



**POISON** - skull and crossbones shows that a material is poisonous or is a danger to life.



**SHARP OBJECT** - pointed object in hand shows that a sharp object presents a danger to limb.

## GENERAL SAFETY WARNINGS DESCRIPTION



### **WARNING**

Electrical high voltage cannot be seen but it can kill you, render you unconscious, or severely burn you. Electricity is unlike most other dangerous things you can come in contact with because it gives no warning and no symptoms to be wary of. To ensure your safety and that of other maintenance personnel, always observe the following precautions:

Food Service Equipment must be electrically grounded. Failure to ground Food Service Equipment may result in serious injury or death from electrical malfunction.

DO NOT perform any maintenance on electrical equipment unless all power is removed.

BE CERTAIN that there is someone assisting you who can remove power immediately.

ALWAYS place POWER OFF warning tags on power supply switches so that no one will apply power while you are performing maintenance.

FOR ARTIFICIAL RESPIRATION, REFER TO FM 21 –11.



### **WARNING**

Some items covered in this manual require two to four people to lift/move. Use appropriate number of personnel when moving large, bulky, or heavy items. Never individually attempt to lift an item if it requires more than one person, to avoid serious injury.



### **WARNING**

Some items covered in this manual require a forklift to lift/move. Do not attempt to move these items by hand. Serious injury or death to personnel may result if safety precautions are not observed.



**WARNING**

Some Food Service Equipment operates with hot water at approximately 180° (F). Allow water to cool before conducting any type of work on the system. Failure to follow this warning could result in serious injury to personnel from scalding.



**WARNING**

Avoid skin contact with graywater. Graywater is to be considered hazardous at all times. Full protection in the form of rubber gloves and safety glasses should be used when performing any type of maintenance that involves graywater. Failure to follow this warning could result in serious illness.



INSERT LATEST CHANGED PAGES / WORK PACKAGES. DESTROY SUPERCEDED DATA

**LIST OF EFFECTIVE PAGES / WORK PACKAGES**

NOTE: The portion of text affected by the changes is indicated by a vertical line in the outer margins of the page. Changes to illustrations are indicated by miniature pointing hands. Changes to wiring diagrams are indicated by shaded areas.

Dates of issue for original and changed pages / work packages are:

Original .. 0 ..15 May 2005

**TOTAL NUMBER OF PAGES FOR FRONT AND REAR MATTER IS 22 AND TOTAL NUMBER OF WORK PACKAGES IS 43 CONSISTING OF THE FOLLOWING:**

<b>Page / WP* No.</b>	<b>Change No.</b>	<b>Page / WP No.</b>	<b>*Change No.</b>	<b>Page / WP No.</b>	<b>*Change No.</b>
Title.....	0				
a-d .....	0				
A-B .....	0				
i-iv.....	0				
WP 0001 00 – 0043 00 .....	0				
Glossary 1 – Glossary 6.....	0				
Index 1 – Index 6.....	0				

\*Zero in this column indicates an original page or work package





HEADQUARTERS  
DEPARTMENT OF THE ARMY  
WASHINGTON, D.C., 15 MAY 2005

**TECHNICAL MANUAL**  
**OPERATOR’S MANUAL**  
**FOR**  
**FORCE PROVIDER FOOD SERVICE EQUIPMENT**

**REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS**

You can help improve this manual. If you find any mistakes, or if you know of a way to improve the procedures, please let us know. Mail your letter, DA Form 2028 (Recommended Changes to Publications and Blank Forms), or DA Form 2028-2 located in the back of this manual, directly to: Commander, U.S. Army Tank-automotive & Armament Command, ATTN: AMSTA-LC-CECT, Kansas St., Natick, MA, 01760-5052. You may also submit your recommended changes by E-mail directly to amssbriml@natick.army.mil. A reply will be furnished directly to you. Instructions for sending an electronic 2028 may be found at the back of this manual immediately preceding the hard copy 2028.

DISTRIBUTION STATEMENT A – Approved for public release. Distribution is unlimited.

**TABLE OF CONTENTS**

	<u>WP Sequence No.</u>
WARNING SUMMARY .....	a
LIST OF EFFECTIVE PAGES .....	A
HOW TO USE THIS MANUAL.....	iii
General Information .....	0001 00
<b>CHAPTER 1 – EQUIPMENT DESCRIPTION AND THEORY OF OPERATION</b>	
Equipment Description and Data .....	0002 00
Theory of Operation .....	0003 00
<b>CHAPTER 2 – OPERATOR INSTRUCTIONS</b>	
Description and Use of Controls and Indicators .....	0004 00
Operation Under Usual Conditions – Food Service Inventory FPS.....	0005 00
Operation Under Usual Conditions – Food Service Inventory FPL .....	0006 00
Operation Under Usual Conditions – Food Warming Cabinet.....	0007 00
Operation Under Usual Conditions – Mechanically Cooled Beverage Dispenser.....	0008 00
Operation Under Usual Conditions – Griddle .....	0009 00
Operation Under Usual Conditions – Ice Machine .....	0010 00
Operation Under Usual Conditions – Steam Kettle .....	0011 00

**CHAPTER 2 – OPERATOR INSTRUCTIONS - continued**

Operation Under Usual Conditions – Steam Kettle (Tilting Type) ..... 0012 00  
Operation Under Usual Conditions – Meat Slicing Machine..... 0013 00  
Operation Under Usual Conditions – Mixing Machine..... 0014 00  
Operation Under Usual Conditions – Oven ..... 0015 00  
Operation Under Usual Conditions – Tilt Fry Pan / Tilt Griddle ..... 0016 00  
Operation Under Usual Conditions – Popcorn Machine..... 0017 00  
Operation Under Usual Conditions – Reach-in Refrigerators ..... 0018 00  
Operation Under Usual Conditions – Tabletop Steam Kettle ..... 0019 00  
Operation Under Usual Conditions – Steam Table ..... 0020 00  
Operation Under Usual Conditions – Electric Toaster..... 0021 00  
Operation Under Usual Conditions – Coffee Urn ..... 0022 00  
Operation Under Usual Conditions – Field Packing Food Service FPS..... 0023 00  
Operation Under Usual Conditions – Field Packing Food Service FPL ..... 0024 00  
Operation Under Unusual Conditions ..... 0025 00

**CHAPTER 3 – OPERATOR TROUBLESHOOTING PROCEDURES**

Operator Troubleshooting Index ..... 0026 00  
Operator Troubleshooting Procedures ..... 0027 00

**CHAPTER 4 – OPERATOR MAINTENANCE INSTRUCTIONS**

Lubrication Instructions ..... 0028 00  
Operator Preventive Maintenance Checks and Services (PMCS) ..... 0029 00  
Operator Maintenance Procedures..... 0030 00  
Food Warming Cabinet ..... 0031 00  
Mechanically Cooled Beverage Dispenser ..... 0032 00  
Ice Machine ..... 0033 00  
Steam Kettle (All Types) ..... 0034 00  
Meat Slicing Machine ..... 0035 00  
Oven..... 0036 00  
Popcorn Machine ..... 0037 00  
Reach-in Refrigerators..... 0038 00  
Coffee Urn ..... 0039 00

**CHAPTER 5 – SUPPORTING INFORMATION**

References..... 0040 00  
Components of End Item (COEI) and Basic Issue Items (BII) List..... 0041 00  
Additional Authorization List (AAL) ..... 0042 00  
Expendable/Durable Items List..... 0043 00

GLOSSARY ..... GLOSSARY 1

ALPHABETICAL INDEX ..... Index 1

## HOW TO USE THIS MANUAL

In this manual, primary chapters appear in upper case/capital letters; work packages are presented in numeric sequence, e.g., 0001 00; paragraphs in a work package are not numbered and are presented in a titles format. For a first level paragraph, title all upper case/capital letters, e.g. FRONT MATTER subordinate paragraph title will have the first letter of the first word of each principle word all upper case/capital letters, e.g., Manual Organization and Page Numbering System. The location of additional material that must be referenced is clearly marked. Illustrations supporting maintenance procedures/text are located underneath, or as close as possible to, their referenced paragraph.

This Operator's Manual contains general information, operating instructions, and operator preventive maintenance checks and services (PMCS) for the Force Provider Food Service Equipment.

### Chapter Organization

#### FRONT MATTER

Front Matter consists of front cover, warning summary, title block, table of contents, and a "how to use this manual" page.

#### CHAPTER 1 - EQUIPMENT DESCRIPTION AND THEORY OF OPERATION

Chapter 1 contains equipment description and introductory information on the Force Provider Food Service Equipment.

#### CHAPTER 2 – OPERATOR INSTRUCTIONS

Chapter 2 contains operating instructions under usual and unusual conditions.

#### CHAPTER 3 – OPERATOR TROUBLESHOOTING INSTRUCTIONS

Chapter 3 contains operator troubleshooting procedures

#### CHAPTER 4 – OPERATOR MAINTENANCE INSTRUCTIONS

Chapter 4 contains PMCS and operator maintenance procedures and instructions.

#### CHAPTER 5 – SUPPORTING INFORMATION

Chapter 5 contains references and other supporting information.

#### REAR MATTER

Rear Matter includes the glossary, alphabetical index, DA Form 2028, authentication page, and back cover.

### **Manual Organization and Page Numbering System**

The manual is divided into five major chapters that detail the topics mentioned above. Within each chapter are work packages covering a wide range of topics. Each work package is numbered sequentially starting at page 1. The work package has its own page-numbering scheme and is independent of the page numbering used by other work packages. Each page of a work package has a page number of the form XXXX YY-ZZ where XXXX is the work package number (e.g. 0010 is work package 10), YY is reserved for the later insertion of revised Work Packages, and ZZ represents the number of the page within that work package. A page number such as 0010 00-1/(2 Blank) means that page 1 contains information but page 2 of that work package has been intentionally left blank.

### **Illustrations**

Illustrations for procedures in this manual always follow the procedure. For example, if given the instruction "1. Locate the pump assembly **(1)**.", **(1)** will reference the diagram or illustration immediately following the procedure.

### **Finding Information**

The table of contents permits the reader to find information in the manual quickly. The reader should start here first when looking for a specific topic. The table of contents lists the topics contained within each chapter and the work package sequence number where it can be found.

Example: If the reader were looking for instructions on "Preventive Maintenance Checks and Services", which is an operator maintenance topic, the table of contents indicates that operator maintenance information can be found in Chapter 4. Scanning down the listings for Chapter 4, "Preventive Maintenance Checks and Services" information can be found in WP 0029 00 (i.e. work package 29).

An alphabetical index can be found at the back of the manual. It lists specific topics with the corresponding work package.

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**OPERATOR MAINTENANCE  
FORCE PROVIDER FOOD SERVICE EQUIPMENT  
GENERAL INFORMATION**

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**SCOPE**

This manual contains an equipment description, operating instructions and maintenance procedures for the Force Provider Food Service Equipment. It also includes references to publications that contain information on separately documented components of the Force Provider Food Service Equipment.

**MAINTENANCE FORMS, RECORDS, AND REPORTS**

Department of the Army forms and procedures used for Force Provider Food Service Equipment maintenance shall be those prescribed by DA PAM 738-750, The Army Maintenance Management System (TAMMS) (Maintenance Management Update).

**REPORTING EQUIPMENT IMPROVEMENT RECOMMENDATIONS (EIR)**

If your Force Provider Food Service Equipment needs improvement, let us know. You, the user, are the only one who can tell us what you don't like about your equipment. Let us know why you don't like the design or performance. Put it on a Standard Form SF368 Product Quality Deficiency Report (PQDR). Mail the report to: Commander, U.S. Army Tank-automotive and Armament Command, Attn: AMSTA-LC-R, Kansas Street, Natick, MA 01760-5052. A reply will be sent directly to you. Instructions for sending an electronic 2028 may be found in the back of this manual immediately preceding the hardcopy 2028.

**CORROSION PREVENTION AND CONTROL (CPC)**

Corrosion Prevention and Control (CPC) of U.S. Army materiel is a continuing concern. It is important that any corrosion problems with the Force Provider Food Service Equipment be reported so that the problem can be corrected and improvements made to prevent the problem in future items. While corrosion is typically associated with rusting of metals, it can also include deterioration of other materials, such as rubber and plastic. Unusual cracking, softening, swelling or breaking of these materials may be considered a corrosion problem. If a corrosion problem is identified, it can be reported using an SF368 PQDR. Using key words such as "corrosion," "rust," "deterioration," or "cracking" will assure that the information is identified as a CPC problem. This form should be submitted to: Commander, U.S. Army Tank-automotive and Armament Command, Attn: AMSTA-LC-R, Kansas Street, Natick, MA 01760-5052.

**OZONE DEPLETING SUBSTANCES (ODS)**

No ODS is deployed with the Force Provider Food Service Equipment.

## DESTRUCTION OF ARMY MATERIEL TO PREVENT ENEMY USE

Destruction of Army materiel to prevent enemy use shall be in accordance with TM 750-244-3.

## PREPARATION FOR STORAGE AND SHIPMENT

Before placing the Force Provider Food Service Equipment in administrative storage or preparing the system for shipment, current maintenance services must be applied; defects and failures corrected; and Modification Work Orders (MWOs) applied. Prepare the system for storage and shipment as described in Chapter 2.

### Placement of Equipment in Storage

Equipment should be placed in storage for limited periods only, when a shortage of maintenance capability exists. Items should be mission ready within 24 hours, or within time factors set by directing authority. During storage periods, maintenance records must be kept current.

### Storage Site Selection

Covered space is preferred. When sufficient covered space is not available, priority should be given to items that are most susceptible to deterioration from the elements. Open sites should be improved hardstand, if available. Unimproved sites should be firm, well-drained locations, free of excessive vegetation.

## WARRANTY INFORMATION

Warranty information for Food Service Equipment components is contained in the commercial literature accompanying the components.

## NOMENCLATURE CROSS REFERENCE LIST

The following cross-references common names used throughout this manual to official nomenclature.

COMMON NAME	OFFICIAL NOMENCLATURE
FSC	Food Sanitation Center
Griddle	Large Griddle
Ice Machine, Ice Maker	Ice Cube Making Machine
Juice Machine	Mechanically Cooled Beverage Dispenser
Kettle	Steam Kettle
Mixer	Electric Food Mixing Machine
Oven, Convection Oven	Baking and Roasting Deck Oven
Popcorn Popper	Popcorn Machine
Refrigerator	20 Cubic Foot Refrigerator
	2 Section Refrigerator
	3 Section Refrigerator
Six Gallon Kettle, Tabletop Kettle	Tabletop Steam Kettle
Slicer, Meat Slicer	Meat Slicing Machine
Tilt Fry Pan, Tilt Griddle, Tilt Skillet	Frying and Braising Pan
Toaster, Conveyor Toaster	Electric Toaster
Urn, Coffee Urn, Coffee Maker	Single Coffee Urn

**LIST OF ABBREVIATIONS/ACRONYMS**

A	Amperes	m <sup>3</sup>	Cubic Meter(s)
AAL	Additional Authorization List	Min	minutes
AC	Alternating Current	mm	Millimeter(s)
BII	Basic Issue Item	MOS	Military Occupational Specialty
°C	Degrees Celsius or Centigrade	MTD	Munitions Technologies Division
CAGEC	Commercial and Government Entity	MTOE	Modified Table of Organization and
	Code		Equipment
cm	Centimeters	MWO	Modification Work Order
COEI	Component of End Item	MWR	Morale, Welfare and Recreation
CPC	Corrosion Prevention Control	NBC	Nuclear, Biological, and Chemical
CTA	Common Table of Allowances	NSN	National Stock Number
DA	Department of the Army	oz	ounce(s)
DC	Direct Current	ODS	Ozone Depleting Substances
DPDT	Double Pole, Double-Throw Switch	P/N	Part Number
DPST	Double Pole, Single-Throw Switch	PAM	Pamphlet
DS2	Decontamination Solution Number	PMCS	Preventive Maintenance Checks and
	Two		Services
ECU	Environmental Control Unit		
EIR	Equipment Improvement	POL	Petroleum, Oil and Lubricant
	Recommendation	PQDR	Product Quality Deficiency Report
°F	Degrees Fahrenheit	psi	Pounds per Square Inch
FM	Field Manual	qt	Quart
FP	Force Provider	Qty	Quantity
FP(L)	Force Provider (Light)	R	Resistance
FSC	Food Sanitation Center	Recm	Recommended
ft	Foot	RPSTL	Repair Parts and Special Tools List
Cu ft	Cubic Feet	Rqr	Required
ftlb	Foot/pound(s)	SEP	Sewage Ejection Pump
gal	Gallon	SF	Standard Form
GFCI	Ground Fault Circuit Interrupt	SOP	Standard Operating Procedure
gm	gram	SPDT	Single Pole, Double-Throw Switch
HP	horsepower	SPST	Single Pole, Single-Throw Switch
Hz	Hertz	TDA	Table of Distribution and Allowances
in, IN, “	Inch(es)	TEMPE	Tent, Extendable, Modular, Personnel
		R	
ISO	International Organization for	TM	Technical Manual
	Standardization	TOE	Table of Organization and Equipment
JTA	Joint Table of Allowance	TRICON	Triple Container
kg	Kilogram(s)	U/M	Unit of Measure
kPA	Kilopascal(s)	UOC	Usable On Code
kW	Kilowatt(s)	VAC	Volts Alternating Current
l	Liter(s)	v	Volt(s)
lb	Pound(s)	W	Watt(s)
m, M	Meter(s)	WP	Work Package

**SAFETY, CARE AND HANDLING**

Be alert and note **WARNINGS**, **CAUTIONS**, and **NOTES**. These provide for safe operation of the equipment, and protect you and your equipment from injury and damage.

**SUPPORTING INFORMATION FOR REPAIR PARTS, SPECIAL TOOLS, AND SUPPORT EQUIPMENT**

No special tools are required for the Force Provider Food Service Equipment.



## **CHAPTER 1**

### **DESCRIPTION AND THEORY OF OPERATION FORCE PROVIDER FOOD SERVICE EQUIPMENT**



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**OPERATOR MAINTENANCE  
FORCE PROVIDER FOOD SERVICE EQUIPMENT  
EQUIPMENT DESCRIPTION AND DATA**

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**EQUIPMENT CHARACTERISTICS, CAPABILITIES AND FEATURES**

**Characteristics**

- Utilizes standard Department of Defense inventory components
- Fully containerized, packed with the Force Provider Module

**Capabilities and Features**

- Provides messing services for up to 550 persons
- Serves as reconstitution facility
- Pre-packaged and ready for immediate shipment
- Can be deployed in standard configuration to arid and temperate climates above 32° F
- Can be deployed if augmented with the Force Provider Modification System, Cold Weather in temperatures to minus 15° F
- Flexible layout can be tailored to unit needs and environmental demands

**NOTE**

Individual components of Force Provider Food Service Equipment may be found to have been manufactured by more than one supplier. The equipment descriptions which follow list the suppliers and model numbers available or currently fielded with Force Provider.

**LOCATION AND DESCRIPTION OF MAJOR COMPONENTS****Food Warming Cabinet**

NSN 7310-01-229-2155

The food warming cabinet provides storage for hot meals, allowing for quicker turnaround and shorter lines at the Force Provider mess hall.

The following units may be found in inventory:

Precision Metal Products Inc - 1HC1840-SD

Lincoln Foodservice Products Inc. - D5100

Lakeside Mfg Inc - 6501, 6503

Piper Industries Of Wisconsin - 1034-DD,  
947-SD

Crescent Metal Products Inc - H-138-CDD-  
1834

US Army Natick Research and  
Development- 1-6-727



**Mechanically Cooled Beverage Dispenser**

NSN 7310-01-428-4082 (Jetspray)  
 NSN 7310-01-504-4061 (Crathco)  
 NSN 7310-01-386-5951 (Crathco)

The mechanically cooled beverage dispenser provides soldiers with self-service to cold (non-carbonated) beverages.

The following units may be found in inventory:

Jet Spray Corp - TJ3(115V, 60 HZ)  
 Crathco Inc - D25-1(115V), D25-4  
 Dripcut Corp - T-1910 (SS), T-2010

**Jetspray****Crathco****Griddle**

NSN 7310-01-034-6041

The griddle provides a large area for pan-frying food. The griddle surface may be adjusted to two or more different cooking temperatures, allowing more than one item to be cooked at a time.

The following units may be found in inventory:

Hobart Corp. – CG41  
 Lang Mfg. – LG-36



**Ice Machine**

NSN 4110-00-837-6442

The ice machine provides cube ice for Force Provider Kitchen personnel to use in food preparation. Cube ice is stored in an insulated bin contained in the unit.

The following units may be found in inventory:

Snyder General Corp - CAE-045-30  
 Mcquay-Perfex Inc - CAE-045-30  
 Schneider Metal Mfg Co Inc, Ross Temp Div  
 - RC-360-SC  
 Scotsman Industries Inc., Scotsman Ice  
 Systems Div - CME650AE-32A/SPKMD-  
 1/HTB250, CME650AS-32A/HTB350,  
 CM650AS-32D/SPKMD-1/HTB250  
 Defense Supply Center Richmond - DGSC-  
 88-06 TYII SZ3 GRA

**Steam Kettle**

NSN 7310-01-364-6312

The steam kettle is used to prepare liquid food items in volume. The steam jacket prevents hot spots and burning of food items. This type incorporates a draw-off valve to drain the kettle basin.

The following units may be found in inventory:

Groen - EE-20  
 Legion - LEC-20



**Steam Kettle (Tilting Type)**

NSN 7310-01-374-8676

The tilting steam kettle is used to prepare liquid food items in volume. The steam jacket prevents hot spots and burning of food items. This type tilts to drain.

The following units may be found in inventory:

Cleveland Range Inc- KET-20-T  
South Bend - EC-20

**Meat Slicing Machine**

NSN 7320-01-097-3163

NSN 7320-01-454-0871

The meat slicing machine is used to slice portion sizes from meat and cheese products.

The following units may be found in inventory:

General Slicing / Red Goat Disposers  
Div Of Standex International Corp - SM10A  
Hobart Corp. - 410 115-60-1, 512 115-60-1  
Globe Food Equipment Co Inc - 500(115V,  
60 HZ)  
Kessel Kitchen Equipment Co Inc – 5402  
Blakeslee Div Of Blako Inc – 5402  
Univex Corp – 7510  
N J C T Corp - 810 115/60/1, CI-250  
(115/60/1)  
Intedge Industries Inc - UL-10 (115V, 60 HZ)



**Mixing Machine**

NSN 7320-00-205-2776

The mixing machine is used to mix dough and batter for baked goods and other items such as pancakes.

The following units may be found in inventory:

Kessel Kitchen Equipment Co Inc - KK22634

Univex Corp - M-20 (SIZE 20)

Middleby Marshall Inc - 620G

**Oven**

NSN 7310-01-420-6851

NSN 7310-01-420-7103

The oven is used for roasting and broiling meats, and baking baked goods such as breads and cakes. The ovens are stackable, and are usually deployed stacked two high.

The following units may be found in inventory:

Vulcan-Hart Corp. - ECO6D 208V/SS;

ECO6D

South Bend – SLEB-20





**Tilt Fry Pan/Tilt Griddle**

NSN 7310-00-758-8564

The tilt fry pan/tilt griddle may be used for pan-frying food items, baking, or for cooking liquid food items. The tilt feature also allow for quick and easy cleaning.

The following units may be found in inventory:

Cleveland Range Inc - SEL30TR, TSCE40

Dover Corp - FPC4

Legion Industries Inc - LGAR-106 SPEC

**Popcorn Machine**

NSN 7310-01-302-1173

The popcorn machine produces freshly popped popcorn for the Force Provider mess hall and MWR facilities.

The following units may be found in inventory:

APW/Wyott - PC-1A

Gold Medal Products Co – 2007

Star Mfg. Intl. Inc. - 49 MINI COMET



**20 Cubic Foot Refrigerator**

NSN 4110-01-412-3996

The 20 cubic foot refrigerator is a single door cold storage unit used as a "break out" box in the Electric Kitchen.

The following units may be found in inventory:

National Refrigeration (Continental)

- C-22-RS-1S , C-26-RS-1S

Foster Refrigerator L L C - GH-20-T-SS

Howard Refrigerator Co Inc - HC20QS

Kessel Kitchen Equipment Co Inc -  
KK14230, KK20924

Puffer-Hubbard Refrigerator Co - SS-R-23-1

**2 Section Refrigerator**

NSN 4110-01-412-8896

The 2 section refrigerator is a double door cold storage unit used as a "break out" box in the Electric Kitchen.

The following units may be found in inventory:

National Refrigeration (Continental)

- 1-2RDS-2S, 2R-SS



**3 Section Refrigerator**

NSN 4110-01-471-3543

The 3 section refrigerator is used to store perishable food in the MWR tent.

The following units may be found in inventory:

National Refrigeration (Continental)  
- 1-3RDS-3S, 3R-SS

**Tabletop Steam Kettle**

NSN 7310-01-374-9972

The tabletop steam kettle is used to prepare low volume liquid food items, such as sauces or limited rations. The steam jacket prevents hot spots and burning of food items.

The following units may be found in inventory:

Vulcan-Hart Corp. - VEC6  
Cleveland Range Inc – KET-6



**Steam Table**

NSN 7310-00-205-1557

The steam table is used to keep food hot in serving lines. The steam table may also be used with ice to serve cold items as a salad or dessert bar.

The following units may be found in inventory:

- Bayonne Stainless Products – STE-E2
- Serve-Queen, Inc. – ST-5
- Food Equipment Corp. - CUSTOM ST6502
- Kessel Kitchen Equipment Co Inc - KK18433
- Low Temp Industries Inc - 5B5



**Electric Toaster**

NSN 7310-01-287-5313

NSN 7310-01-382-3014

NSN 7310-01-391-2051

The electric toaster is a conveyor fed toaster provided for self-service toasting of bread and other items such as bagels or muffins. Both horizontal and vertical feed units may be issued with a given FP module.

The following units may be found in inventory:

- Savory Equipment Co - RT-2 NSU, C20VS



**RT-2**



**C20VS**

**Coffee Urn**

NSN 7310-01-374-5832

The coffee urn provides freshly brewed, filtered coffee and hot water for other beverages such as tea or powdered cocoa.

The following units may be found in inventory:

American Metalware Grindmaster – 7416E

**EQUIPMENT DATA**

Refer to WP 0003 00, Theory of Operation, for equipment data details.



**OPERATOR MAINTENANCE  
FORCE PROVIDER FOOD SERVICE EQUIPMENT  
THEORY OF OPERATION**

**INTRODUCTION**

This work package provides equipment data, a brief explanation of how each component of the Force Provider Food Service Equipment works, as well as its function in the Force Provider Electric Kitchen.

**Force Provider/ Food Service Equipment/ Theory of Operation Index**

Food Warming Cabinet .....	WP 0003 00-2
Mechanically Cooled Beverage Dispenser .....	WP 0003 00-3
Griddle.....	WP 0003 00-4
Ice Machine.....	WP 0003 00-5
Steam Kettle.....	WP 0003 00-6
Steam Kettle (Tilting Type).....	WP 0003 00-7
Meat Slicing Machine.....	WP 0003 00-8
Mixing Machine .....	WP 0003 00-9
Oven.....	WP 0003 00-10
Tilt Fry Pan / Tilt Griddle .....	WP 0003 00-11
Popcorn Machine .....	WP 0003 00-13
20 Cubic Foot Refrigerator.....	WP 0003 00-14
2 Section Refrigerator .....	WP 0003 00-15
3 Section Refrigerator .....	WP 0003 00-16
Tabletop Steam Kettle.....	WP 0003 00-17
Steam Table.....	WP 0003 00-18
Electric Toaster .....	WP 0003 00-19
Coffee Urn.....	WP 0003 00-21

**NOTE**

Individual components of Force Provider Food Service Equipment may be found to have been manufactured by more than one food service equipment supplier.

**Food Warming Cabinet**

Capacity .....70 half-size pans maximum: 35 full-size pans  
 Electrical requirements ..... 115 VAC, 50/60 Hz  
 Height..... 70 in (177.8 cm)  
 Water capacity ..... 1.5 qt (1.4 liters) maximum  
 Weight .....greater than 240 lbs (109 kg) empty

The food warming cabinet (**1**) is used to store hot food items produced in the Force Provider Electric Kitchen, allowing for the accumulation of hot foods over the workday in order to maximize the output of the Electric Kitchen.

The food warming cabinet uses three 1500W elements to produce 140°F to 150°F (60°C to 63.8°C) storage temperatures for food items.

A heated water basin is used to retain humidity in the cabinet, and prevents food from drying out in storage. The food warming cabinet can maintain 95% humidity as long as the water basin is kept filled.



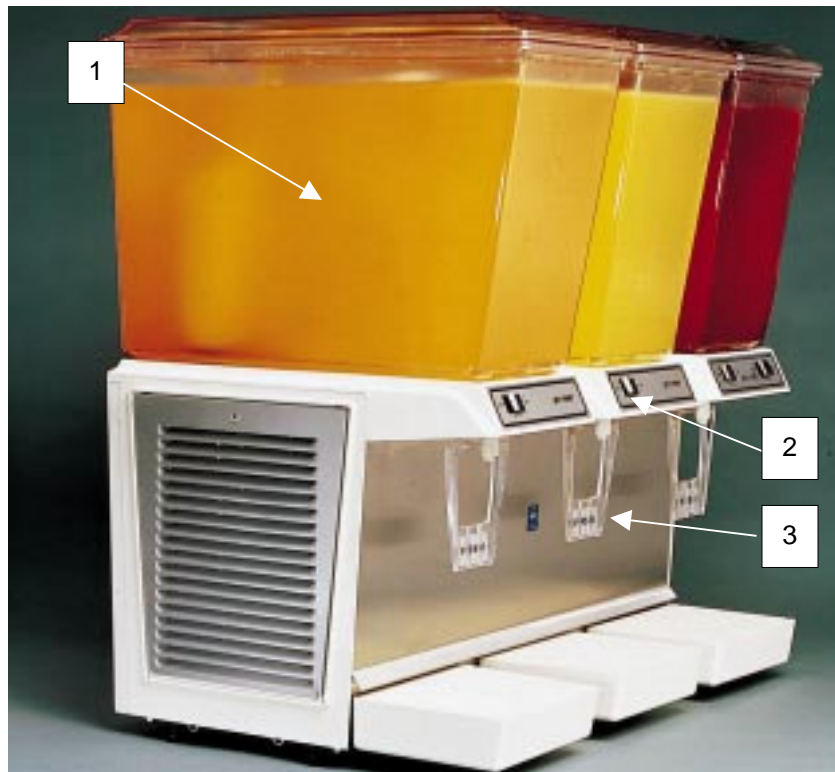


**Mechanically Cooled Beverage Dispenser**

Capacity ..... 6 to 15 US gallons (22.7 to 56.7 l), depending on model  
 Electrical requirements ..... 115 VAC, 50/60 Hz  
 Height ..... 24 - 27 in (177.8 cm)  
 Compressor Horsepower (hp) ..... 1/3 hp  
 Weight ..... greater than 68 lbs (109 kgs) empty

The mechanically cooled beverage dispenser is used to provide cold fresh beverages to personnel in a self-serve, sanitary fashion.

The mechanically cooled beverage dispenser employs a bowl (1) used to store the beverage being served. The beverage is both cooled and recirculated within the bowl. The operator may control the cooling and recirculation functions of the dispenser using individual rocker switches (2). Personnel serve themselves from the dispenser by operating a handle (3), which in turn opens a dispensing valve or pinch tube, depending on the manufacturer and model.



**Griddle**

Length ..... 48 in (121.9 cm)  
 Depth..... 27.5 in (70 cm)  
 Electrical requirements ..... 208 VAC, 50/60 Hz  
 Weight ..... greater than 275 lbs (125 kg) without leg assembly

The griddle is used to fry food items in volume, such as meats, sandwiches, and eggs.

The griddle employs four elements to heat the griddle surface **(1)**. Each element is individually controlled by a thermostat **(2)**. Grease and liquid runoff, as well as cleaned food residue, are channeled into a grease trough **(3)**, which in turn drains into a removable grease drawer **(4)**.

The griddle may be set up on an optional leg assembly **(5)**, or may be installed on any fixed, heat resistant working surface.



**Ice Machine**

Ice Production in 24 hours .....	477 lb (216.4 kg)
Compressor Horsepower (hp) .....	1¼ hp
Refrigerant .....	R-502
Electrical Requirements .....	208 VAC / Single Phase
Bin Capacity .....	40 US gal (155 l)
Condenser Cooling .....	Air Cooled

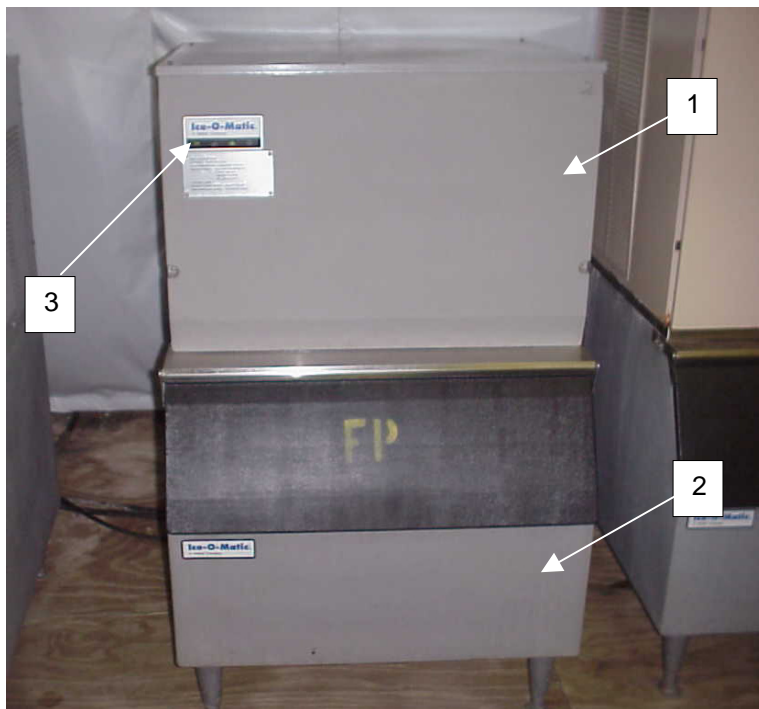
The ice machine is composed of two major assemblies, the ice maker (1) and the storage bin (2). The ice maker is connected to the Force Provider Electric Kitchen water manifold for potable water. The ice maker operates within a timed harvest cycle. In the beginning of the cycle, the water is metered into a reservoir, from which it is pumped up and over the evaporator. The water is recirculated in the reservoir until the end of the harvest cycle.

At the next point in the cycle, the timer activates a hot gas valve, which diverts hot refrigerant from the condenser to the evaporator, freeing the ice from the evaporator. The ice then falls into the storage bin, from which the ice is dispensed as needed.

The final point in the cycle is a brief delay, which ensures that all ice has cleared the evaporator grid. The average time for a harvest cycle is approximately 18 to 20 minutes, depending on ambient temperature, incoming water temperature, and the volume of ice dispensed.

The storage bin is cooled by the ice maker, but has a separate thermostat control. A drain tube is provided to accommodate melting.

An external indicator panel (3) is provided to allow the operator to monitor the status of the ice maker.



**Steam Kettle**

Capacity .....	20 US gal (75 l)
Diameter .....	26 in (66 cm)
Rim Height .....	37 in (94 cm)
Total Width .....	26 in (66 cm)
Front to Back .....	38 in (97 cm)
Electrical Requirements .....	208 VAC / 50/60 HZ

When the operator starts up the kettle by turning the operating thermostat dial **(1)** from “OFF” to a desired setting, the thermostat switch closes. This lights up the heating indicator light **(2)** and causes the contactors to close, allowing power to flow to the heating elements. When the temperature of the steam jacket reaches the temperature set at the dial, the thermostat switch opens. This turns off the heating indicator light and opens the contactors, cutting power to the heating elements.

When the kettle cools below the set point, the thermostat switch closes, the heating indicator light comes on, the contactors close, and the heating elements come on again. On-off cycling continues, keeping the kettle at the set temperature. The heating indicator light cycles on and off during normal operation.

If steam pressure greater than 30 psi is generated in the jacket, the safety valve will open and relieve the excess pressure. If the jacket water level gets too low before the heating elements overheat, the high-limit control will open and shut off power to the elements until the kettle cools.

Setting the operating thermostat dial to “OFF” shuts down all control and heating circuits.

A cover **(3)** is provided to conserve heat, control evaporation, and to provide a sanitary barrier.

A draw off valve **(4)** is fitted to allow drainage of liquid food products, as well as drainage for cleaning.

A safety valve is provided to relieve excess jacket pressure in the event of a malfunction.

Some kettles may be fitted with a water fill accessory **(5)**.



**Steam Kettle (Tilting Type)**

Capacity .....	20 US gal (75 l)
Total Width .....	14.5 in (36.8 cm)
Front to Back .....	32 in (81.2 cm)
Pour Path – minimum to maximum .....	6 in to 28 in (15.2 cm to 71.1cm)
Electrical Requirements .....	208 VAC / 30 AMP / 3 Phase

When the operator starts up the kettle by turning the operating thermostat dial **(1)** from “OFF” to a desired setting, the thermostat switch closes. This lights up the heating indicator light **(2)** and causes the contactors to close, allowing power to flow to the heating elements. When the temperature of the steam jacket reaches the temperature set at the dial, the thermostat switch opens. This turns off the heating indicator light and opens the contactors, cutting power to the heating elements.

When the kettle cools below the set point, the thermostat switch closes, the heating indicator light comes on, the contactors close, and the heating elements come on again. On-off cycling continues, keeping the kettle at the set temperature. This is why the heating indicator light cycles on and off during normal operation.

If steam pressure greater than 30 psi is generated in the jacket, the safety valve will open and relieve the excess pressure. If the jacket water level gets too low before the heating elements overheat, the high-limit control will open and shut off power to the elements until the kettle cools.

Setting the operating thermostat dial to “OFF” shuts down all control and heating circuits.

The kettle is mounted on a pivot **(3)**, and drained by pouring. A marine lock may be fitted to prevent accidental tipping. No cover is fitted.

A safety valve is provided to relieve excess jacket pressure in the event of a malfunction.



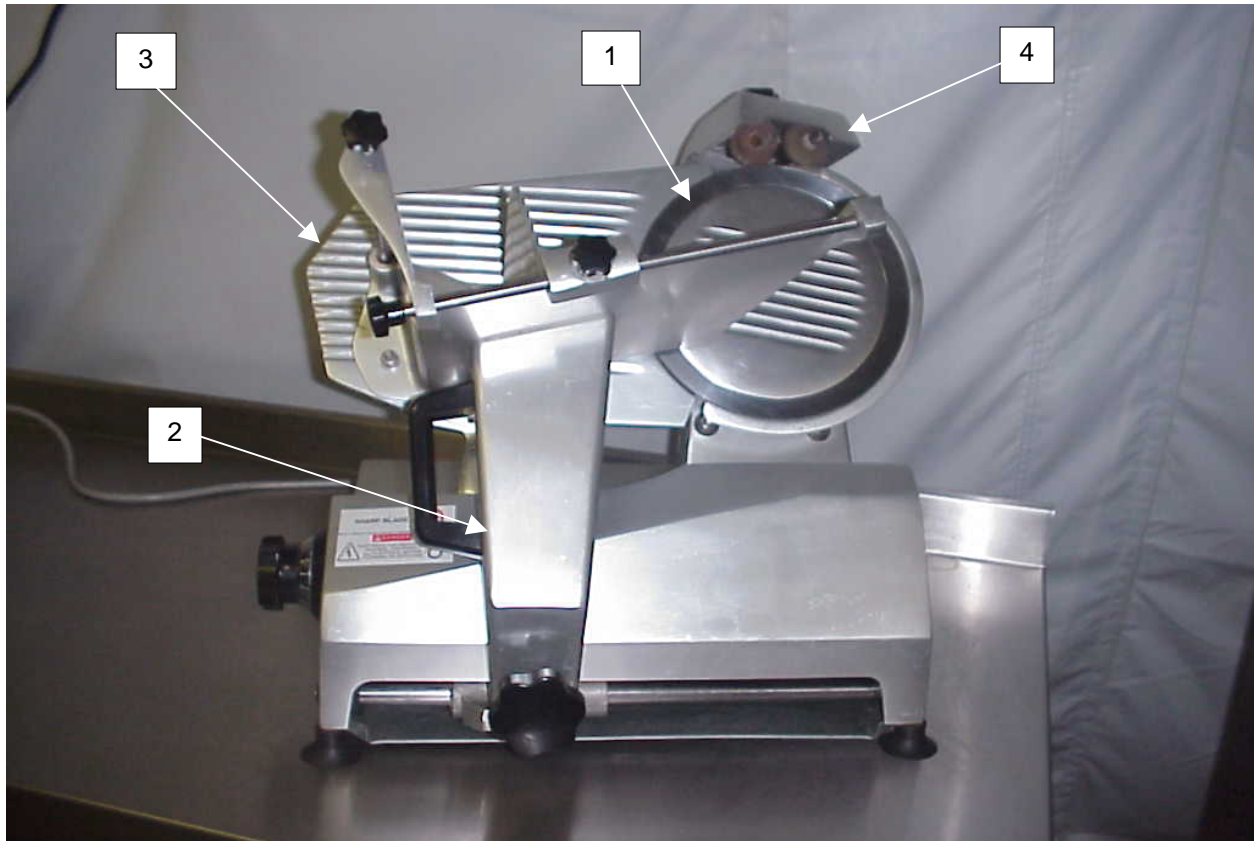
## Meat Slicing Machine

Weight ..... 80 lbs (36.2 kg)  
Motor .....  $\frac{1}{3}$  hp  
Blade ..... 10 in (25.4 cm) diameter, 475 r/min  
Electrical requirements ..... 115 VAC, 60 Hz

The meat slicing machine uses a motor driven rotary knife **(1)** to cut food products. The food product is placed in the carriage **(2)**, and the edge being cut faces the fence **(3)**. The carriage is then moved toward the spinning knife blade. Food sliced from the product held in the carriage then falls down into a tray shaped into the slicer base.

Some slicers shipped to Force Provider units may be equipped with automatic carriage drives, which can be engaged to automatically work the carriage back and forth. A last-slice shutoff device prevents damage to the slicer when the food product in the carriage is exhausted. All slicers may be operated manually.

Slicers may be equipped with integral sharpening devices **(4)**, which allow the rotary knife to be sharpened in place.



**Mixing Machine**

Weight ..... 215 lbs (97.7 kg)  
 Capacity ..... 20 qt (20 l)  
 Motor Horsepower (hp) ..... ½ hp  
 Electrical requirements ..... 115 VAC

The mixing machine uses an assortment of beaters (1) immersed in a bowl (2) to mix food ingredients into dough, batter, or other foods requiring large volume mixing. The bowl is removable, and is raised and lowered mechanically with a lever (3). Beater speeds may be adjusted with the speed control lever (4) to suit the ingredients being processed.

A safety guard (5) is furnished to prevent accidental contact with a rotating beater. Some models are equipped with interlock switches to prevent the mixer from operating when the bowl is lowered or missing, or when the safety guard is not positioned in place.

A power take off (6) is supplied to drive accessory components such as meat grinding or vegetable slicing attachments.



**Oven**

Width .....	40 in (101.6 cm)
Depth.....	43 in (109.2 cm)
Height (Stacked) .....	70 in (177.8 cm)
Height (Single, with legs) .....	39 in (99.1 cm)
Height (Single, without legs) .....	31 in (78.7 cm)
Electrical requirements .....	208-240 VAC, 3 phase

The oven **(1)** employs two electric resistance elements to create heat within the oven cavity **(2)**. A two speed, operator controlled, motor driven blower is used to recirculate air within the oven cavity, creating the convection currents. This use of convection allows for quicker, more even cooking by eliminating “hot spots” within the oven cavity.

An operator-adjusted thermostat controls the heating elements **(3)**. When the oven temperature reaches the temperature set on the thermostat, the thermostat opens, cutting power to the elements. The thermostat closes and routes power back to the elements when the oven has cooled past a fixed differential.

A electric timer **(4)** is used to automatically turn power ON and OFF.





**Tilt Fry Pan / Tilt Griddle**

Capacity .....	31 US gal (117.3 l)
Width .....	56.3 in (101.6 cm)
Depth.....	39.1 in (109.2 cm)
Cooking area (L x W) .....	41 in x 25.1 in (104.1 cm x 63.8 cm)
Rotation .....	greater than 90°
Electrical requirements .....	208-240 VAC, 3 phase

**NOTE**

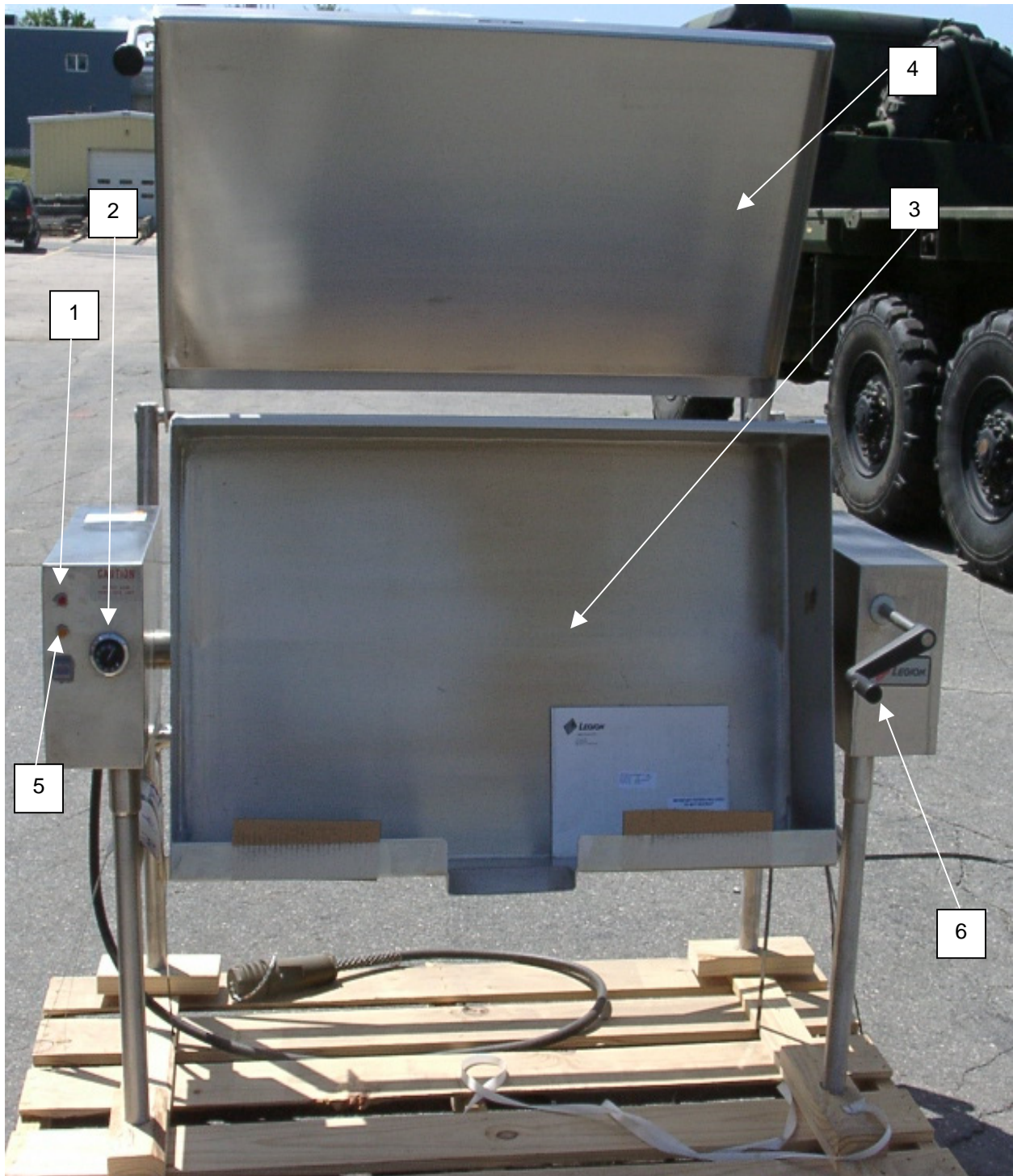
The indicator light arrangement may vary according to manufacturer, model, and date of manufacture.

When the main power supply to the unit has been turned “ON”, the function switch (if equipped) is flipped up to the “ON” position. The red indicator light **(1)** will come on, indicating that the unit has been energized and is ready for operation. The temperature control (primary) thermostat **(2)** is turned clockwise to the desired temperature. The small pilot light located immediately above the knob will come on, indicating that the heating elements have been energized. This light will cycle on and off with the heating elements as the selected temperature is maintained. The unit must be allowed to cycle a number of times before assuming that the cooking surface **(3)** has reached and stabilized at the desired temperature, particularly when the skillet is cold. Keeping the cover **(4)** closed during this rise time will speed up the process.

If the amber indicator light **(5)** comes on during operation, this means that the primary thermostat has allowed the temperature to exceed its maximum setting and the secondary (automatic high temperature cut-off) thermostat has been activated. The secondary thermostat, once engaged, will cut off current to the heating elements. Should this happen, the unit must be allowed to cool down below the cutoff temperature. This should take approximately fifteen minutes to one-half hour. If the primary thermostat has been left in the “ON” position, the heaters will reactivate once the unit cools down below the temperature setting.

The tilt fry pan / tilt griddle is a versatile tool, capable of functioning as a griddle, oven, and kettle. When used for baking, the lid can be used to cover the griddle area to retain heat, allowing for even cooking of baked items. When used as a kettle, the cooked liquid product may be drained by tilting the skillet using the operating crank **(6)**.



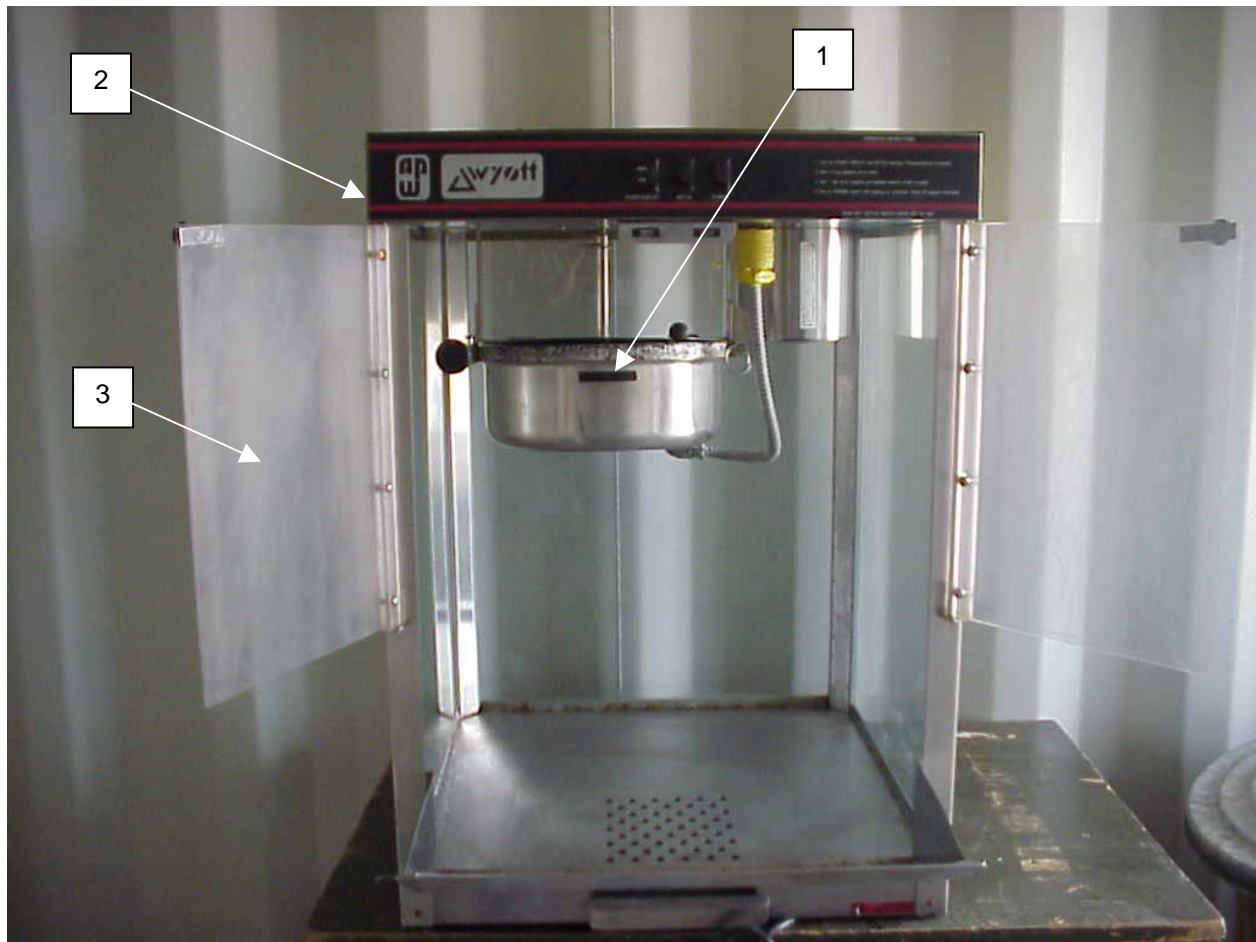


**Popcorn Machine**

Kettle Capacity .....	8 oz (227 gm)
Width .....	28 in (71.1 cm)
Length .....	20.5 in (52 cm)
Height .....	40 in (101.6 cm)
Weight .....	87 lb (39.5 kg)
Servings/Hour .....	150 to 175
Electrical requirements .....	115 VAC

The popcorn machine is comprised of a heated kettle (1) placed in a rotating mount within a glass display and storage cabinet (2). When popcorn is to be popped, popcorn kernels and oil are measured and placed inside of the kettle. The kettle has a loose fitting cover, which is closed over the kernels. The kettle is heated by electric resistance elements. As the kettle comes up to temperature, the kernels will pop. On some models, a motor driven agitator is fitted to the kettle to keep the kernels from burning. As more kernels pop, they take up a greater volume within the kettle, and spill out into the glass cabinet.

Popped corn within the cabinet is kept warm by the kettle heat and by the display lighting. Some units are equipped with dedicated warming elements for the popcorn. Popcorn is served through an access door(s) (3) in the cabinet.



**20 Cubic Foot Refrigerator**

Capacity .....	20 Cu ft (0.57 m <sup>3</sup> )
Width .....	26 in (66 cm)
Length .....	35 ½ in (90.2 cm)
Height .....	82 ¼ in (208.9 cm)
Weight (empty) .....	210 lb (95.5 kg)
Refrigerant .....	R-134a
Electrical requirements .....	115VAC

The 20 cubic foot refrigerator (**1**) is a single door unit employing a conventional air cooled refrigeration system. In this system, refrigerant gas is taken into a compressor and discharged at high pressure into an air cooled condenser. Heat is removed from the refrigerant in the condenser and dissipated into the air. The refrigerant cools enough in the condenser to liquefy. Liquid refrigerant is conducted to a metering device, which sprays liquid refrigerant into the evaporator. The evaporator operates at much lower pressure than the condenser, and the refrigerant flashes off into gas, absorbing heat in the process. The warm gas exiting the evaporator is then returned to the compressor to begin the cycle again.

A thermostat monitors the cabinet temperature, and cycles the refrigeration system on and off as required. The thermostat is adjustable, but does not normally require any adjustment.

The 20 cubic foot refrigerator may be equipped with an electric defrost system, incorporating a timer and an electric heating grid attached to the evaporator. The timer can be set to operate the defrost grid at any time desired. Models without an electric defrost system rely on the cabinet air to defrost the evaporator when the refrigeration system has cycled off.



**2 Section Refrigerator**

Capacity .....	48 ft <sup>3</sup> (1.36 m <sup>3</sup> )
Width .....	52 in (132.1 cm)
Length .....	35 ½ in (90.2 cm)
Height .....	82 ¼ in (208.9 cm)
Weight .....	350 lb (159 kg)
Refrigerant .....	R-134a
Electrical requirements .....	115VAC

The 2 section refrigerator (**1**) is a glass front, two door unit employing a conventional air cooled refrigeration system. In this system, refrigerant gas is taken into a compressor and discharged at high pressure into an air cooled condenser. Heat is removed from the refrigerant in the condenser and dissipated into the air. The refrigerant cools enough in the condenser to liquefy. Liquid refrigerant is conducted to a metering device, which sprays liquid refrigerant into the evaporator. The evaporator operates at much lower pressure than the condenser, and the refrigerant flashes off into gas, absorbing heat in the process. The warm gas exiting the evaporator is then returned to the compressor to begin the cycle again.

A thermostat monitors the cabinet temperature, and cycles the refrigeration system on and off as required. The thermostat is adjustable, but does not normally require any adjustment.

The 2 section refrigerator may be equipped with an electric defrost system, incorporating a timer and an electric heating grid attached to the evaporator. The timer can be set to operate the defrost grid at any time desired. Models without an electric defrost system rely on the cabinet air to defrost the evaporator when the refrigeration system has cycled off.



**3 Section Refrigerator**

Capacity .....	70 ft <sup>3</sup> (1.98 m <sup>3</sup> )
Width .....	78 in (198.1 cm)
Length .....	35 ½ in (90.2 cm)
Height .....	82 ¼ in (208.9 cm)
Weight .....	515 lb (234 kg)
Refrigerant .....	R-134a
Electrical requirements .....	115VAC

The 3 section refrigerator (**1**) is a glass front, three door unit employing a conventional air cooled refrigeration system. In this system, refrigerant gas is taken into a compressor and discharged at high pressure into an air-cooled condenser. Heat is removed from the refrigerant in the condenser and dissipated into the air. The refrigerant cools enough in the condenser to liquefy. Liquid refrigerant is conducted to a metering device, which sprays liquid refrigerant into the evaporator. The evaporator operates at much lower pressure than the condenser, and the refrigerant flashes off into gas, absorbing heat in the process. The warm gas exiting the evaporator is then returned to the compressor to begin the cycle again.

A thermostat monitors the cabinet temperature, and cycles the refrigeration system on and off as required. The thermostat is adjustable, but does not normally require any adjustment.

The 3 section refrigerator may be equipped with an electric defrost system, incorporating a timer and an electric heating grid attached to the evaporator. The timer can be set to operate the defrost grid at any time desired. Models without an electric defrost system rely on the cabinet air to defrost the evaporator when the refrigeration system has cycled off.

The 3 section refrigerator is normally installed in the MWR TEMPER in Force Provider.



**Tabletop Steam Kettle**

Capacity .....	6 US gal (22.7 l)
Total Width .....	12 in (30.5 cm)
Front to Back.....	18 in (45.7 cm)
Pour Path .....	6 in (15.2 cm)
Electrical Requirements .....	208-240VAC, 60 Hz, 1 or 3 phase

When the operator starts up the kettle by first turning the ON/OFF switch **(1)** (if fitted) to ON, and then turning the operating thermostat dial **(2)** from “OFF” to a desired setting, the thermostat switch closes. This lights up the heating indicator light **(3)** and causes the contactors to close, allowing power to flow to the heating elements. When the temperature of the steam jacket reaches the temperature set at the dial, the thermostat switch opens. This turns off the heating indicator light and opens the contactors, cutting power to the heating elements.

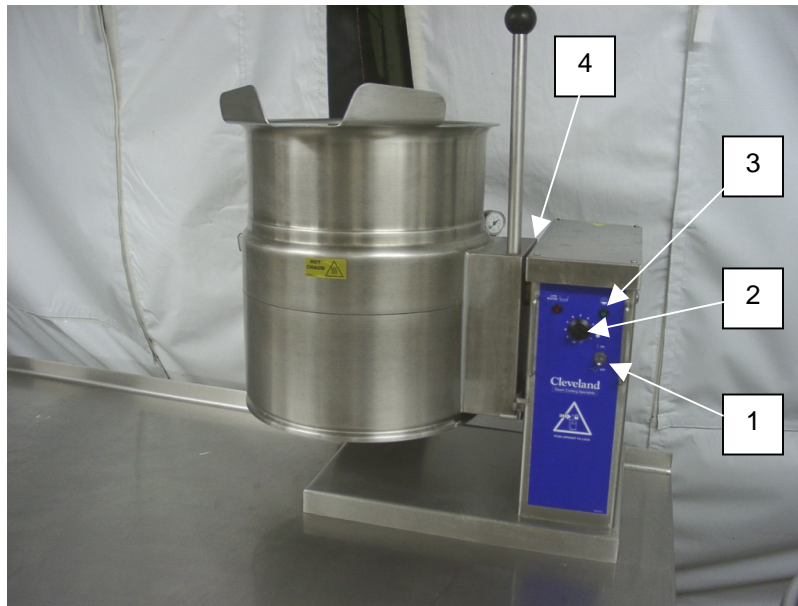
When the kettle cools below the set point, the thermostat switch closes, the heating indicator light comes on, the contactors close, and the heating elements come on again. On-off cycling continues, keeping the kettle at the set temperature. This is why the heating indicator light cycles on and off during normal operation.

If steam pressure greater than 30 psi is generated in the jacket, the safety valve will open and relieve the excess pressure. If the jacket water level gets too low before the heating elements overheat, the high-limit control will open and shut off power to the elements until the kettle cools.

Setting the operating thermostat dial to “OFF” shuts down all control and heating circuits. On units equipped with an ON/OFF switch, the switch accomplishes this function.

The kettle is mounted on a pivot **(4)**, and drained by pouring. Some models have a marine lock fitted to prevent accidental tipping. No cover is fitted.

A safety valve is provided to relieve excess jacket pressure in the event of a malfunction.



**Steam Table**

Capacity ..... 5 full size (8 in depth) serving pans  
 Width ..... 30 in (76.2 cm)  
 Length ..... 77.5 in (196.8 cm)  
 Electrical Requirements ..... 220-230VAC single phase

The steam table **(1)** is used to keep food hot or cold as required on the serving line. When used for heating, a common reservoir containing two or more heating elements is filled with water. The heating elements are controlled by a thermostat, which supplies power to the element as needed. Indicator lights provide visual indications that the elements are heating. Serving pans with food are set into pan openings **(2)** in the deck of the steam table, where they are in contact with the hot water in the reservoir. A drain valve is fitted to allow for easy drainage of the heating water when service is finished.

When used for cooling, no electricity is used. The reservoir is filled with ice, which cools the serving pans. The ice may be melted and drained through the drain valve.

A shelf and sneeze guard assembly **(3)** provides additional service of food items or utensils, as well as a boundary from accidental contamination of food.





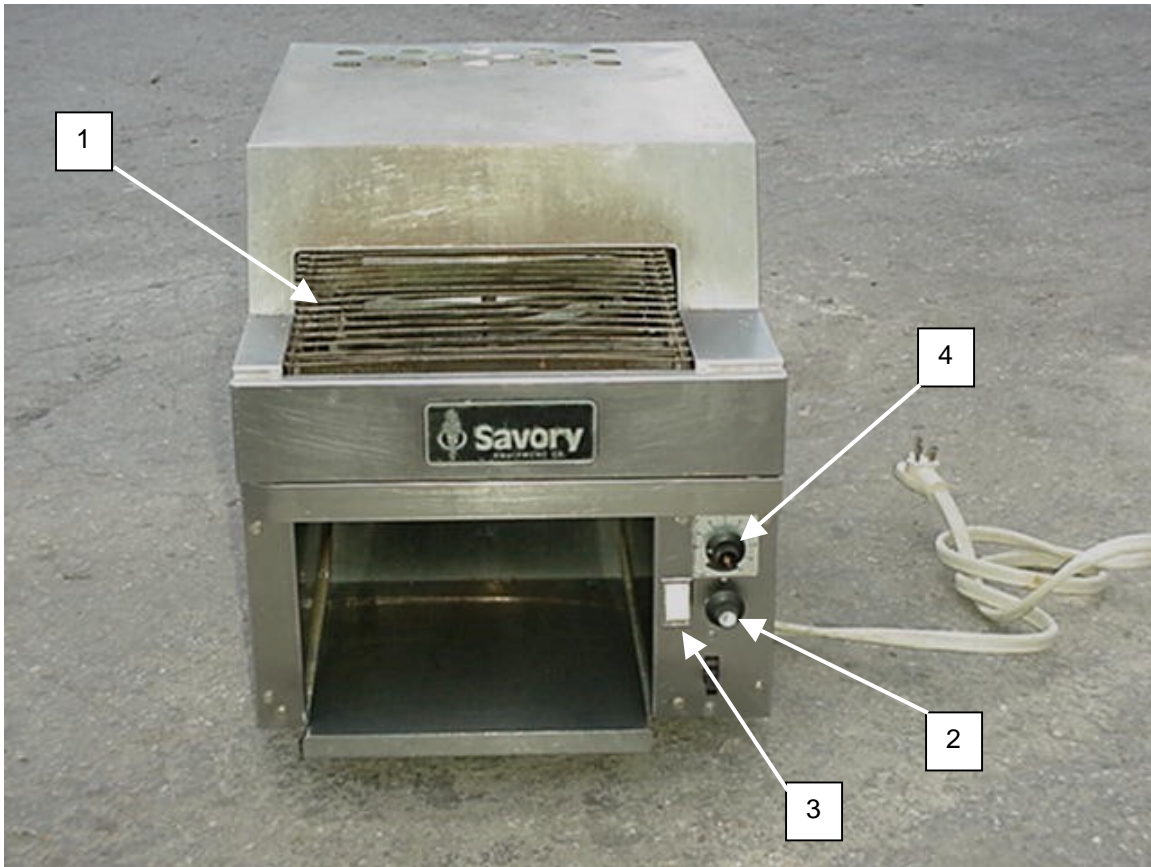
**Electric Toaster**

Capacity .....	720 slices / hour
Length (horizontal toaster) .....	23 ¾ inches (60.3 cm)
Width (horizontal toaster) .....	12 ¾ inches (32.4 cm)
Height (horizontal toaster) .....	16 ½ inches (41.9 cm)
Width (vertical toaster) .....	14 11/16 inches (37.3 cm)
Height (vertical toaster) .....	30 ¾ inches (78.1 cm)
Electrical Requirements .....	208VAC single phase

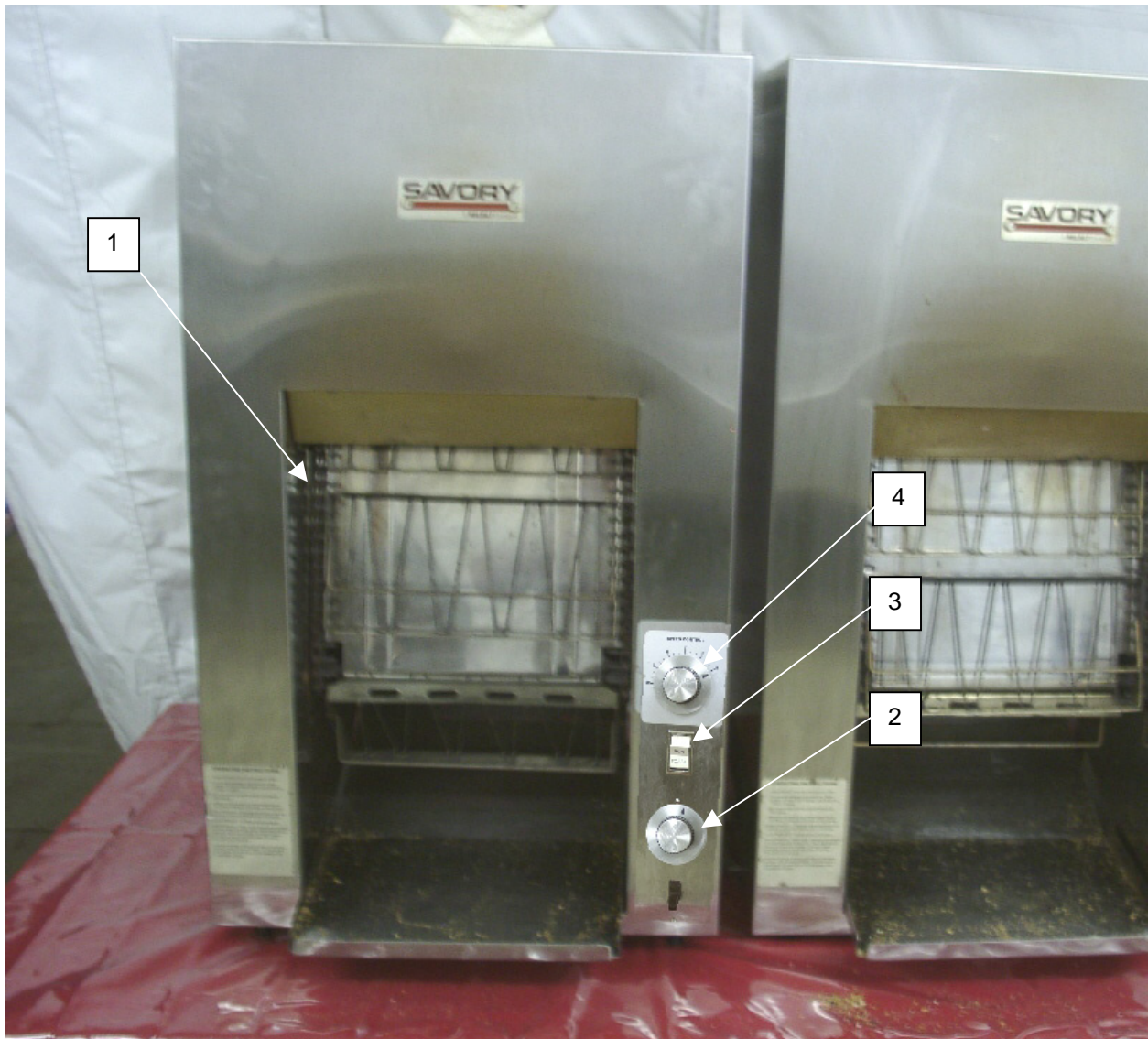
The electric toaster employs a motor driven conveyor chain (1) to pass breads through a pair of heating elements. The heating elements are controlled by a thermostat (2), which regulates the internal temperature of the toaster. One element may be shut off by a BUN/TOAST switch (3), which allows for single sided toasting of items such as sandwich buns, English muffins, and bagels.

Some models may be equipped with a variable speed conveyor motor and control (4).

The electric toaster is supplied to the Force Provider Electric Kitchen in either horizontal or vertical models.



**Horizontal Conveyor Toaster**



Vertical Conveyor Toaster

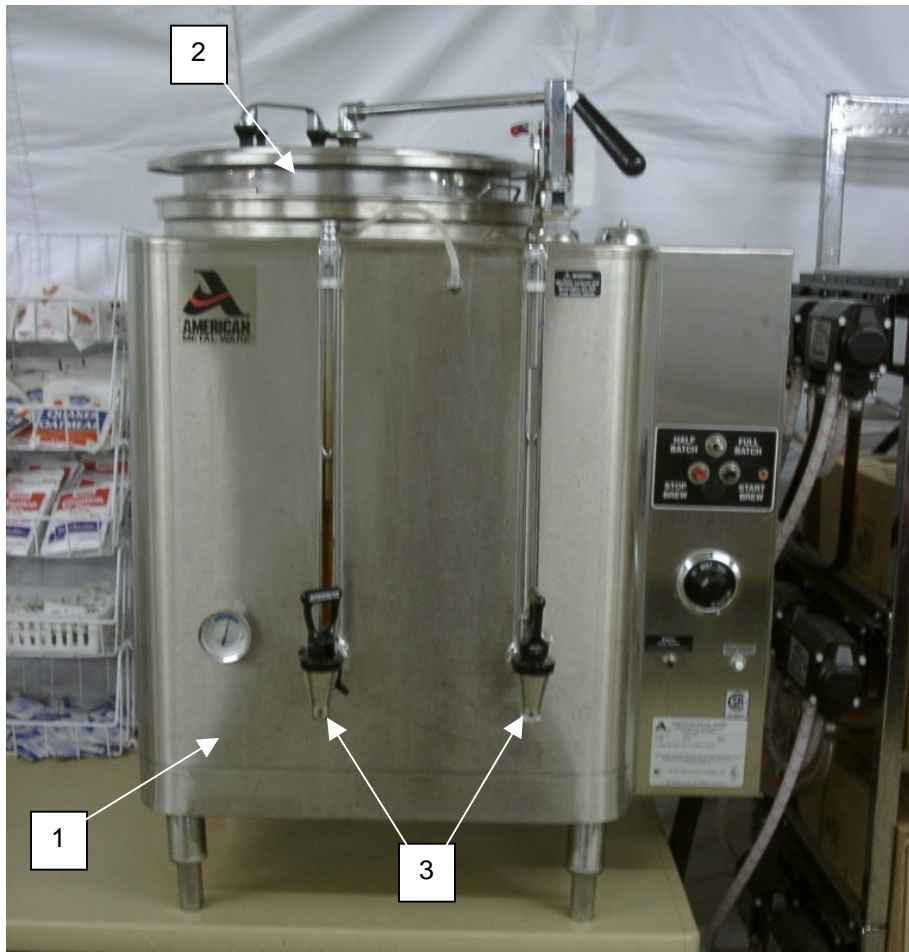
**Coffee Urn**

Liner Capacity .....	6 US gal (22.7 l)
Depth.....	20 ¼ in (51.4 cm)
Width .....	26 ½ in (67.3 cm)
Height.....	33 ⅞ in (84.1 cm)
Electrical Requirements .....	208VAC 3 phase

The coffee urn provides hot water for tea or hot drinks, and freshly brewed hot coffee. The urn admits potable water into the urn jacket (1) by way of a level controlled solenoid valve. Water in the jacket is heated by an electric heating element. The jacket water serves to warm the coffee liner, as well as providing hot potable water service.

When coffee is brewed, coffee grounds are placed in a filter, which in turn rests in a filter basket (2). At the start of the brew cycle, hot water from the urn jacket is further heated and dispensed to the filter basket. The hot water drips through the coffee grounds and then passes through the filter and basket into the urn liner, where the brewed coffee is collected and stored. The brew cycle is timed, and is adjustable between brewing a full or half batch.

Coffee and hot water are dispensed through faucets (3).





**CHAPTER 2**  
**OPERATOR INSTRUCTIONS**  
**FORCE PROVIDER FOOD SERVICE EQUIPMENT**



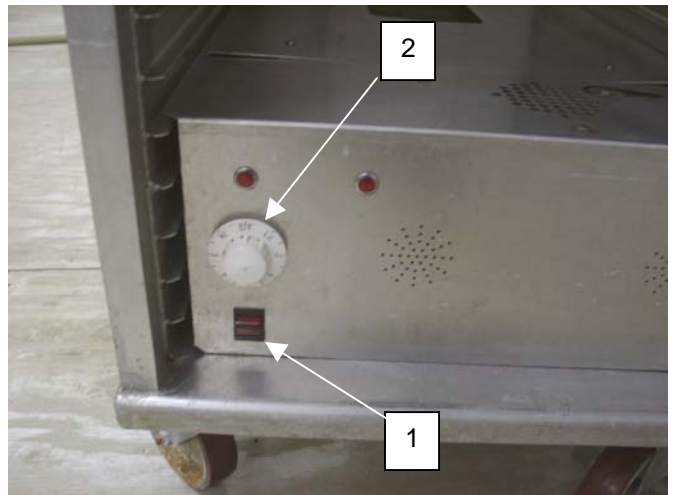
**OPERATOR MAINTENANCE  
FORCE PROVIDER FOOD SERVICE EQUIPMENT  
DESCRIPTION AND USE OF CONTROLS AND INDICATORS**

**GENERAL**

This work package contains information on the controls and indicators of the individual components of the Force Provider Kitchen Equipment.

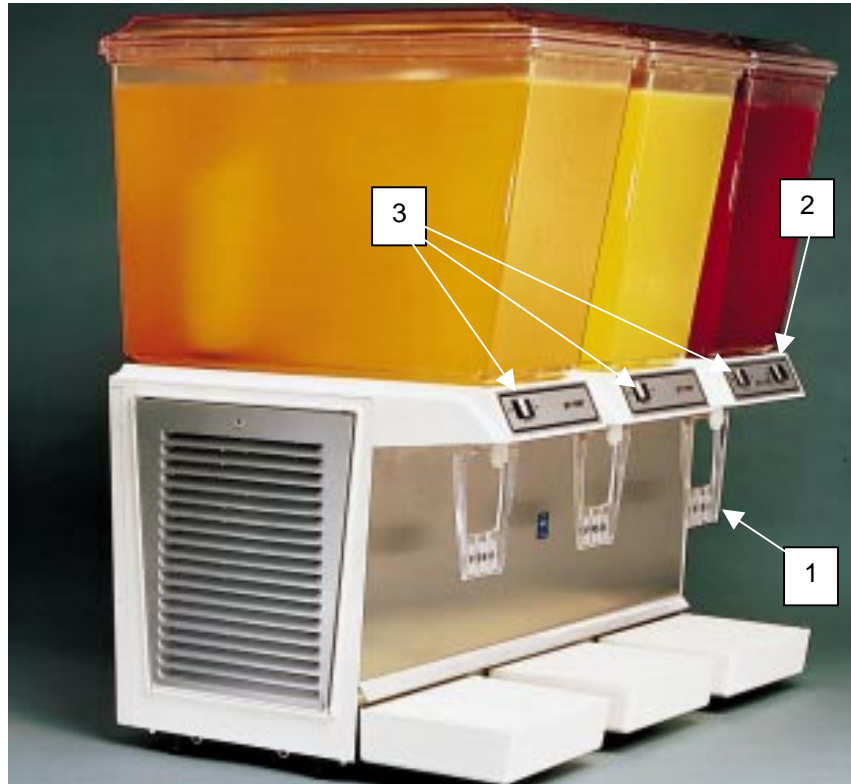
Controls and Indicators for the:

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Popcorn Machine .....	WP 0004 00-12
Reach-in Refrigerators .....	WP 0004 00-13
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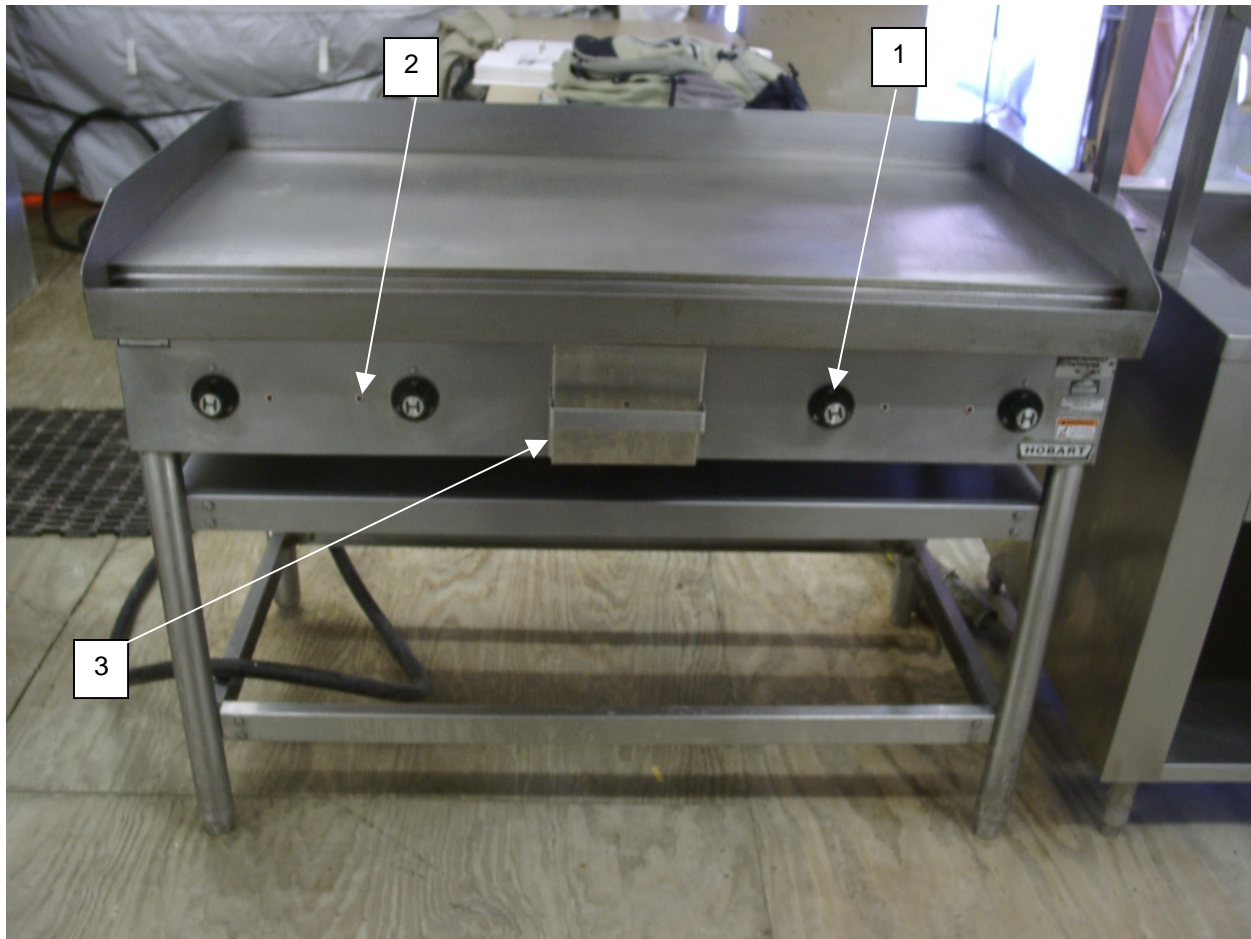


Food Warming Cabinet		
Key	Control or Indicator	Function
1	Mode Selector	Provides ON/OFF control and selection of humid or dry heat.
2	Thermostat	Controls cabinet temperature.
3	Thermometer	Indicates interior temperature.

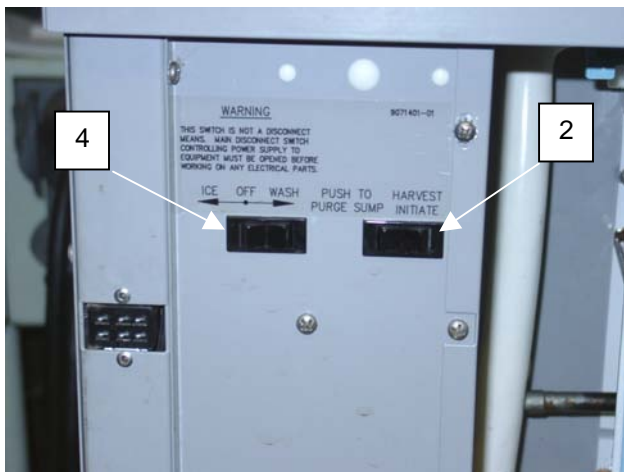




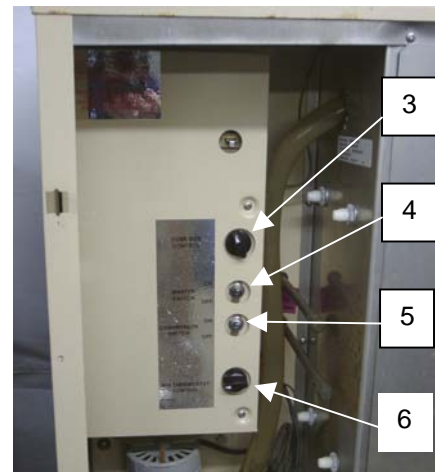
<b>Mechanically Cooled Beverage Dispenser</b>		
<b>Key</b>	<b>Control or Indicator</b>	<b>Function</b>
1	Handle	Operates dispensing valve or pinch tube, depending on model and manufacturer.
2	Refrigeration Switch	Provides ON/OFF control of dispenser refrigeration.
3	Agitator Switch	Provides ON/OFF control of dispenser agitation. One per bowl.



Griddle		
Key	Control or Indicator	Function
1	Thermostat	Controls temperature of griddle surface. Each thermostat controls a 12-in wide griddle section independently.
2	Red Indicator Lights	When lit, indicates heating elements are providing heat to that section of the Griddle. When off, indicates that particular section has reached set temperature. Flashes on and off during cooking operation to show that correct temperature is being maintained.
3	Grease Drawer	Provides a collection point for grease and food residues.

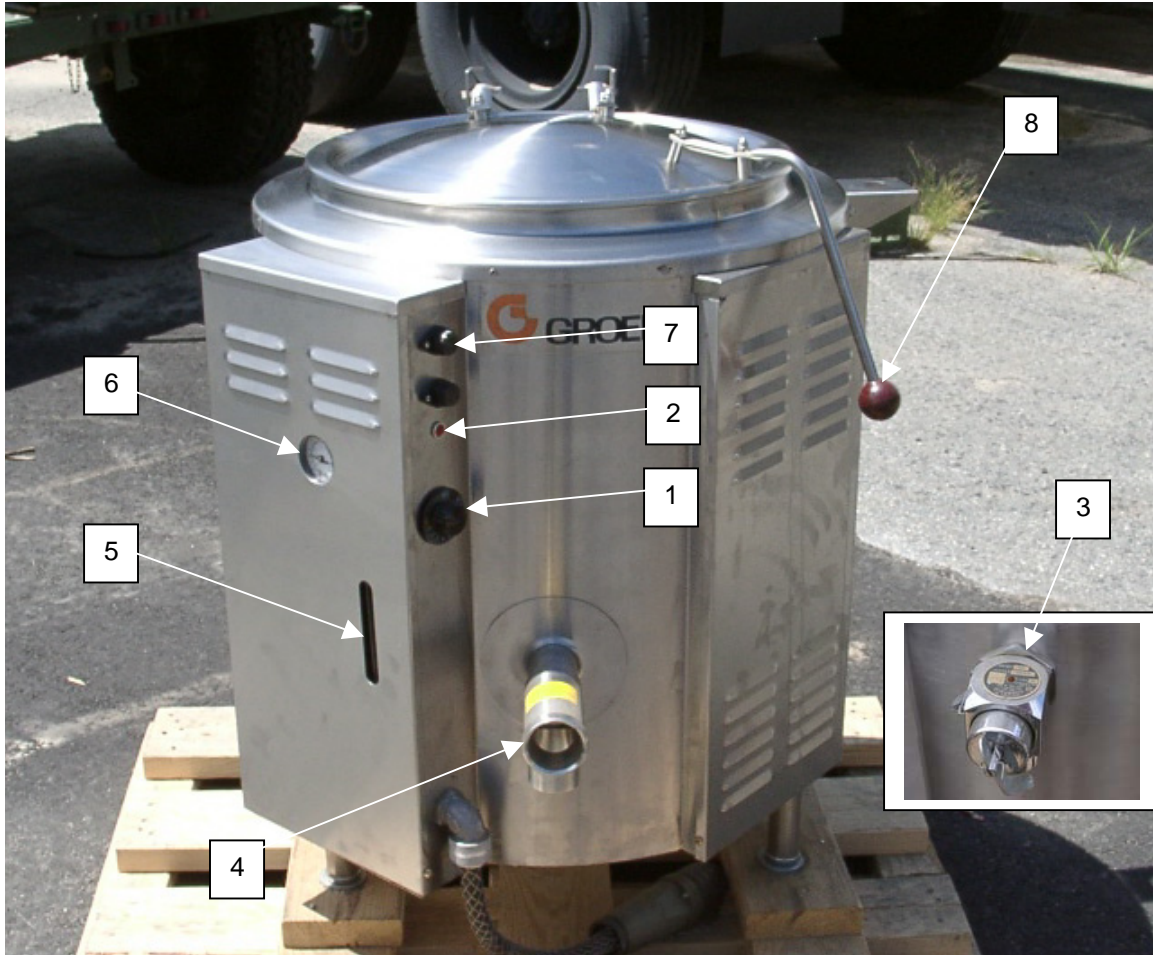


Late Production



Early Production

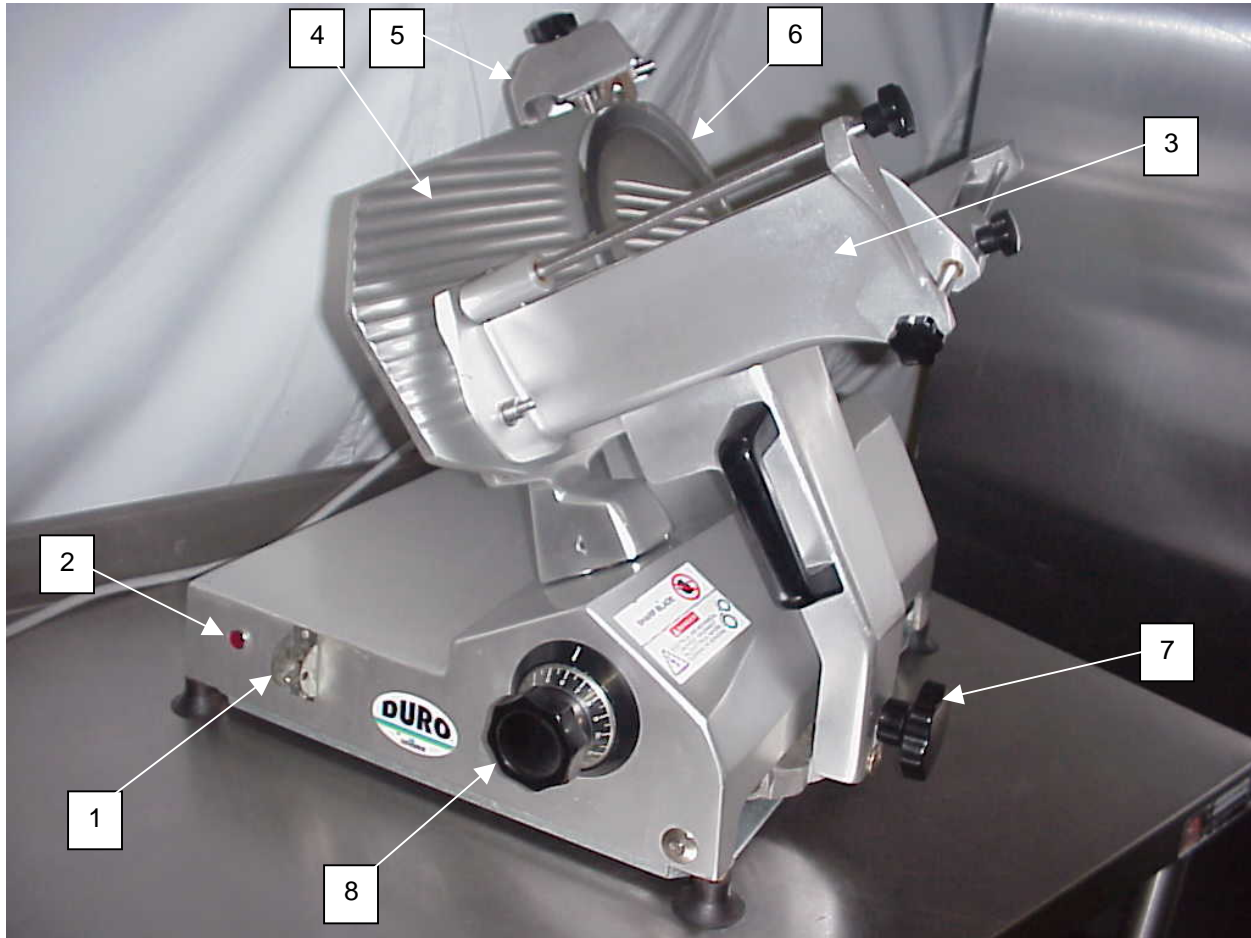
Ice Machine		
Key	Control or Indicator	Function
1	Indicator Panel	Displays operating information about the Ice Machine.
2	Harvest Initiate Switch	Provides control to start harvest cycle and water system purge (late production only).
3	Cube Size Control	Provides adjustment for the ice cube thickness (early production only).
4	Master Switch	Provides ON/OFF control of the Ice Machine.
5	Compressor Switch	Provides ON/OFF control of the compressor (early production only).
6	Bin Thermostat	Provides adjustment for bin temperature (early production only).



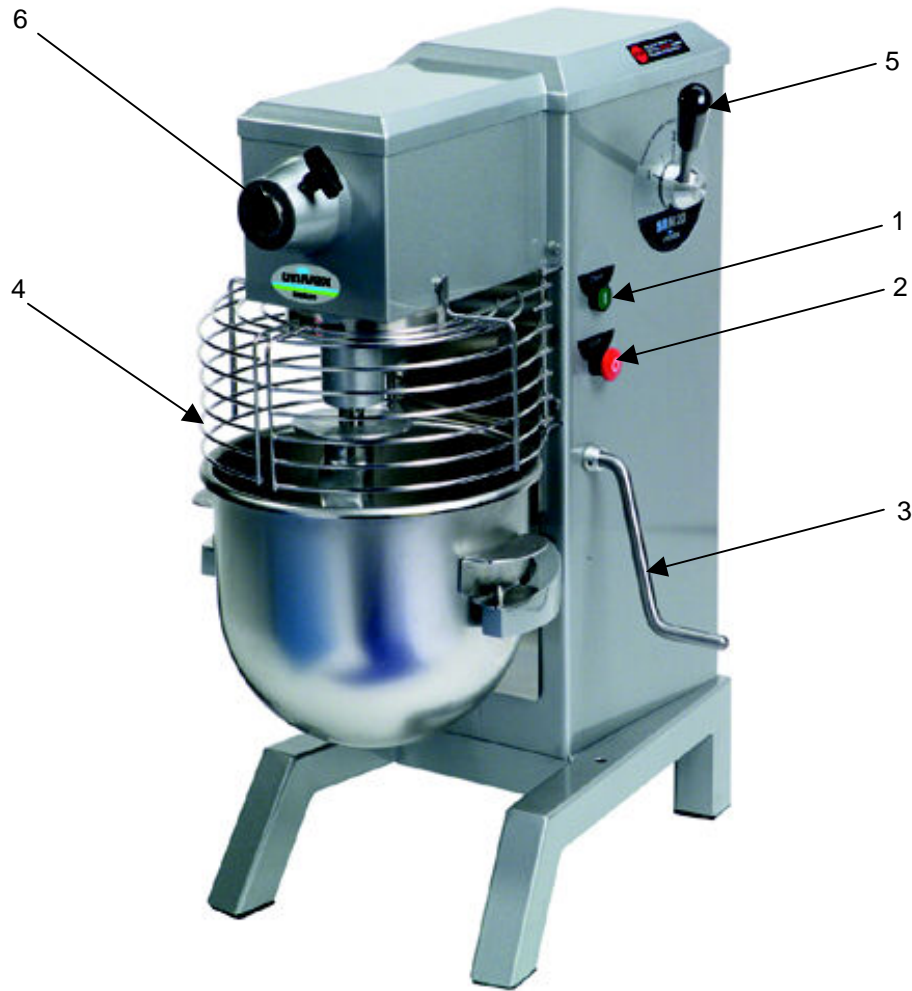
Steam Kettle		
Key	Control or Indicator	Function
1	Thermostat	Controls operating temperature of kettle.
2	Indicator Light	Provides visual indication of kettle operation by coming on when heating element is activated.
3	Safety Valve	Relieves excess steam pressure in the event of a malfunction.
4	Draw Off Valve	Provides drainage of the kettle.
5	Jacket Water Level Glass	Provides visual indication of water level in steam jacket (Groen only).
6	Vacuum / Pressure Gauge	Provides visual indication jacket vacuum or pressure.
7	Fuse	Provides internal electrical protection.
8	Lid Handle	Opens kettle cover.



Steam Kettle (Tilting Type)		
Key	Control or Indicator	Function
1	Thermostat	Controls operating temperature of kettle.
2	Indicator Light	Provides visual indication of kettle operation by coming on when heating element is activated.
3	Safety Valve	Relieves excess steam pressure in the event of a malfunction.
4	Operating Handle	Provides drainage of the kettle by tilting.
5	Vacuum / Pressure Gauge	Provides visual indication jacket vacuum or pressure.
6	Fuse	Provides internal electrical protection.



Meat Slicing Machine		
Key	Control or Indicator	Function
1	ON / OFF Switch	Controls power to Meat Slicing Machine motor.
2	Indicator Light	Illuminates when power is ON.
3	Carriage	Supports product being sliced.
4	Fence	Guides product into knife.
5	Sharpener	Sharpens knife edge.
6	Knife Guard	Shields knife edge.
7	Carriage Arm Knob	Secures carriage to slicer drive.
8	Slice Adjustment	Adjusts thickness of slices.



Mixing Machine		
Key	Control or Indicator	Function
1	ON Switch	Switches power to Mixing Machine ON.
2	OFF Switch	Switches power to Mixing Machine OFF.
3	Bowl Operating Lever	Raises and lowers bowl.
4	Safety Guard	Prevents accidental contact with beater.
5	Speed Control Lever	Controls beater speed.
6	Power Take Off	Interface for power driven accessories.

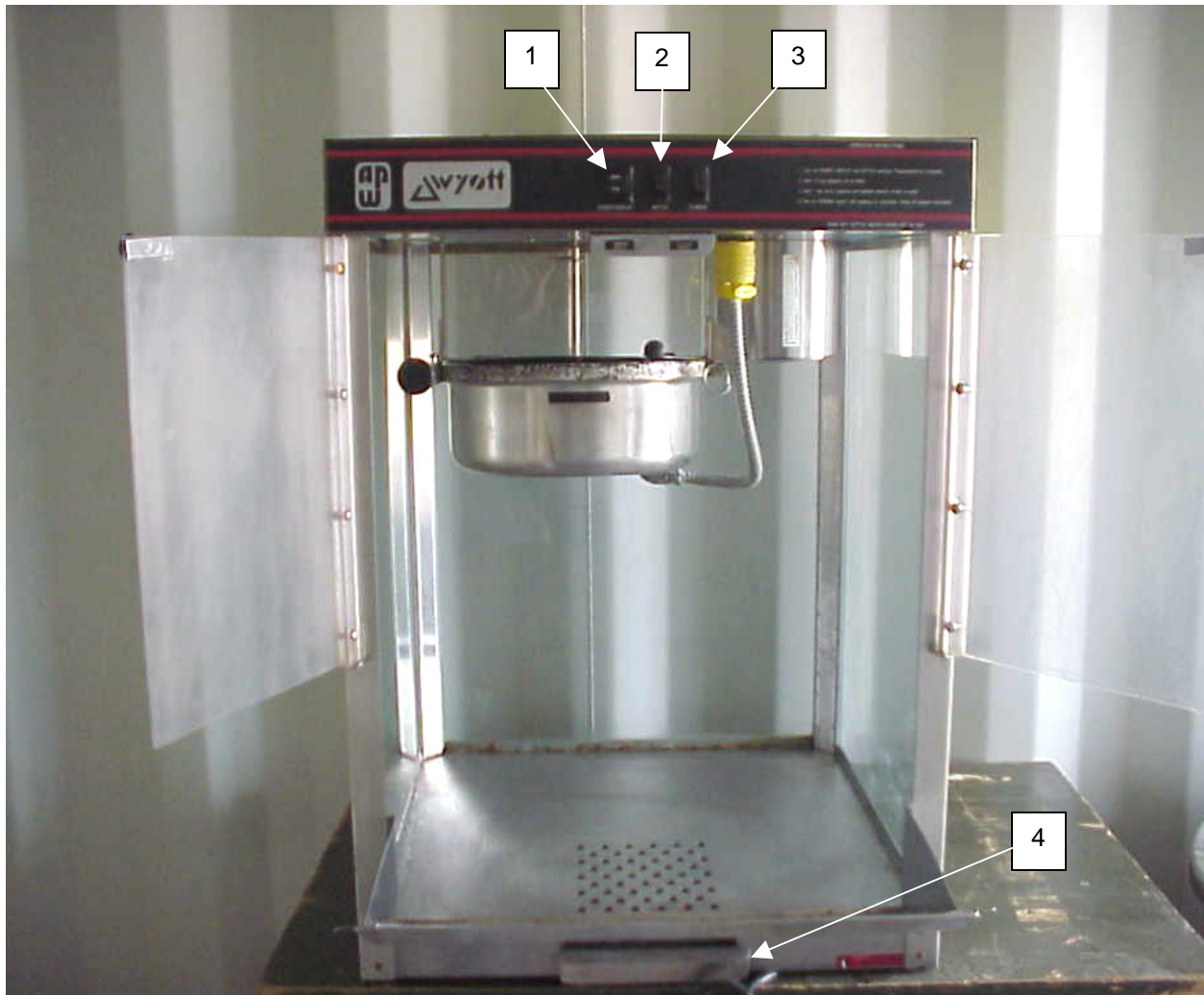


Oven		
Key	Control or Indicator	Function
1	Toggle Switches (two)	4-position switches (OFF, LOW, MEDIUM, HIGH) that independently control the top and bottom heating elements for each oven section. Some ovens may be fitted with 2-position ON-OFF switches.
2	ON/OFF Switch	Turns entire oven ON or OFF.
3	Thermostat	Maintains overall interior temperature.
4	Indicator Light	When lit, indicates heating elements are providing heat to the Oven.
5	Timer	A 60-minute timer is provided on each oven section.
6	Damper Control Lever	Regulates moisture and releases cooking vapor through a vent.
7	Light Switch	Turns interior oven lights ON and OFF.
8	Fuses	Provides circuit protection to internal electrical components.





Tilt Fry Pan / Tilt Griddle		
Key	Control or Indicator	Function
1	Operating Crank	Controls angle of pan.
2	Function Switch	Turns power ON or OFF.
3	Thermostat	Maintains cooking surface temperature.
4	Red Indicator Light	When lit, indicates power is connected to the unit.
5	Amber Indicator Light	When lit, indicates that the secondary (high temperature) thermostat has been activated. This light indicates the unit may have overheated.

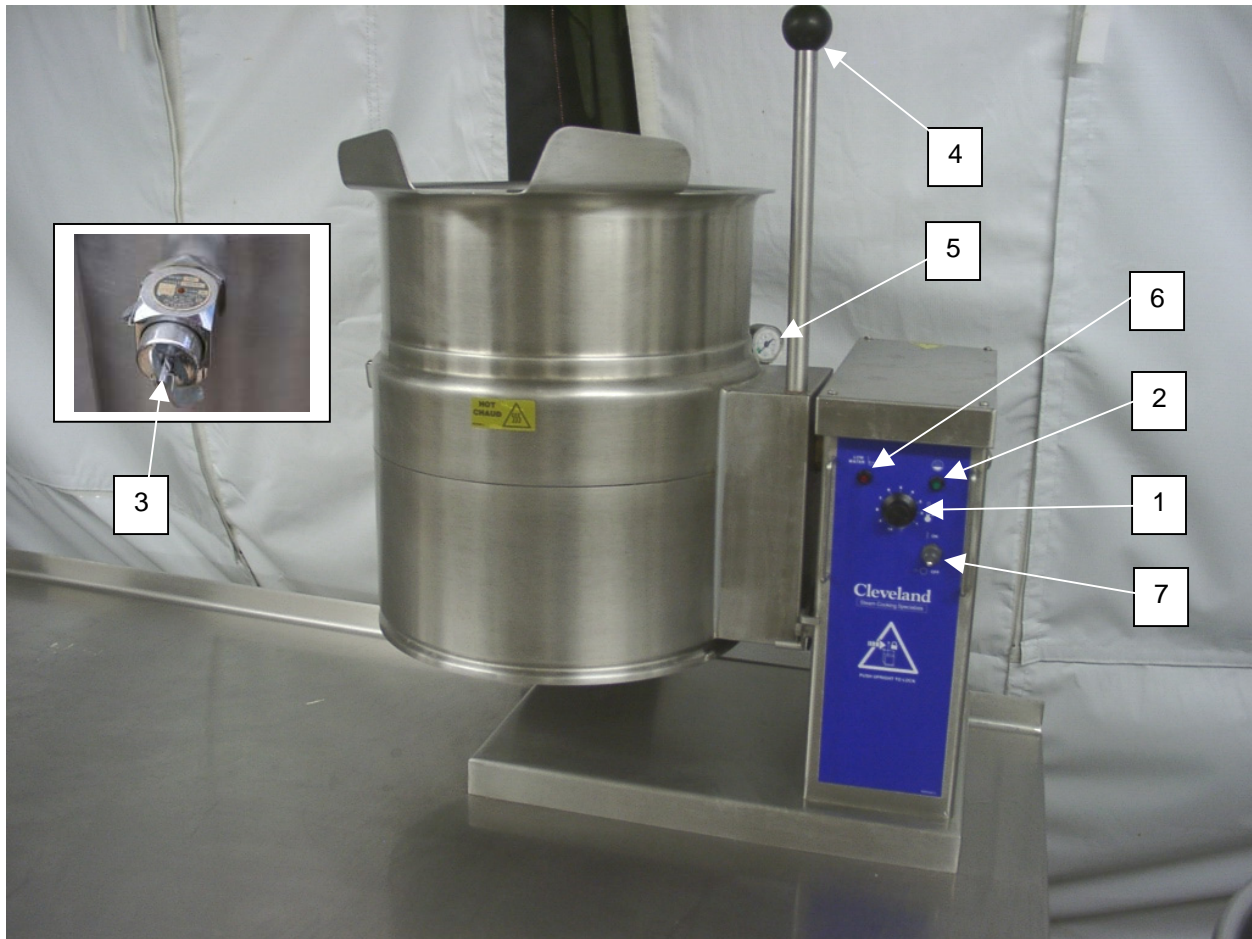


Popcorn Machine		
Key	Control or Indicator	Function
1	Corn Warming Switch	Controls operation of cabinet warmer and light.
2	Kettle Switch	Controls power to kettle.
3	Agitator Switch	Controls power to agitator.
4	Drawer	Collects un-popped kernels.

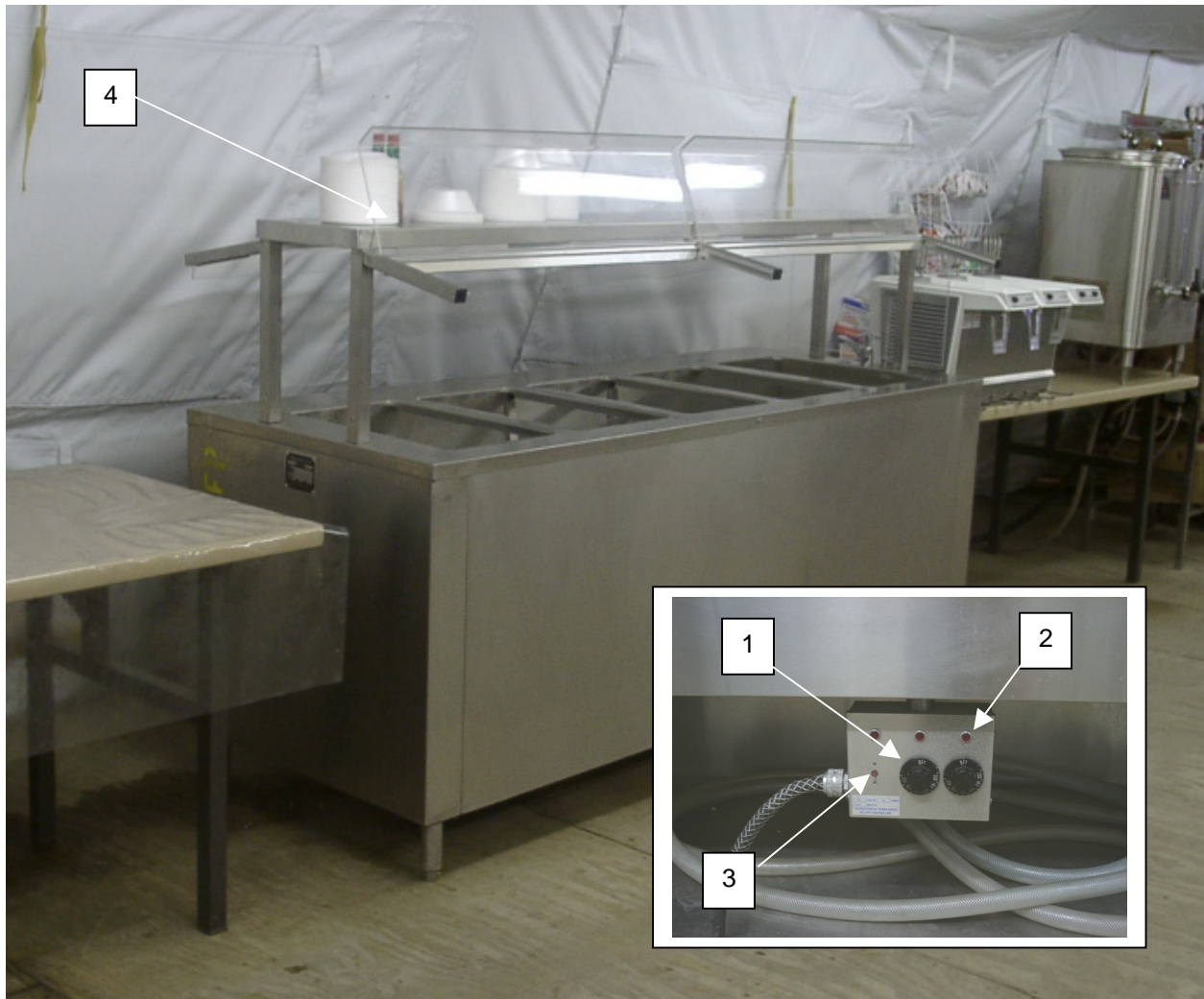


**Reach-in Refrigerators**  
**Refrigerator, 20 Cu ft (shown)**  
**Refrigerator, 2 Section**  
**Refrigerator, 3 Section**

Key	Control or Indicator	Function
1	Thermometer	Provides indication of interior temperature.



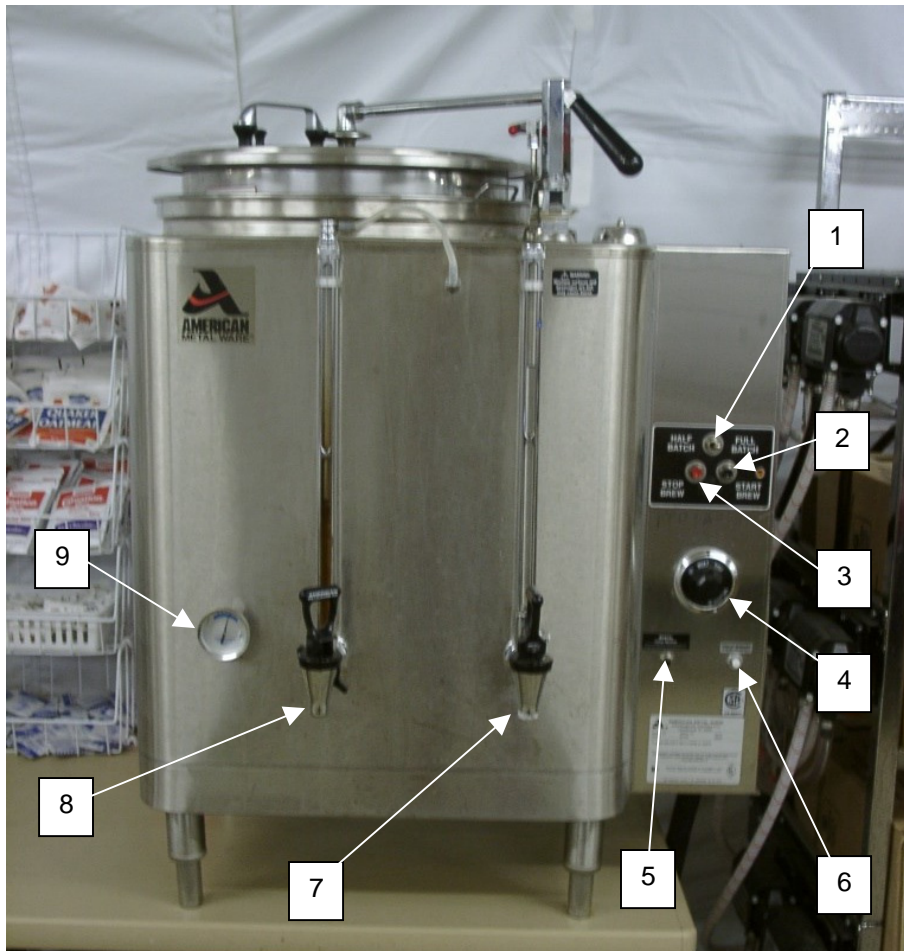
Tabletop Steam Kettle		
Key	Control or Indicator	Function
1	Thermostat	Controls operating temperature of kettle.
2	Indicator light	Provides visual indication of kettle operation by coming on when heating element is activated.
3	Safety valve	Relieves excess steam pressure in the event of a malfunction.
4	Operating Handle	Provides drainage of the kettle by tilting.
5	Vacuum / Pressure Gauge	Provides visual indication jacket vacuum or pressure.
6	Fuse	Provides internal electrical protection.
7	ON/OFF switch	Controls electrical operation of the kettle.



Steam Table		
Key	Control or Indicator	Function
1	Thermostat	Controls operating temperature of steam table.
2	Indicator light	Provides visual indication of steam table operation by coming on when heating element is activated.
3	Circuit Breaker	Provides overload protection to electrical components.
4	Sneeze Guard	Protects food from accidental contamination.



Electric Toaster		
Key	Control or Indicator	Function
1	Conveyor Speed Control	Provides manual control of conveyor speed.
2	BUN/TOAST Switch	Provides option of double or single sided toasting.
3	Thermostat	Controls operating temperature of Electric Toaster.
4	ON/OFF switch	Controls electrical power to Electric Toaster.



Coffee Urn		
Key	Control or Indicator	Function
1	Half / Full Batch Switch	Provides control of batch volume.
2	Start Switch	Starts brewing cycle.
3	Stop Switch	Interrupts brewing cycle.
4	Thermostat	Controls operating temperature of toaster.
5	ON/OFF switch	Controls electrical power to Coffee Urn.
6	Circuit Breaker	Provides protection for electrical components.
7	Hot Water Faucet	Dispenses hot potable water.
8	Coffee Faucet	Dispenses hot coffee.
9	Thermometer	Indicates jacket water temperature.





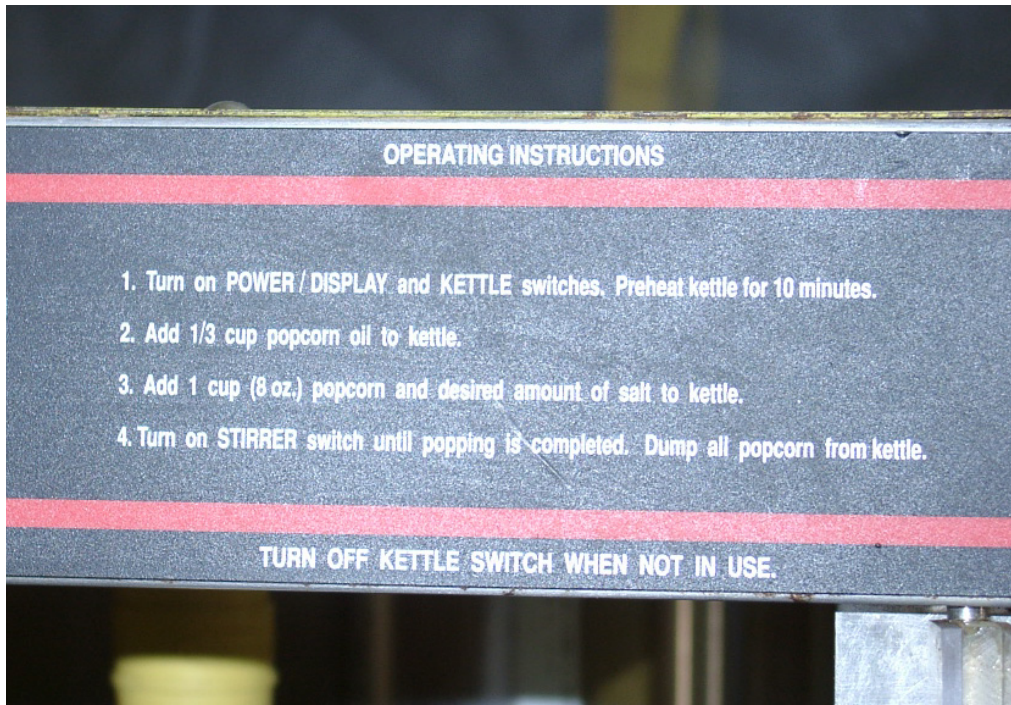
The following decals and instruction plates are found on the Steam Kettle (Tilting Type):



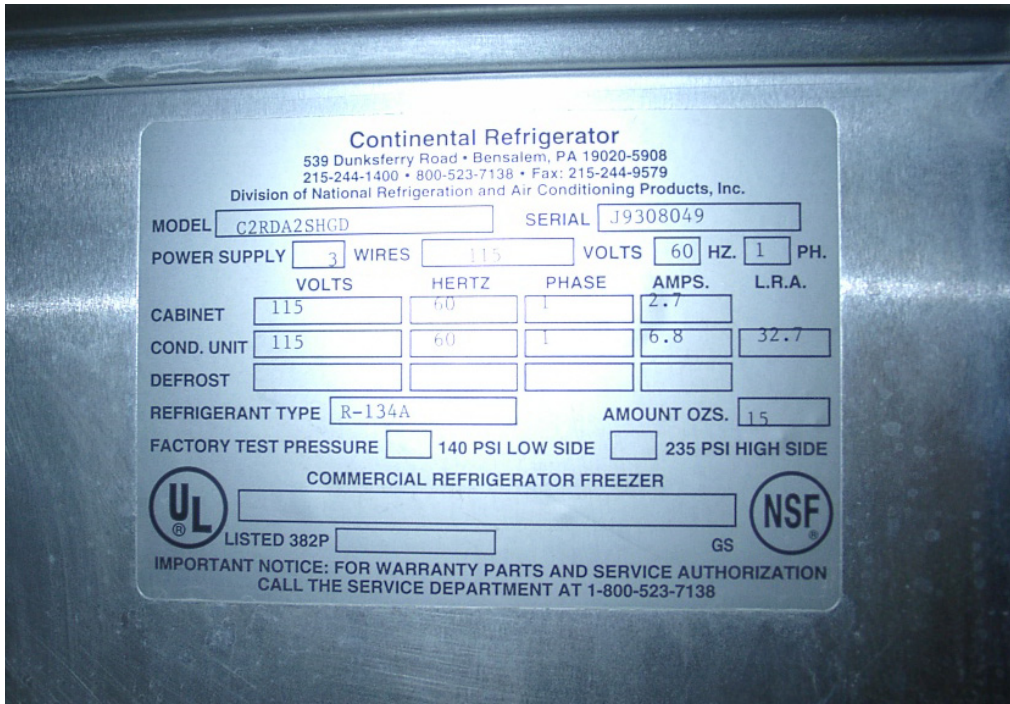
The following decals and instruction plates are found on the Oven:



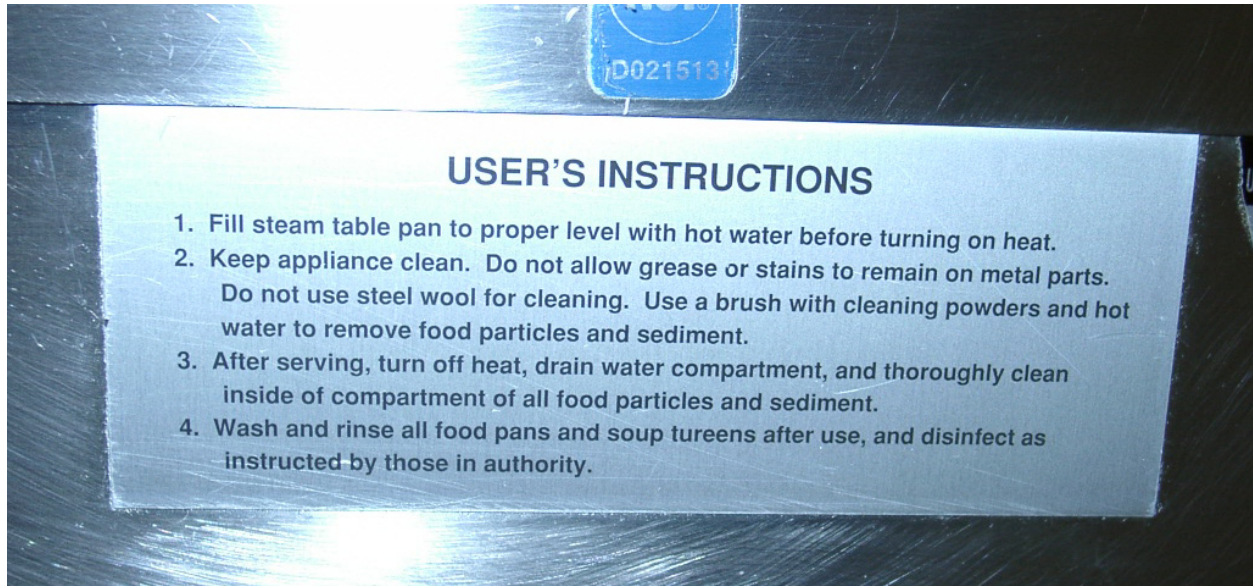
The following decals and instruction plates are found on the Popcorn Machine:



The following decals and instruction plates are found on the Reach-in Refrigerators:



The following decals and instruction plates are found on the Steam Table:



The following decals and instruction plates are found on the Coffee Urn:



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**OPERATOR MAINTENANCE  
FORCE PROVIDER FOOD SERVICE EQUIPMENT  
OPERATION UNDER USUAL CONDITIONS – FOOD SERVICE INVENTORY FPS**

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**GENERAL****NOTE**

This Work Package covers the unpacking and inventory of Food Service equipment for standard Force Provider Modules. Do not use this Work Package to inventory Force Provider (Lite) modules – refer to WP 0006 00.

Before assembly and preparation for use of the food service subsystem, the Force Provider Module site selection, planning, preparation, staking and staging of the food service site must be completed. The food service subsystem requires connection to a power source, potable water distribution, and the graywater collection subsystem. Prior to assembly and preparation for use of the food service subsystem, Force Provider Module level site selection, site planning, site preparation, staking and staging of the food service site must be completed.

**UNPACKING AND INVENTORY**

Unpack and inventory food service subsystem components using Table 1 through 5 of this work package.

Food service collection equipment is packed in the following container types and quantities:

One TRICON type 10B Kitchen Kit, Part A  
One TRICON type 10H Kitchen kit, Part B  
One TRICON type 10M Kitchen Kit, Part C  
One TRICON type 10N Kitchen Kit, Part D  
One TRICON type 10P Kitchen Kit, Part E

The Single Coffee Urn is packed in TRICON 10G.

Open each container and check its contents against Tables 1 through 5 for the container type. The container type is stenciled on container door.

Remove each item from the container and set it aside, but not in an area where equipment is to be positioned for operation.

Retain all dunnage and packing materials for use when repacking.

Table 1. Inventory List for Kitchen Kit Part A Type 10B.

Subcomponent	Where Listed/Illustrated	Qty
Brush (in rack set 1)	WP 0041 00, COEI, Item 39	2
Can Opener, Hand (in rack set 1)	WP 0041 00, COEI, Item 29	4
Container, Oven, Reusable	WP 0041 00, COEI, Item 41	1
Cook Pot, 10-Gal without cover (2 each in rack set 1 & 2)	WP 0041 00, COEI, Item 24	4
Cook Pot, 15-Gal w/cover (2 each in rack set 1 & 2)	WP 0041 00, COEI, Item 25	4
Cookie Cutter (in rack set 1)	WP 0041 00, COEI, Item 40	2
Cover, Cooking Pot	WP 0041 00, COEI, Item 21	4
Cover, Food Serving Pan (in rack set 3)	WP 0041 00, COEI, Item 17	3
Dust Pan	WP 0041 00, COEI, Item 9	2
Fire Extinguisher (in rack set 1)	WP 0041 00, COEI, Item 2	6
First Aid Kit (in rack set 1)	WP 0041 00, BII, Item 3	2
Flour Sifter (in rack set 1)	WP 0041 00, COEI, Item 18	2
Food Container, Insulated	WP 0041 00, COEI, Item 28	3
Fork, 21-in (in rack set 2)	WP 0041 00, COEI, Item 31	6
Fork, Food Preparation (in rack set 1 & 2)	WP 0041 00, COEI, Item 34	4
Garden Hose Assembly (in rack set 1)	WP 0041 00, COEI, Item 6	2
Griddle, Self-heating with Splash Guard	WP 0041 00, COEI, Item 15	1
Knife (in rack set 1 & 2)	WP 0041 00, COEI, Item 7	4
Ladle, 2-oz (in rack set 2)	WP 0041 00, COEI, Item 22	4
Liquid Measure 2-qt (in rack set 1 & 2)	WP 0041 00, COEI, Item 19	4
Measuring Set, Spoon (in rack set 1)	WP 0041 00, COEI, Item 23	4
Oven	WP 0041 00, COEI, Item 14	1
Pan, Food Serving and Storage	WP 0041 00, COEI, Item 16	27
Peeler, Potato (in rack set 1)	WP 0041 00, COEI, Item 20	4
Pepper Shaker (inside food container)	WP 0041 00, COEI, Item 37	48
Pitcher, 5-qt (in rack set 1)	WP 0041 00, COEI, Item 35	3
Pot Holder (in rack set 1)	WP 0041 00, COEI, Item 27	8
Salt Shaker (inside food container)	WP 0041 00, COEI, Item 38	48
Server, Pie and Cake (in rack set 2)	WP 0041 00, COEI, Item 33	2
Shelf Assembly, Storage and Display	WP 0041 00, COEI, Item 3	4
Special Purpose Web, Tiedown	WP 0041 00, COEI, Item 4	6
Splash Plate (in rack set 1)	WP 0041 00, COEI, Item 26	4
Spoon, Service, 15-in (in rack set 1 & 2)	WP 0041 00, COEI, Item 32	8
Spoon, Service, Slotted (in rack set 1 & 2)	WP 0041 00, COEI, Item 30	16
Steam Table, Electric, w/accessories and Sneeze Guard	WP 0041, COEI, Item 12	1
Steel Wool, 1-lb roll (in rack set 2)	WP 0041 00, BII, Item 5	6
Stone, Sharpening (in rack set 2)	WP 0041 00, COEI, Item 5	1
Storage/drying Rack	WP 0041 00, COEI, Item 10	6
Sugar Dispenser (inside food container)	WP 0041 00, COEI, Item 36	48
Table, Folding Legs	WP 0041 00, COEI, Item 11	4
Thermometer, Bi-metal, Type III	WP 0041 00, COEI, Item 8	4
Water Can, Military	WP 0041 00, COEI, Item 13	10
TM 10-7310-282-10	WP 0041 00, BII, Item 2	1
TM 10-5419-206-13	WP 0041 00, BII, Item 7	1
TM 10-5419-206-23P	WP 0041 00, BII, Item 8	1
TM 10-7360-208-13&P	WP 0041 00, BII, Item 1	1



**Table 2. Inventory List for Dining Tent Kit Part B Type 10H.**

Subcomponent	Where Listed/Illustrated	Qty
Beverage Dispenser	WP 0041 00, COEI, Item 47	1
Butchers Steel	WP 0041 00, COEI, Item 57	2
Can, Ash and Garbage, 32-Gal	WP 0041 00, COEI, Item 45	2
Cover, Can, Ash and Garbage	WP 0041 00, COEI, Item 46	2
Dipper, Kitchen	WP 0041 00, COEI, Item 56	4
Dispenser, Liquid, 5-Gal	WP 0041 00, COEI, Item 51	15
Egg Whip	WP 0041 00, COEI, Item 61	2
Food Turner	WP 0041 00, COEI, Item 54	6
Food Warming Cabinet	WP 0041 00, COEI, Item 50	1
Fork, Food Preparation	WP 0041 00, COEI, Item 66	6
Ice Making Machine, 208VAC, 500-lb	WP 0041 00, COEI, Item 42	2
Knife, Boning	WP 0041 00, COEI, Item 64	4
Knife, Cook's	WP 0041 00, COEI, Item 69	4
Knife, Paring	WP 0041 00, COEI, Item 68	4
Knife, Slicing	WP 0041 00, COEI, Item 70	4
Knife, Steak	WP 0041 00, COEI, Item 65	4
Ladle, Kitchen, 4-oz.	WP 0041 00, COEI, Item 59	3
Ladle, Kitchen, 8-oz.	WP 0041 00, COEI, Item 53	4
Opener, Can, Mounted	WP 0041 00, COEI, Item 63	4
Oven	WP 0041 00, COEI, Item 52	1
Pick, Ice	WP 0041 00, COEI, Item 55	2
Reusable Oven Container	WP 0041 00, COEI, Item 71	1
Sharpening Stone	WP 0041 00, COEI, Item 44	2
Skimmer	WP 0041 00, COEI, Item 60	4
Spatula	WP 0041 00, COEI, Item 62	4
Special Purpose Web, Tiedown	WP 0041 00, COEI, Item 43	7
Spoon, Food Service	WP 0041 00, COEI, Item 67	20
Tilt Fry Pan	WP 0041 00, COEI, Item 48	1
Toaster	WP 0041 00, COEI, Item 49	1
Tongs, Food, Turning	WP 0041 00, COEI, Item 58	6
TM 10-7360-208-13&P	WP 0041 00, BII, Item 1	1

**Table 3. Inventory List for Kitchen Kit Part C Type 10M.**

<b>Subcomponent</b>	<b>Where Listed/Illustrated</b>	<b>Qty</b>
Bakers Scraper (Pan Fry Box 2)	WP 0041 00, COEI, Item 85	2
Can, Ash and Garbage, 32-Gal	WP 0041 00, COEI, Item 78	2
Container, Oven, Reusable	WP 0041 00, COEI, Item 41	1
Cover, Can, Ash and Garbage	WP 0041 00, COEI, Item 79	2
Cutlery Roll (Pan Fry Box 1)	WP 0041 00, COEI, Item 87	2
Dispenser, Liquid, 5-Gal	WP 0041 00, COEI, Item 82	5
Dispenser, Mechanical, Beverage	WP 0041 00, COEI, Item 80	1
Food Container, Insulated	WP 0041 00, COEI, Item 28	4
Holder, Scouring Brick (Pan Fry Box 1)	WP 0041 00, COEI, Item 88	2
Ice Making Machine, 208VAC, 500 Pound Capacity	WP 0041 00, COEI, Item 72	1
Knife, Slicing (Pan Fry Box 1)	WP 0041 00, COEI, Item 86	4
Meat Slicing Machine, 115VAC	WP 0041 00, COEI, Item 83	1
Oven	WP 0041 00, COEI, Item 14	1
Pliers, Slip Joint (Pan Fry Box 1)	WP 0041 00, COEI, Item 75	2
Refrigerator, 20 Cubic Foot, 120VAC	WP 0041 00, COEI, Item 73	1
Rolling Pin (Pan Fry Box 1)	WP 0041 00, COEI, Item 84	2
Screwdriver, Cross Tip 4-In (Pan Fry Box 1)	WP 0041 00, COEI, Item 76	2
Screwdriver, Flat Tip (Pan Fry Box 1)	WP 0041 00, COEI, Item 74	2
Special Purpose Web, Tiedown	WP 0041 00, COEI, Item 4	9
Stainless Steel Sponge (Pan Fry Box 1)	WP 0041 00, BII, Item 4	6
Steel Wool	WP 0041 00, BII, Item 5	8
Toaster, 115VAC	WP 0041 00, COEI, Item 81	1
Wrench, Adjustable (Pan Fry Box 1)	WP 0041 00, COEI, Item 77	2
TM 10-7310-282-10	WP 0041 00, BII, Item 2	1

**Table 4. Inventory List For Kitchen Kit Part D Type 10N.**

<b>Subcomponent</b>	<b>Where Listed/Illustrated</b>	<b>Qty</b>
Board, Food Chopping	WP 0041 00, COEI, Item 94	4
Colander, Stainless Steel 16-Qt	WP 0041 00, COEI, Item 95	2
Cover, Cooking Pot	WP 0041 00, COEI, Item 21	4
Cover, Pan, Food Serving	WP 0041 00, COEI, Item 17	9
Cover, Steam Table, Full Size	WP 0041 00, COEI, Item 92	12
Cover, Steam Table, Half Size	WP 0041 00, COEI, Item 93	12
Food Container, Insulated	WP 0041 00, COEI, Item 28	5
Oven	WP 0041 00, COEI, Item 14	1
Pan, Baking and Roast, Bottom	WP 0041 00, COEI, Item 98	10
Pan, Baking and Roast, Top	WP 0041 00, COEI, Item 97	10
Pan, Baking and Roasting	WP 0041 00, COEI, Item 96	20
Pan, Baking Sheet, Aluminum, 26-in X 18-in	WP 0041 00, COEI, Item 99	30
Pan, Food Serving and Storage	WP 0041 00, COEI, Item 16	45
Pan, Steam Table, Large	WP 0041 00, COEI, Item 90	6
Pan, Steam Table, Small	WP 0041 00, COEI, Item 91	12
Rack Assembly, Storage/Drying	WP 0041 00, COEI, Item 10	6
Reusable Oven Container	WP 0041 00, COEI, Item 41	1
Special Purpose Web, Tiedown	WP 0041 00, COEI, Item 4	5
Sponge, Cellulose	WP 0041 00, BII, Item 6	60
Strainer, 5½-Qt	WP 0041 00, COEI, Item 100	1
TM 10-7310-282-10	WP 0041 00, BII, Item 2	1

**Table 5. Inventory List for Kitchen Kit Part E Type 10P.**

<b>Subcomponent</b>	<b>Where Listed/Illustrated</b>	<b>Qty</b>
Ice Making Machine, 208VAC, 500-lb	WP 0041 00, COEI, Item 72	1
Mixing Machine, Food, Electric, 115VAC, w/ Attachments	WP 0041 00, COEI, Item 118	1
Special Purpose Web, Tiedown	WP 0041 00, COEI, Item 4	4
Steam Kettle, Floor Standing, 20-Gal	WP 0041 00, COEI, Item 117	1
Steam Kettle, Table Top, 6-Gal, Tilt	WP 0041 00, COEI, Item 116	1
TM 10-7310-282-10	WP 0041 00, BII, Item 2	1

Refer to TM 10-5419-206-13, "Operator's, Unit, and Direct Support Maintenance for Force Provider" as well as Unit SOP to position equipment and place implements after unpacking.

**OPERATION OF FOOD SERVICE EQUIPMENT**

Food Warming Cabinet .....	WP 0007 00
Mechanically Cooled Beverage Dispenser .....	WP 0008 00
Griddle.....	WP 0009 00
Ice Machine .....	WP 0010 00
Steam Kettle.....	WP 0011 00
Steam Kettle (Tilting Type).....	WP 0012 00
Meat Slicing Machine .....	WP 0013 00
Mixing Machine .....	WP 0014 00
Oven.....	WP 0015 00
Tilt Fry Pan / Tilt Griddle.....	WP 0016 00
Popcorn Machine .....	WP 0017 00
20 Cubic Foot Refrigerator .....	WP 0018 00
2 Section Refrigerator .....	WP 0018 00
3 Section Refrigerator .....	WP 0018 00
Tabletop Steam Kettle.....	WP 0019 00
Steam Table .....	WP 0020 00
Electric Toaster .....	WP 0021 00
Coffee Urn .....	WP 0022 00

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**OPERATOR MAINTENANCE  
FORCE PROVIDER FOOD SERVICE EQUIPMENT  
OPERATION UNDER USUAL CONDITIONS – FOOD SERVICE INVENTORY FPL**

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**GENERAL****NOTE**

This Work Package covers the unpacking and inventory of Food Service equipment for Force Provider (Lite) modules. Do not use this Work Package to inventory standard Force Provider modules – refer to WP 0005 00.

Before assembly and preparation for use of the food service subsystem, the Force Provider Module site selection, planning, preparation, staking and staging of the food service site must be completed. The food service subsystem requires connection to a power source, potable water distribution, and the graywater collection subsystem. Prior to assembly and preparation for use of the food service subsystem, Force Provider Module level site selection, site planning, site preparation, staking and staging of the food service site must be completed.

**UNPACKING AND INVENTORY**

Unpack and inventory food service subsystem components using Tables 1 through 4 of this work package.

**NOTE**

TRICON 10H, Kitchen Kit, Part B is not included in FP(L) modules.

Food service collection equipment is packed in the following container types and quantities:

One TRICON type 10B Kitchen Kit, Part A  
One TRICON type 10M Kitchen Kit, Part C  
One TRICON type 10N Kitchen Kit, Part D  
One TRICON type 10P Kitchen Kit, Part E

The Single Coffee Urn is packed in TRICON 10G.

Open each container and check its contents against Tables 1 through 4 for the container type (the container type is stenciled on container door).

Remove each item from the container and set it aside, but not in an area where equipment is to be positioned for operation.

Retain all dunnage and packing materials for use when repacking.

Table 1. Inventory List for Kitchen Kit Part A, Type 10B.

Subcomponent	Where Listed/Illustrated	Qty
Brush (in rack set 1)	WP 0041 00, COEI, Item 39	2
Can Opener, Hand (in rack set 1)	WP 0041 00, COEI, Item 29	4
Container, Oven, Reusable	WP 0041 00, COEI, Item 41	1
Cook Pot, 10-Gal without cover (2 each in rack set 1 & 2)	WP 0041 00, COEI, Item 24	4
Cook Pot, 15-Gal w/cover (2 each in rack set 1 & 2)	WP 0041 00, COEI, Item 25	4
Cookie Cutter (in rack set 1)	WP 0041 00, COEI, Item 40	2
Cover, Cooking Pot	WP 0041 00, COEI, Item 21	4
Cover, Food Serving Pan (in rack set 3)	WP 0041 00, COEI, Item 17	3
Dust Pan	WP 0041 00, COEI, Item 9	2
Fire Extinguisher (in rack set 1)	WP 0041 00, COEI, Item 2	6
First Aid Kit (in rack set 1)	WP 0041 00, BII, Item 3	2
Flour Sifter (in rack set 1)	WP 0041 00, COEI, Item 18	2
Food Container, Insulated	WP 0041 00, COEI, Item 28	3
Fork, 21-in (in rack set 2)	WP 0041 00, COEI, Item 31	6
Fork, Food Preparation (in rack set 1 & 2)	WP 0041 00, COEI, Item 34	4
Garden Hose Assembly (in rack set 1)	WP 0041 00, COEI, Item 6	2
Griddle, Self-heating with Splash Guard	WP 0041 00, COEI, Item 15	1
Knife (in rack set 1 & 2)	WP 0041 00, COEI, Item 7	4
Ladle, 2-oz (in rack set 2)	WP 0041 00, COEI, Item 22	4
Liquid Measure 2-qt (in rack set 1 & 2)	WP 0041 00, COEI, Item 19	4
Measuring Set, Spoon (in rack set 1)	WP 0041 00, COEI, Item 23	4
Oven	WP 0041 00, COEI, Item 14	1
Pan, Food Serving and Storage	WP 0041 00, COEI, Item 16	27
Peeler, Potato (in rack set 1)	WP 0041 00, COEI, Item 20	4
Pepper Shaker (inside food container)	WP 0041 00, COEI, Item 37	48
Pitcher, 5-qt (in rack set 1)	WP 0041 00, COEI, Item 35	3
Pot Holder (in rack set 1)	WP 0041 00, COEI, Item 27	8
Salt Shaker (inside food container)	WP 0041 00, COEI, Item 38	48
Server, Pie and Cake (in rack set 2)	WP 0041 00, COEI, Item 33	2
Shelf Assembly, Storage and Display	WP 0041 00, COEI, Item 3	4
Special Purpose Web, Tiedown	WP 0041 00, COEI, Item 4	6
Splash Plate (in rack set 1)	WP 0041 00, COEI, Item 26	4
Spoon, Service, 15-in (in rack set 1 & 2)	WP 0041 00, COEI, Item 32	8
Spoon, Service, Slotted (in rack set 1 & 2)	WP 0041 00, COEI, Item 30	16
Steam Table, Electric, w/accessories and Sneeze Guard	WP 0041 00, COEI, Item 12	1
Steel Wool, 1-lb roll (in rack set 2)	WP 0041 00, BII, Item 5	6
Stone, Sharpening (in rack set 2)	WP 0041 00, COEI, Item 5	1
Storage/drying Rack	WP 0041 00, COEI, Item 10	6
Sugar Dispenser (inside food container)	WP 0041 00, COEI, Item 36	48
Table, Folding Legs	WP 0041 00, COEI, Item 11	4
Thermometer, Bi-metal, Type III	WP 0041 00, COEI, Item 8	4
Water Can, Military	WP 0041 00, COEI, Item 13	10
TM 10-7310-282-10	WP 0041 00, BII, Item 2	1
TM 10-5419-206-13	WP 0041 00, BII, Item 7	1
TM 10-5419-206-23P	WP 0041 00, BII, Item 8	1
TM 10-7360-208-13&P	WP 0041 00, BII, Item 1	1

Table 2. Inventory List For Kitchen Kit Part C, Type 10M.

Subcomponent	Where Listed/Illustrated	Qty
Bakers Scraper (Pan Fry Box 2)	WP 0041 00, COEI, Item 85	2
Can, Ash and Garbage, 32-Gal	WP 0041 00, COEI, Item 78	2
Container, Oven, Reusable	WP 0041 00, COEI, Item 41	1
Cover, Can, Ash and Garbage	WP 0041 00, COEI, Item 79	2
Cutlery Roll (Pan Fry Box 1)	WP 0041 00, COEI, Item 87	2
Dispenser, Liquid, 5-Gal	WP 0041 00, COEI, Item 82	5
Dispenser, Mechanical, Beverage	WP 0041 00, COEI, Item 80	1
Food Container, Insulated	WP 0041 00, COEI, Item 28	4
Holder, Scouring Brick (Pan Fry Box 1)	WP 0041 00, COEI, Item 88	2
Ice Making Machine, 208VAC, 500 Pound Capacity	WP 0041 00, COEI, Item 72	1
Knife, Slicing (Pan Fry Box 1)	WP 0041 00, COEI, Item 86	4
Meat Slicing Machine, 115VAC	WP 0041 00, COEI, Item 83	1
Oven	WP 0041 00, COEI, Item 14	1
Pliers, Slip Joint (Pan Fry Box 1)	WP 0041 00, COEI, Item 75	2
Refrigerator, 20 Cubic Foot, 120VAC	WP 0041 00, COEI, Item 73	1
Rolling Pin (Pan Fry Box 1)	WP 0041 00, COEI, Item 84	2
Screwdriver, Cross Tip 4-In (Pan Fry Box 1)	WP 0041 00, COEI, Item 76	2
Screwdriver, Flat Tip (Pan Fry Box 1)	WP 0041 00, COEI, Item 74	2
Special Purpose Web, Tiedown	WP 0041 00, COEI, Item 4	9
Stainless Steel Sponge (Pan Fry Box 1)	WP 0041 00, BII, Item 4	6
Steel Wool	WP 0041 00, BII, Item 5	8
Toaster, 115VAC	WP 0041 00, COEI, Item 81	1
Wrench, Adjustable (Pan Fry Box 1)	WP 0041 00, COEI, Item 77	2
TM 10-7310-282-10	WP 0041 00, BII, Item 2	1

Table 3. Inventory List For Kitchen Kit Part D, Type 10N.

Subcomponent	Where Listed/Illustrated	Qty
Board, Food Chopping	WP 0041 00, COEI, Item 94	4
Butcher's Steel	WP 0041 00, COEI, Item 101	5
Can Opener, Mounted	WP 0041 00, COEI, Item 114	4
Can, Ash And Garbage, 32-Gal	WP 0041 00, COEI, Item 78	2
Colander, Stainless Steel 16-Qt	WP 0041 00, COEI, Item 95	2
Cover, Can Ash And Garbage	WP 0041 00, COEI, Item 79	2
Cover, Cooking Pot	WP 0041 00, COEI, Item 21	4
Cover, Pan, Food Serving	WP 0041 00, COEI, Item 17	9
Cover, Steam Table, Full Size	WP 0041 00, COEI, Item 92	12
Cover, Steam Table, Half Size	WP 0041 00, COEI, Item 93	12
Dipper, Kitchen	WP 0041 00, COEI, Item 102	4
Dispenser, Liquid, 5-Gal	WP 0041 00, COEI, Item 82	15
Dispenser, Mechanical, Beverage	WP 0041 00, COEI, Item 80	1
Egg Whip	WP 0041 00, COEI, Item 103	2
Food Container, Insulated	WP 0041 00, COEI, Item 28	5
Food Turner	WP 0041 00, COEI, Item 54	6
Fork, Food Preparation, Long	WP 0041 00, COEI, Item 105	6
Ice Pick	WP 0041 00, COEI, Item 115	2
Knife, Boning	WP 0041 00, COEI, Item 106	4
Knife, Cook's	WP 0041 00, COEI, Item 110	4
Knife, Paring	WP 0041 00, COEI, Item 109	4
Knife, Slicing	WP 0041 00, COEI, Item 111	4
Knife, Steak	WP 0041 00, COEI, Item 107	4
Ladle, Kitchen, 4-Oz	WP 0041 00, COEI, Item 112	3
Ladle, Kitchen, 8-Oz	WP 0041 00, COEI, Item 113	4
Oven	WP 0041 00, COEI, Item 14	1
Pan, Baking and Roast, Bottom	WP 0041 00, COEI, Item 98	10
Pan, Baking and Roast, Top	WP 0041 00, COEI, Item 97	10
Pan, Baking and Roasting	WP 0041 00, COEI, Item 96	20
Pan, Baking Sheet, Aluminum, 26-in X 18-in	WP 0041 00, COEI, Item 99	30
Pan, Food Serving And Storage	WP 0041 00, COEI, Item 16	45
Pan, Steam Table, Large	WP 0041 00, COEI, Item 90	6
Pan, Steam Table, Small	WP 0041 00, COEI, Item 91	12
Rack Assembly, Storage and Drying	WP 0041 00, COEI, Item 10	6
Reusable Oven Container	WP 0041 00, COEI, Item 41	1
Skimmer, Kitchen	WP 0041 00, COEI, Item 60	4
Special Purpose Web, Tiedown	WP 0041 00, COEI, Item 4	5
Sponge, Cellulose	WP 0041 00, BII, Item 6	60
Spoon, Food Service 21-in	WP 0041 00, COEI, Item 108	20
Stone, Sharpening, Medium Grid	WP 0041 00, COEI, Item 5	2
Strainer, 5½ -Qt	WP 0041 00, COEI, Item 100	1
Toaster	WP 0041 00, COEI, Item 81	1
TM 10-7310-282-10	WP 0041 00, BII, Item 2	1
TM 10-7360-208-13&P	WP 0041 00, BII, Item 1	1



**Table 4. Inventory List For Kitchen Kit Part E, Type 10P.**

<b>Subcomponent</b>	<b>Where Listed/Illustrated</b>	<b>Qty</b>
Ice Making Machine, 208VAC, 500-lb	WP 0041 00, COEI, Item 72	1
Mixing Machine, Food, Electric, 115VAC, w/ Attachments	WP 0041 00, COEI, Item 118	1
Special Purpose Web, Tiedown	WP 0041 00, COEI, Item 4	4
Steam Kettle, Floor Standing, 20-Gal	WP 0041 00, COEI, Item 117	1
Steam Kettle, Table Top, 6-Gal, Tilt	WP 0041 00, COEI, Item 116	1
TM 10-7310-282-10	WP 0041 00, BII, Item 2	1

Refer to TM 10-5419-206-13, "Operator's, Unit, and Direct Support Maintenance for Force Provider" as well as Unit SOP to position equipment and place implements after unpacking.

**OPERATION OF FOOD SERVICE EQUIPMENT**

Food Warming Cabinet .....	WP 0007 00
Mechanically Cooled Beverage Dispenser .....	WP 0008 00
Griddle.....	WP 0009 00
Ice Machine .....	WP 0010 00
Steam Kettle.....	WP 0011 00
Steam Kettle (Tilting Type).....	WP 0012 00
Meat Slicing Machine .....	WP 0013 00
Mixing Machine .....	WP 0014 00
Oven.....	WP 0015 00
Tilt Fry Pan / Tilt Griddle.....	WP 0016 00
Popcorn Machine .....	WP 0017 00
20 Cubic Foot Refrigerator .....	WP 0018 00
2 Section Refrigerator .....	WP 0018 00
3 Section Refrigerator .....	WP 0018 00
Tabletop Steam Kettle.....	WP 0019 00
Steam Table .....	WP 0020 00
Electric Toaster .....	WP 0021 00
Coffee Urn .....	WP 0022 00



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**OPERATOR MAINTENANCE  
FORCE PROVIDER FOOD SERVICE EQUIPMENT  
OPERATION UNDER USUAL CONDITIONS – FOOD WARMING CABINET**

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**SITING REQUIREMENTS**

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**WARNING**

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A minimum of two persons should move the Food Warming Cabinet. Failure to observe safety precautions can result in injury or death to personnel.

The food warming cabinet is mobile, and can be positioned and repositioned as needed. To be safely operated, the food warming cabinet requires a flat and level floor area.





### **WARNING**

Ensure that all components in direct contact with food or beverages have been cleaned and sanitized in accordance with unit SOP and FM 10-23 (Basic Doctrine for Army Field Feeding).

### **OPERATION**

To operate the food warming cabinet, proceed as follows:

1. Ensure that the water reservoir is filled with at least 3 pints (1.5 litres) of potable water.
2. Set all controls **(1)** to OFF.
3. Connect the power cord to a nearby 120VAC receptacle.
4. Adjust the controls **(1)** for the desired heat and humidity level.
5. Allow the unit approximately 30 minutes to come up to temperature before placing food inside.



**PREPARE FOR MOVEMENT**

1. Disconnect the food warming cabinet from any electrical power.
2. Clean and sanitize the cabinet interior, ensuring that the water reservoir is dry.
3. Pack the Food Warming Cabinet in accordance with the instructions given in WP 0023 00 (Force Provider) or WP 0024 00 (Force Provider (L)).

**END OF WORK PACKAGE**



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**OPERATOR MAINTENANCE  
FORCE PROVIDER FOOD SERVICE EQUIPMENT  
OPERATION UNDER USUAL CONDITIONS – MECHANICALLY COOLED BEVERAGE DISPENSER**

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**SITING REQUIREMENTS**

The mechanically cooled beverage dispenser must be mounted at least 36 inches from the floor in the installation area; for example, it may be placed on one of the folding tables furnished with the Force Provider Electric Kitchen. The mechanically cooled beverage dispenser should be installed in an area serviced by air conditioning to allow for the most efficient operation of the unit, both mechanically and for ease of access.

**ASSEMBLY AND PREPARATION FOR USE**

**CAUTION**

Ensure that the mechanically cooled beverage dispenser has been stored upright when packed. Do not allow the mechanically cooled beverage dispenser to be placed in any other position for longer than 5 minutes. If the mechanically cooled beverage dispenser has been stored in any other than the upright position, allow the unit to stand upright at least 12-hours before connecting power and operating. Failure to do so may allow oil to lock the compressor, rendering the unit unserviceable and possibly damaging the compressor. Observe these precautions with any item possessing a refrigeration system.

**NOTE**

Procurement over time within this National Stock Number has produced equipment which, while similar in function and operation, may not exactly match the equipment described here. Consult the commercial manuals supplied with your equipment when necessary to address differences.

**Unpack the Mechanically Cooled Beverage Dispenser**

1. Remove the dispenser components from all packing materials.
2. Store the packing materials in a secure, out of the way, location. Do not discard packing materials.

**Inventory the Mechanically Cooled Beverage Dispenser**

**NOTE**

Procurement over time within this National Stock Number has produced equipment which, while similar in function and operation, may not exactly match the equipment described here. Consult the commercial manuals supplied with your equipment when necessary to address differences.

1. Inventory the loose components of the mechanically cooled beverage dispenser.

<b>Component (Jetspray JT-30 Series)</b>	<b>Quantity</b>
Cover	3
Bowl	3
Pump Cover	3
Impeller	3
Spout with Gasket	3
Bowl Gasket	3
Chassis	1
Drip Pan	3
Cup Rest	3
Impeller Support Pin with Cotter Pin	3

<b>Component (Crathco D25 Series)</b>	<b>Quantity</b>
Cover	2
Bowl	2
Pump Cover	2
Impeller	2
Spout with Gasket	2
Bowl Gasket	2
Chassis	1
Drip Pan	2
Cup Rest	2
Spray Tube	2

2. After inventory, sanitize all components in accordance with unit SOP and FM 10-23 (Basic Doctrine for Army Field Feeding).



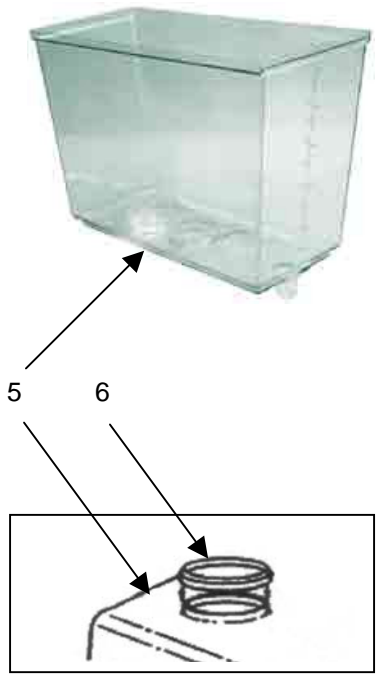
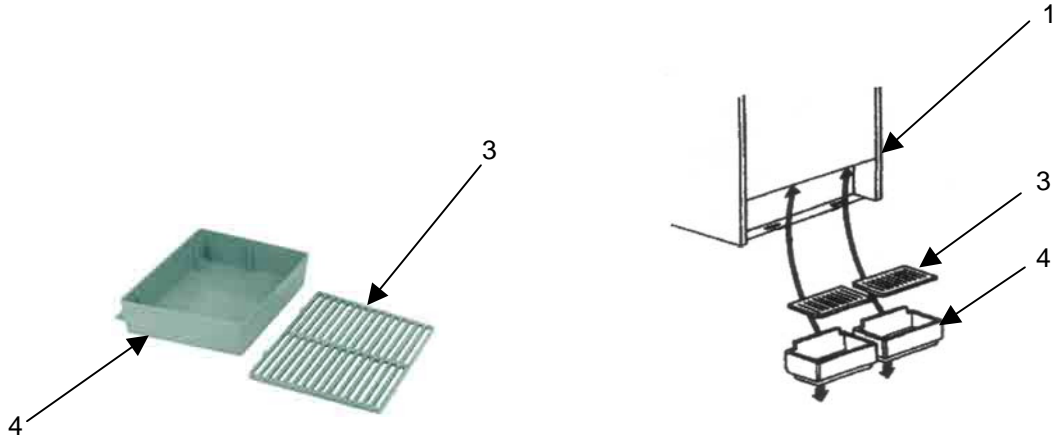
**Assembly – Jetspray DT-30****WARNING**

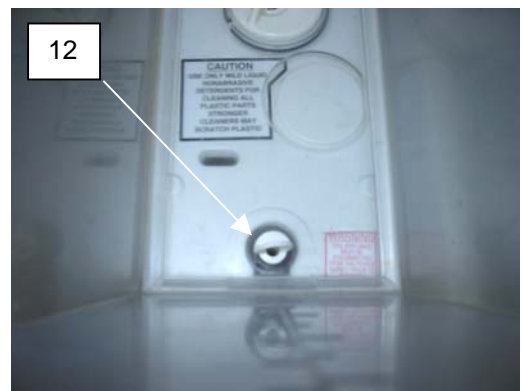
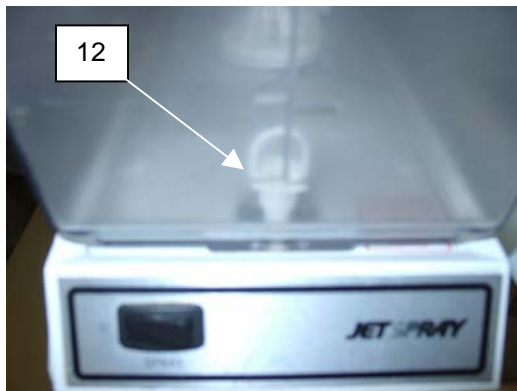
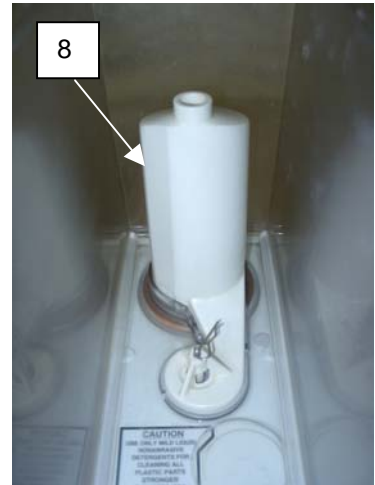
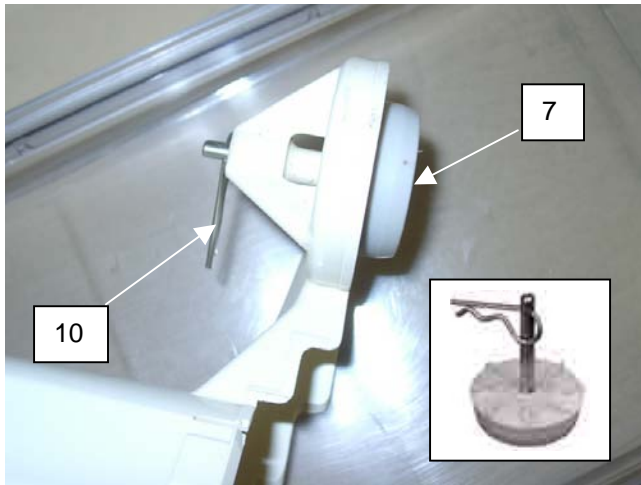
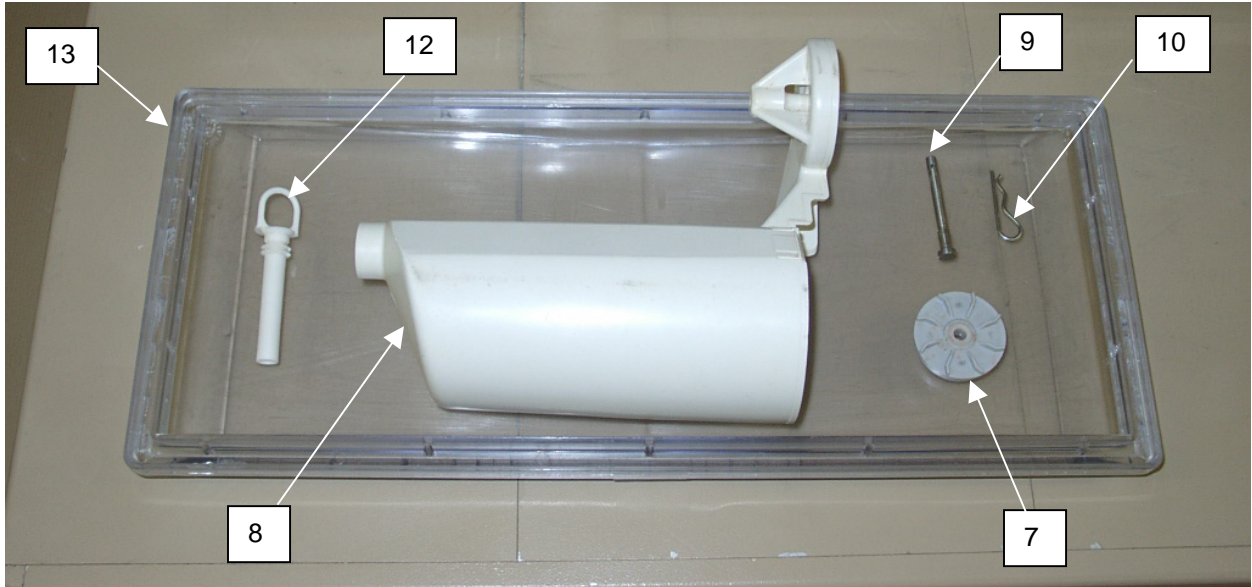
Ensure that all components in direct contact with food or beverages have been cleaned and sanitized in accordance with unit SOP and FM 10-23 (Basic Doctrine for Army Field Feeding). Do not proceed until all components have been sanitized. Serious illness or death by contamination or disease may result from failure to observe safety precautions.

**CAUTION**

Do not pick up the beverage dispenser by the ventilation slots.

1. Pick up the dispenser chassis **(1)** by placing your fingers under the base plate, and place the unit on its operating location. Ensure there are at least six inches of air space on both sides and rear of the dispenser next to the ventilation slots.
2. Make sure all switches **(2)** are in the "OFF" position.
3. Place a cup rest **(3)** in the top of each drip pan **(4)** and assemble the drip pans onto the front of the dispenser.
4. Set the clear plastic bowl **(5)** upside-down on a clean working surface.
5. Wet the bowl gasket **(6)** and the bowl opening with potable water.
6. Place the bowl gasket **(6)** over the neck of the large opening on the bottom of the bowl **(5)**.
7. Place the bowl **(5)** right-side up, and with the bowl gasket **(6)** centered on the cooling plate, grasp the bowl by the opposite top corners.
8. With a back and forth twisting motion and a downward pressure the bowl **(5)** will slip down into position. Make sure the bowl is square to the front and over the drip pan. If necessary for easier assembly, a touch of corn oil can be put on the outside of the gasket.
9. Place the impeller **(7)** into the pump cover **(8)**, vanes up.
10. Slide the impeller support pin **(9)** through the impeller **(7)** and pump cover **(8)**, so that the tapered end protrudes from the upper side of the pump cover. Retain with cotter pin **(10)**.
11. Position the pump cover **(8)** into the recess formed in the interior of the bowl **(5)**. Press in firmly to lock the pump cover into place.
12. While holding the handle **(11)** in place and pushed back, carefully lower the pinch tube **(12)** down through the valve hole and through the hole in the handle.
13. Release handle **(11)**.
14. Install cover **(13)** onto top of bowl **(5)**.
15. Plug the service cord into a standard 115VAC 15A three-prong outlet.





**Assembly – Crathco D25****WARNING**

Ensure that all components in direct contact with food or beverages have been cleaned and sanitized in accordance with unit SOP and FM 10-23 (Basic Doctrine for Army Field Feeding). Do not proceed until all components have been sanitized. Serious illness or death by contamination or disease may result from failure to observe safety precautions.

**CAUTION**

Do not pick up the beverage dispenser by the ventilation slots.

1. Pick up the dispenser chassis **(1)** by placing your fingers under the base plate, and place the unit on its operating location. Ensure there are at least six inches of air space on both sides and rear of the dispenser next to the ventilation slots.
2. Make sure all switches **(2)** are in the "OFF" position.
3. Place a cup rest **(3)** in the top of each drip pan **(4)** and assemble the drip pans onto the front of the dispenser.
4. Set the clear plastic bowl **(5)** upside-down on a clean work surface.
5. Wet the bowl gasket **(6)** and the bowl opening with potable water.
6. Place the bowl gasket **(6)** over the neck of the large opening on the bottom of the bowl **(5)**.
7. Place the bowl **(5)** right-side up, and with the bowl gasket **(6)** centered on the cooling plate and guide pin, grasp the bowl by the opposite top corners.
8. With a back and forth twisting motion and a downward pressure the bowl **(5)** will slip down into position. Make sure the bowl is square to the front and over the drip pan **(4)**. If necessary for easier assembly, a touch of corn oil can be put on the outside of the gasket **(6)**.
9. Place the bearing sleeve **(7)** over the guide pin **(8)** in the middle of the cooling plate.
10. There are flats on the outside of the guide pin **(8)** and on the inside of the bearing sleeve **(7)**. Turn the bearing sleeve until the flats line up and it drops down onto the cooling plate. The flange on the bearing sleeve must rest on the cooling plate.

**NOTE**

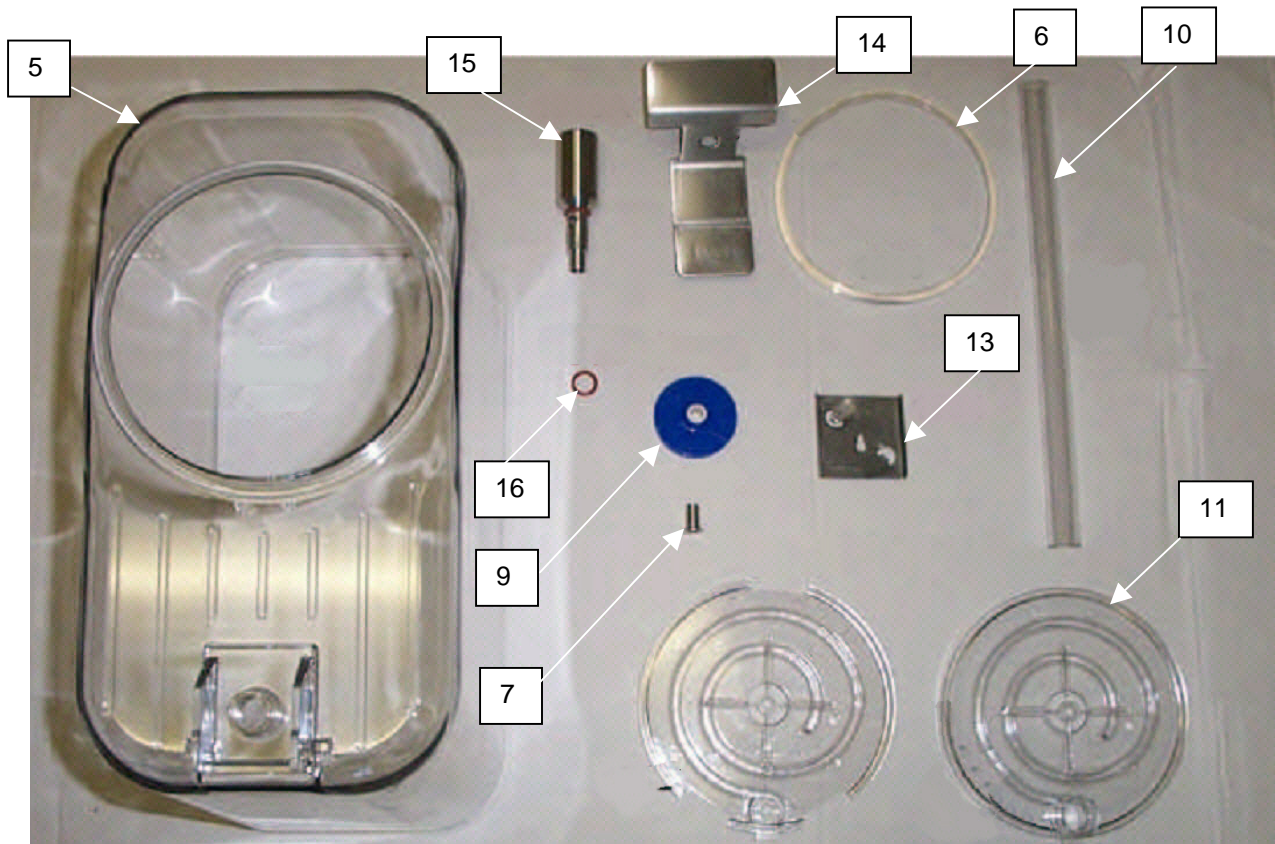
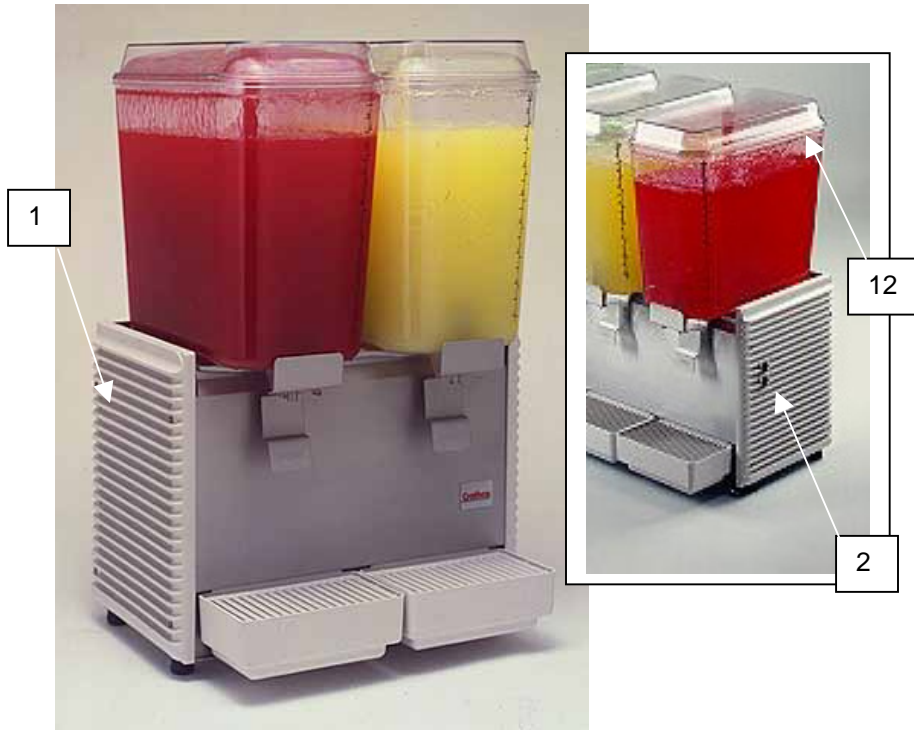
The bearing sleeve will be locked in place and in its proper position after it slides down over the guide pin and rests on the cooling plate.

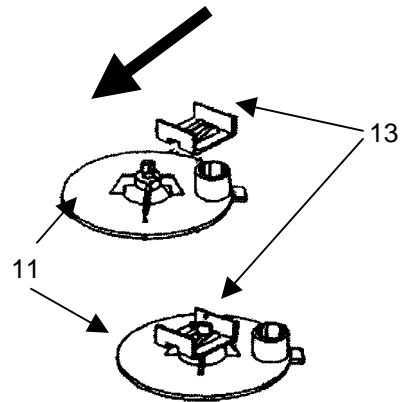
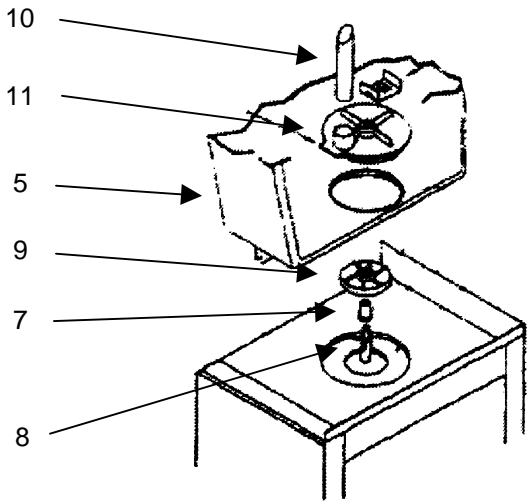
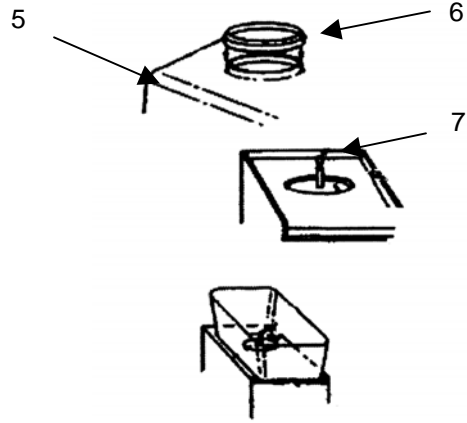
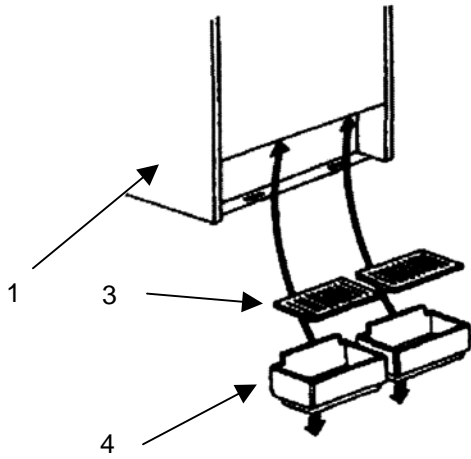
11. Place the impeller **(9)** over the bearing sleeve **(7)**, fin side up.
12. Press the tube **(10)** into the sleeve on the top of the pump cover **(11)**. Make sure the tube is into the sleeve far enough so the bowl cover **(12)** will not hit it when the cover is situated.

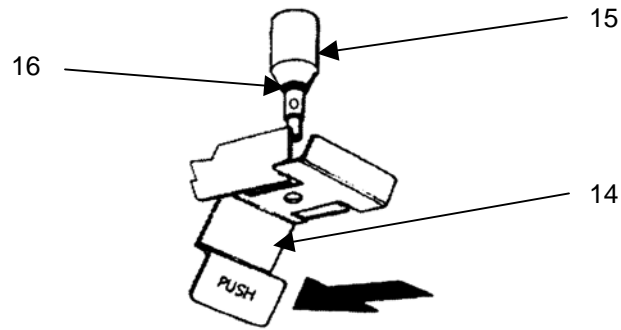
**NOTE**

The  $\frac{3}{8}$ -inch tab on the front of the pump cover, next to the spray tube holder, goes between the tube locator buttons on the bowl.

13. Place the pump cover **(11)** over the guide pin **(8)**, keeping the spray tube **(10)** toward the front of the unit and centered in the bowl **(5)**. The tip of the tube is "pinched" and bent. The "pinched" and bent top end of the tube is to be pointed toward the front (valve and handle end) of the bowl.
14. Slide the lockdown washer **(13)** onto the pump cover **(11)** and the head of the guide pin **(8)** in the keyway as shown in step #1 of the figure.
15. Slide the lockdown washer **(13)** under the head of the guide pin **(8)** until the neck of the guide pin is completely in the locking keyway. The lockdown washer should be snug and can move no further. The pump cover **(11)** and bowl **(5)** are locked to the chassis **(1)** by the lockdown washer. Be sure the lockdown washer is properly locked before operating the dispenser.
16. Push the rear of the handle **(14)** up as far as it will go and lower the valve **(15)** down through the valve hole and through the hole in the handle.
17. Release handle **(14)**.
18. Push down on the front part of the handle **(14)** marked PUSH DOWN and release it several times to make sure the valve **(15)** moves up and down freely. To set the O-Ring **(16)**, press down on valve and twist.
19. Plug the service cord into a standard 115VAC 15A three-prong outlet.







### Operation

1. Ensure that the agitator pump and refrigeration system are OFF.
2. Remove the covers from the bowls.
3. Fill each bowl with water and drink mix as specified on the mix container.
4. Install the cover.
5. Turn the agitator pumps ON. Observe the discharge from the spray tube to verify proper operation of the agitator pump.
6. Turn the refrigeration system ON.
7. Monitor the beverage level during the course of the meal. Refill with water and drink mix when the bowl is approximately  $\frac{1}{4}$  full.



**Jetspray JT-30**



**Crathco D25**



**Cleaning**

1. After each meal, the dispenser must be cleaned and sanitized.
2. Turn the refrigeration system OFF.
3. Turn all agitators OFF.
4. Drain all remaining beverage mix from the bowls.
5. Remove the covers, and fill each bowl half full with potable water.
6. Reinstall the covers on each bowl, and turn all agitators ON for five minutes.
7. Turn agitators OFF, and drain each bowl.
8. Remove covers.
9. Remove pump cover and spray tube as an assembly.
10. Release bowl, and remove.
11. Remove valve and handle from bowl.
12. Remove impeller.
13. Clean and sanitize bowls, covers, pump covers, valves, valve handles, spray tubes, and impellers. This may be done in the Food Sanitation Center (FSC).

**CAUTION**

Do not use any tools or abrasives to clean the refrigeration coil. Unauthorized cleaning methods may severely damage the refrigeration system.

14. Clean and sanitize the refrigeration coil and bowl base.
15. Reassemble the dispenser as outlined on WP 0008 00, Assembly, Jetspray DT-30 Unit, and WP 0008 00, Assembly, Crathco D25 Unit.

**PREPARE FOR MOVEMENT**

1. Turn the refrigeration system OFF.
2. Turn all agitators OFF.
3. Drain all remaining beverage mix from the bowls.
4. Remove the covers, and fill each bowl half full with potable water.
5. Reinstall the covers on each bowl, and turn all agitators ON for five minutes.
6. Turn agitators OFF, and drain each bowl.
7. Remove covers.
8. Remove pump cover and spray tube as an assembly.
9. Release bowl, and remove.
10. Remove valve and handle from bowl.
11. Remove impeller.
12. Clean and sanitize bowls, covers, pump covers, valves, valve handles, spray tubes, and impellers. This may be done in the Food Sanitation Center (FSC).

**CAUTION**

Do not use any tools or abrasives to clean the refrigeration coil. Unauthorized cleaning methods may severely damage the refrigeration system.

13. Clean and sanitize the refrigeration coil and bowl base.
14. Pack the pump covers, valves, valve handles, spray tubes, and impellers into the bowls.
15. Cover the bowls, and tape the covers to the bowls.
16. Pack the bowls and the chassis into the saved packing materials.
17. Pack the dispenser in accordance with the instructions given in WP 0023 00 (Force Provider) or WP 0024 00 (Force Provider (Lite)).

**END OF WORK PACKAGE**

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**OPERATOR MAINTENANCE  
FORCE PROVIDER FOOD SERVICE EQUIPMENT  
OPERATION UNDER USUAL CONDITIONS – GRIDDLE**

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**SITING REQUIREMENTS**

Exact placement of the griddle within the Force Provider Electric Kitchen will be determined by the requirements of the unit, kitchen TEMPER layout, and the preference of the mess personnel.

Allow at least 18-inches of clearance from the back of the griddle to the TEMPER tent wall. Allow adequate space around the griddle for operation and servicing.



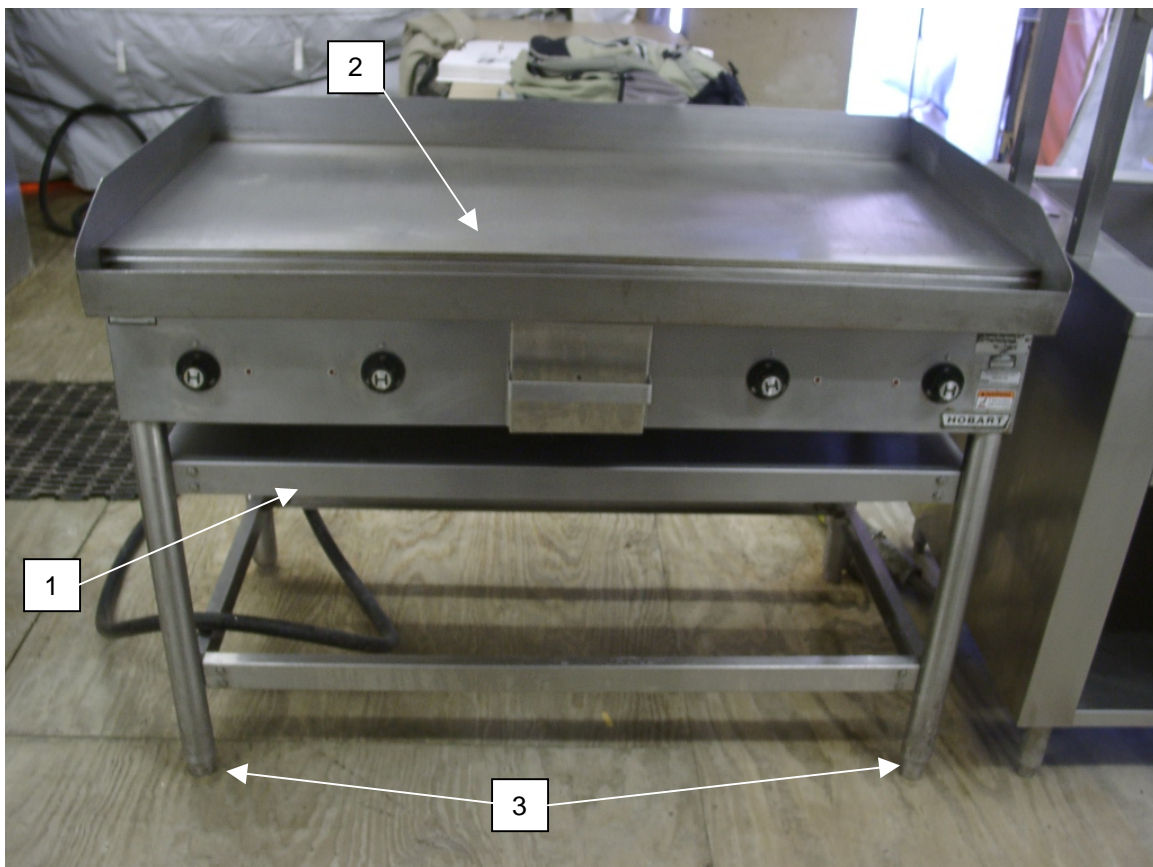
**ASSEMBLY AND PREPARATION FOR USE****WARNING**

The griddle is a four person lift. Do not attempt to lift or move the griddle without sufficient assistance. Failure to observe safety precautions may result in serious injury to personnel.

**NOTE**

An adjustable wrench is required to assemble the griddle.

1. Place the leg assembly **(1)** in the griddle's operating position.
2. Place the griddle **(2)** onto the leg assembly **(1)**. Attach the Griddle to the leg assembly with the bolts provided, and tighten with an adjustable wrench.
3. Level the griddle **(2)** front-to-back and side-to-side. Hold the leg with one hand to prevent the leg from loosening from the body and use a wrench to turn the foot **(3)** to increase or decrease leg height.



## OPERATION



### WARNING

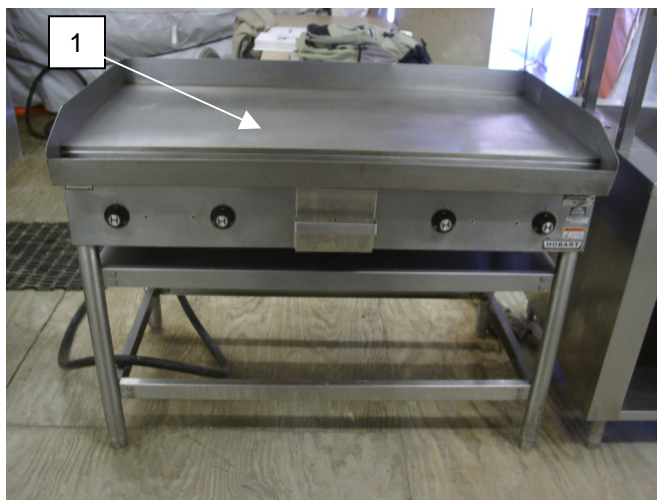
The griddle and its parts are hot. Use care when operating, cleaning and servicing the griddle. Failure to observe safety precautions may result in serious injury or death to personnel.

### CAUTION

The griddle plate is steel, but the surface is relatively soft and can be scored or dented by carelessly using a spatula. Be careful not to dent, scratch, or gouge the plate surface. Do not try to knock off loose food that may be on the spatula by tapping the corner or the edge of the spatula on the griddle surface.

### Seasoning the Griddle

1. The griddle is shipped with a protective coating of grease. Remove this grease when the griddle plate **(1)** is being cleaned prior to its first use. Using a mild detergent and hot water, wash the griddle well, rinse thoroughly with a clean, damp cloth, and wipe dry.
2. The metal surface **(1)** of the griddle is porous. Food tends to get trapped in these pores and stick; therefore, it is important to “season” or fill up these pores with cooking oil before cooking on any metal surfaced griddle. Seasoning gives the surface a slick, hard finish from which the food will release easily.
3. To season, heat the griddle to 400°F; when 400°F is reached, the indicator light goes off. Pour on a small amount of cooking oil (about one ounce per square foot of surface). With a cloth, spread the oil over the entire griddle surface to create a thin film. Wait two minutes, then wipe off excess oil. Repeat this operation.



## Operating the Griddle

1. To turn the griddle ON, turn the thermostats **(1)** to the desired setting.
2. To turn the griddle OFF, turn all thermostats **(1)** to the OFF position.
3. To preheat the griddle, turn the thermostats **(1)** on 15 to 20 minutes before cooking. Load the griddle and cook according to the recipe. Turn foods half-way through cooking time unless otherwise specified in the recipe.

### NOTE

Temperatures and times given in authorized recipes supercede all values given in Table 1.

4. Use the thermostat settings and times given in Table 1 as a guide to cooking common menu items.

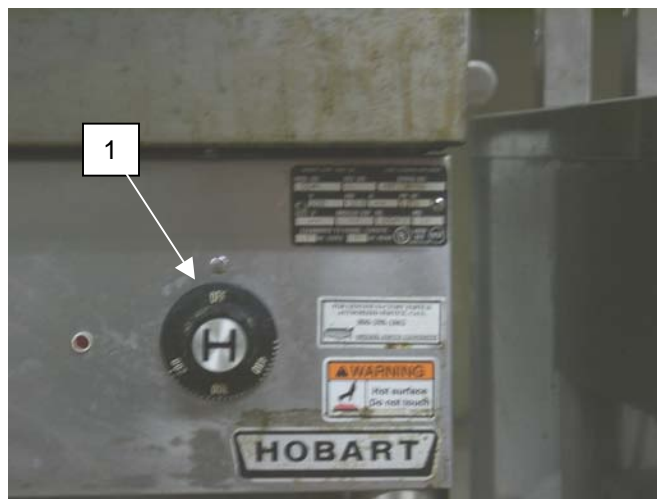
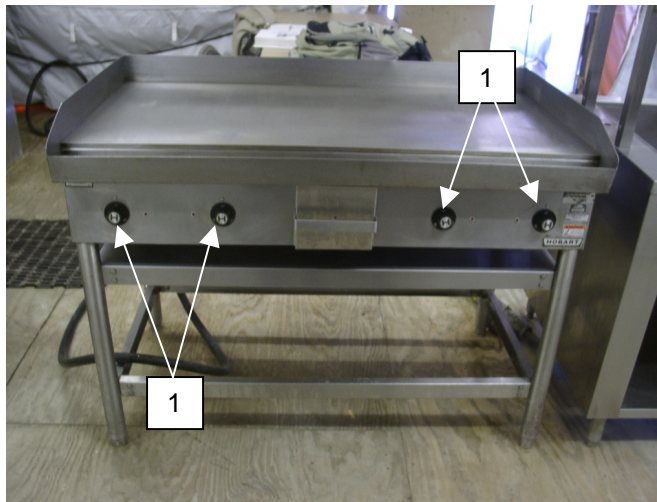


Table 1. Suggested Cooking Guide.

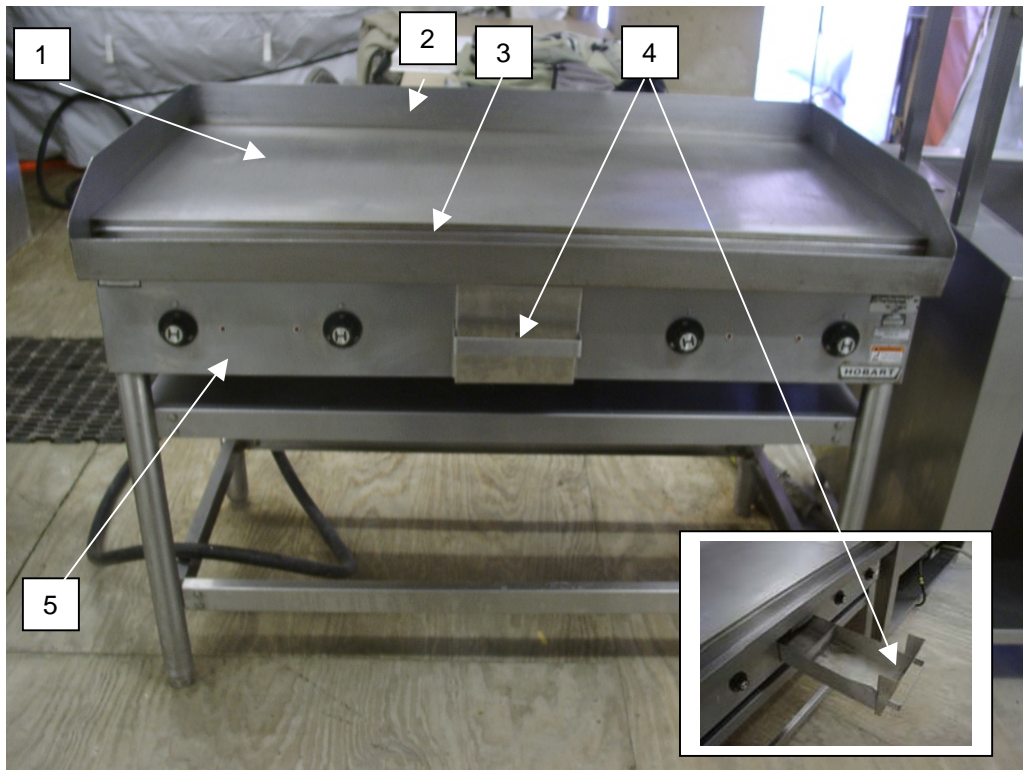
Food	Thermostat Setting (°F)	Time
<b>Sandwich Items</b>		
Hamburgers	350	3 to 4 minutes
Cheeseburgers	350	3 to 4 minutes
Cheese Sandwich	375	3 to 4 minutes
Ham Salad Sandwich	375	3 to 4 minutes
<b>Meats</b>		
Frankfurters	325	2 to 3 minutes
Minute Steak - Medium	400	3 to 4 minutes
Club Steaks - Inch thick, Medium	400	3 to 5 minutes
Ham Steaks	375	3 to 4 minutes
Beef Tenderloin	400	3 to 4 minutes
Boiled Ham	375	2 minutes
Corned Beef Patties	350	2 to 3 minutes
Bacon	350	2 to 3 minutes
Canadian Bacon	350	2 to 3 minutes
Sausage Links	350	3 minutes
Sausage Patties	350	3 minutes
<b>Eggs</b>		
Scrambled Eggs	300	1 to 2 minutes
Hard Fried Eggs	300	3 minutes
Soft Fried Eggs	300	2 minutes
Sunny Side Up Eggs	300	2 minutes
<b>Other</b>		
French Toast	350	2 to 3 minutes
Pancakes	375	2 minutes
American Fries	375	3 to 4 minutes
Potato Patties	375	3 to 4 minutes

## CAUTION

The griddle plate is steel, but the surface is relatively soft and can be scored or dented by carelessly using a spatula. Be careful not to dent, scratch, or gouge the plate surface. Do not try to knock off loose food that may be on the spatula by tapping the corner or the edge of the spatula on the griddle surface.

### Cleaning

1. Turn all thermostats to the OFF position.
2. After each meal, scrape the griddle surface **(1)** with a scraper or rigid spatula to remove excess fat and food particles. Take care that the integral splash back **(2)** is not rigorously banged with a spatula.
3. As necessary during use, wipe out accumulated material to provide good drainage. At the end of the workday, thoroughly clean and wipe out the grease trough **(3)** around the griddle.
4. Remove the grease drawer **(4)**, empty and wash it in the same manner as any ordinary cooking utensil. Wipe the griddle exterior **(5)** clean with a damp cloth and dry.
5. Weekly, or when necessary, polish the griddle surface **(1)** thoroughly using a pumice or griddle stone over the surface. Polish the metal while still warm (not hot). Do not use steel wool because it may damage the surface of the Griddle.
6. After each thorough cleaning, the cooking surface **(1)** must be reseasoned.





**PREPARE FOR MOVEMENT**

1. Turn all thermostats **(1)** to the OFF position.
2. Disconnect the electrical supply **(2)** to the griddle.
3. Clean the griddle, grease trough, and grease drawer.
4. Polish the griddle surface **(3)** thoroughly using a pumice or griddle stone **(4)** over the surface.
5. Allow the griddle surface **(3)** to cool and apply a heavy coat of cooking grease over the griddle plate to inhibit rusting.

**NOTE**

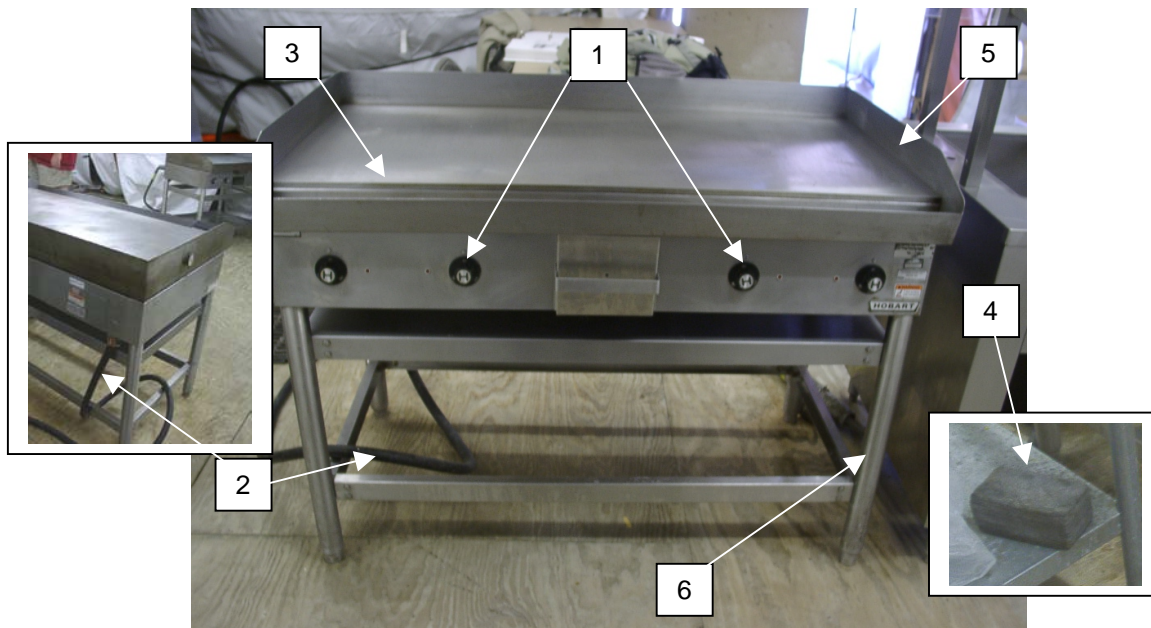
An adjustable wrench is required to disassemble the griddle.

6. Use an adjustable wrench to remove the bolts retaining the griddle **(5)** to the legs **(6)**.

**WARNING**

The griddle is a four person lift. Do not attempt to lift or move the griddle without sufficient assistance. Failure to observe safety precautions may result in serious injury to personnel.

7. Remove the griddle **(5)** from the leg assembly **(6)**.
8. Pack the griddle in accordance with the instructions given in WP 0023 00 (Force Provider) or WP 0024 00 (Force Provider (L)).

**END OF WORK PACKAGE**



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**OPERATOR MAINTENANCE  
FORCE PROVIDER FOOD SERVICE EQUIPMENT  
OPERATION UNDER USUAL CONDITIONS – ICE MACHINE**

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**SITING REQUIREMENTS**

Exact placement of the ice machine within the Force Provider Electric Kitchen will be determined by the requirements of the unit, kitchen TEMPER layout, and the preference of the mess personnel.

Potable water and 115VAC power connections must be available.

A minimum clearance of five-inches must be available for the rear and sides for proper condenser air flow and utility connections.

Drain lines for the ice machine and bin must be separate and well pitched, leading to an open or trapped drain within ten-feet of the ice machine.



**ASSEMBLY AND PREPARATION FOR USE****CAUTION**

Ensure that the ice machine has been stored upright when packed. Do not allow the ice machine to be placed in any other position for longer than 5 minutes. If the ice machine has been stored in any other than the upright position, allow the unit to stand upright at least 12 hours before connecting power and operating. Failure to do so may allow oil to lock the compressor, rendering the unit unserviceable and possibly damaging the compressor. Observe these precautions with any item possessing a refrigeration system.

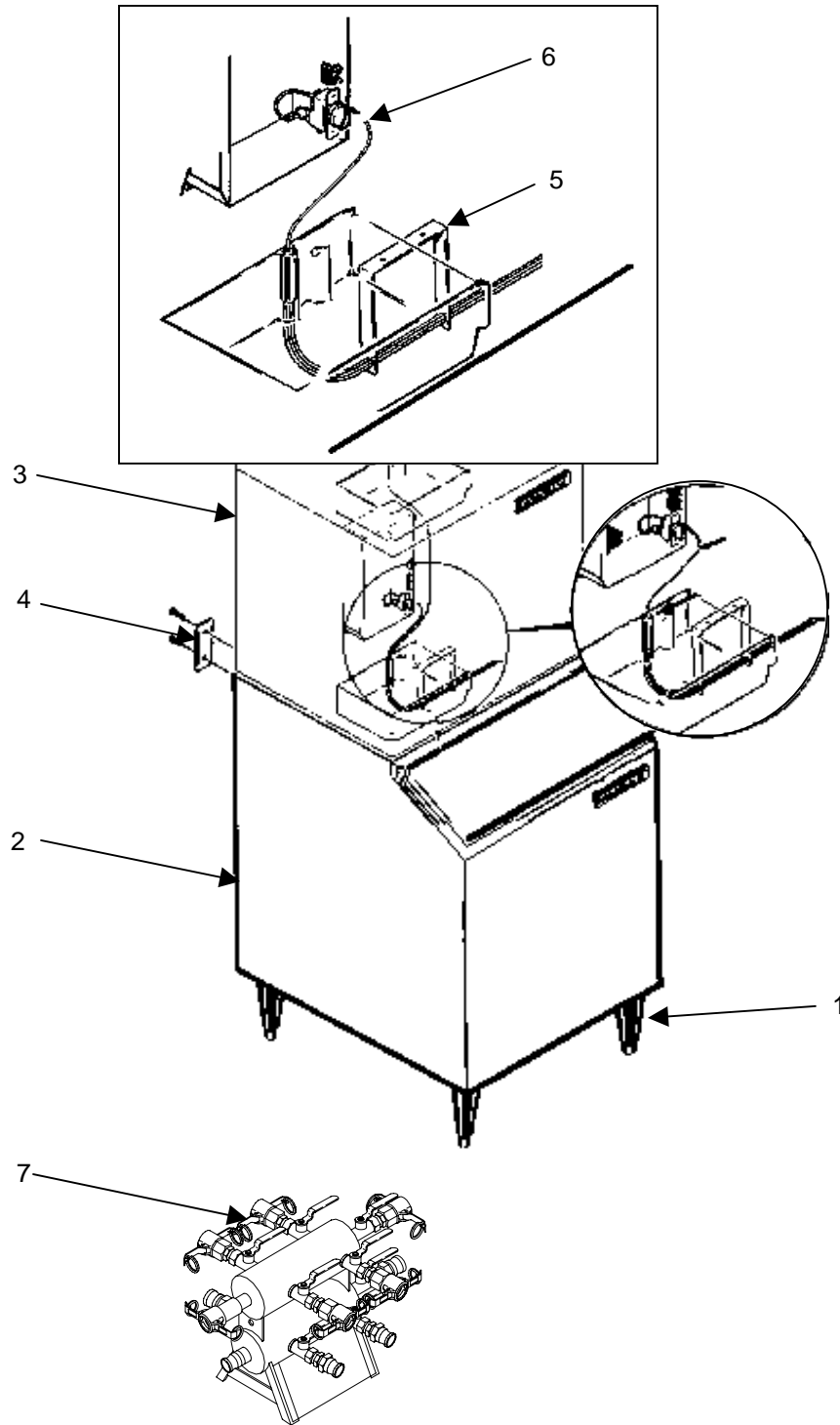
**Assembly**

1. Attach the legs **(1)** onto the ice storage bin **(2)**.
2. Remove the front panel from the ice maker. Remove the screws retaining the front cover, and remove the front cover.

**WARNING**

The ice machine is a four person lift. Do not attempt to lift or move the ice machine without sufficient assistance. Failure to observe safety precautions may result in serious injury to personnel.

3. Place the ice maker **(3)** onto the storage bin **(2)**.
4. Line up the ice maker **(3)**, and check that there is a good seal between the ice maker and the storage bin **(2)**.
5. Attach the ice maker **(3)** to the bin **(2)** using the straps **(4)** and bolts shipped with the ice machine.
6. Remove the rubber cap from the end of the thermostat bracket **(5)**.
7. Attach the bin thermostat bracket **(5)** to the bottom of the ice maker using the thumb screws provided.
8. There are pre-drilled and tapped holes located just behind the cube drop area. The end of the bin thermostat bracket **(5)** with the plastic tubing on it will fit into the hole in the base of the machine.
9. Locate and uncoil a portion of the bin thermostat capillary tube **(6)**.
10. Route the end of the capillary tube **(6)** into and through the bin thermostat bracket tube **(5)**. It should be inserted the full length of the tube, but not past the end.
11. Connect the ice maker to the water distribution manifold **(7)**. It may be necessary to adapt the ice maker water connection using components from the Force Provider Water Distribution Kit, TRICON 10D.
12. Install the front panel and retain with screws.



## OPERATION

**WARNING**

Ensure water connections have been inspected by Potable Water Service personnel (MOS 77W) before operating the ice machine. Improper water connections may cause serious illness or death to personnel.

**NOTE**

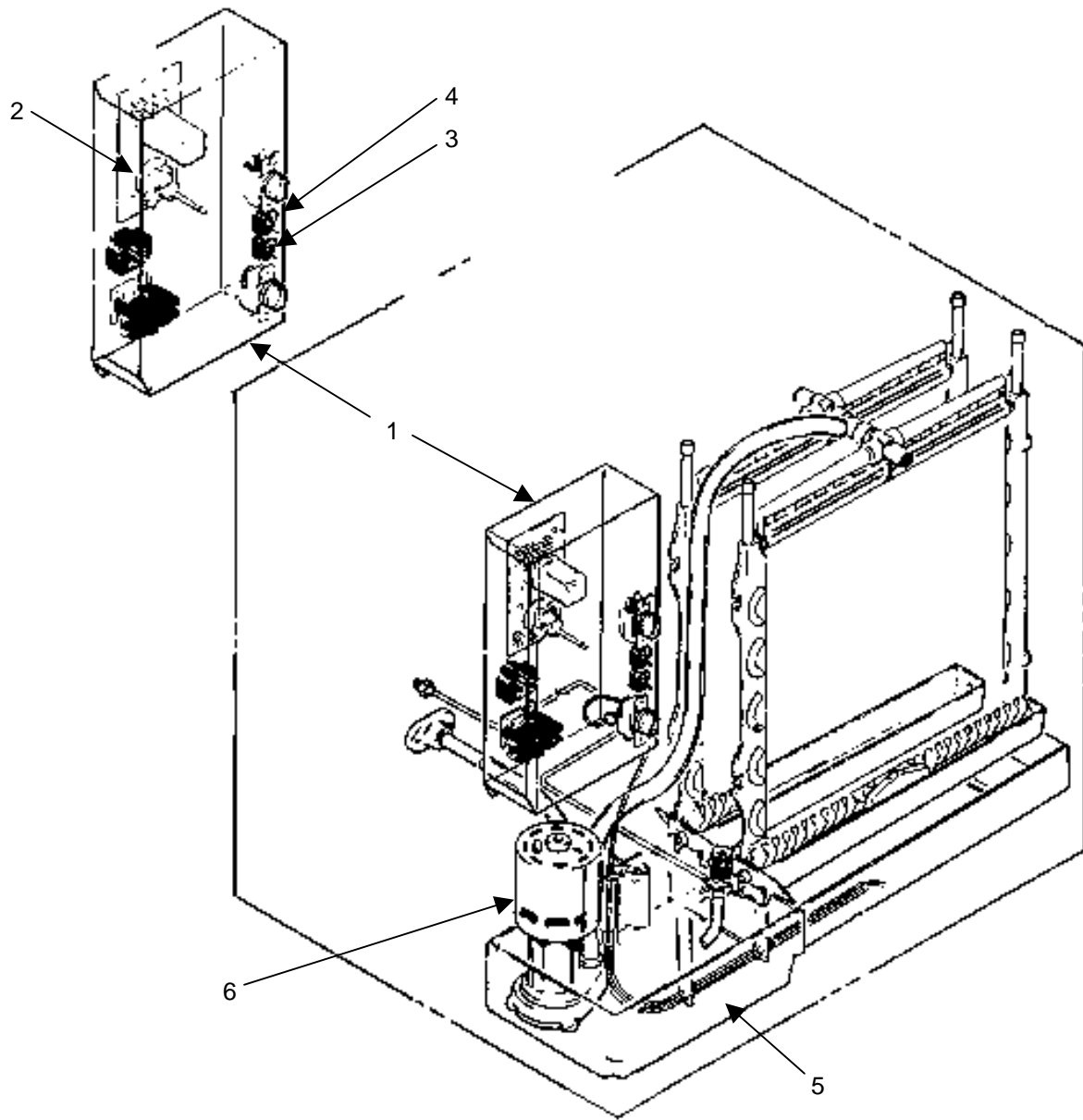
The water shutoff is located on the potable water manifold.

1. Open the water shutoff valve on the water distribution manifold.
2. Connect electrical power.

**WARNING**

Use caution while setting up ice maker for operation. Components behind the front panel are electrically energized and operate at high voltage. Failure to observe safety precautions may result in serious injury or death to personnel.

3. Remove the front panel. Remove the screws retaining the front cover, and remove the front cover.
4. Remove the cover for the control box **(1)**.
5. Locate the timer **(2)** and rotate the cam clockwise until the timer is in the harvest position.
6. Switch the compressor switch **(3)** to OFF.
7. Locate the ON/OFF switch **(4)**, switch it to ON. The inlet water valve will open, and water will flow into the reservoir **(5)**. The water pump **(6)** will begin to pump water over the evaporators.
8. Allow the reservoir **(5)** to fill.
9. Switch the compressor switch **(3)** to ON. The fan motor will begin to turn, and warm air will be discharged from the left side of the ice machine. The water temperature in the reservoir **(5)** will soon be 32°F, and ice should begin to form on the evaporators. In some cases some slush will form in the reservoir. This is temporary and normal.
10. Allow the ice machine to operate for about 18-minutes. The ice should be fully formed and should be harvested within a few minutes.
11. Install the cover on the control box **(1)**.
12. Install the front panel and retain screws.
13. The ice machine should run without any further assistance or attention. If unit fails to make ice, contact Unit Maintenance.

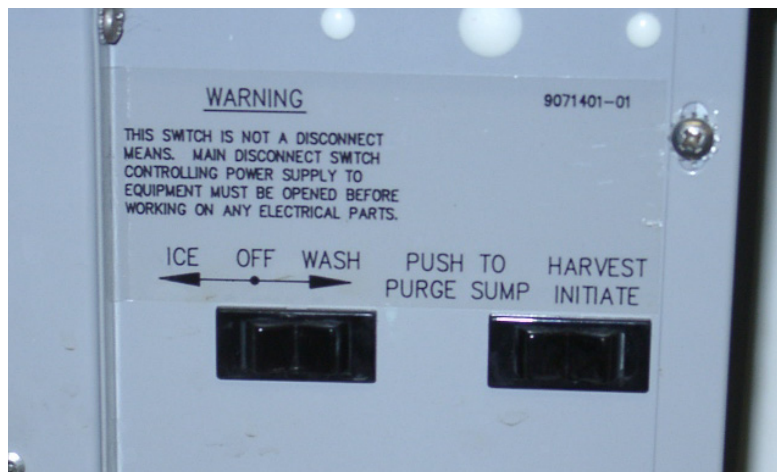


## Manually Purge Water System

### NOTE

The purge procedure is used to flush mineral deposits and scale from the system. The ice maker programming automatically provides a purge cycle during normal operation.

1. Remove the screws retaining the front cover, and remove the front cover.
2. Set harvest switch to purge position.
3. Verify operation of purge cycle by observing water flow from drain tube.
4. After purging for desired length of time, reset switch to harvest initiate.
5. Install cover, and retain with screws.





**PREPARE FOR MOVEMENT****NOTE**

There is no need to disassemble the ice maker from the bin, unless instructed otherwise for packing purposes.

**NOTE**

The front panel may be removed to ease disassembly. Reinstall the front panel before packing.

1. Empty ice bin, purge and drain the icemaker and bin.
2. Turn external controls OFF.
3. Disconnect power.
4. Turn water OFF at manifold, and disconnect water supply.
5. Push the end of the capillary tube out through the bin thermostat bracket tube.
6. Coil the free portion of the bin thermostat capillary tube to prevent damage.
7. Remove the thumbscrews retaining the bin thermostat bracket to the bottom of the ice maker, and remove the bin thermostat.
8. Install the rubber cap onto the end of the thermostat bracket.
9. Remove the straps and bolts retaining the ice maker to the bin, and remove the ice maker from the bin.
10. Clean and sanitize ice maker and bin.

**CAUTION**

Ensure that the ice machine is stored upright when packed. Do not allow the ice machine to be placed in any other position for longer than 5 minutes.

11. Pack the ice machine in accordance with the instructions given in WP 0023 00 (Force Provider) or WP 0024 00 (Force Provider (L)).

**END OF WORK PACKAGE**



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**OPERATOR MAINTENANCE  
FORCE PROVIDER FOOD SERVICE EQUIPMENT  
OPERATION UNDER USUAL CONDITIONS – STEAM KETTLE**

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**SITING REQUIREMENTS**

Exact placement of the steam kettle within the Force Provider Electric Kitchen will be determined by the requirements of the unit, kitchen TEMPER layout, and the preference of the mess personnel.

Clearance Requirements:

- 8-inches of clearance on sides
- 12-inches of clearance from back

**NOTE**

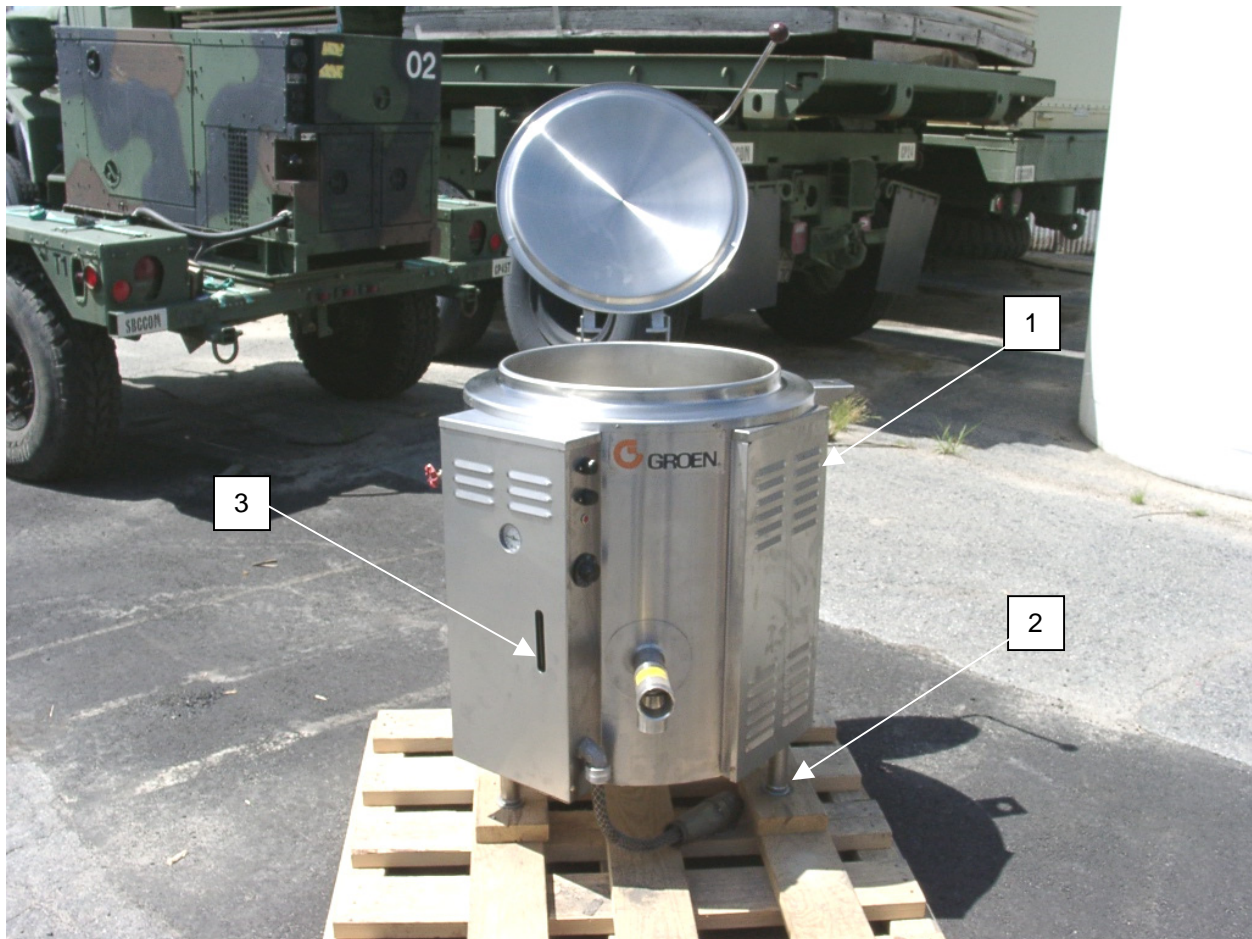
Different manufacturers have supplied 20-gallon steam kettles to Force Provider modules. Significant difference in operation will be noted by the manufacturer's name. The kettle in any given module may be different from those described here.



**ASSEMBLY AND PREPARATION FOR USE****WARNING**

The kettle is a four person lift. Do not attempt to lift or move the kettle without sufficient assistance. Failure to observe safety precautions may result in serious injury to personnel.

1. Set the kettle **(1)** in place.
2. Level the kettle by turning the feet **(2)** to adjust leg length.
3. Confirm that the jacket water level is above the mid point of the gauge glass **(3)**. If the level is low, notify unit maintenance (Groen only).
4. Clean and sanitize the kettle before use. Prepare a hot solution of detergent/cleaning compound as prescribed by the supplier. Clean the kettle thoroughly and sanitize at least once every 12 hours using an approved sanitizer.



## OPERATION

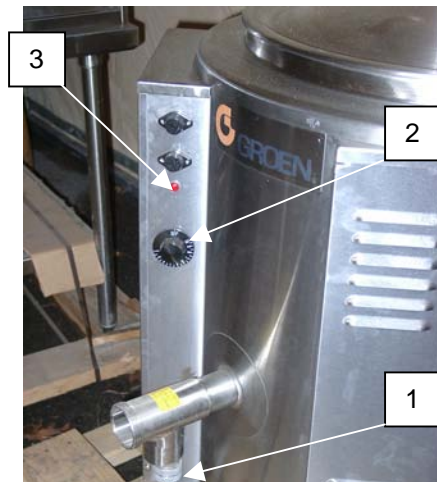
**WARNING**

Use caution when cooking with the kettle. The kettle operates at a high temperature, and may cause serious burn injury to personnel if used incorrectly.

**WARNING**

Use caution when operating the kettle. The kettle steam safety relief valve may discharge steam, causing burns to personnel

1. Clean and sanitize the kettle. Prepare a hot solution of detergent/cleaning compound as prescribed by the supplier. Clean the kettle thoroughly and sanitize at least once every 12 hours using an approved sanitizer.
2. Connect kettle to power supply.
3. Close draw-off valve **(1)** at bottom of the kettle.
4. Set thermostat **(2)** to desired temperature setting.
5. Place food product or cooking medium (water or oil) into the kettle.
6. Monitor indicator light **(3)**. Indicator light will go out when the kettle has reached set temperature.
7. Turn thermostat **(2)** to OFF when the kettle is no longer in use.
8. Disconnect, drain, clean, and sanitize the kettle.



**PREPARE FOR MOVEMENT**

1. Turn kettle thermostat to OFF, and allow the kettle to cool.
2. Disconnect power supply from the kettle.
3. Drain, clean, and sanitize the kettle.
4. Pack the kettle in accordance with the instructions given in WP 0023 00 (Force Provider) or WP 0024 00 (Force Provider (L)).

**END OF WORK PACKAGE**

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**OPERATOR MAINTENANCE  
FORCE PROVIDER FOOD SERVICE EQUIPMENT  
OPERATION UNDER USUAL CONDITIONS - STEAM KETTLE (TILTING TYPE)**

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**SITING REQUIREMENTS**

Exact placement of the kettle within the Force Provider Electric Kitchen will be determined by the requirements of the unit, kitchen TEMPER layout, and the preference of the mess personnel.

Clearance Requirements:

- 8-inches of clearance on sides
- 12-inches of clearance from back
- 6-inch to 28-inch pour path

**NOTE**

Different manufacturers have supplied 20-gallon steam kettles to Force Provider modules. Significant differences in operation will be noted by the manufacturer's name. The kettle in any given module may be different from those described here.



**ASSEMBLY AND PREPARATION FOR USE****WARNING**

The kettle is a four person lift. Do not attempt to lift or move the kettle without sufficient assistance. Failure to observe safety precautions may result in serious injury to personnel.

1. Set the kettle **(1)** in place.
2. Level the kettle by turning the feet **(2)** to adjust leg length.
3. Clean and sanitize the kettle before use. Prepare a hot solution of detergent/cleaning compound as prescribed by the supplier. Clean the kettle thoroughly and sanitize at least once every 12 hours using an approved sanitizer.





**OPERATION****WARNING**

Use caution when cooking with the kettle. The kettle operates at a high temperature, and may cause serious burn injury to personnel if used incorrectly.

1. Clean and sanitize the kettle **(1)**. Prepare a hot solution of detergent/cleaning compound as prescribed by the supplier. Clean the kettle thoroughly and sanitize at least once every 12 hours using an approved sanitizer.
2. Ensure the thermostat is set to OFF.
3. Connect kettle to power supply.
4. Set thermostat **(2)** to desired temperature setting.
5. Place food product or cooking medium (water or oil) into the kettle **(1)**.
6. Monitor indicator light **(3)**. Indicator light will go out when the kettle has reached set temperature.
7. Turn thermostat **(2)** to OFF when the kettle is no longer in use.

**WARNING**

Use caution when cooking with the kettle. The kettle operates at a high temperature, and may cause serious burn injury to personnel if used incorrectly.

**WARNING**

Use caution when cooking with the kettle. The kettle may be accidentally tilted, and when released, is self righting. The kettle and operating bar may cause serious burn injury to personnel if safety precautions are not observed.

8. Use operating bar **(4)** to pour contents from the kettle **(1)**.
9. Drain, clean, and sanitize the kettle **(1)**.



**PREPARE FOR MOVEMENT**

1. Turn the kettle thermostat to OFF, and allow the kettle to cool.
2. Disconnect power from the kettle.
3. Drain, clean, and sanitize the kettle.
4. Pack the kettle in accordance with the instructions given in WP 0023 00 (Force Provider) or WP 0024 00 (Force Provider (L)).

**END OF WORK PACKAGE**



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**OPERATOR MAINTENANCE  
FORCE PROVIDER FOOD SERVICE EQUIPMENT  
OPERATION UNDER USUAL CONDITIONS - MEAT SLICING MACHINE**

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**SITING REQUIREMENTS**

Exact placement of the meat slicing machine within the Force Provider Electric Kitchen will be determined by the requirements of the unit, kitchen TEMPER layout, and the preference of the mess personnel.

The meat slicing machine must be mounted at least 36-inches from the floor in the installation area; for example, it may be placed on one of the folding tables furnished with the Force Provider Electric Kitchen. It is most important that the forearm of the operator be at the proper level for ease and safety of operation as well as for maximum production. This height is considered optimum when the carriage handle of the slicer is at approximately the height of the operator's elbow when standing.



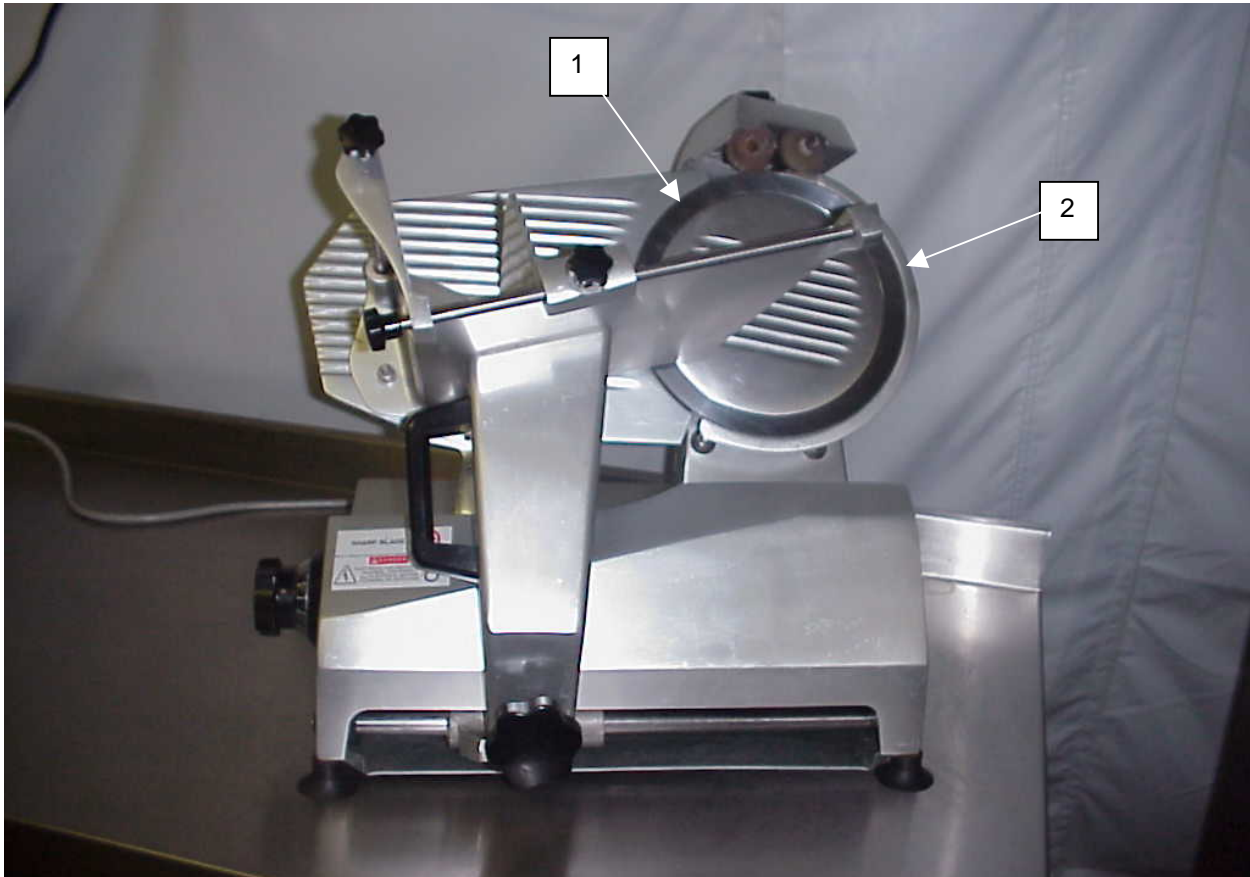
**ASSEMBLY AND PREPARATION FOR USE****WARNING**

The rotary knife used by the meat slicing machine is extremely sharp, and can cause severe cuts even when not rotating. Never operate the meat slicing machine without the guard installed, and remove the guard only for cleaning and maintenance. Wear steel mesh gloves whenever using or maintaining the meat slicing machine. Failure to observe safety precautions may result in injury to personnel.

**NOTE**

The meat slicing machine should arrive boxed, and should not require any assembly.

1. Ensure that the rotary knife **(1)** and guard **(2)** are installed.
2. Clean and sanitize the meat slicing machine before use.



## OPERATING INSTRUCTIONS

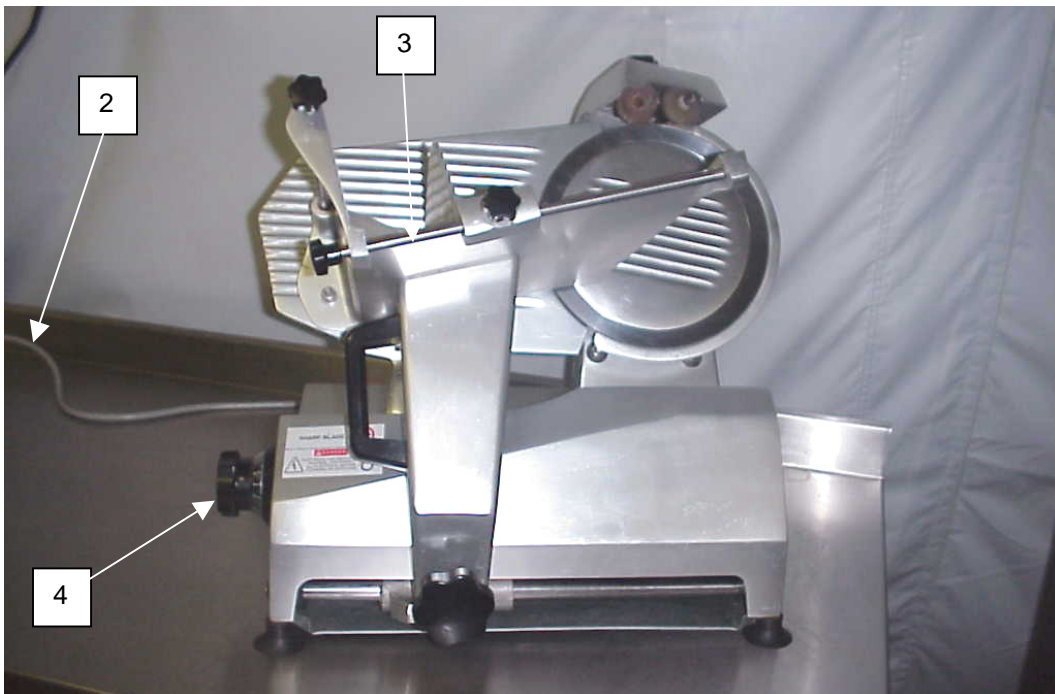


### **WARNING**

The rotary knife used by the meat slicing machine is extremely sharp, and can cause severe cuts even when not rotating. Never operate the meat slicing machine without the guard installed, and remove the guard only for cleaning and maintenance. Wear steel mesh gloves whenever using or maintaining the meat slicing machine. Failure to observe safety precautions may result in injury to personnel.

#### **Operate the Meat Slicing Machine**

1. Ensure slicer has been cleaned and sanitized.
2. Ensure ON / OFF switch **(1)** is OFF.
3. Connect power cord **(2)** to electrical outlet.
4. Secure food product in carriage **(3)**.
5. Turn slice adjustment **(4)** 2 to 5 notches from the "0" setting.
6. Turn ON / OFF switch **(1)** ON.
7. Pull carriage **(3)** gently back towards operator, then push carriage gently away.
8. Turn ON / OFF switch **(1)** OFF.
9. Examine slice thickness.
10. Adjust thickness as desired by opening or closing slice adjustment **(4)**.
11. Turn slicer ON, and continue slicing product.
12. Turn slicer OFF when not in use.
13. Remove unsliced food product from slicer when not in use.
14. Return slice adjustment **(4)** to "0" when not in use.
15. Disconnect power cord **(2)** when slicer is not in use.
16. Ensure slicer has been cleaned and sanitized after use.







## WARNING

The rotary knife used by the meat slicing machine is extremely sharp, and can cause severe cuts even when not rotating. Never operate the meat slicing machine without the guard installed, and remove the guard only for cleaning and maintenance. Wear steel mesh gloves whenever using or maintaining the meat slicing machine. Failure to observe safety precautions may result in injury to personnel.

### Sharpening Instructions

#### NOTE

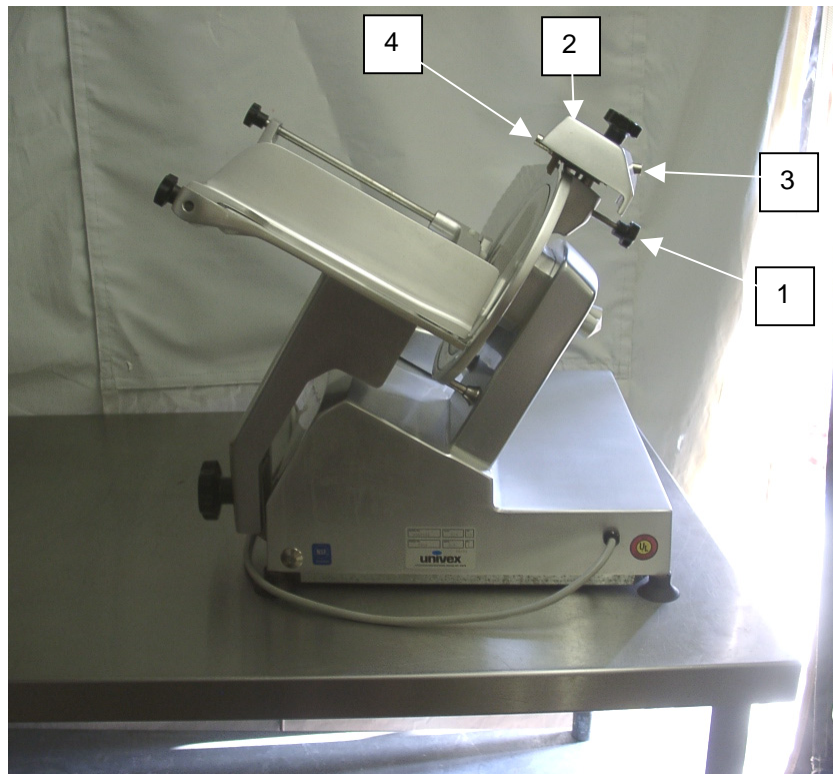
The slicer is equipped with a knife having a concave or hollowed rear surface. The knife must be sharpened regularly and properly in order to maintain productivity. The knife sharpener, on this machine, is a top mounted integral design with an automatic aligning feature.

1. Completely close the slice adjustment (beyond "0") so that the knife edge is not exposed.
2. The knife's cutting area should be clean and free from food, especially grease. Grease will ruin the ability of a grinding stone to sharpen an edge.
3. Disconnect the electrical supply cord.
4. Loosen sharpener lock pin **(1)** bearing against sharpener post.
5. Lift sharpener assembly **(2)** and rotate it ½ turn (180°).
6. Seat the sharpener assembly **(2)** down over knife.
7. Tighten sharpener lock pin **(1)**.
8. As the lock is tightened, it bears on the sharpener post and automatically aligns the preset grinding and deburring stones.
9. Turn slicer ON.
10. Depress the sharpener button **(3)** and hold. This will start the grinding wheel rotating.
11. Run until the beveled cutting surface cleans up. This can take from 30 seconds to several minutes depending on how dull the blade has become.
12. Release sharpener button **(3)**.
13. Turn slicer OFF and check for the formation of a very slight burr on the side of knife opposite the bevel which indicates complete grinding of the bevel. This slight burr can be detected either visually or by picking with a small piece of stiff paper.
14. Turn slicer ON.

### CAUTION

It is important not to deburr the knife too long. The keen edge will be destroyed due to the formation of an undesirable second bevel on the opposite side. This condition tends to be the primary cause of unsatisfactory slicing results.

15. Lightly press deburring (honing) button **(4)** and hold for 1 to 2 seconds while you turn OFF the slicer. Blade should now be completely sharpened and honed.
16. Verify slicer is OFF
17. Loosen lock pin **(1)**, then lift and return sharpener **(2)** to its storage position.
18. Tighten lock pin **(1)**.
19. Clean slicer and knife according to the cleaning procedure in WP 0013 00 in order to thoroughly remove grinding debris.



## Cleaning



### **WARNING**

The rotary knife used by the meat slicing machine is extremely sharp, and can cause severe cuts even when not rotating. Never operate the meat slicing machine without the guard installed, and remove the guard only for cleaning and maintenance. Wear steel mesh gloves whenever using or maintaining the meat slicing machine. Failure to observe safety precautions may result in injury or death to personnel.

1. Turn OFF slicer and disconnect electrical cord before cleaning. Leave protective guard **(1)** in place.
2. Turn slice adjustment **(2)** to the fully closed position (beyond "0") so that the knife edge is not exposed.

### **NOTE**

Use care in washing the sharply pointed prongs on the last slice feed grip. A small bristle brush is recommended. Use only warm water and mild soap.

3. Remove carriage assembly **(3)**. The carriage assembly may be washed separately in a sink.

### **NOTE**

Never use caustic detergents or wash the slicer, or any of its parts, in a dishwashing machine or the clear protective finish will be damaged.

4. Rinse carriage assembly **(3)** with warm water and dry thoroughly using a clean soft cloth.

### **NOTE**

Under no circumstance should the slicer be hose rinsed. It is recommended that a cloth be folded over a thin wooden stick when cleaning between the fence plate and the knife.

5. Wash body **(4)** of slicer with a soft cloth, using warm water and mild soap.
6. Remove knife guard **(1)** by loosening knife guard knob **(5)** and pushing the long stud upward to lift the knife guard above surface of knife.
7. Carefully lift and remove knife guard **(1)**.

### **NOTE**

It is recommended that a cloth be folded over a thin wooden stick as a further caution to avoid accidental contact with the knife.

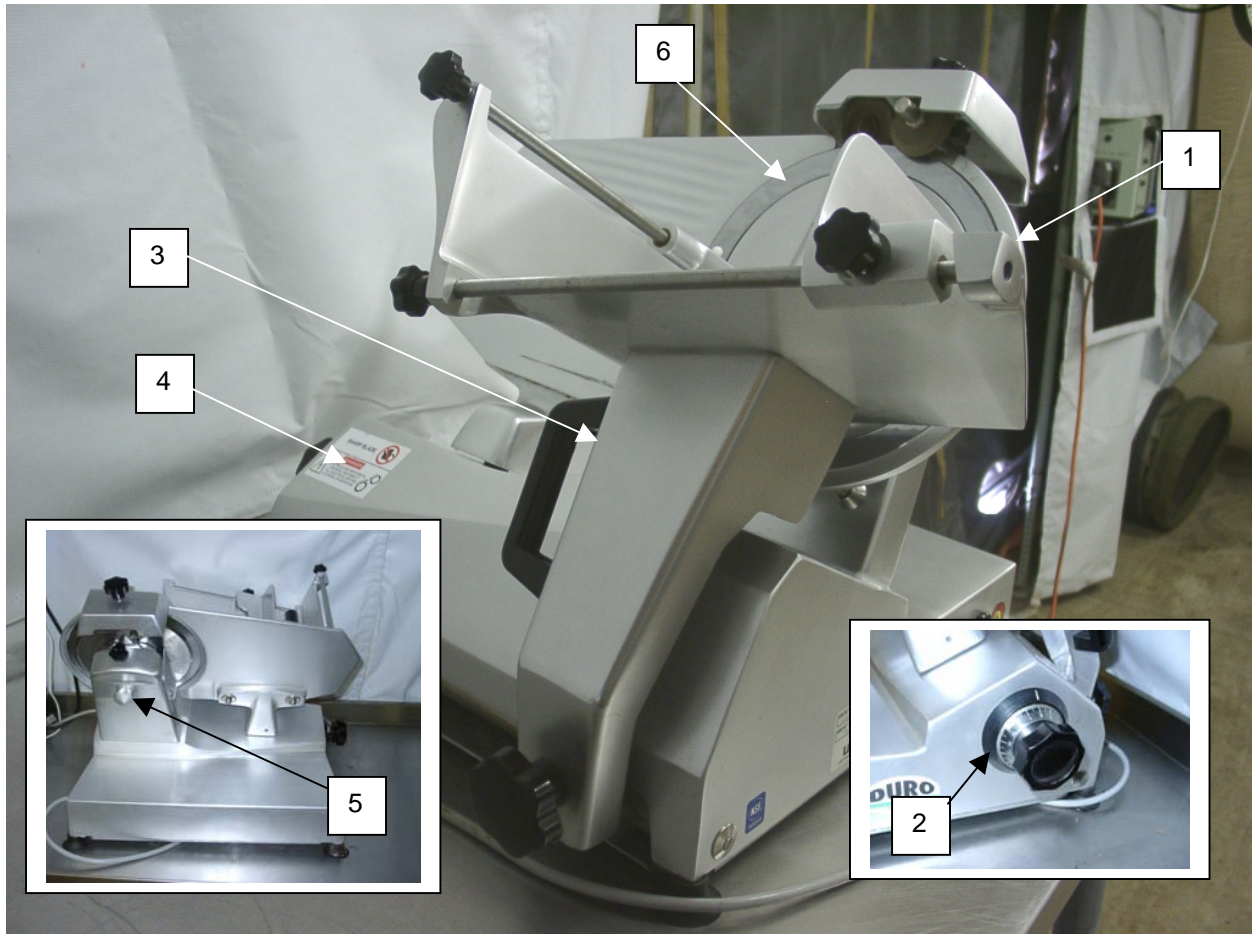
8. Wash the front and rear of the knife **(6)** with a cloth using warm water and mild soap.
9. Rinse with warm water applied with a cloth.
10. Dry thoroughly with a clean soft cloth.

11. Following cleaning, a commercial non-toxic sanitizer may be wiped on the clean surfaces with a soft clean cloth or sprayed as recommended on the container labeling.

### NOTE

It is important that the sanitizer be compatible with anodized aluminum or the clear protective finish on the slicer will be damaged. Surfaces should be wetted completely, but not to the point of running or puddling.

12. Reinstall the knife guard (1). Never leave the slicer without its knife guard installed.
13. Reinstall carriage assembly (3).



**PREPARE FOR MOVEMENT****WARNING**

The rotary knife used by the meat slicing machine is extremely sharp, and can cause severe cuts even when not rotating. Never operate the meat slicing machine without the guard installed, and remove the guard only for cleaning and maintenance. Wear steel mesh gloves whenever using or maintaining the meat slicing machine. Failure to observe safety precautions may result in injury to personnel.

1. Switch slicer OFF.
2. Disconnect power cord.
3. Ensure that the slicer has been cleaned and sanitized as described in WP 0013 00, "Cleaning".
4. Pack slicer in original packing, if available.
5. Pack the meat slicing machine in accordance with the instructions given in WP 0023 00 (Force Provider) or WP 0024 00 (Force Provider (L)).

**END OF WORK PACKAGE**



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**OPERATOR MAINTENANCE  
FORCE PROVIDER KITCHEN EQUIPMENT  
OPERATION UNDER USUAL CONDITIONS - MIXING MACHINE**

---

**SITING REQUIREMENTS**

Exact placement of the mixing machine within the Force Provider Electric Kitchen will be determined by the requirements of the unit, kitchen TEMPER layout, and the preference of the mess personnel.

The mixing machine is a floor mount model. Ensure that the mixer is positioned to allow access to the bowl and controls without placing the mixer in any traffic path.

The mixing machine may ship with or without an installed timer, depending on the manufacturer and model.



**ASSEMBLY AND PREPARATION FOR USE**

1. Unpack the mixer **(1)** and retain packing materials.

**WARNING**

The mixer is a four person lift. Do not attempt to lift or move the mixer without sufficient assistance. Failure to observe safety precautions may result in serious injury to personnel.

2. Place the mixer **(1)** in its operating area.
3. Clean and sanitize the safety guard **(2)**, beaters **(3)**, and bowl **(4)**. These may be sent to the Food Sanitation Center (FSC) for cleaning and sanitizing.
4. Install the beater **(3)** onto the beater drive.
5. Install the safety guard **(2)**.
6. Install the bowl **(4)**.





**OPERATION**



**WARNING**

Use caution when operating the mixer. The mixer may grab loose clothing, fingers, or arms if personnel are inattentive. Failure to install safety guard or observe safety precautions may result in serious injury or death to personnel.

1. Ensure that all components of the mixer **(1)** have been cleaned and sanitized.
2. Open the safety guard **(2)**.

**NOTE**

To ensure quick and even mixing, match the bowl capacity to the job. Do not use the 20-quart bowl for small batches, as uneven mixing will occur. Do not overload either bowl – if the batch exceeds the capacity of the mixing bowl, divide into two or more batches to suit the available bowl capacity.

3. Use hand crank to lower the bowl support **(3)** to the lowest position, and install the 20-quart bowl or the 12-quart bowl as necessary.
4. Ensure that the correct beater **(4)** is installed. The bowl will not rise into the operating position if a 20-quart beater is fitted with the 12-quart bowl. If a 12-quart beater is used with the 20-quart bowl, the batch will not mix evenly.

**Table 1. Beaters.**

<b>20-Quart Beaters</b>	<b>12-Quart Beaters</b>
Batter Beater, 20-Quart	Batter Beater, 12-Quart
Wire Whip, 20-Quart	Wire Whip, 12-Quart
Dough Hook, 20-Quart	Dough Hook, 12-Quart
Pastry Knife, 20-Quart	Pastry Knife, 12-Quart
Four Wing Beater, 20-Quart	Four Wing Beater, 12-Quart
Sweet Dough Beater, 20-Quart	Sweet Dough Beater, 12-Quart

5. Pour the required ingredients into the bowl **(5)**.
6. Use hand crank to raise the bowl **(5)**.
7. Connect the power cord to the power supply.
8. Push the ON button **(6)**.

**NOTE**

Speed may only be adjusted while the mixer is operating. The speed control lever will not function if the mixer is switched OFF.

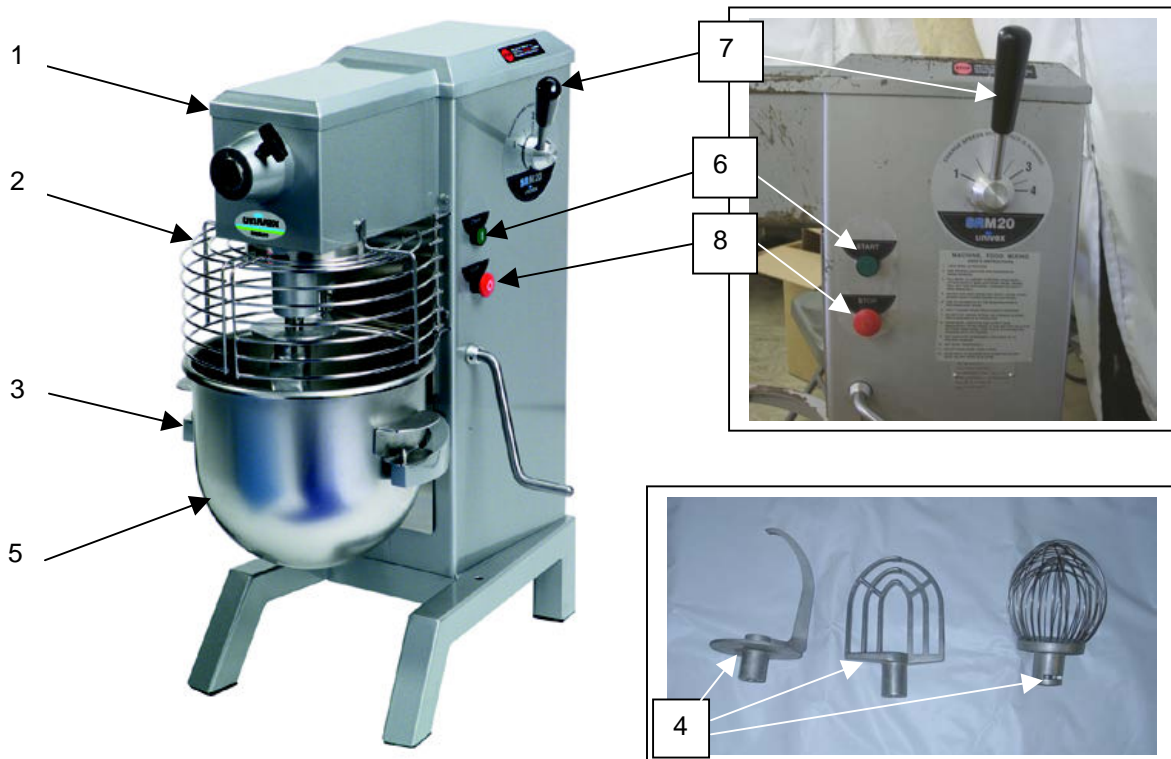
9. Adjust the speed control lever **(7)** to suit the food being processed (slower for mixing, faster for beating or whipping).

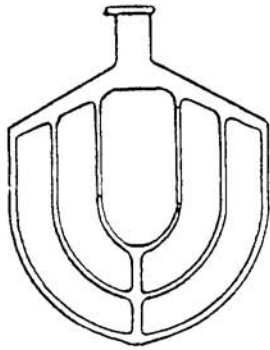


## WARNING

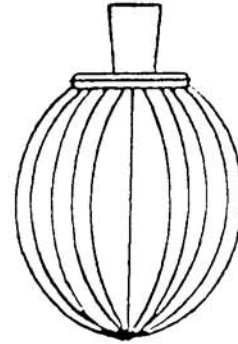
If the recipe requires the addition of ingredients during the mixing cycle, switch the mixer to OFF while adding. The mixer may grab loose clothing, fingers, or arms if personnel are inattentive. Failure to observe safety precautions may result in serious injury or death to personnel.

10. Allow the mixer to process the food for the time required in the recipe.
11. Return the speed control lever (7) to the slowest setting.
12. Push the OFF switch (8).
13. Open the safety guard (2).
14. Lower the bowl (5).
15. Remove the contents.
16. Disconnect the power cord.
17. Clean and sanitize all mixer (1) components.





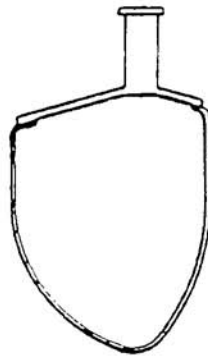
**Batter Beater**



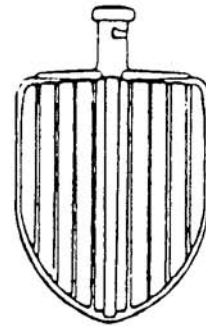
**Wire Whip**



**Dough Hook**



**Pastry Knife**



**Four Wing Beater**



**Sweet Dough Beater**

**PREPARE FOR MOVEMENT**

1. Disconnect power cord.
2. Clean and sanitize all mixer components. The bowl, beaters, and safety guard may be removed, cleaned, and sanitized at the FSC.
3. Pack mixer in retained packing materials.
4. Pack the mixing machine in accordance with the instructions given in WP 0023 00 (Force Provider) or WP 0024 00 (Force Provider (L)).

**END OF WORK PACKAGE**

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**OPERATOR MAINTENANCE  
FORCE PROVIDER KITCHEN EQUIPMENT  
OPERATION UNDER USUAL CONDITIONS - OVEN**

---

### **SITING REQUIREMENTS**

Exact placement of the oven within the Force Provider Electric Kitchen will be determined by the requirements of the unit, kitchen TEMPER layout, and the preference of the mess personnel.

The site within the Force Provider Electric kitchen must have 208VAC three phase power supplied. The oven must have at least 20-inches (0.5-meters) of clearance from the TEMPER fabric. The oven should be placed well out of the way of any working traffic in the Electric Kitchen.

The oven should be placed close to a ventilation source.

The oven may be stacked two high, or may be installed side by side if a suitable worktable is available.



## ASSEMBLY AND PREPARATION FOR USE

### Assembly



### **WARNING**

Do not attempt to lift or move the oven without the using a properly rated forklift. The oven may be installed before placement of the TEMPER, or may be lifted in through a window section after the fabric has been raised. Failure to observe safety precautions may result in serious injury to personnel.

### **NOTE**

The oven may arrive assembled and stacked, or may require stacking if desired.

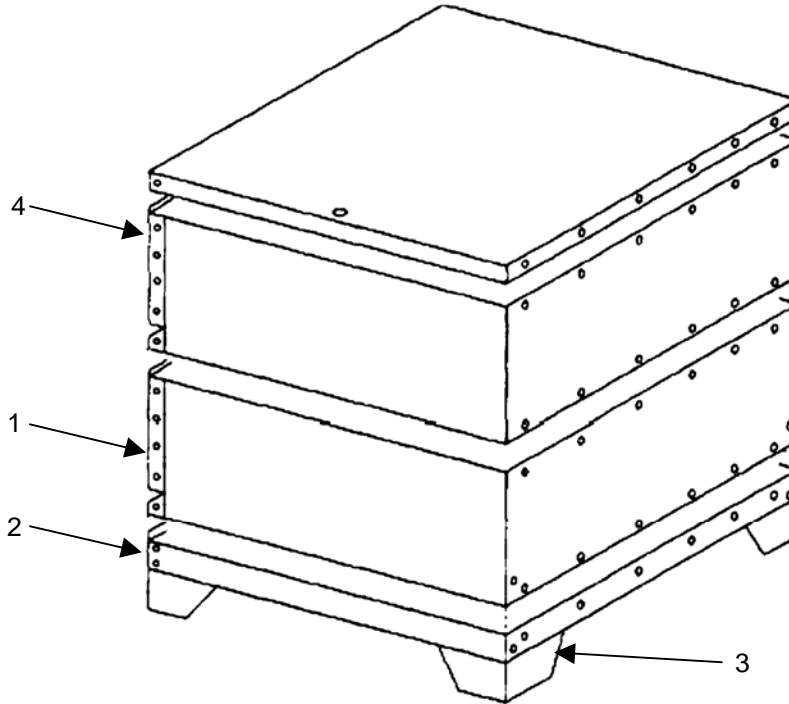
### **NOTE**

Assembly of the ovens and stacking will require the use of flat tip and cross head screwdrivers, slip joint pliers, and an adjustable wrench. These tools are provided with the Force Provider Electric Kitchen. Refer to WP 0041 00 (COEI) for location of these items.

1. Locate the ovens as close to the installation location as possible.
2. Uncrate bottom deck **(1)** and base section **(2)**.
3. Uncrate legs **(3)** and fasten legs to base section with the hex head bolts, nuts and washers provided. Some models may not require legs.
4. Uncrate the top oven **(4)**.
5. Place the assembled bottom deck **(1)** in its installation position if sufficient work access exists or is as near its installation position as possible. Place a piece of 1-inch lumber (approximately 60 inches x 4 inches x 1 inch) across the top of the base section.
6. Lift the top oven **(4)** up onto the assembled bottom deck **(1)**. Slide the oven forward until the tabs on the body sides engage behind the base section front top.
7. Remove the lumber and lower the rear of the top oven **(4)** onto the assembled bottom deck **(1)**. Make sure that the vent stacks engage properly.
8. Fasten sides to assembled bottom deck **(1)** front with the flat head bolts provided. Fasten backs with sheet metal screws provided.
9. If the oven is not in place, move it to its final installed position.
10. Level the oven assembly. If the oven assembly does not have adjustable feet, the feet may be shimmed.

**NOTE**

When installing a new oven section without base on a previously installed oven section or sections, the top should be removed and the new deck installed as in Steps 4 through 7. The main top should then be reinstated, making sure that the vent stack engages with the vent cover and that the two long screws are replaced halfway along the main top sides.

**Preparation for Use**

1. Before first use, clean oven decks with a soft brush.
2. To release any paint fumes or moisture content, set the thermostat at 300°F and the toggle switches to ON or MEDIUM, as applicable.
3. Allow ovens to operate for 6 to 8 hours with the damper wide open.

**OPERATION****WARNING**

The oven operates at high temperatures. Always use pot holders, pot hooks, and oven mitts when operating the oven. Ensure that adequate protective clothing is worn when operating the oven. Failure to observe safety precautions may result in serious burns to personnel.

**Preheating****NOTE**

Start day's baking with products that require the lowest temperature.

**NOTE**

Stagger preheat periods of oven sections and use a minimum of electricity for other purposes while preheating.

1. Set the toggle switches **(1)** to ON or HIGH as applicable, and the thermostat **(2)** to the temperature desired. The indicator light **(3)** will light and remain lit until the selected temperature is reached.
2. Keep the door **(4)** and damper **(5)** closed while preheating.
3. Preheat to cooking temperature.
4. To ensure optimum heat saturation of the oven chamber, allow approximately an additional 20-minutes before loading.

**Loading the Oven****NOTE**

Load oven decks to capacity at one time; small loads are uneconomical.

1. Load product quickly to prevent heat loss from the open oven door **(4)**. Position pans **(6)** in rows from rear to front of oven, starting from the right wall.
2. Pans **(6)** should not touch each other or the walls of the oven; at least 2-inches clearance is needed to permit air circulation between and around pans.



## Cooking

### NOTE

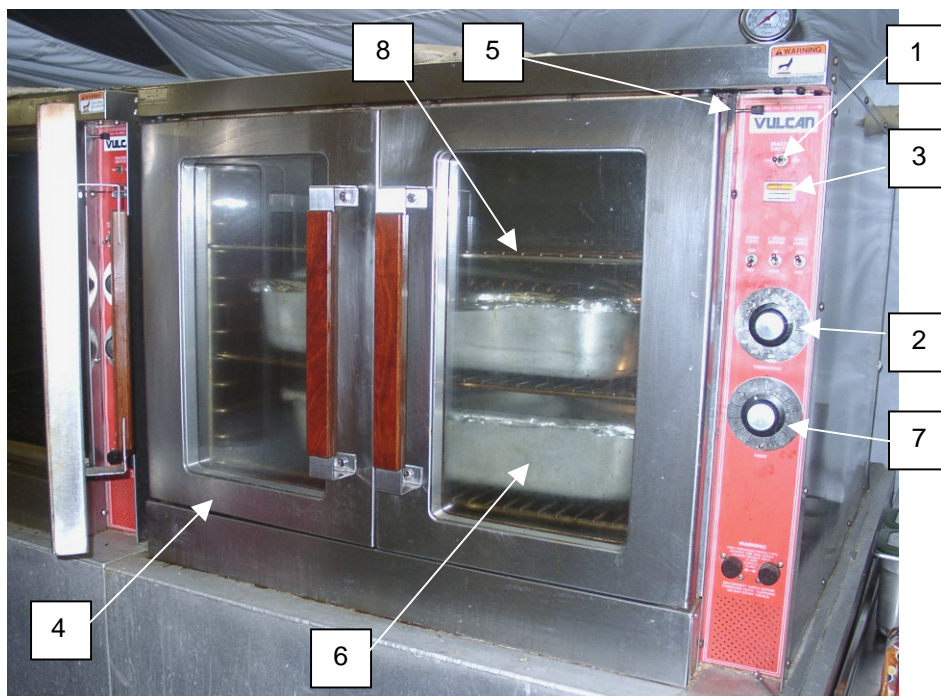
High top heat results in well colored or caramelized finish to meats. When roasting fowl and a heavily browned appearance is not desired, the top oven switch (if fitted) should be set at MEDIUM or LOW. The use of a meat thermometer is recommended for all roasting operations.

1. Close oven door **(4)** and set timer **(7)** to desired cooking time.
2. Where intermediate oven racks **(8)** are used for baking, it may be necessary to move the pans (rack-to-deck and deck-to-rack) when baking is one-half to two-thirds done to obtain desirable top and bottom browning. Keep door opening during baking to a minimum for best product results.
3. The ovens are provided with a light and a door window that may be used to check baking progress as necessary. Avoid excessive door opening.
4. Keep lower edge of door **(4)** free of charred food particles. Clear decks of carbonized foods after each loading.

### NOTE

Do not use thermometers to measure oven heat.

5. Do not open damper **(5)** more than necessary to carry off steam; this may cause uneven baking.



## Baking Guide

Use this table as a guide to establish baking times and settings. Times and temperatures given in authorized recipes supercede the values given here.

### NOTE

Not all ovens are equipped with three heat switches.

**Table 1. Baking Guide.**

Product	Temperature in °F	3-heat Switch Setting - Top	3-heat Switch Setting - Bottom	Time in Minutes
Cakes, Angel & Sponge Cake	300 to 325	LO or MED	LO or MED	40
Cupcakes	350 to 400	MED	MED	15
Layer and Sheet Cakes	350 to 380	MED or LO	MED or LO	20
Cookies	325 to 350	LO or MED	LO or MED	15
Pies, Pastries, Fruit Pies	375 to 450	MED or LO	MED	30
Meringue Pies	425 to 450	HI	OFF	
Pie Shells	400 to 450	MED or LO	MED or LO	10
Puff Pastries	400	MED	MED	20
Quick Breads, Muffins, Biscuits	425 to 475	MED	MED	18
Corn Bread	425 to 475	MED or HI	MED	20
Corn Muffins	400 to 475	MED or HI	MED	15
Muffins, Plain & Fruit	375 to 425	MED	MED	20
Yeast Breads, Rolls, Loaf Bread	375 to 425	MED or LO	MED	30
Rolls	400 to 450	MED	MED	10
Sweet Rolls	375 to 425	LO or MED	MED	10
Special Products, Brown & Serve Rolls	400 to 450	MED	MED	
Casseroles	300 to 325	MED	MED	30
Pizza	500 to 600	HI	MED or HI	
Toasted Sandwiches	400 to 425	HI	HI or MED	10
Special Meats, Chicken, Oven Broil	400 to 425	HI	MED or LO	30
Hamburgers	400 to 425	HI	HI or MED	10

**Roasting Guide**

Use this table as a guide to establish roasting times and settings. Times and temperatures given in authorized recipes supercede the values given here.

**Table 2. Roasting Guide.**

Fully Thawed Type of Meat	Temperature Setting in °F	Internal Meat Temperature in °F	Minutes Per Lb.
<b>BEEF</b>			
Standing Rib 7 Rib, 20 to 25 lb.	300	Rare 125°F	13
Rolled Rib 7 Rib, 16 to 18 lb.	250	Medium 140°F Well 150°F	15 17
Rump or Chuck, 18 to 23 lb.	300	140 to 170	20 to 30
<b>LAMB</b>			
Leg, 7-8 Lb.	300	180	30 to 35
Shoulder	300	180	40 to 45
<b>PORK</b>			
Ham, Leg, 15 lb.	350	185	30 to 35
Ham, Boned, 15 lb.	350	185	30 to 35
Boston Butt	350	185	45 to 50
Cured Ham, 20 lb.	300	160	15 to 18
<b>VEAL</b>			
Leg, 25 lb.	300	170	18 to 20
Shoulder, 15 lb.	300	170	25
Shoulder, Rolled, 10 lb.	300	170	35 to 40
<b>POULTRY</b>			
Chicken, Dressed, 4 to 6 lb.	250 to 300	190	35 to 40
Duck, Dressed, 5 to 8 lb.	300	190	25 to 30
Turkey, Dressed, 14 to 19 lb.	300	190	20 to 25

## Cleaning



### **WARNING**

Disconnect electrical power supply before cleaning. Failure to observe safety precautions may result in serious injury or death to personnel from electrocution.

### **NOTE**

Wear rubber gloves, apron, and eye protection when cleaning the oven. Scouring powder should be used only with great care. It will scratch and fog the glass, and it is easy to build up accumulations of excess scouring powder that can damage the oven and is extremely difficult to remove.

1. Stainless steel oven fronts may be cleaned with a damp cloth. Stubborn soil may be removed with detergent.
2. Porcelain oven linings and door linings may be cleaned with an oven cleaner compound or with a cloth dampened with detergent solution. Rinse thoroughly and dry with a soft clean cloth.
3. Inspection and light windows may be cleaned in the same manner as the door linings, or with a mild abrasive if necessary.
4. Silver tone surfaces may be cleaned with a cloth dampened with detergent solution.
5. Rinse thoroughly and dry with a soft clean cloth.
6. Steel decks may be removed and scoured at the FSC (South Bend only).

### **NOTE**

Turning the steel decks every 30-days will keep a clean appearance (South Bend only).

7. After scouring, the steel decks should be lightly but thoroughly coated with oil and allowed to season in the oven at 450°F for 30-minutes to an hour. Seasoning will lessen sticking of spillage and inhibit rust (South Bend only).

**PREPARATION FOR MOVEMENT****WARNING**

Disconnect electrical power supply before cleaning. Failure to observe safety precautions may result in serious injury or death to personnel from electrocution.

1. Allow the oven to cool at least 2-hours before attempting preparation for movement.
2. Disconnect power.
3. Clean the oven as described in "Cleaning", located on the previous page.
4. If the oven has been stacked, remove screws and bolts securing top oven to bottom oven. Retain screws and store in one of the ovens.

**WARNING**

Do not attempt to lift or move the oven without the use of a forklift. The oven may be installed before placement of the TEMPER, or may be lifted in through a window section after the fabric has been raised. Failure to observe safety precautions may result in serious injury to personnel.

5. Use a forklift to remove the top oven from the bottom oven. Deliver the top oven to its assigned packing container.
6. Use a forklift to remove the bottom oven. Deliver the bottom oven to its assigned packing container.
7. Pack the oven in accordance with the instructions given in WP 0023 00 (Force Provider) or WP 0024 00 (Force Provider (L)).

**END OF WORK PACKAGE**



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**OPERATOR MAINTENANCE  
FORCE PROVIDER FOOD SERVICE EQUIPMENT  
OPERATION UNDER USUAL CONDITIONS - TILT FRY PAN / TILT GRIDDLE**

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**SITING REQUIREMENTS**

Exact placement of the tilt fry pan / tilt griddle within the Force Provider Electric Kitchen will be determined by the requirements of the unit, kitchen TEMPER layout, and the preference of the mess personnel.

A 208VAC 3-phase power connection must be available at the installation location.

Provisions for drainage should be made to accommodate cleaning the tilt fry pan / tilt griddle.

There should be a clearance of 24-inches from the back of the tilt fry pan / tilt griddle to the TEMPER fabric.



**ASSEMBLY AND PREPARATION FOR USE****WARNING**

The tilt fry pan / tilt griddle is a four person lift. Do not attempt to lift or move the tilt fry pan / tilt griddle without assistance. Failure to observe safety precautions may result in serious injury to personnel.

**CAUTION**

Do not use the operating crank as a handle to lift or position the tilt fry pan / tilt griddle. Misuse of the operating crank may result in an unserviceable tilt griddle.

1. Position the tilt griddle **(1)** in its operating location, being careful not to use the operating crank **(2)** as a lever or handle.
2. Adjust the feet **(3)** so that the cooking surface **(4)** is level front to back as well as side to side.





**OPERATION****WARNING**

The tilt fry pan / tilt griddle and its parts are hot. Use care when operating the tilt fry pan / tilt griddle. Failure to observe safety precautions may result in serious burn injury to personnel.

**CAUTION**

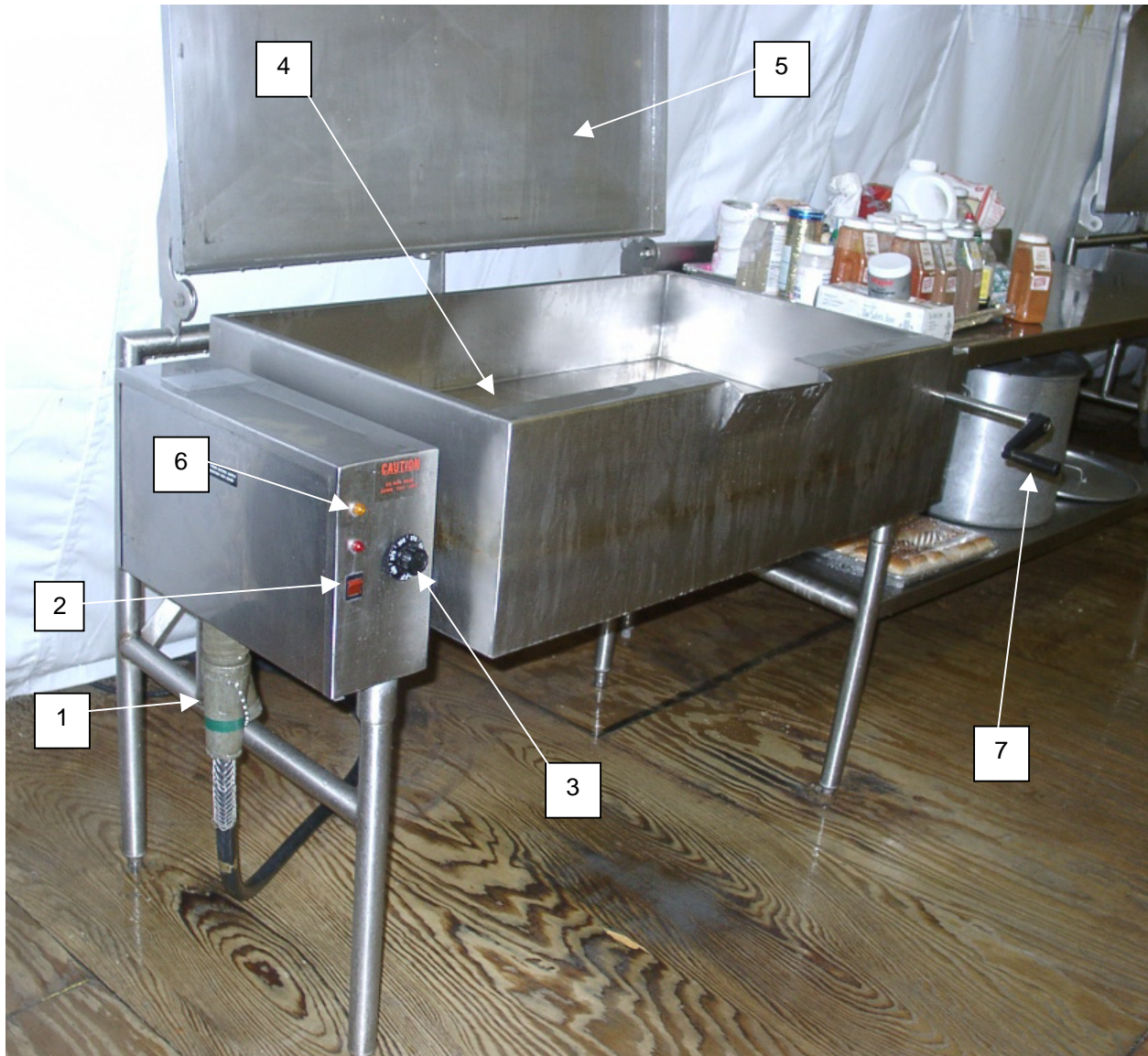
The griddle plate is steel, but the surface is relatively soft and can be scored or dented by carelessly using a spatula. Be careful not to dent, scratch, or gouge the plate surface. Do not try to knock off loose food that may be on the spatula by tapping the corner or the edge of the spatula on the griddle surface.

1. Connect power **(1)** to the tilt fry pan / tilt griddle.
2. Flip the function switch **(2)** (if fitted) up to the “ON” position.
3. Turn the thermostat **(3)** clockwise to the desired temperature.
4. Allow the unit to cycle a number of times before assuming that the cooking surface **(4)** has reached and stabilized at the desired temperature.
5. If using the tilt fry pan / tilt griddle as a griddle, leave the lid **(5)** open.
6. If using the tilt fry pan / tilt griddle as a oven or kettle, close the lid **(5)**.

**NOTE**

The indicator light arrangement may vary according to manufacturer, model, and date of manufacture.

7. If the amber indicator light **(6)** comes on during operation, allow the unit to cool down approximately fifteen-minutes to one-half hour. If the thermostat has been left in the “ON” position, the heaters will reactivate once the unit cools down below the temperature setting.
8. If using the tilt fry pan / tilt griddle as a kettle, use the operating crank **(7)** to pour the contents of the pan into serving containers.
9. When through cooking, turn thermostat **(3)** to its lowest setting, and flip the function switch **(2)** OFF.



## Cleaning



### WARNING

The tilt fry pan / tilt griddle and its parts are hot. Use care when operating, cleaning and servicing the tilt fry pan / tilt griddle. Failure to observe safety precautions may result in serious injury to personnel.

### CAUTION

The griddle plate is steel, but the surface is relatively soft and can be scored or dented by carelessly using a spatula. Be careful not to dent, scratch, or gouge the plate surface. Do not try to knock off loose food that may be on the spatula by tapping the corner or the edge of the spatula on the griddle surface.

1. After each meal, scrape the tilt griddle surface **(1)** with a scraper or rigid spatula to remove excess fat and food particles.
2. Wash the tilt griddle interior with hot soapy water, drain, and rinse.
3. Wipe the tilt griddle exterior clean with a damp cloth and dry.
4. Weekly, or when necessary, polish the griddle surface **(1)** thoroughly using a pumice or griddle stone over the surface. Rub with the grain of the metal while still warm (not hot). Do not use steel wool because it will damage the surface of the tilt fry pan / tilt griddle.



**PREPARE FOR MOVEMENT**

1. Clean the tilt fry pan / tilt griddle as directed "Cleaning", located on the previous page.

**NOTE**

Power disconnection must be accomplished by MOS 52E (converted to 21P).

2. Disconnect power.
3. Ensure that lid is completely closed.

**CAUTION**

Do not use the operating crank as a handle to lift or position the tilt fry pan / tilt griddle. Misuse of the operating crank may result in an unserviceable tilt guide.

4. Pack the tilt fry pan / tilt griddle in accordance with the instructions given in WP 0023 00 (Force Provider) or WP 0024 00 (Force Provider (L)).

**END OF WORK PACKAGE**

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**OPERATOR MAINTENANCE  
FORCE PROVIDER KITCHEN EQUIPMENT  
OPERATION UNDER USUAL CONDITIONS - POPCORN MACHINE**

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**SITING REQUIREMENTS**

The popcorn machine must be mounted at least 36-inches from the floor in the installation area; for example, it may be placed on one of the folding tables furnished with the Force Provider Electric Kitchen or MWR.

**CAUTION**

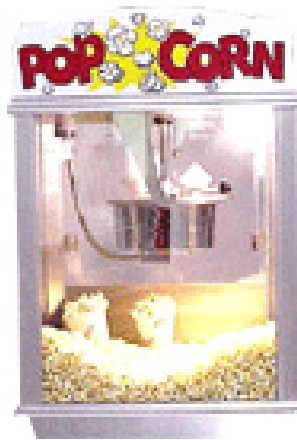
The motor air intake and exhaust holes located on top of the machine must be clear of any obstruction. Do not cover these air vent holes as serious damage will result.

The popcorn machine should be installed with a clearance of at least 18-inches from the TEMPER fabric.

A 115VAC power supply must be available.



**AP Wyott**



**Gold Medal**



**Star**

**ASSEMBLY AND PREPARATION FOR USE**

1. Unpack the popcorn machine **(1)**, and retain packing.

**WARNING**

The popcorn machine is a two person lift. Do not attempt to lift or move the popcorn machine without assistance. Failure to observe safety precautions may result in serious injury to personnel.

2. Install the popcorn machine **(1)** in its operating location.

**NOTE**

Popcorn Machines supplied to Force Provider modules may or may not require any assembly, depending on the manufacturer and model.

3. Install the kettle **(2)** onto the kettle mount.
4. Clean and sanitize the kettle **(2)** and the popcorn machine cabinet.
5. Connect the kettle power cord **(3)** to the interior receptacle.



**OPERATION****WARNING**

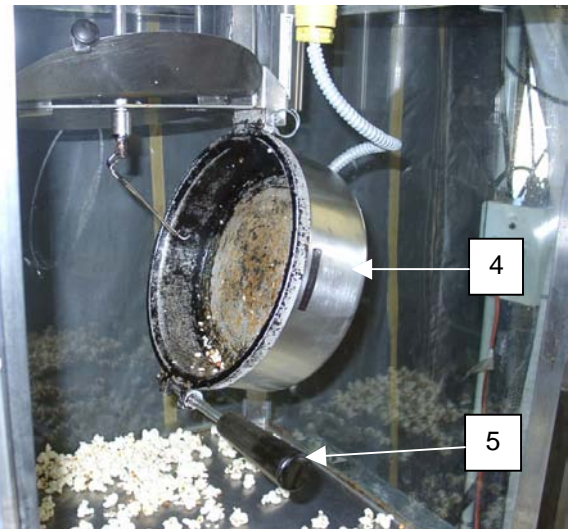
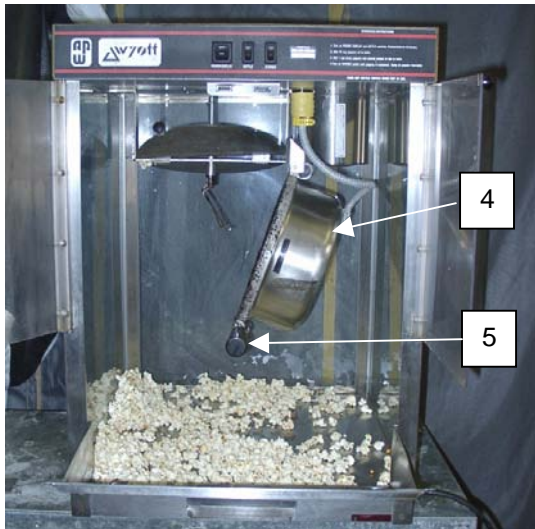
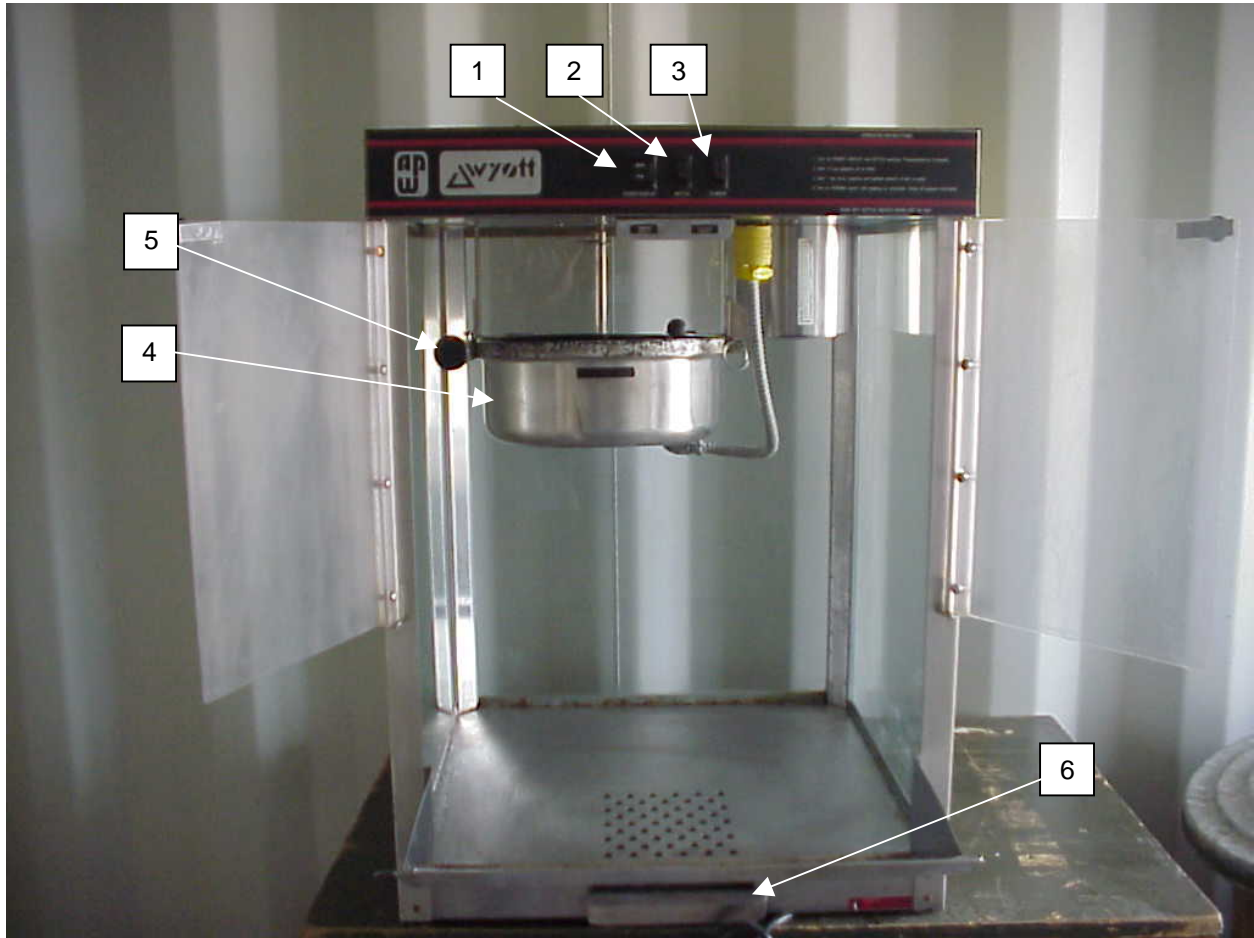
The popcorn machine and its parts are hot. Use care when operating the popcorn machine. Failure to observe safety precautions may result in serious burn injury to personnel.

1. Turn ON the corn warming switch **(1)** (if fitted). This switch controls the bottom heating element, the top heating lamp and the sign display lamps.
2. Turn ON the kettle switch **(2)**. This switch controls the kettle heating element. The red pilot light is provided to indicate when the kettle switch is ON. Allow six to seven-minutes to pre-heat the kettle. The kettle heating element is thermostatically controlled. Thermostat adjustments should not be necessary as it has been preset at the factory for the correct popping temperature.
3. Turn ON the stirrer switch **(3)** located at the right end of the motor housing. This switch will function only when the kettle switch is in the ON position. If the kettle switch is turned OFF, the motor will also stop. This motor should always be running when there is corn in the kettle. This will prevent scorching or burning of corn.

**NOTE**

A measuring cup is supplied with the popcorn machine.

4. Pour a level measuring cup of oil (2 ounces) in kettle **(4)**. Add a level measuring cup of raw corn (8-ounces) and a teaspoon of popcorn salt. Vary the amount of salt and oil to suit taste. If desired, salt may be added after the corn is popped.
5. When the corn stops popping, dump the kettle **(4)** immediately by turning the handle **(5)** clockwise approximately 90° to release latch. Recharge as quickly as possible. Screen out unpopped kernels over the perforated section of the corn pan.
6. Turn the kettle switch OFF when the desired amount of popping is completed.
7. Remove unpopped kernels from the drawer **(6)**.
8. Turn the corn warming switch **(1)** (if fitted) OFF when the popcorn machine is to be secured.





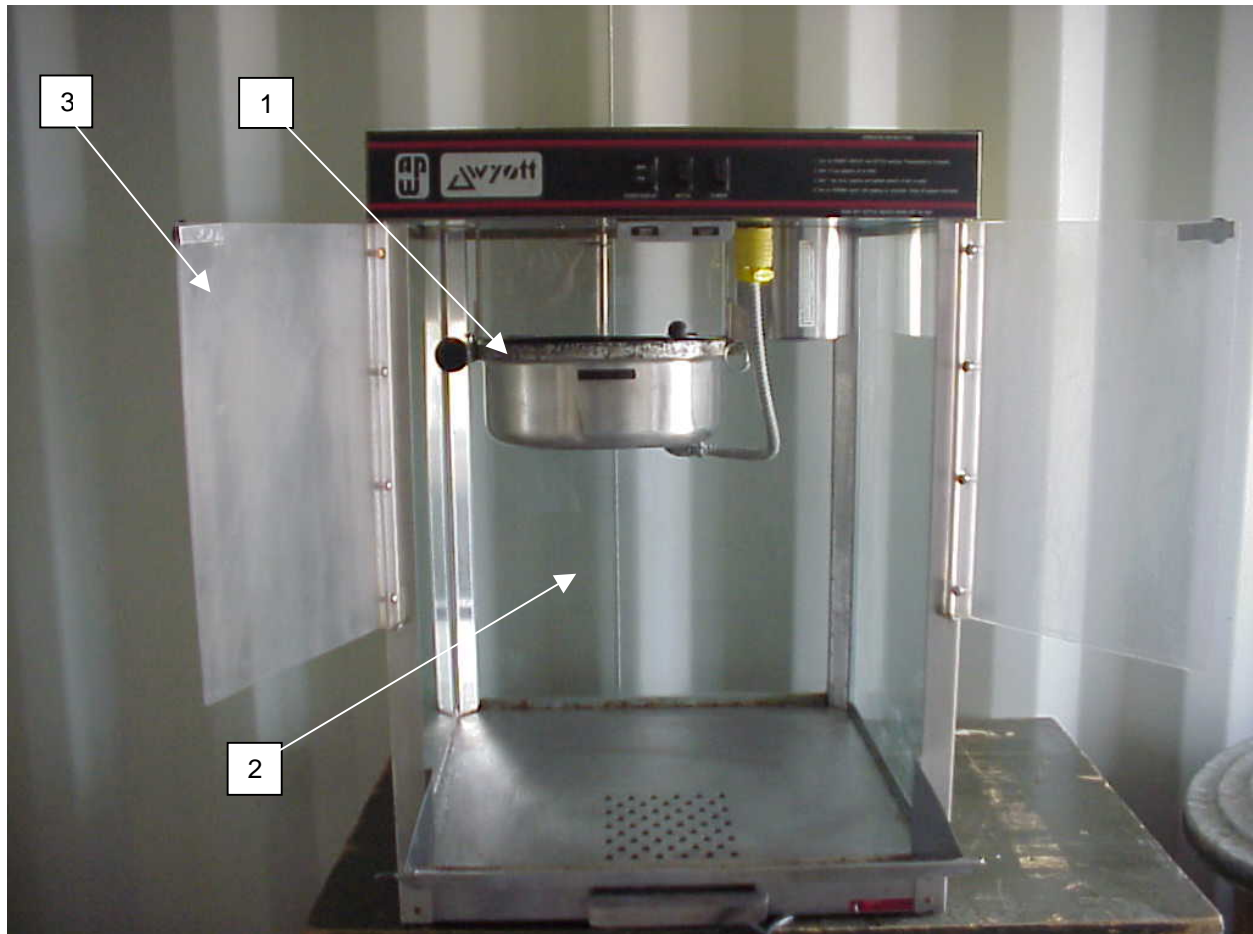
## Cleaning



### **WARNING**

The popcorn machine and its parts are hot. Use care when cleaning and servicing the popcorn machine. Failure to observe safety precautions may result in serious burn injury to personnel.

1. After each popping period, wipe clean the kettle **(1)** inside and out while it is warm. This is important because if seasoning and salt are not thoroughly removed, a carbonized material will form. This condition not only lowers popping efficiency and causes excessive smoking, but could damage the unit.
2. For retaining the high lustre on the stainless steel kettle **(1)** shell and lids, use a non-abrasive standard stainless steel cleaner when the kettle is cold.
3. Use a damp cloth and warm mild soap solution to clean the glass **(2)** and clear plastic surfaces **(3)**.



**PREPARE FOR MOVEMENT**

1. Clean the popcorn machine thoroughly as described in "Cleaning" section, located on the previous page.
2. Package the popcorn machine in the retained packing materials.
3. Pack the popcorn machine in accordance with the instructions given in WP 0023 00 (Force Provider) or WP 0024 00 (Force Provider (L)).

**END OF WORK PACKAGE**

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**OPERATOR MAINTENANCE  
FORCE PROVIDER KITCHEN EQUIPMENT  
OPERATION UNDER USUAL CONDITIONS – REACH-IN REFRIGERATORS**

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**GENERAL**

This work package covers the operating procedures for the following reach-in refrigerators:

- 20 cubic foot refrigerator **(1)** – located within the Force Provider Electric Kitchen  
NSN 4110-01-009-3738
- 2 section refrigerator **(2)** – located within the Force Provider Electric Kitchen  
NSN 4110-01-412-8896
- 3 section refrigerator **(3)** – located within the Force Provider MWR TEMPER  
NSN 4110-01-471-3543

Procedures given in this work package apply to all three reach-in refrigerators unless otherwise noted.





## SITING REQUIREMENTS

Exact placement of the reach-in refrigerators within the Force Provider Electric Kitchen and the MWR TEMPER will be determined by the requirements of the unit, kitchen and MWR TEMPER layout, and the preference of the mess and MWR personnel.

The final location of the reach-in refrigerators must be able to provide a large quantity of cool, clean air. The refrigeration system operates most efficiently and trouble-free with cool, dry air circulation. Avoid locations near heat and moisture generating equipment such as stoves, ovens, cooking ranges, fryers, dish washers, steam kettles, etc. Also, do not select a location in an unheated room or area where temperatures may drop below 55° F. Air supply to the condensing unit is equally important. Restricting the air supply will place an excessive heat load on the condensing unit and adversely effect its operating efficiency.

To assure sufficient air supply and circulation to the condensing unit, a minimum clearance of 12-inches above the grill **(1)** and 3-inches on each side and back of the cabinet **(2)** must be provided. If necessary, special venting or air supply ducts must be installed by the installer for this purpose. Do not at any time obstruct the grill area in front of the cabinet in any way, and never place or store anything on top of the cabinet machine compartment.

All three reach-in refrigerators run on 115VAC single-phase 15A power. Ensure an independently protected 115VAC single-phase 15A receptacle is provided at the operating location.



**ASSEMBLY AND PREPARATION FOR USE****WARNING**

Do not attempt to lift or move the reach-in refrigerators without the use of a forklift. The reach-in refrigerators may be installed before placement of the TEMPER, or may be lifted in through a window section after the fabric has been raised. Failure to observe safety precautions may result in serious injury to personnel.

**CAUTION**

Ensure that the reach-in refrigerators have been stored upright when packed. Do not allow a reach-in refrigerator to be placed in any other position for longer than 5-minutes. If a reach-in refrigerator has been stored in any other than the upright position, allow the unit to stand upright at least 12-hours before connecting power and operating. Failure to do so may allow oil to lock the compressor, rendering the unit unserviceable and possibly damaging the compressor. Observe these precautions with any item possessing a refrigeration system.

1. Use a forklift to install the reach-in refrigerator in its operating location.
2. Level the refrigerator by turning the feet as necessary.
3. Clean and sanitize the refrigerator interior.



**OPERATION**

1. Connect power cord. The refrigerator will begin operation immediately.

**NOTE**

Refrigerators may be equipped with an energy-saving fan delay control to prevent the interior fans from operating until the evaporator coil becomes chilled. Therefore, on initial start-up, the fans will not turn on immediately. Allow sufficient time for the evaporator coil to reach its operating temperature (approximately 20-minutes).

2. Monitor for normal operation. All refrigerators must be given sufficient time to reach normal operating temperature before placing any food inside. Refrigerators are designed to maintain an ideal cabinet temperature of 38°F to 40°F (3.3°C to 4.4°C) and approximately 2-hours of operation are required to reach this temperature.

**NOTE**

Never overload top shelf with products so as to block or restrict cabinet airflow. Doing so will result in poor performance, decrease efficiency and possible need for service to de-ice evaporator.

3. Utilize the reach-in refrigerators as “break out boxes” to store the day’s use of refrigerated food products. The reach-in refrigerators should be emptied and cleaned at the end of each workday.

## Cleaning



### WARNING

Do not clean the refrigerator interior with food products still inside. Cleaning products may contaminate food. Failure to observe safety precautions may result in serious illness or death to personnel from poisoning.



### WARNING

Ensure that foods removed from any refrigerator are either transferred immediately to another refrigerator, served, or disposed of. Failure to observe safety precautions may result in serious illness or death to personnel from food poisoning.

1. Disconnect the power supply from the refrigerator.
2. Completely empty the refrigerator of all food products **(1)** and food handling equipment **(2)** before cleaning.

### CAUTION

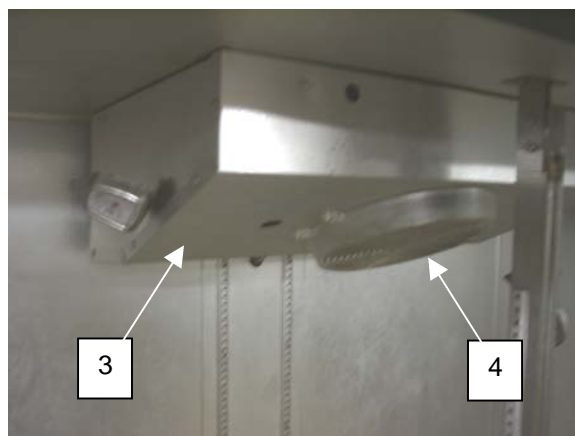
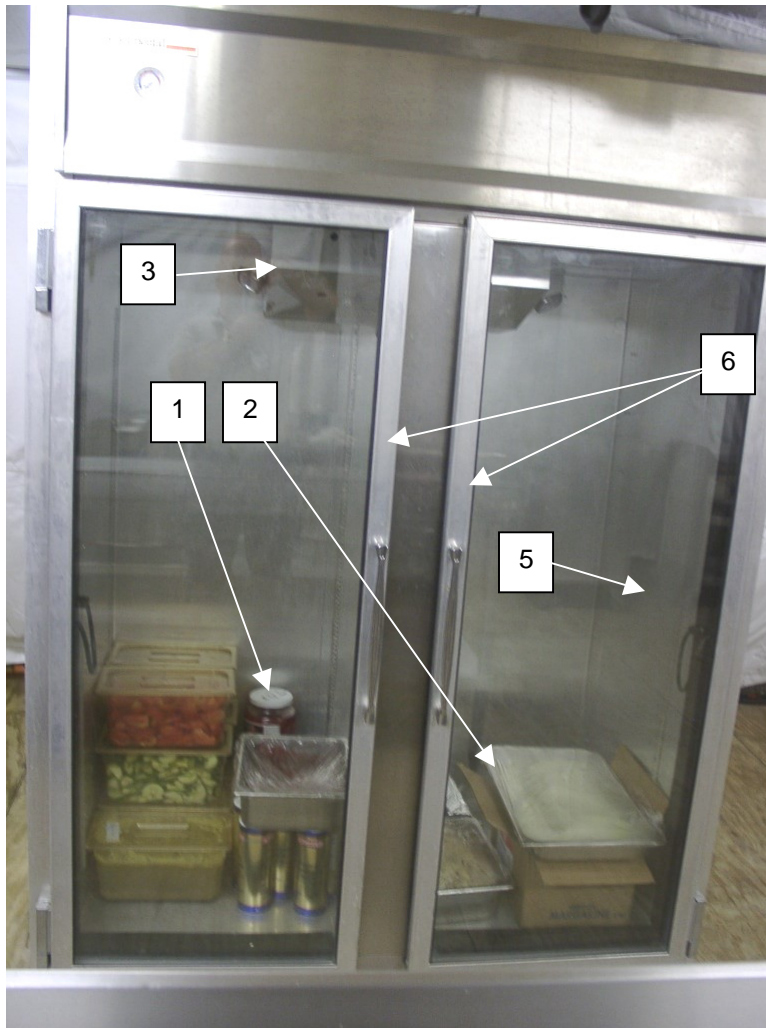
Do not attempt to clean the evaporator **(3)** or fan **(4)**. Do not attempt to remove any ice from the evaporator. Failure to observe this precaution may result in severe damage to the evaporator, rendering the refrigerator inoperable.

### NOTE

Do not use excess amounts of water and soap to clean the cabinet interior. This may create icing on the evaporator, diminishing performance until the next defrost cycle.

3. Use hot water and mild soap to clean food residue from the cabinet interior **(5)**.
4. Use hot water and mild soap to clean food residue from the cabinet exterior and door(s) **(6)**.
5. Dry the cabinet interior, and restock food if necessary.





**PREPARE FOR MOVEMENT**

1. Remove all contents from the refrigerator interior.
2. Disconnect the power cord.
3. Clean and sanitize the cabinet interior as directed in the "Cleaning" section, located on the previous pages.

**CAUTION**

Do not attempt to clean the evaporator or fan. Do not attempt to remove any ice from the evaporator. Failure to observe this precaution may result in severe damage to the evaporator, rendering the refrigerator inoperable.

**NOTE**

It is important to allow the evaporator enough time to defrost and air dry. Failure to allow adequate time to defrost may result in mildew or water damage to other kitchen components when the Force Provider Electric Kitchen is packed. If time constraints do not allow sufficient time to adequately defrost the refrigerator, arrange with unit maintenance to manually advance the defrost timer.

4. Allow the cabinet to defrost and interior to air dry, if necessary, for at least two hours with the door(s) fixed open.
5. Pack the reach-in refrigerators in accordance with the instructions given in WP 0023 00 (Force Provider) or WP 0024 00 (Force Provider (L)).

**END OF WORK PACKAGE**

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**OPERATOR MAINTENANCE  
FORCE PROVIDER FOOD SERVICE EQUIPMENT  
OPERATION UNDER USUAL CONDITIONS – TABLETOP STEAM KETTLE**

---

### SITING REQUIREMENTS

Exact placement of the tabletop steam kettle **(1)** within the Force Provider Electric Kitchen will be determined by the requirements of the unit, kitchen TEMPER layout, and the preference of the mess personnel.

The tabletop steam kettle must be mounted at least 36-inches from the floor in the installation area; for example, it may be placed on one of the folding tables furnished with the Force Provider Electric Kitchen.

The tabletop steam kettle **(1)** should be mounted on up against the rear edge of the table **(2)**. This is necessary to provide support for pots or serving vessels receiving soups, stews, or sauces cooked in the tabletop steam kettle.



**OPERATION****WARNING**

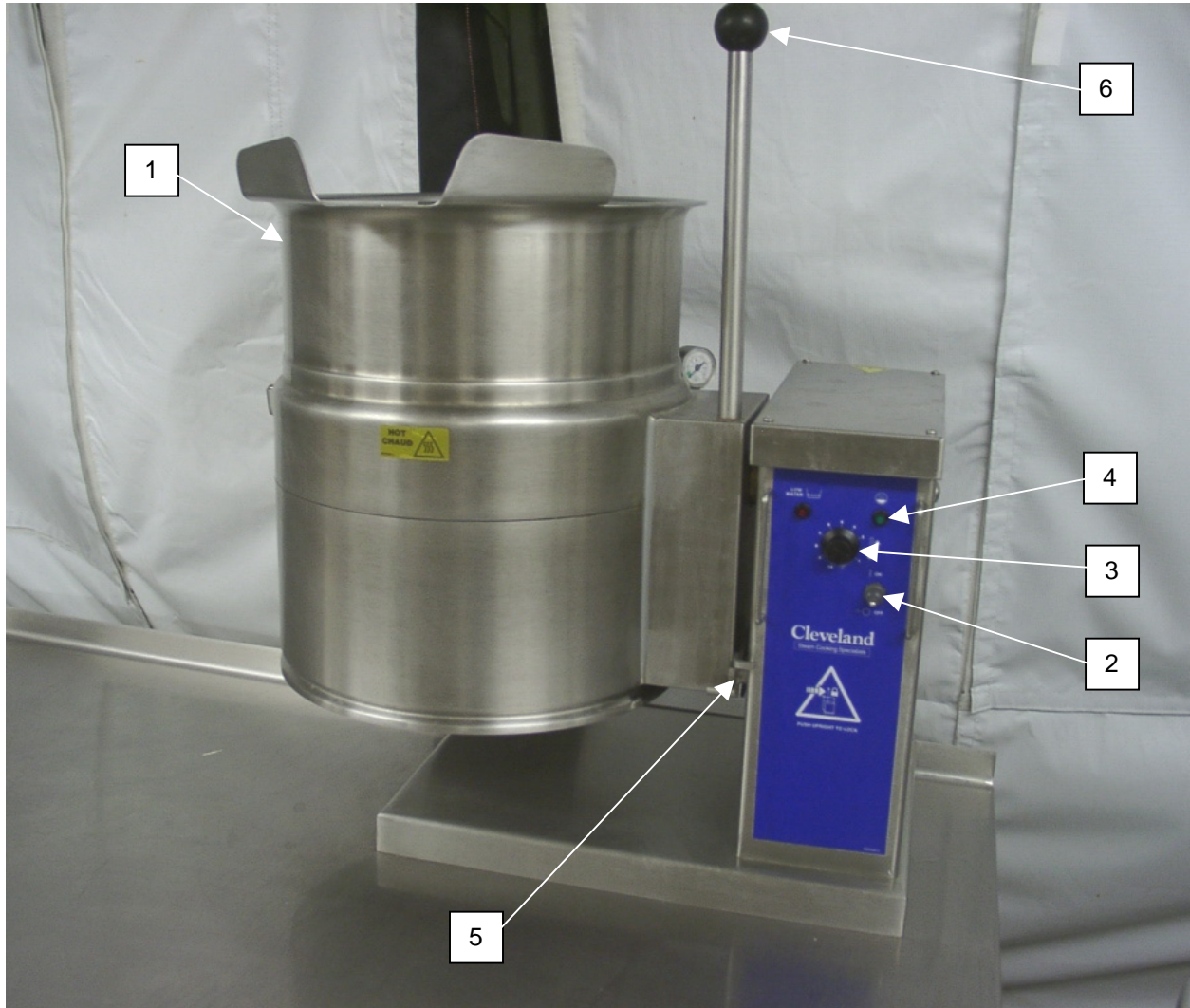
Use caution when cooking with the kettle. The kettle operates at a high temperature, and may cause serious burn injury to personnel if used incorrectly.

1. Clean and sanitize kettle **(1)**.
2. Connect power.
3. Turn ON/OFF switch **(2)** (if fitted) to ON.
4. Set thermostat **(3)** to desired temperature setting.
5. Place food product or cooking medium (water or oil) into kettle **(1)**.
6. Monitor indicator light **(4)**. Indicator light will go out when kettle has reached set temperature.
7. Turn thermostat **(3)** to OFF when kettle is no longer in use.

**WARNING**

Use caution when cooking with the kettle. If the kettle is accidentally tilted and released, it will self right. The kettle and handle may cause serious injury to personnel if safety precautions are not observed.

8. Disengage marine lock **(5)**, if fitted, and use handle **(6)** to pour contents from kettle **(1)**.
9. Turn ON/OFF switch **(2)** (if fitted) to OFF.
10. Drain, clean, and sanitize kettle **(1)**.



**PREPARE FOR MOVEMENT**

1. Turn kettle thermostat to OFF, and allow kettle to cool.
2. Turn ON/OFF switch (if fitted) to OFF.
3. Disconnect power from kettle.
4. Drain, clean, and sanitize kettle.
5. Pack the tabletop steam kettle in accordance with the instructions given in WP 0023 00 (Force Provider) or WP 0024 00 (Force Provider (L)).

**END OF WORK PACKAGE**

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**OPERATOR MAINTENANCE  
FORCE PROVIDER FOOD SERVICE EQUIPMENT  
OPERATION UNDER USUAL CONDITIONS – STEAM TABLE**

---

**SITING REQUIREMENTS**

Exact placement of the steam table within the Force Provider Electric Kitchen will be determined by the requirements of the unit, kitchen TEMPER layout, and the preference of the mess personnel. The steam table is portable, and can be wheeled to different locations within the Force Provider Electric Kitchen as needed.

The steam table requires a 208VAC, 40A connection to operate as a hot food service line. No power is required for cold food service.



**ASSEMBLY AND PREPARATION FOR USE**

Attach the shelf (1) and sneeze guards (2) onto the steam table (3), and retain with the screws provided. If screws are unavailable, contact unit maintenance.





## OPERATION

### Serving Hot Food



#### WARNING

Use caution when using the steam table. The heating elements are exposed within the water reservoir, and can cause serious burn injury to personnel if safety precautions are not observed.

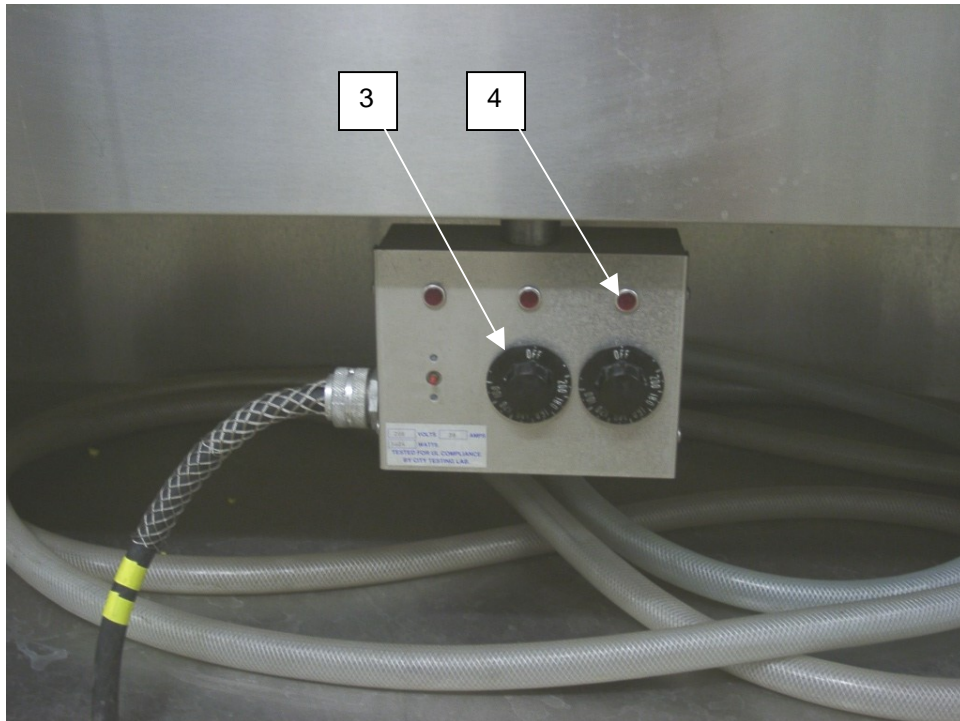
#### CAUTION

Do not connect the power cord until the steam table water reservoir has been filled. Failure to observe this precaution may result in damage to the heating elements.

#### NOTE

Use of hot water is preferred to speed heating of the steam table.

1. Close the drain valve, and fill the reservoir through the pan openings **(1)** to approximately 5-inches deep with water.
2. Cover the pan openings with covers **(1)**.
3. Connect power cord **(2)**.
4. Set thermostat(s) **(3)** to desired setting. The indicator light(s) **(4)** will come on, indicating that power is being supplied to the heating elements.
5. When the indicator lights **(4)** go out, the steam table is ready for use. Remove the pan covers and install the food service pans into the openings **(1)**.
6. Ensure that the sneeze guards **(5)** are down, and that the food service pans are kept covered until food is served.
7. When food service is through, remove all food service pans.
8. Set thermostat(s) **(3)** to lowest or OFF setting.
9. Disconnect power cord **(2)**.
10. Allow steam table to cool for at least one hour.
11. Open drain valve, drain water, and dispose of water in accordance with unit SOP.
12. Clean reservoir, shelf and sneeze guard assembly, and steam table exterior of any food residue.
13. Allow to air dry, with covers off.



**Serving Cold Food****CAUTION**

Do not connect the power cord unless the steam table water reservoir has been filled with water (not ice). Do not use the heating elements to melt ice. Failure to observe this precaution may result in damage to the heating elements.

1. Ensure power cord is disconnected
2. Close the drain valve, and fill the reservoir approximately 5 inches deep with ice.
3. Cover the pan openings.
4. Install the food service pans into the openings.
5. Ensure that the sneeze guards are down, and that the food service pans are kept covered until food is served.
6. When food service is through, remove all food service pans.
7. Melt remaining ice with hot water.
8. Open drain valve, drain water and dispose of water in accordance with unit SOP.
9. Clean reservoir, shelf and sneeze guard assembly, and steam table exterior, of any food residue.
10. Allow to air dry, with covers off.

**PREPARE FOR MOVEMENT**

1. Clean reservoir, shelf and sneeze guard assembly, and steam table exterior of any food residue.
2. Remove the screws retaining the shelf and sneeze guard assembly to the steam table.
3. Remove the shelf and sneeze guard assembly from the steam table.
4. Tape the screws to the bottom of the shelf.
5. Pack the steam table in accordance with the instructions given in WP 0023 00 (Force Provider) or WP 0024 00 (Force Provider (L)).

**END OF WORK PACKAGE**

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**OPERATOR MAINTENANCE  
FORCE PROVIDER FOOD SERVICE EQUIPMENT  
OPERATION UNDER USUAL CONDITIONS - ELECTRIC TOASTER**

---

**SITING REQUIREMENTS**

Exact placement of the electric toaster within the Force Provider Electric Kitchen will be determined by the requirements of the unit, kitchen TEMPER layout, and the preference of the mess personnel.

The electric toaster should be mounted at least 36-inches from the floor in the installation area; for example, it may be placed on one of the folding tables furnished with the Force Provider Electric Kitchen.

A minimum clearance of ½-inch is required for air circulation. The rounded acorn nuts protruding from the sides and rear ensure circulation. Overhead clearance from the top of the toaster should be as much as possible to allow heat dissipation.

The electric toaster requires a 115 or 208VAC 40A electrical supply.



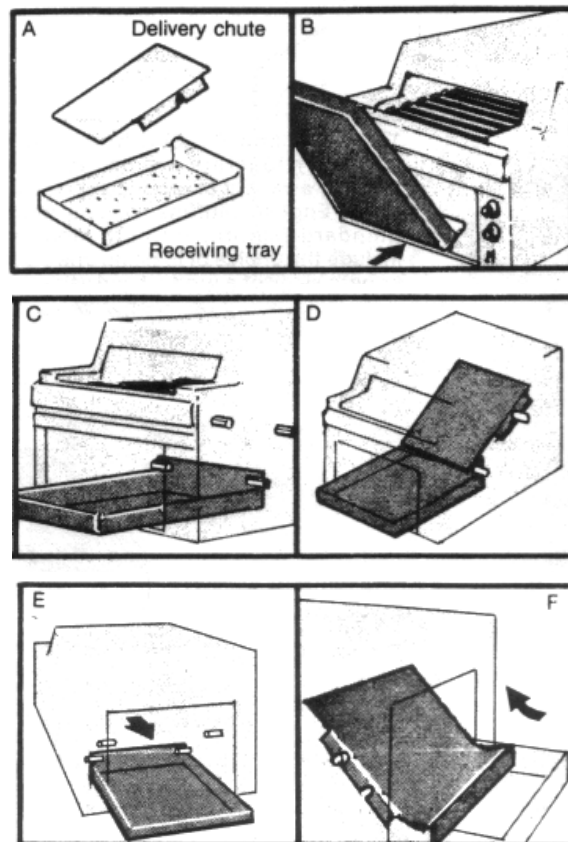
**ASSEMBLY AND PREPARATION FOR USE**

1. Place the toaster in its operating location.
2. Level the toaster by adjusting the legs.

**NOTE**

If supplied with a vertical toaster, no further preparation for use is required.

3. Tilt the receiving tray so that the back end slides along the bottom of opening and passes under and behind the two lower pins as shown in Figure B.
4. With tray resting flatly on bottom of opening, gently pull toward you until the back wall is stopped by the pins as shown in Figure C.
5. The delivery chute is now installed through the same opening. Verify that the chute has the open side facing down.
6. Slide chute over the upper pins until they rest in notches, then lower chute so opposite end rests on the lower pins as shown in Figure E and F.



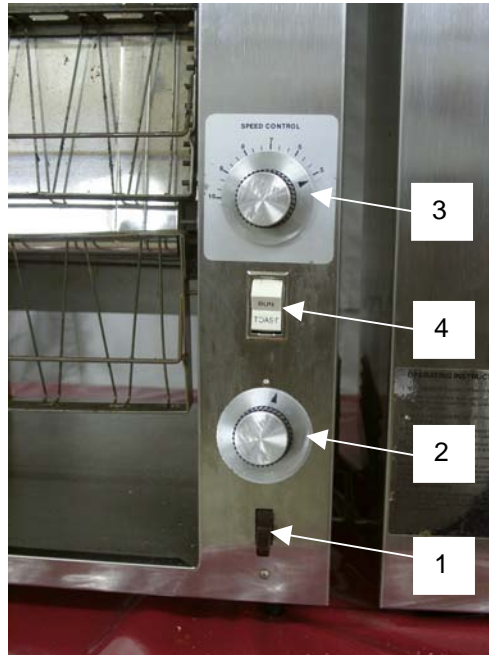
**OPERATION**

1. Connect the power cord.
2. Flip the On/Off switch **(1)** to the ON position.
3. Turn the thermostat knob **(2)** to the highest setting.

**NOTE**

To avoid damage to the conveyor system, always have the conveyor belt running when heaters are working.

4. On toasters with speed control **(3)**, turn the speed control to maximum speed setting (counter-clockwise until stopped).
5. Set Bun / Toast switch **(4)** to the TOAST position.
6. A 20-minute pre-heat time is required. After pre-heat time has elapsed, turn the temperature control to midpoint.
7. Wait approximately five minutes for the toaster to cool down. On toasters with speed control, turn the conveyor speed control to desired setting.
8. Turn the ON/OFF switch **(1)** OFF when through toasting.
9. Disconnect the power cord when the toaster is to be left unattended.



**WARNING**

Use caution while operating the toaster. The toaster operates at a high temperature and has a hot exterior. Failure to observe safety precautions may result in serious burn injury to personnel.

**Two Sided Toasting**

1. Ensure toaster is properly pre-heated.
2. Set Bun / Toast switch to TOAST.
3. Place two slices of bread, side by side, on the conveyor belt, and continue feeding bread in the same manner. The product passes through the toaster and slides down the chute into the receiving tray.
4. Leaving the toasted product in the receiving tray allows the product to remain warm until needed (horizontal feed toasters only).
5. If product is too dark, decrease the temperature control one number and wait one minute for heat dissipation. Repeat procedure if product remains too dark.
6. If the product is too light, increase the temperature control one number and wait several minutes for heat build-up.
7. On toasters with speed control, if product remains light after increasing the temperature control, slow the conveyor speed slightly by turning the speed control knob clockwise. It may be necessary to pass the product through the conveyor a second time to achieve the desired toasting results.

**One Sided Toasting**

1. Ensure toaster is properly pre-heated.
2. Set Bun / Toast switch to BUN.
3. Feed buns with cut side up onto conveyor belt
4. Leaving the toasted product in the receiving tray allows the product to remain warm until needed (horizontal feed toasters only).
5. If product is too dark, decrease the temperature control one number and wait one minute for heat dissipation. Repeat procedure if product remains too dark.
6. If the product is too light, increase the temperature control one number and wait several minutes for heat build-up.
7. On toasters with speed control, if product remains light after increasing the temperature control, slow the conveyor speed slightly by turning the speed control knob clockwise. It may be necessary to pass the product through the conveyor a second time to achieve the desired toasting results.





## WARNING

Ensure that the toaster is cool prior to attempting cleaning. The toaster operates at a high temperature and has a hot exterior. Failure to observe safety precautions may result in serious burn injury to personnel.

### Cleaning

1. The stainless steel outer case **(1)** requires a daily wiping with a damp cloth. If an excessive amount of grease or dirt is present, hot sudsy water may be used. Care must be taken to prevent water or cleaning compounds from getting on internal parts, especially the switches on the control panel **(2)**.
2. Bread crumbs collecting on the base may be removed by lifting out the receiving tray and the delivery chute and brushing off the crumbs.
3. The heat reflector tray, located beneath the conveyor, should be removed and cleaned daily (horizontal toasters only).



**PREPARE FOR MOVEMENT**

1. Disconnect the toaster power cord.
2. Allow the toaster to cool at least one hour.
3. Clean the toaster as described in the "Cleaning" section, located on the previous page.
4. Pack the Toaster, Electric in accordance with the instructions given in WP 0023 00 (Force Provider) or WP 0024 00 (Force Provider (L)).

**END OF WORK PACKAGE**

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**OPERATOR MAINTENANCE  
FORCE PROVIDER FOOD SERVICE EQUIPMENT  
OPERATION UNDER USUAL CONDITIONS – COFFEE URN**

---

**SITING REQUIREMENTS****NOTE**

The coffee urn is packed in TRICON 10G.

Exact placement of the coffee urn within the Force Provider Electric Kitchen will be determined by the requirements of the unit, kitchen TEMPER layout, and the preference of the mess personnel.

The coffee urn should be mounted at least 36-inches from the floor in the installation area; for example, it may be placed on one of the folding tables furnished with the Force Provider Electric Kitchen.

The coffee urn requires a 208VAC, 3-phase power connection and a potable water hookup.



**ASSEMBLY AND PREPARATION FOR USE**

1. Remove the coffee urn **(1)** from any packing containers or material. Retain all packing materials.
2. Position the urn **(1)** at its operating location.
3. Ensure the urn **(1)** is level. Adjust the legs **(2)** as required to level the urn.

**NOTE**

The urn should be equipped with the correct fittings to connect to the potable water supply. If the fittings are incompatible or incomplete, notify unit maintenance.

4. Connect the potable water connection to a potable water hose.
5. Verify water supply to urn **(1)**.
6. Ensure all controls are OFF.

**CAUTION**

Do not connect power unless water is supplied to urn. Urn will fill with water as soon as power connection is made.

7. Connect the power cord.

**NOTE**

Ensure that the urn is cleaned and rinsed thoroughly before using. Use only water and mild soap or detergent to clean.

**NOTE**

The urn liner is the cylindrical basin where coffee is brewed. The urn jacket is the hot water jacket surrounding the liner. Hot water for tea and hot mixes is drawn from the urn jacket.

8. Clean the urn liner, cover **(3)**, faucets **(4)**, and urn exterior.



**OPERATION****WARNING**

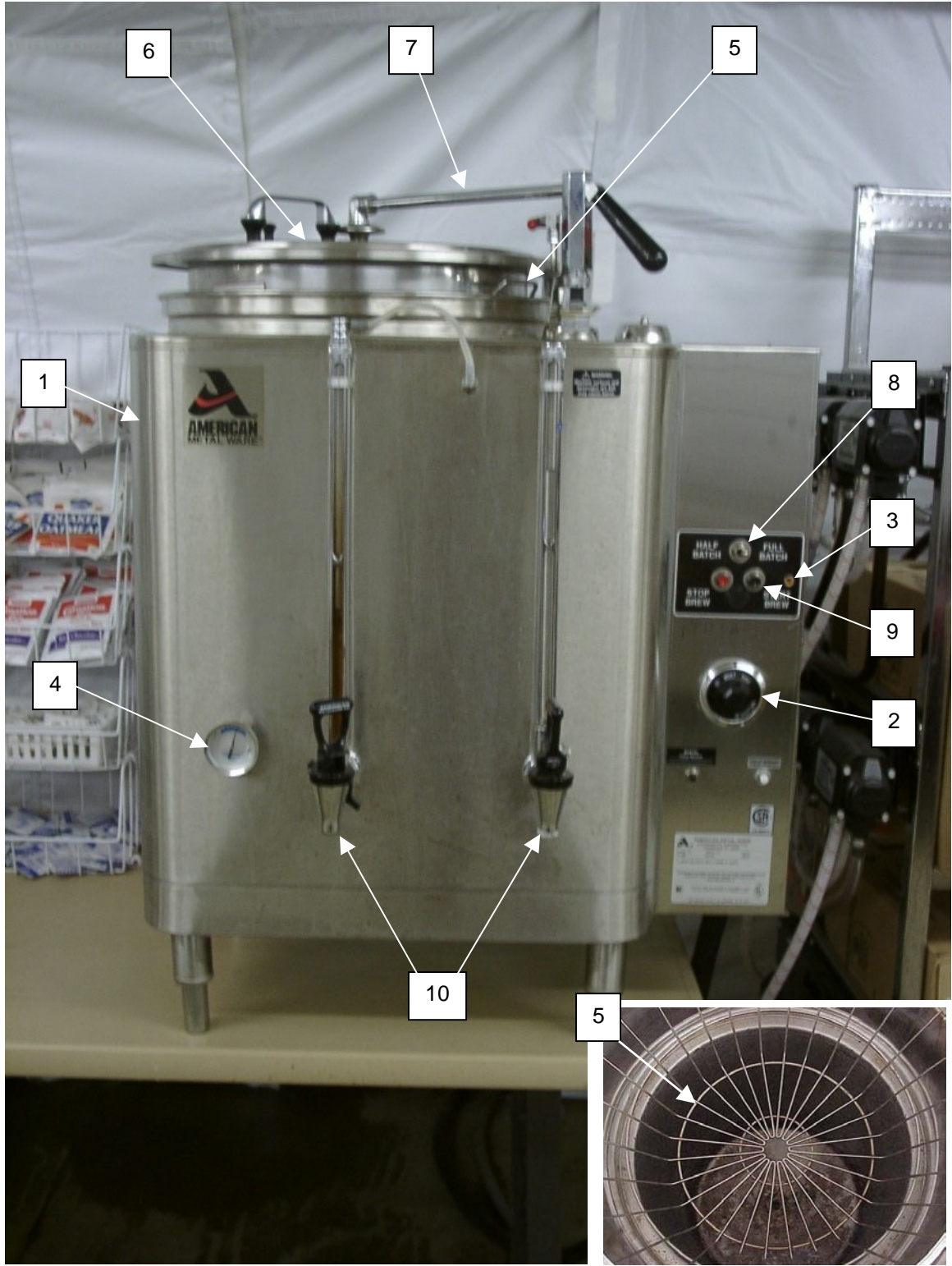
Use caution while operating the coffee urn. The urn operates at a high temperature, and presents a hot exterior. Both the jacket water and coffee are capable of producing scalding injuries. Failure to observe safety precautions may result in serious burn injury to personnel.

1. Ensure that water and power supply are connected to urn **(1)**.
2. Ensure that urn **(1)** is clean and well rinsed.
3. Turn the thermostat knob **(2)** in front of housing to BREW position. The pilot light **(3)** on top of thermostat bezel will illuminate. Water in urn will heat up, and thermometer **(4)** pointer will rise to high end of BREW zone on thermometer dial. It will take approximately 45-minutes to heat water, depending on inlet water temperature, and urn heater wattage. Pilot light on top of thermostat bezel will go out when water in urn is at brew temperature.

**NOTE**

Always be sure to thoroughly rinse the urn liner between batches, and brew and discard at least one batch of water before commencing operation for the day.

4. Brew and discard at least one batch of water.
5. Place filter paper in brew basket **(5)** with designated amount of coffee grounds. Make certain you have a level bed of coffee.
6. Replace cover **(6)**, then lift and rotate the spray arm **(7)** to position the nozzle in the hole on the basket cover.
7. Set the batch size toggle **(8)** for a full or half batch. Press the start button **(9)** on timer.
8. The brew cycle takes approximately 2 to 15-minutes depending on the size of the batch. When the brew is finished, allow one to two minutes for the coffee to drip from the basket.
9. When the drip period is complete, rotate (Stop # 6 centers the spray arm) the spray arm **(7)** and remove the basket **(5)** to throw away the grounds. Replace the liner cover **(6)** to keep the coffee hot.
10. Hold brewed coffee at 185<sup>0</sup>F to 190<sup>0</sup>F by turning to the HOLD setting on thermostat knob **(2)**.
11. Dispense coffee and hot water through the faucets **(10)**.



## Cleaning



### **WARNING**

Use caution while operating the coffee urn. The urn operates at a high temperature, and presents a hot exterior. Both the jacket water and coffee are capable of producing scalding injuries. Ensure the Coffee Urn is emptied of coffee, and that the urn jacket has cooled to below 100°F (37°C). Failure to observe safety precautions may result in serious burn injury to personnel.

### **NOTE**

A step aid may be required to clean the coffee urn.

1. Press the stop brew button on timer and drain urn (liner/water jacket) and allow to cool.
2. Clean the urn thoroughly at the end of the workday.
  - a. Remove the coffee faucet and clean thoroughly.
  - b. Clean liners by rinsing and scrubbing with large, plastic bristle brush.
  - c. Wipe outside surfaces of the urn with a damp cloth.
  - d. Clean the brew basket. Remove wire basket insert if needed.
  - e. Wipe clean the liner covers.
  - f. Install the coffee faucet.
  - g. Fill the liners with about one gallon of water to prevent coffee oil burn-in.



**PREPARE FOR MOVEMENT****WARNING**

Use caution while operating the coffee urn. The urn operates at a high temperature, and presents a hot exterior. Both the jacket water and coffee are capable of producing scalding injuries. Failure to observe safety precautions may result in serious injury to personnel.

1. Disconnect the power cord.
2. Turn water supply OFF, and disconnect.
3. Allow urn to cool to less than 100<sup>0</sup>F (37<sup>0</sup>C).
4. Drain and clean the urn liner as described in the “Cleaning” section, located on the previous page.
5. Drain the urn jacket.
6. Package in retained packing materials.
7. Pack the coffee urn in TRICON 10G, in accordance with the instructions given in TM 10-5419-206-13, “Operator, Unit, and Direct Support Maintenance for Force Provider”.

**END OF WORK PACKAGE**



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**OPERATOR MAINTENANCE  
FORCE PROVIDER FOOD SERVICE EQUIPMENT  
OPERATION UNDER USUAL CONDITIONS - FIELD PACKING FOOD SERVICE FPS**

---

**GENERAL****NOTE**

This work package covers field packing the food service equipment for standard Force Provider modules only. Do not use these instructions to field pack Force Provider (Lite) modules.

Force Provider Food Service Equipment must be repacked in the correct TRICON containers before the Force Provider module may be moved or redeployed. The TRICONS covered in this TM include:

- 10B Kitchen Kit, Part A
- 10H Kitchen Kit, Part B
- 10M Kitchen Kit, Part C
- 10N Kitchen Kit, Part D
- 10P Kitchen Kit, Part E

Information and packing plans for components and system outside of the scope of this TM are covered in TM 10-5419-206-13, "Operator's, Unit, and Direct Support Maintenance Manual for Force Provider".

**REPACKING INSTRUCTIONS**

Force Provider subsystem field packing instructions described in this and other WP provide procedures for packing equipment originally shipped for each subsystem. Due to consumption during operation, certain material, spare parts, discretionary, and expendable items may not be available for return shipment at all, or in quantities other than indicated in the packing instructions. In addition, used cleaning implements should not be returned but disposed of locally. Also, originally shipped equipment items may have been replaced with new, and/or differently configured items.

Under these conditions, follow the packing instructions as closely as possible. Return-ship any new equipment received in place of the original, and, where necessary, fill empty spaces in TRICON with additional dunnage available.

**FIELD PACKING FOOD SERVICE KITCHEN KIT PART A TYPE 10B (FP)**

This paragraph provides information to pack food service equipment into TRICON type 10B. Close adherence to these procedures is imperative to prevent equipment damage, and allow all equipment to fit into designated container. The following procedures are for field packing one TRICON type 10B.

Depot shelves, packaging, blocking, bracing, tiedowns, and dunnage retained during unpacking will be needed to repack equipment for storage or shipment.

Equipment must be clean, dry, and debris-free before packing. Prepare components for packing as follows:

1. Locate TRICON with "FOOD SERVICE KITCHEN KIT PART A TYPE 10B..." stenciled on the left door. This container should be staged in the Food Service area.
2. Ensure plywood boxes, shelving, fiberboard boxes, and bracing are present and serviceable in TRICON. If no longer serviceable, these will have to be reproduced before packing.

**WARNING**

Use appropriate number of personnel when moving large, bulky, or heavy items. Never individually attempt to lift an item if it requires more than one person to avoid serious injury.

3. Locate one oven and prepare for packing as follows:
  - a. Open the oven and remove the racks.
  - b. Tape the racks together and place back into the oven bottom.
  - c. Wrap the 60A connector in cushioning material and secure with tape.
  - d. Close the oven doors and secure with twine.
  - e. Place two pieces of fiberboard onto the skids of the reusable oven container.
  - f. Position the oven onto the skid and secure with tiedown straps. Crisscross the straps over the oven and connect to the eyebolts on the skid.
  - g. Place cover on pallet and connect using locking fixtures.
4. Locate one steam table and prepare for packing as follows:
  - a. Place the fiberboard cover sleeve on top of the table and secure with tape.
  - b. Locate the electrical power cord, wrap the connector in cushioning material, and secure with tape.
  - c. Coil the cable and place it at the end of the cable assembly. Secure with tape.
  - d. Locate the drain hose. Neatly coil the hose and secure to table with wire ties.
  - e. Locate the sneeze guard and place it on top of the steam table.
5. Locate one griddle assembly and prepare for packing as follows:

- a. Secure the grease trap draw with tape.
  - b. Wrap electrical cord connector in cushioning material and secure with tape.
  - c. Use nylon bands to secure the top to the bottom part of the griddle.
  - d. Cover the cooking surface with fiberboard, and place the griddle manual on top. Secure with tape.
6. Locate three insulated food containers, 48 sugar dispensers, 48 pepper shakers, and 48 salt shakers.
- a. Wrap shakers and dispensers in cushioning material.
  - b. Place 48 of each type shakers/dispensers into a separate insulated food container.
7. Locate the following items:

Item	Quantity
Cookie Cutters	1
First Aid Kit	1
Craftsman Knife	1
2-qt Liquid Measure	2
15-in Food Service Spoon	4
Slotted Food Service Spoon	8
Food Preparation Fork	1
10-gallon Cooking Pot	1
Type III Bi-Metal Thermometer	2

- a. Individually wrap each item in protective paper and secure with tape.
  - b. Place items into a 10-gallon cooking pot.
8. Locate the following items:

Item	Quantity
Cookie Cutters	1
First Aid Kit	1
Craftsman Knife	1
2-qt Liquid Measure	2
15-in Food Service Spoon	8
Slotted Food Service Spoon	8
21-in Food Preparation Fork	6
2-oz Kitchen Ladle	4
Pie and Cake Server	2
Scouring Pad	6
10-gallon Cooking Pot	1
Type III Bi-Metal Thermometer	2

- a. Individually wrap each item in protective paper and secure with tape.
- b. Place items into a separate 10-gallon cooking pot.

9. Locate the following items:

Item	Quantity
Spoon Measuring Sets	2
Garden Hose	2
Hand Can Opener	2
Hand Potato Peeler	2
15-gal Pot	1
Pot Holder	4

- a. Individually wrap each item in protective paper and secure with tape.
- b. Place items into a 15-gallon cooking pot.

10. Locate six fire extinguishers and place them in fiberboard containers. Secure containers with tape.

11. Locate the following items:

Item	Quantity
10-Gal Pots Previously packed	2
15-Gal Pot Previously packed	1
Splash Plates	4
Rubber Dust Pans (if unused)	2
Brushes	2
Hand Flour Sifter	2
5-qt Pitcher	3

- a. Individually wrap each item in protective paper or cushioning material and secure with tape.
- b. Pack the splash plates, sifters and pitchers in the bottom rack of a rack set, and place the second rack on top of the bottom one so they are nested

12. Locate the following items:

Item	Quantity
15-Gal Pot Previously packed	1
Cooking Pot Covers	4
Three Grid Section Sharpening Stone	1

- a. Wrap the pot covers and sharpening stone in cushioning material.
- b. Secure with tape.

13. Locate 27 food serving and storage pans, and three food serving pan covers (box of six, 18 total). Place these items into their fiberboard containers. Pack these items into a storage rack. Place the second rack on top of the bottom one so they are nested.

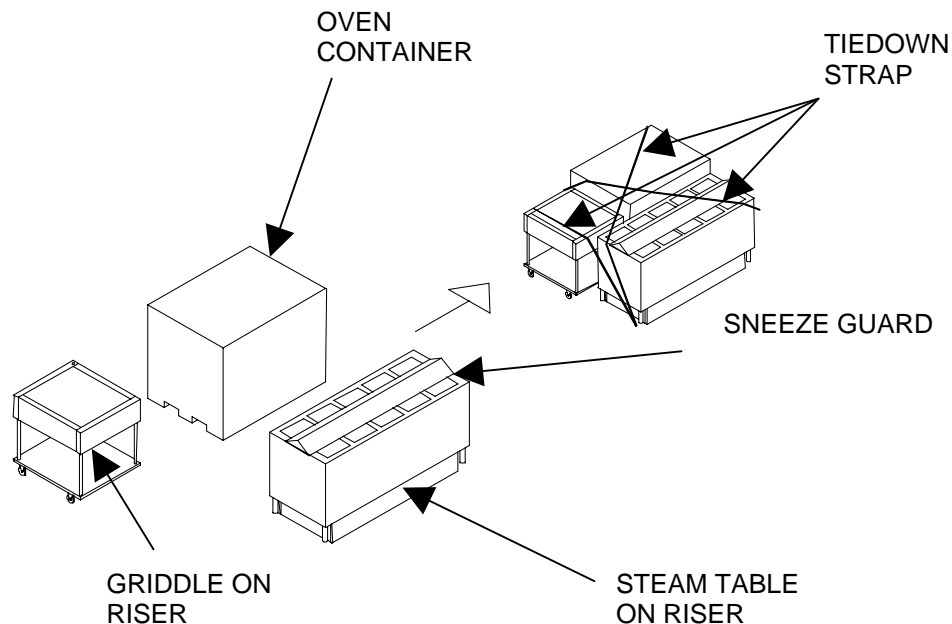
### Packing Procedures for TRICON 10B (standard FP configuration)



#### **WARNING**

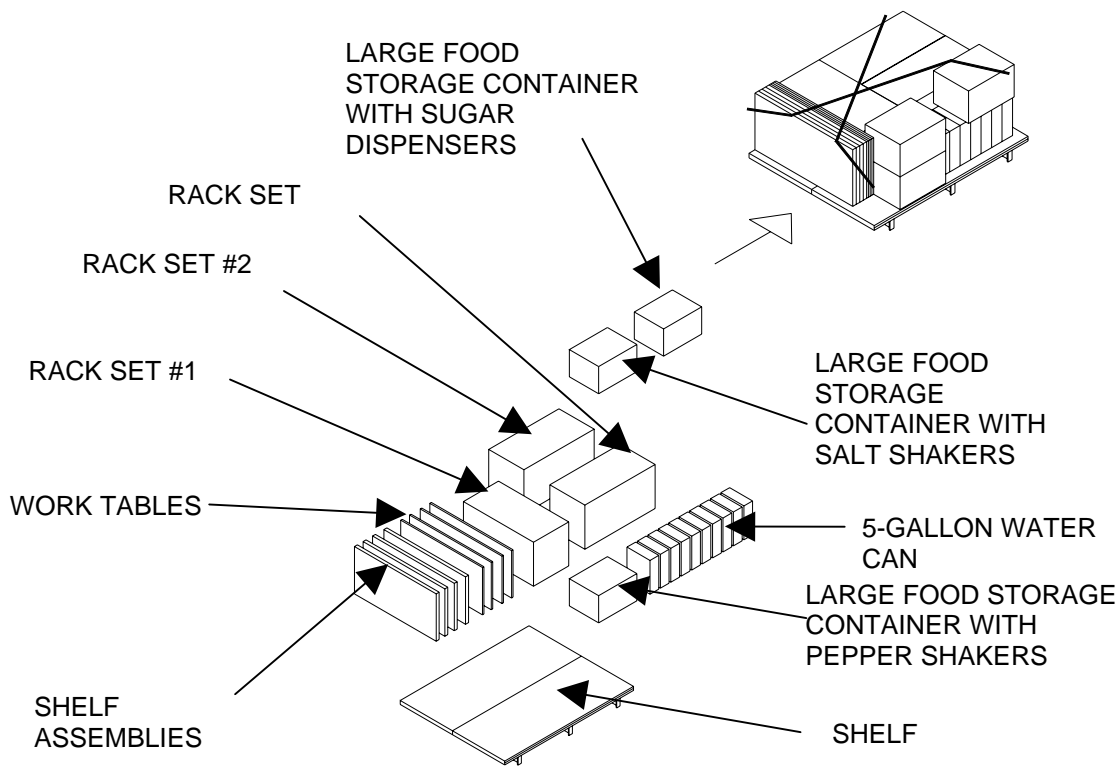
Use appropriate number of personnel when moving large, bulky, or heavy items. Never individually attempt to lift an item if it requires more than one person to avoid serious injury.

1. Place a 72½-inch x 30-inch piece of plywood on the TRICON floor.
2. Attach the non-ratchet end of a tiedown strap to the back tiedown loops on each side of the container.
3. Place the steam table riser on the floor against the right wall of the TRICON.
4. Position the steam table on top of the riser and move into the far right corner of the container.
5. Place the oven container lengthwise into the back left of the container
6. Place the griddle riser on the floor in front of the oven container. Position the griddle on the riser.
7. Connect the strap from behind the oven container to the tiedown loop in front of the steam table. Connect another tiedown strap from the from a tiedown loop next to the griddle, to the loop in front of the steam table.
8. Connect one each strap to the back corner tiedown bar on each side of the container.



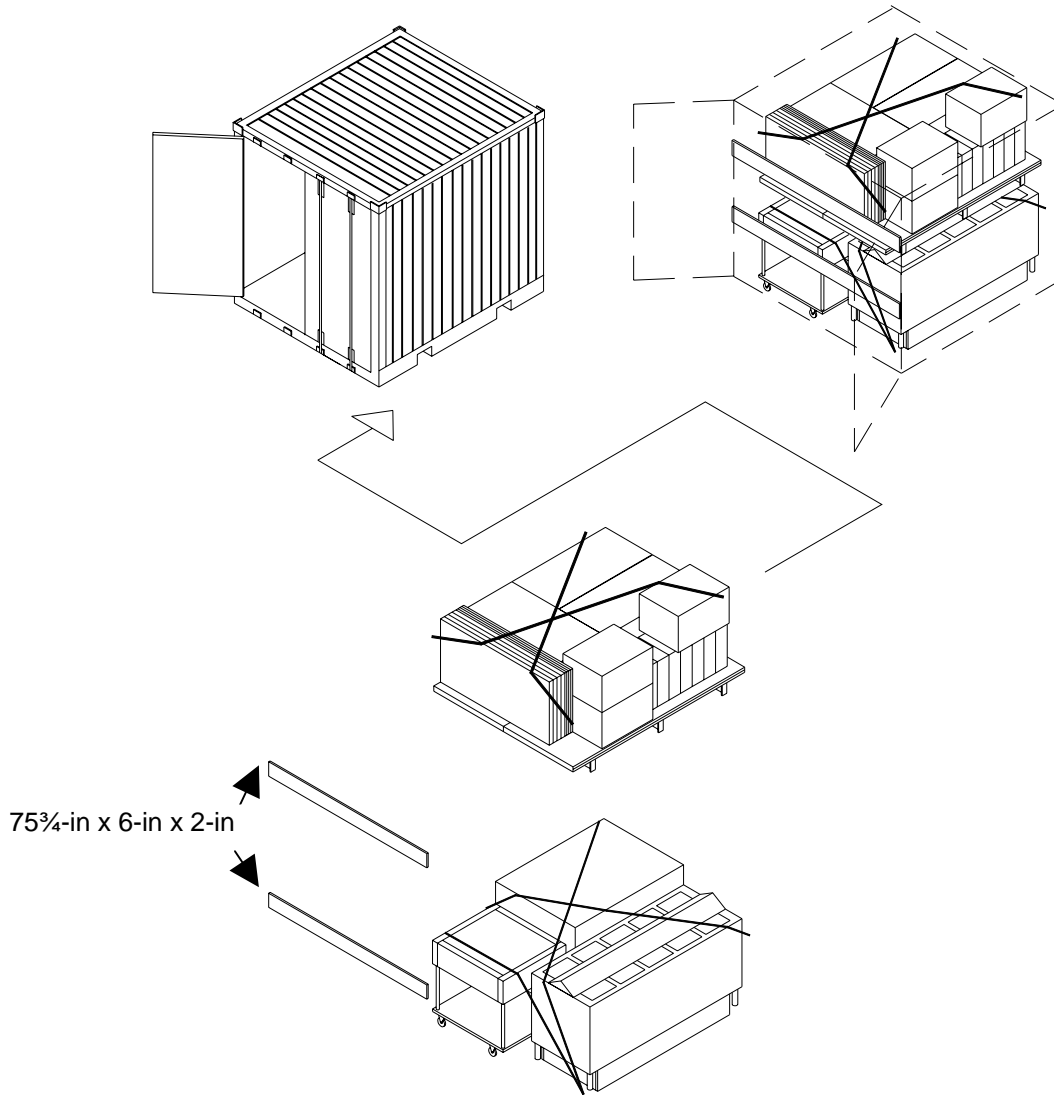
9. Install three TRICON shelf support brackets as marked on the vertical uprights. Install two modified shelf assemblies on top of the brackets.

10. Place one rack set length-wise in the back left corner of the shelf.
11. Place the second rack set to the right of the first rack set.
12. Place water cans in back right corner of the shelf.
13. Place the food storage container with 48 sugar dispensers packed inside, in the back right corner of the container on top of the water cans.
14. Place the third rack set sideways in front of the other two racks.
15. Place the remaining two food storage containers in front of the water cans.
16. Place four tables sideways in front of the storage racks.
17. Place four shelf assemblies in front of the four tables.





18. Crisscross the straps over the shelf and connect to the restraint beam support bars.
19. Ensure straps are properly tightened and not twisted.
20. Place a 75¼-inch x 6-inch x 2-inch piece of lumber in front of the first layer so that it is in line with the top of the griddle.
21. Place a 75¼-inch x 6-inch x 2-inch piece of lumber in front of the second layer so that it is in the middle of the shelf assemblies.
22. Install honeycomb, cross boards, blocking and bracing as required to fill spaces and gaps between items.
23. Close and secure TRICON doors.



**FIELD PACKING FOOD SERVICE KITCHEN KIT PART A TYPE 10B**

**FIELD PACKING FOOD SERVICE DINING TENT KIT PART B TYPE 10H**

1. Locate TRICON container with “FOOD SERVICE DINING TENT KIT PART B TYPE 10H...” stenciled on the left door. This container should be staged in the Food Service area.
2. Ensure plywood boxes, shelving and bracing are present and serviceable in TRICON. If no longer serviceable, these will have to be reproduced before packing.
3. Locate one reusable oven container and one oven.



**WARNING**

Use appropriate number of personnel when moving large, bulky, or heavy items. Never individually attempt to lift an item if it requires more than one person to avoid serious injury.

- a. Open oven and remove racks.
  - b. Wrap racks together using cushioning material secured with tape.
  - c. Position racks in the oven and use filler to prevent movement.
  - d. Wrap the 60A connector in cushioning material and secure with tape.
  - e. Close oven doors and tie together using twine or a wire tie.
  - f. Place two pieces of fiberboard on the skids on the reusable container.
  - g. Position the oven on the platform over the fiberboard protectors.
  - h. Place the cover on the pallet and connect using locking fixtures.
4. Locate the following items:

Item	Quantity
Steak Knives	4
Slicing Knives	4
Paring Knives	4
Boning Knives	4
Kitchen Ladles, 8-oz	4
Kitchen Ladles, 4-oz	3
Kitchen Dippers	4
Butchers Steel	2
Sharpening Stones	2
Cooks Knives	4

- a. Individually wrap each item in cushioning material and secure with tape.
- b. Layer each item inside a fiberboard container (box #1).

5. Locate the following items:

Item	Quantity
Spatulas	4
Kitchen Skimmers	4
Long Food Prep Forks	6
Food Turners	6
Egg Whips	2
Ice Picks	2
Food Service Spoons	20
Food Service Tongs	6

- a. Individually wrap each item in cushioning material and secure with tape.
- b. Layer each item inside a fiberboard container (box #2).

6. Locate one tilt fry pan / tilt griddle.

- a. Place box #1 and box #2 (packed above) into the griddle.
- b. Secure the cover of the fry pan with nylon banding.
- c. Wrap the fitting with cushioning material and secure with tape.

7. Locate one food warming cabinet.

- a. Open the cabinet and secure any racks or loose objects inside the cabinet.
- b. Close door and secure.
- c. Wrap the plug end of the cable in cushioning material.
- d. Coil the electrical cable and secure to the cabinet.

8. Locate two ice making machines. (Each machine contains two parts.)

- a. Place cushioning material around the water fittings on each half of the ice machine and secure with tape.
- b. Wrap the fittings on the bucket half in cushioning material and secure with tape.
- c. Place each of the two bucket halves in a fiberboard container.
- d. Wrap the plug of the mechanical portion of the ice machine with cushioning material and secure with tape.
- e. Coil and secure the power cable to the mechanical portion of the machine.
- f. Place each of the "mechanical halves" in a fiberboard container and close.

9. Locate one electric toaster.
  - a. Place cushioning material around the plug and secure in place with tape.
  - b. Coil the cable and place it inside the toaster.
  - c. Place the toaster and the commercial manual inside a reusable crate.
  - d. Close the crate and secure the latch using wire or a wire tie.
10. Locate one mechanical beverage dispenser.
  - a. Wrap cushioning material around the plug and secure with tape.
  - b. Place dispenser and the commercial manual in a reusable crate.
11. Locate four mounted can openers.
  - a. Wrap each can opener with cushioning material and secure with tape.
  - b. Place each can opener into a fiberboard container.
12. Locate fifteen 5-gallon liquid dispensers and place each one in their original container.

## Packing Procedures for TRICON 10H (standard FP configuration)

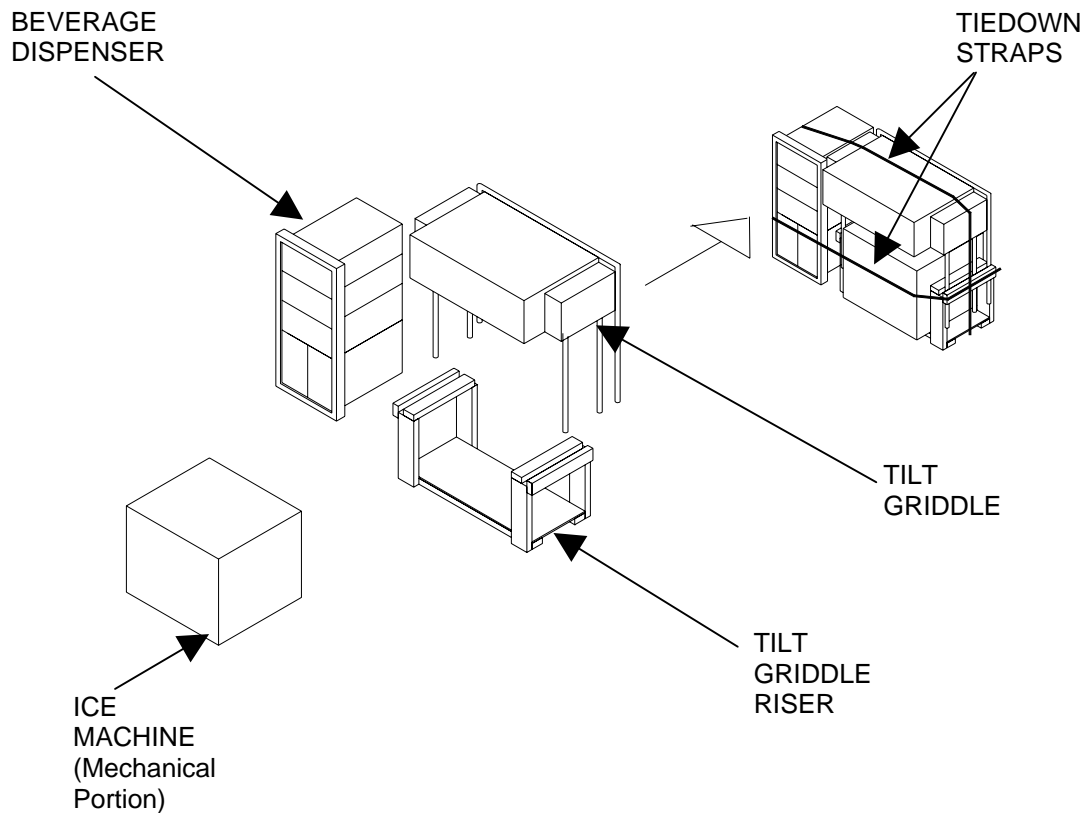


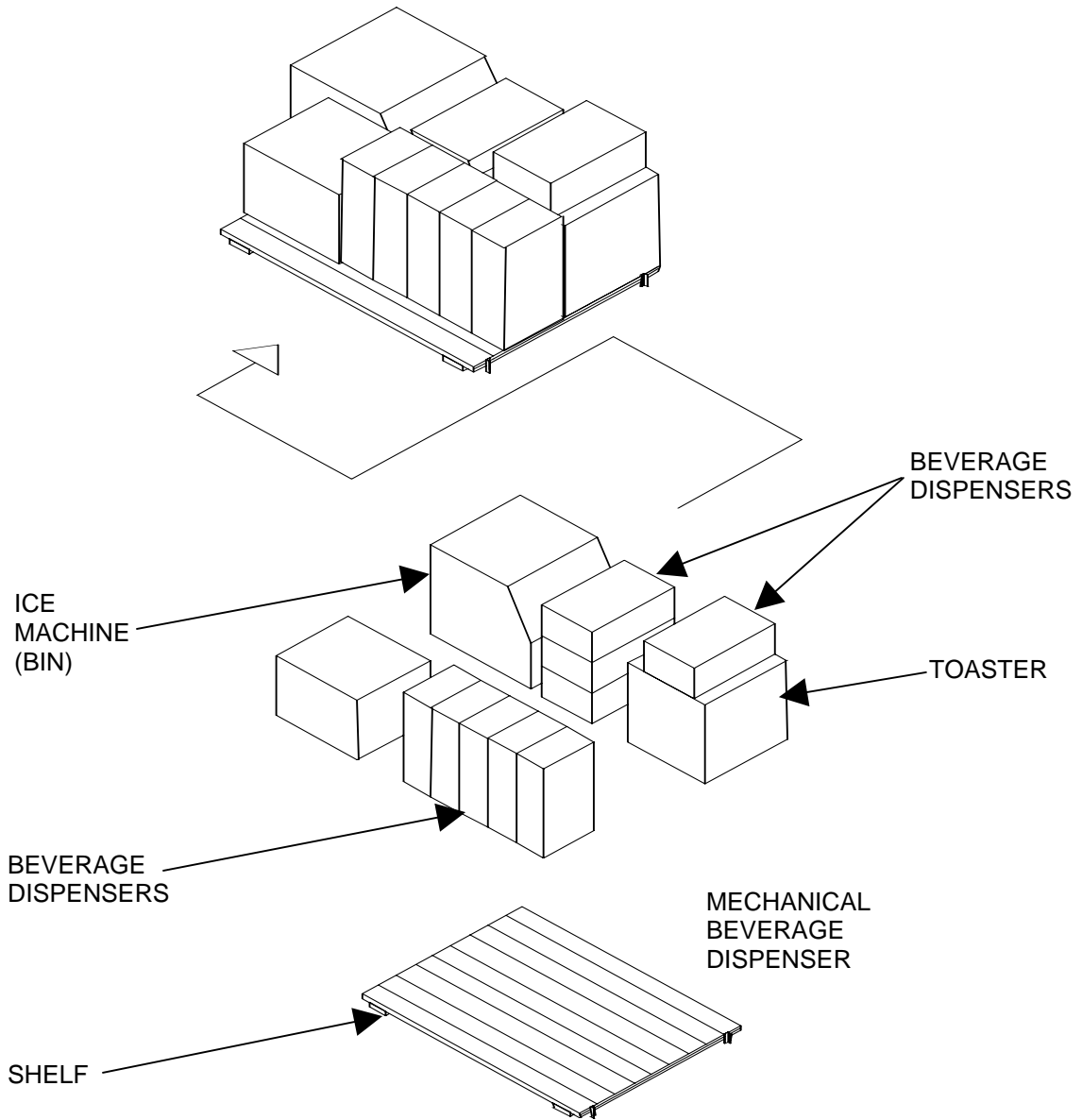
### **WARNING**

Use appropriate number of personnel when moving large, bulky, or heavy items. Never individually attempt to lift an item if it requires more than one person to avoid serious injury.

#### Bottom Layer

1. Attach one tiedown strap to the back tiedown loops on the left side of the container. Connect another strap to the lower rear corner tiedown bar on the right side of the container.
2. Place the tilt griddle riser on the back right wall of the container and place the griddle on top of it.
3. Place one of the mechanical portions of the ice machine on the shelf under the tilt griddle.
4. Stack five beverage dispensers next to the tilt griddle. Create a filler as necessary to fit in front of the dispensers.





**Top Layer****WARNING**

Use appropriate number of personnel when moving large, bulky, or heavy items. Never individually attempt to lift an item if it requires more than one person to avoid serious injury.

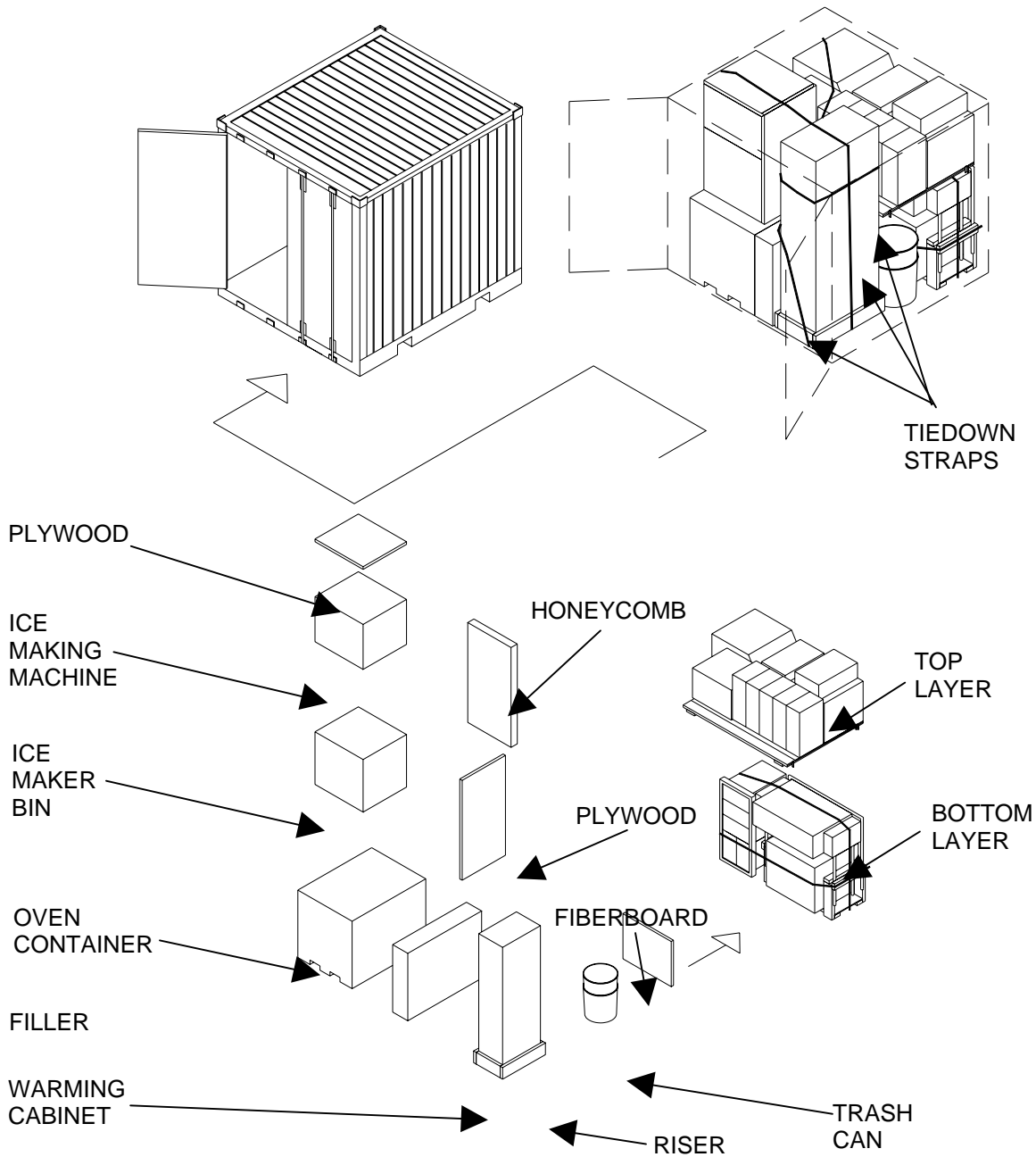
1. Install three shelf assemblies on the wooden shelf supports.
2. Place one beverage dispenser inside the bin of the ice machine, and place it on the back left corner of the shelf.
3. Place the toaster crate on the back right corner of the shelf.
4. Locate four beverage dispensers.
5. Stack three of the dispensers in between the ice machine bin and the toaster.
6. Place the fourth dispenser on top of the toaster.
7. Locate the mechanical beverage dispenser crate and five more beverage dispensers.
8. Place the crate in front of the bin of the ice machine, and place the beverage dispensers next to it across the shelf.

**Front Portion of TRICON**

1. Connect tiedown straps to the left wall in preparation for securing items.
2. Position the oven container along the left wall.
3. Locate two trashcans and four mounted can openers.
  - a. Nest the trashcans.
  - b. Place the four can opener boxes inside the cans.
  - c. Place the two covers on top of the cans and secure.
  - d. Place the two cans under the shelf and in front of the tilt fry pan. Place a piece of fiberboard between the trashcans and the griddle. Add filler if necessary.
4. Locate the second ice making machine.
  - a. Place the bin on top of the oven container so the drain fitting is facing the doors of the container and the unit is against the shelf.
  - b. Place the mechanical portion on top of the bin.
5. Use honeycomb to fill between the machine and the shelf.
6. Place a piece of plywood on the front and right side of the ice machine.



7. Place the warming cabinet on the riser against the right wall of the container, up against the trash cans.
8. Connect tiedown straps securing the riser and ice machine.
9. Install honeycomb, cross boards, blocking and bracing as required to fill spaces and gaps between items.
10. Close and secure TRICON doors.



FIELD PACKING FOOD SERVICE DINING TENT KIT PART B TYPE 10H

**FIELD PACKING KITCHEN KIT PART B TYPE 10M**

This paragraph provides information to pack the food service equipment into TRICON type 10M. Close adherence to these procedures is imperative to prevent equipment damage, and allow all equipment to fit into designated container. The following procedures are for field packing one TRICON type 10M.

Depot shelves, packaging, blocking, bracing, tiedowns, and dunnage retained during unpacking will be needed to repack equipment for storage or shipment.

Equipment must be clean, dry, and debris-free before packing. Prepare components for packing as follows:

1. Locate one reusable oven container and one oven.
  - a. Wrap racks together using cushioning material and position in oven.
  - b. Use filler to prevent movement.
  - c. Wrap the 60A connector in cushioning material and secure in place with tape.
  - d. Close oven doors and tie together using twine or wire tie.
  - e. Place two pieces of fiberboard on the skid on the reusable container.
  - f. Position the oven on the platform resting on the fiberboard.
  - g. Secure the oven to the skid using two tiedown straps.
  - h. Place the cover on the pallet and connect using locking fixtures.
2. Locate the items listed below. Wrap each item in cushioning material and layer one by one in a fiberboard container (box #1).

Item	Quantity
Stainless Steel Sponges, 12-pack (if unused)	6
Scouring Brick Holders	2
Cutlery Rolls	2
Rolling Pins	2
Flat Tip Screwdriver	2
Cross-tip Screwdriver	2
Adjustable Wrenches	2
Slicing Knives	4
Slip Joint Pliers	2

3. Place eight rolls of (unused only) steel wool and two bakers scrapers (12 per pack) into a fiberboard container (box #2).
4. Place box #1 and box #2 inside the tilt fry pan / tilt griddle. Wrap the 60A connector in cushioning material and secure in place with tape.

**WARNING**

Use appropriate number of personnel when moving large, bulky, or heavy items. Never individually attempt to lift an item if it requires more than one person to avoid serious injury.

5. Locate one 20 cubic foot refrigerator.
  - a. Remove evaporator holder from the bottom of the fridge and secure the hose coming down the back of the refrigerator.
  - b. Open the refrigerator and secure the evaporator, evaporator stand and any loose items inside.
  - c. Close door and secure.
  - d. Coil electrical cable and secure to the unit.
  - e. Secure skids to the bottom of the refrigerator using bolts.
  - f. Fasten top piece and side pieces using lag bolts.
6. Locate one ice making machine (each machine comes in two parts).
  - a. Place cushioning material around the water fittings on each half of the ice machine and secure in place with tape.
  - b. Wrap the fittings on the bucket half in cushioning material and secure with tape.
  - c. Wrap cushioning material around the plug on mechanical half of machine and secure with tape.
  - d. Coil the power cable and secure to the machine.
  - e. Place the mechanical half of the machine into a fiberboard container.
  - f. Place the bin in a fiberboard container.
7. Locate one electric toaster.
  - a. Wrap cushioning material around the plug and secure with tape.
  - b. Neatly coil the cable and place it inside the toaster.
  - c. Place toaster in a reusable crate.
  - d. Close the crate and secure the latch using wire or wire tie.
8. Locate one mechanical beverage dispenser.
  - a. Wrap plug with cushioning material and secure with tape.
  - b. Place dispenser into a reusable crate.
  - c. Close the crate and secure the latch using wire or wire tie.

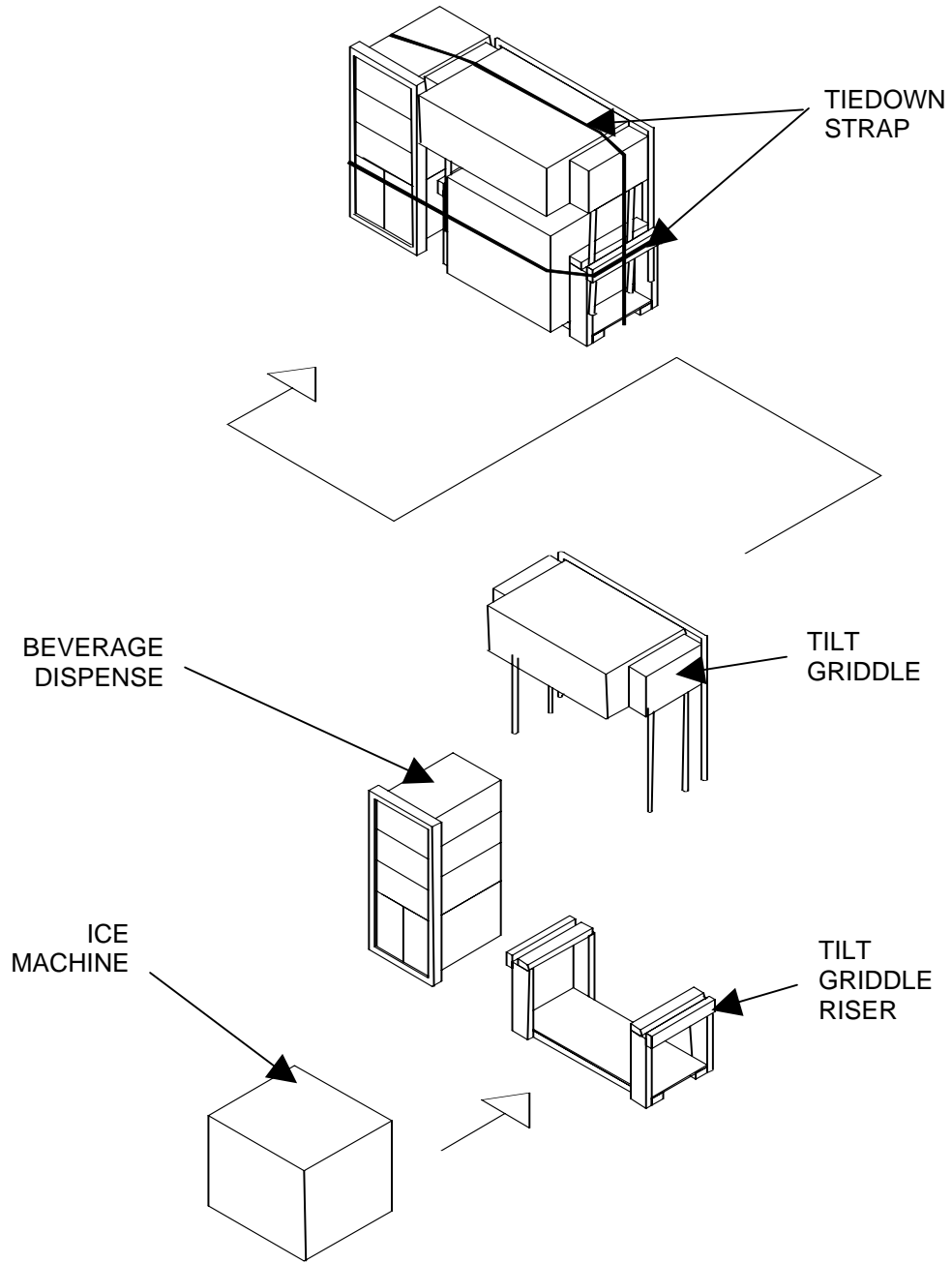
**WARNING**

Use appropriate number of personnel when moving large, bulky, or heavy items. Never individually attempt to lift an item if it requires more than one person to avoid serious injury.

9. Locate one meat slicing machine.
  - a. Wrap cushioning material around the plug and secure in place with tape.
  - b. Place machine into a reusable crate along with the commercial manual.
  - c. Close the crate and secure the latch using wire or a wire tie.
10. Place five 5-gallon liquid dispensers back into their original cartons and close.

**Packing Procedures for TRICON 10M (standard FP configuration)**

1. Locate TRICON container with "FOOD SERVICE KITCHEN KIT PART B TYPE 10M..." stenciled on the left door (this container should be staged in the Food Service area).
2. Ensure plywood boxes, shelving and bracing are present and serviceable in TRICON. If no longer serviceable, these will have to be reproduced before packing.
3. Attach one tiedown strap to the back tiedown loops on the left side of the container. Connect another tiedown strap to the lower rear corner tiedown bar on the right side of the container.
4. Place the tilt griddle riser in the container against the rear wall and place the griddle on top of it.
5. Place the mechanical portion of the ice machine on the shelf under the tilt griddle.
6. Stack the five beverage dispensers next to the griddle.
7. Connect the tiedown straps to the corresponding tiedown loops and secure.



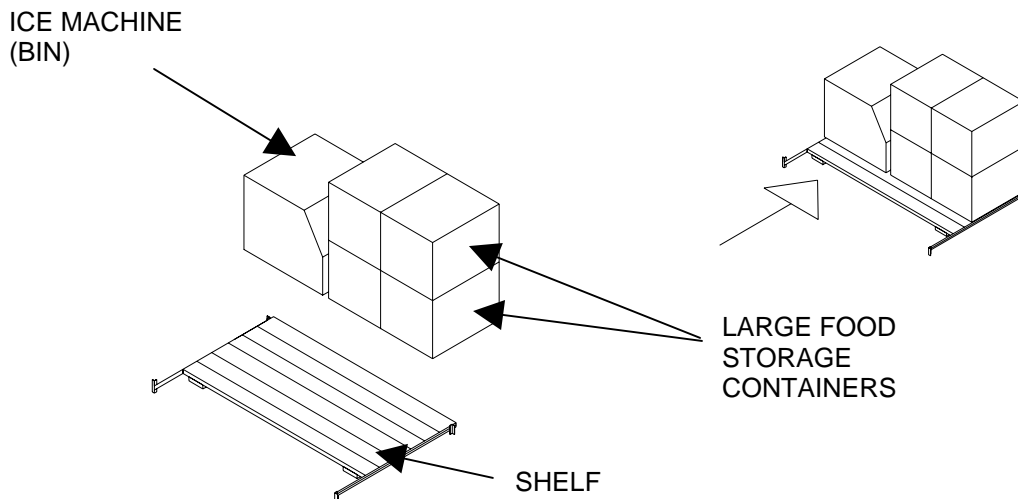


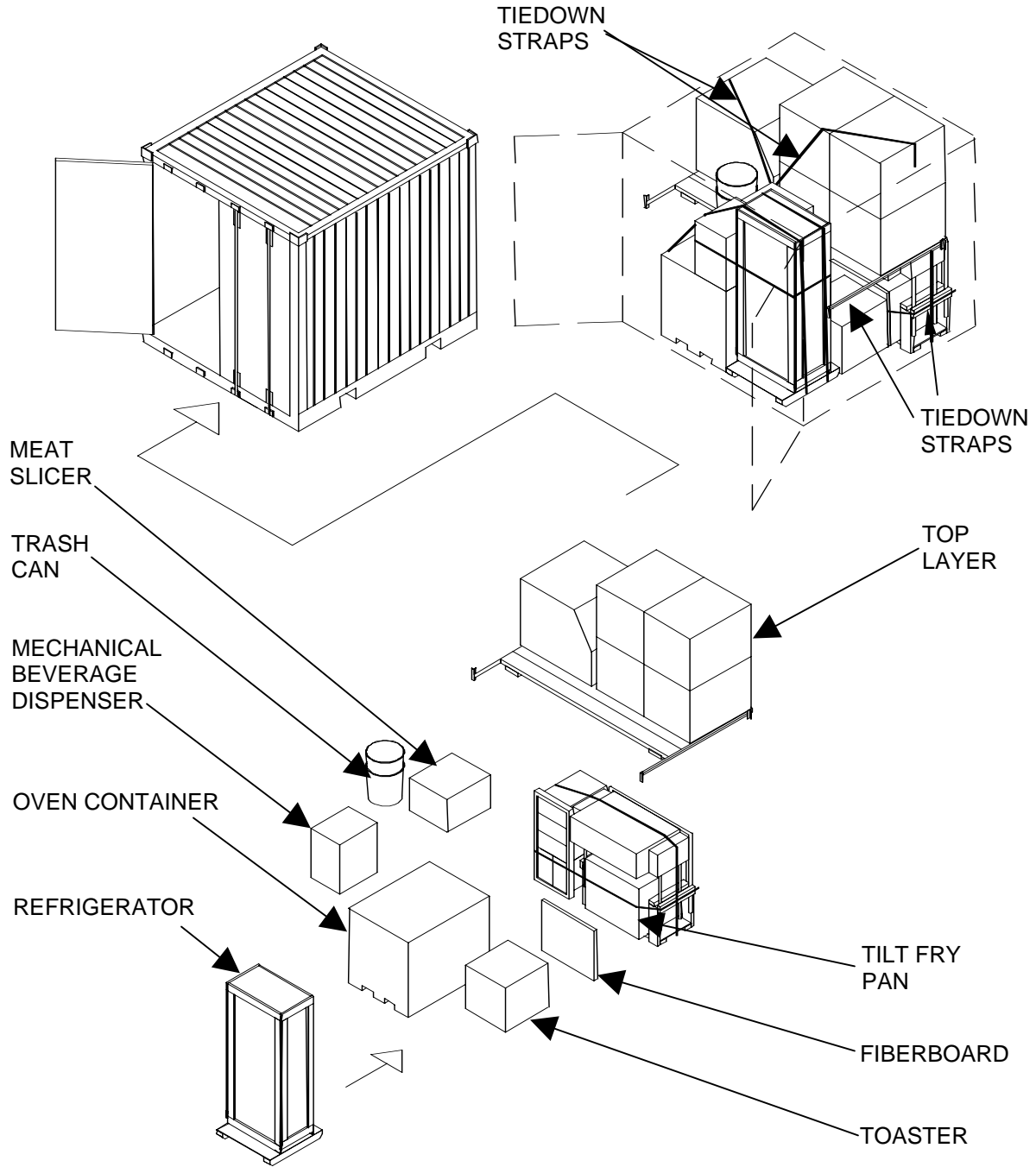
## WARNING

Use appropriate number of personnel when moving large, bulky, or heavy items. Never individually attempt to lift an item if it requires more than one person to avoid serious injury.

### Top layer

1. Install two shelf assemblies on the wooden shelf supports.
2. Place the bucket portion of the ice machine in the back left corner of the shelf.
3. Place four insulated food containers stacked two high next to the ice machine.
4. Attach tiedown straps to the left wall.
5. Position the oven container along the left wall of the container.
6. Locate two trash cans w/covers.
  - a. Nest the two cans and place the covers on the cans and secure the covers.
  - b. Place the nested cans on top of the oven container, against the shelf and left wall.
7. Place the meat slicer on the oven container in front of the trash cans.
8. Place the mechanical beverage dispenser on the oven container, in front of the meat slicer.
9. Connect tiedown straps.
10. Install honeycomb, cross boards, blocking and bracing as required to fill spaces for a tight pack.
11. Close and secure TRICON doors.





**FIELD PACKING FOOD SERVICE KITCHEN KIT PART B TYPE 10M**

**FIELD PACKING FOOD SERVICE KITCHEN KIT PART C TYPE 10N**

This paragraph provides information to pack the food service equipment into TRICON type 10N. Close adherence to these procedures is imperative to prevent equipment damage, and allow all equipment to fit into designated container. The following procedures are for field packing one TRICON type 10N.

Depot shelves, packaging, blocking, bracing, tiedowns, and dunnage retained during unpacking will be needed to repack equipment for storage or shipment.

Equipment must be clean, dry, and debris-free before packing. Prepare components for packing as follows:

**WARNING**

Use appropriate number of personnel when moving large, bulky, or heavy items. Never individually attempt to lift an item if it requires more than one person to avoid serious injury.

1. Locate one reusable oven container and one oven.
  - a. Wrap racks together using cushioning material and position in oven.
  - b. Use filler to prevent movement.
  - c. Wrap the 60A connector in cushioning material and secure in place with tape.
  - d. Close oven doors and tie together using twine or wire tie.
  - e. Place two pieces of fiberboard on the skid on the reusable container.
  - f. Position the oven on the platform resting on the fiberboard.
  - g. Secure the oven to the skid using two tiedown straps.
  - h. Place the cover on the pallet and connect using locking fixtures.
2. Locate twelve half-size and twelve full-size steam table covers and place into fiberboard container.
3. Locate six large and twelve small steam table pans and place into fiberboard container.
4. Locate one griddle assembly.
  - a. Cover cooking surface and splash guards with grease proof barrier.
  - b. Secure top portion of griddle to base.
  - c. Cover class L connector with cushioning material and secure with tape.
5. Locate one insulated food container. Secure the lid.
6. Locate one insulated food container and one 5 ½ -quart strainer.
  - a. Wrap the strainer with cushioning material.



- b. Place strainer inside Insulated food container and secure the lid.
7. Locate the items listed below and storage/drying rack assemblies.

Item	Quantity
26-in x 18-in Baking Sheet Pans	30
Food Chopping Boards	4
Baking and Roasting Pans	20
Cooking Pot Covers	4

- a. Wrap each baking sheet pan with cushioning material and place ten inside each of three fiberboard containers.
  - b. Place four food chopping boards inside a 20 ¼ -inch x 15 ½ -inch x 3 ½ -inch fiberboard container.
  - c. Wrap twenty baking and roasting pans with cushioning material and place inside a 22-inch x 17-inch x 9-inch fiberboard container.
  - d. Wrap four cooking pot cover with a cushioning material and place inside a fiberboard container.
  - e. Place containers in the storage rack.
  - f. Fill empty space with cushioning material.
  - g. Nest the second rack over the first, using fiberboard to keep them from rubbing.
  - h. Secure racks together with twine or wire ties. (This assembly will be identified as rack set #1)
8. Locate the items listed below and storage/drying rack assemblies.

Item	Quantity
16-qt Stainless Steel Colanders	2
Food Serving and Storage Pans	23
Food Serving Pan Covers	4

- a. Wrap each colander with cushioning material and place each inside a 16 ½ -inch x 16 ½ -inch x 6 ½ -inch fiberboard container.
- b. Wrap the food serving and storage pans, and the food serving pan covers with cushioning material.
- c. Place containers, food serving and storage pans, and covers in the storage rack.
- d. Fill empty space with cushioning material.
- e. Nest the second rack over the first, using fiberboard to keep them from rubbing.
- f. Secure racks together with twine or wire ties. This assembly will be identified as rack set #2.

9. Locate the items listed below and two storage/drying rack assemblies. Pack rack set #3 in the same manner as rack set #2.

Item	Quantity
Food Serving and Storage Pans	22
Food Serving Pan Covers	5

10. Locate ten baking and roast pans (bottom)
  - a. Wrap baking and roast pans with cushioning material.
  - b. Place inside a 25 ¼ -inch x 19 ½ -inch x 14 ½ -inch fiberboard container.
11. Locate ten baking and roast pans (tops) and pack in the same manner as above.

**Packing Procedures for TRICON 10N (standard FP configuration)**

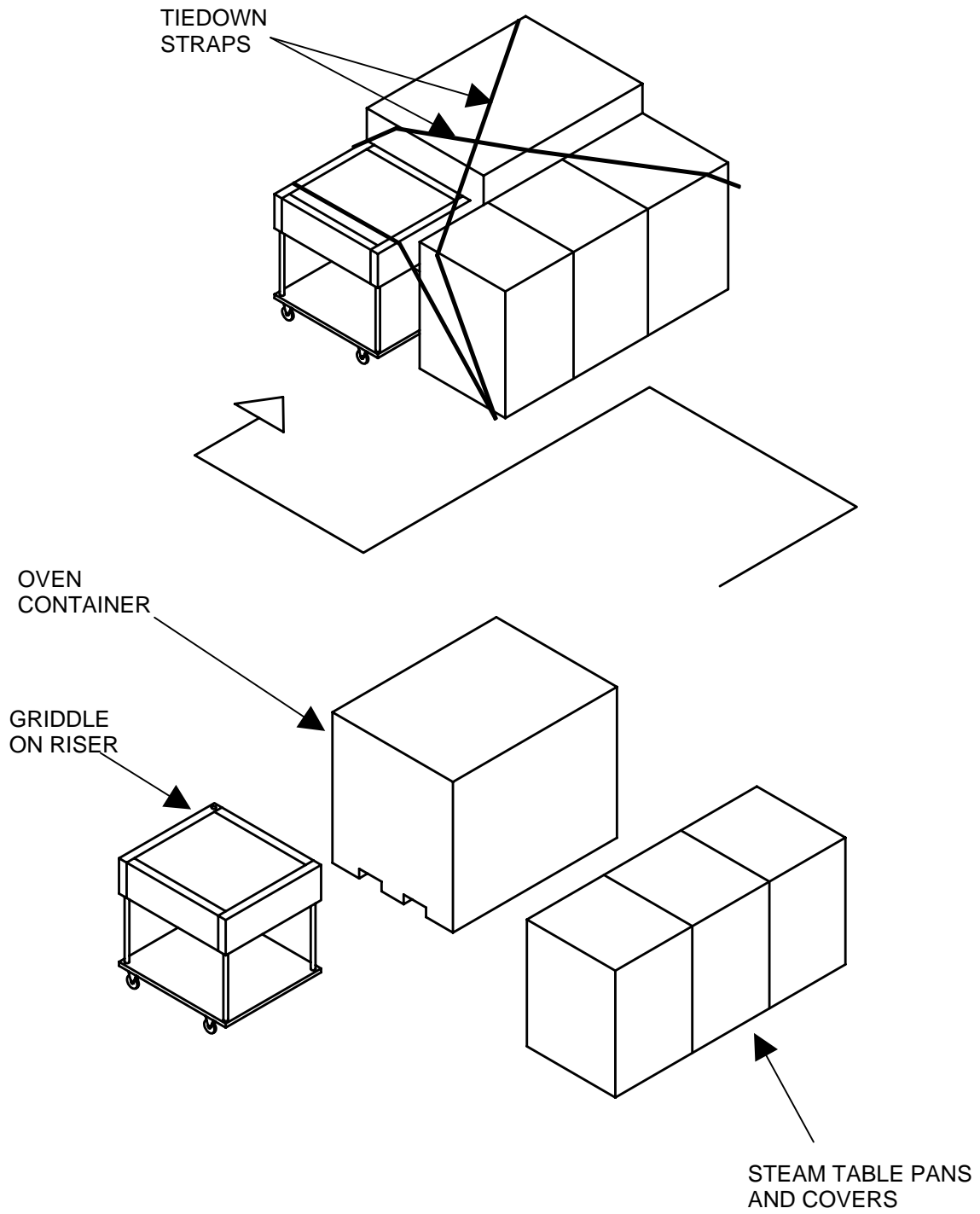
**Bottom Layer**



**WARNING**

Use appropriate number of personnel when moving large, bulky, or heavy items. Never individually attempt to lift an item if it requires more than one person to avoid serious injury.

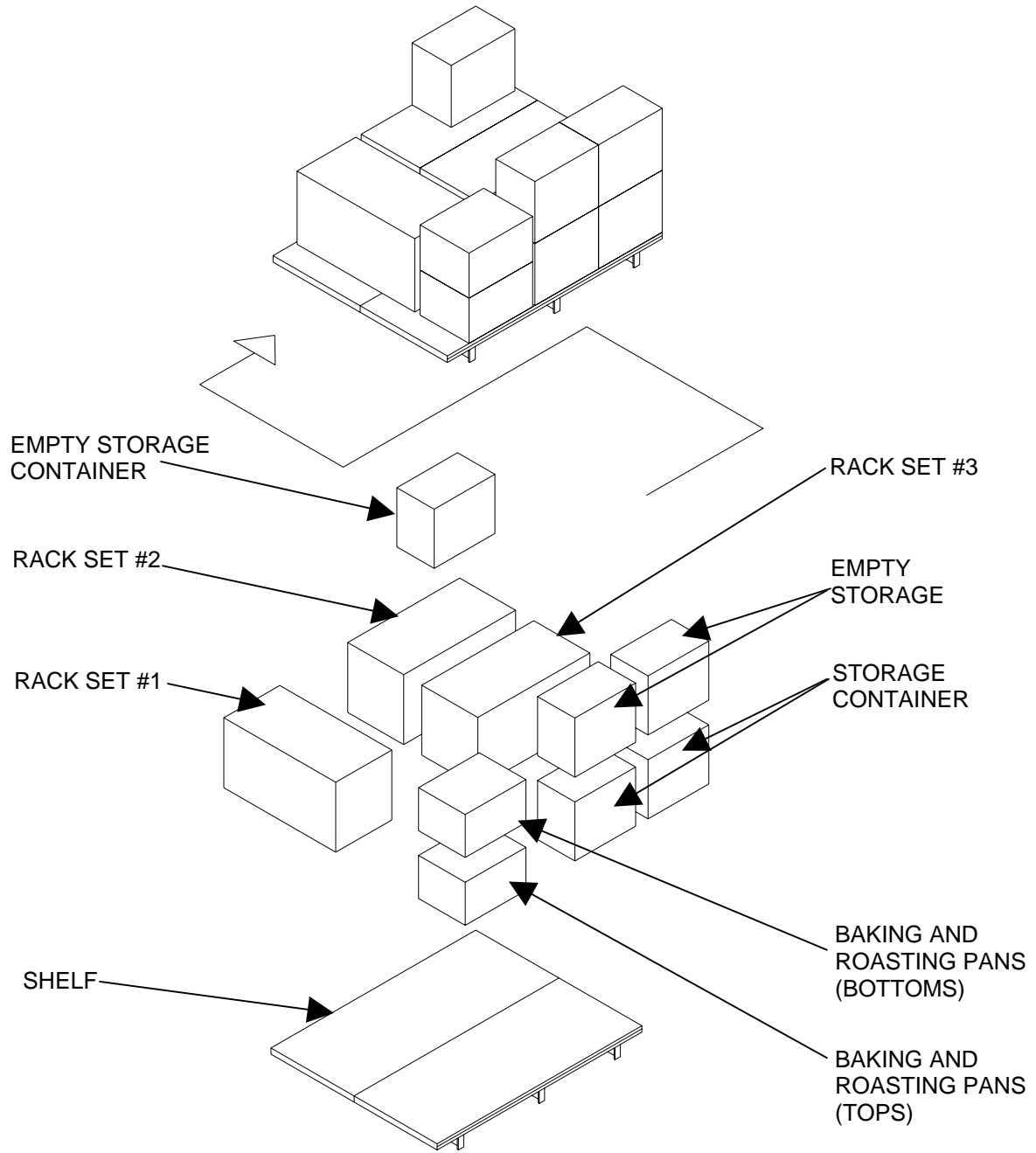
1. Locate TRICON container with "FOOD SERVICE KITCHEN KIT CO. TYPE 10N..." stenciled on the left door (this container should be staged in the Food Service area).
2. Ensure plywood boxes, shelving and bracing are present and serviceable in TRICON. If no longer serviceable, these will have to be reproduced before packing.
3. Attach one tiedown strap to the back tiedown loops on the left side of the container. Connect another tiedown strap to the lower rear corner tiedown bar on the right side of the container.
4. Place the oven container lengthwise into the back left corner of the container.
5. Connect the tiedown strap behind the steam table component boxes to tie down the loop in front of the oven.
6. Place one griddle riser on the floor of the container in front of the oven container.
7. Connect the tiedown strap from behind the oven container to tie down the loop in front of the steam table component boxes. Use a piece of fiberboard to protect the griddle from damage. Use another tiedown strap and connect it from the tiedown loop next to the griddle to the loop in front of the steam table component boxes.
8. Connect the tiedown straps to the corresponding tiedown loops and secure.
9. Place a cross board in front of the layer.

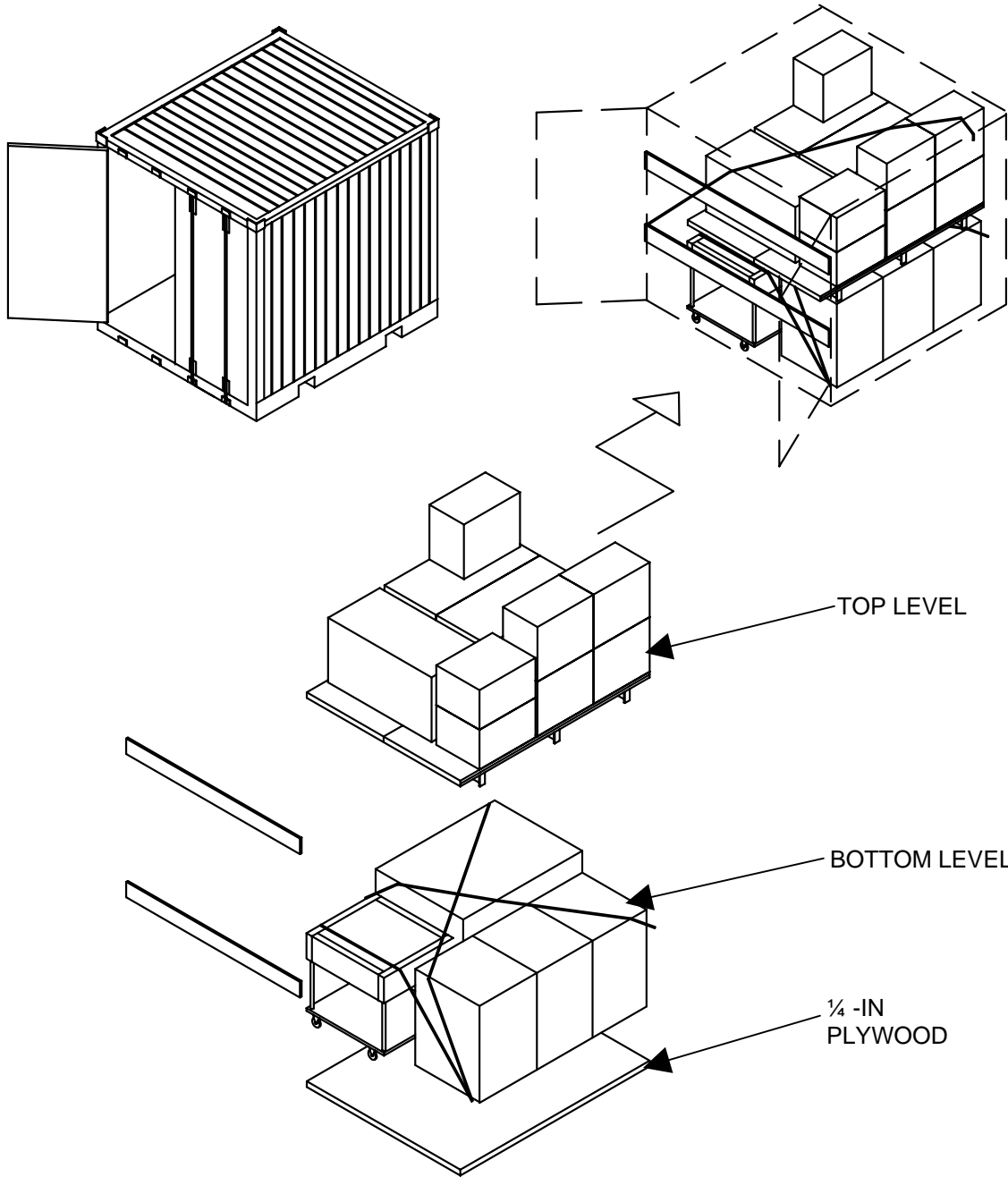


**Top Layer****WARNING**

Use appropriate number of personnel when moving large, bulky, or heavy items. Never individually attempt to lift an item if it requires more than one person to avoid serious injury.

1. Install the two modified shelf assemblies on top of the existing brackets.
2. Place rack set #2 lengthwise in the back left corner of the shelf.
3. Place rack set #3 next to the right of rack set #2.
4. Place two food storage containers on the shelf next to the storage racks.
5. Stack two empty food storage containers on top of the food storage containers previously positioned.
6. Place the third empty food storage container on top of rack set #2 in the back left of the container.
7. Place rack set #1 sideways in front of the other two storage racks.
8. Place the two fiberboard containers with the roasting pans tops and bottoms in front of the storage containers.
9. Install honeycomb, crossboards, blocking and bracing as required to fill spaces and gaps to create a tight pack
10. Close and secure TRICON doors.





FIELD PACKING FOOD SERVICE KITCHEN KIT TYPE 10N

**FIELD PACKING FOOD SERVICE KITCHEN KIT TYPE 10P**

This paragraph provides information to pack the food service equipment into TRICON type 10P. Close adherence to these procedures is imperative to prevent equipment damage, and allow all equipment to fit into designated container. The following procedures are for field packing one TRICON type 10P.

Equipment must be clean, dry, and debris-free before packing. Prepare components for packing as follows:

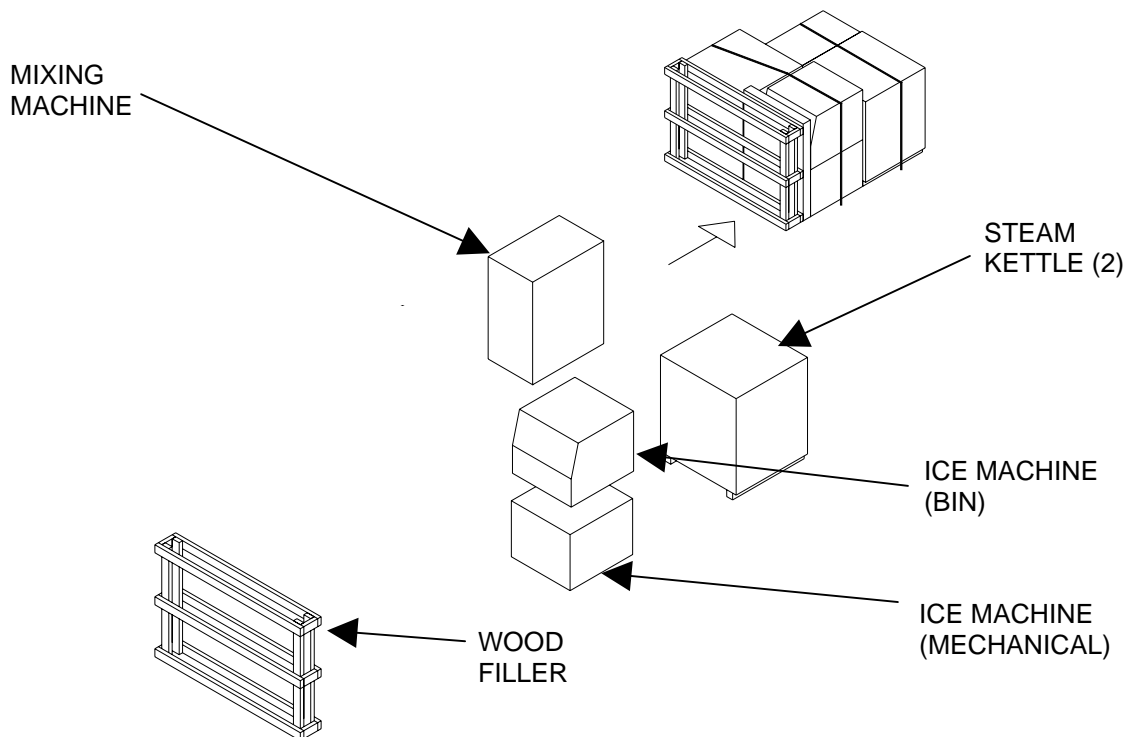
**WARNING**

Use appropriate number of personnel when moving large, bulky, or heavy items. Never individually attempt to lift an item if it requires more than one person to avoid serious injury.

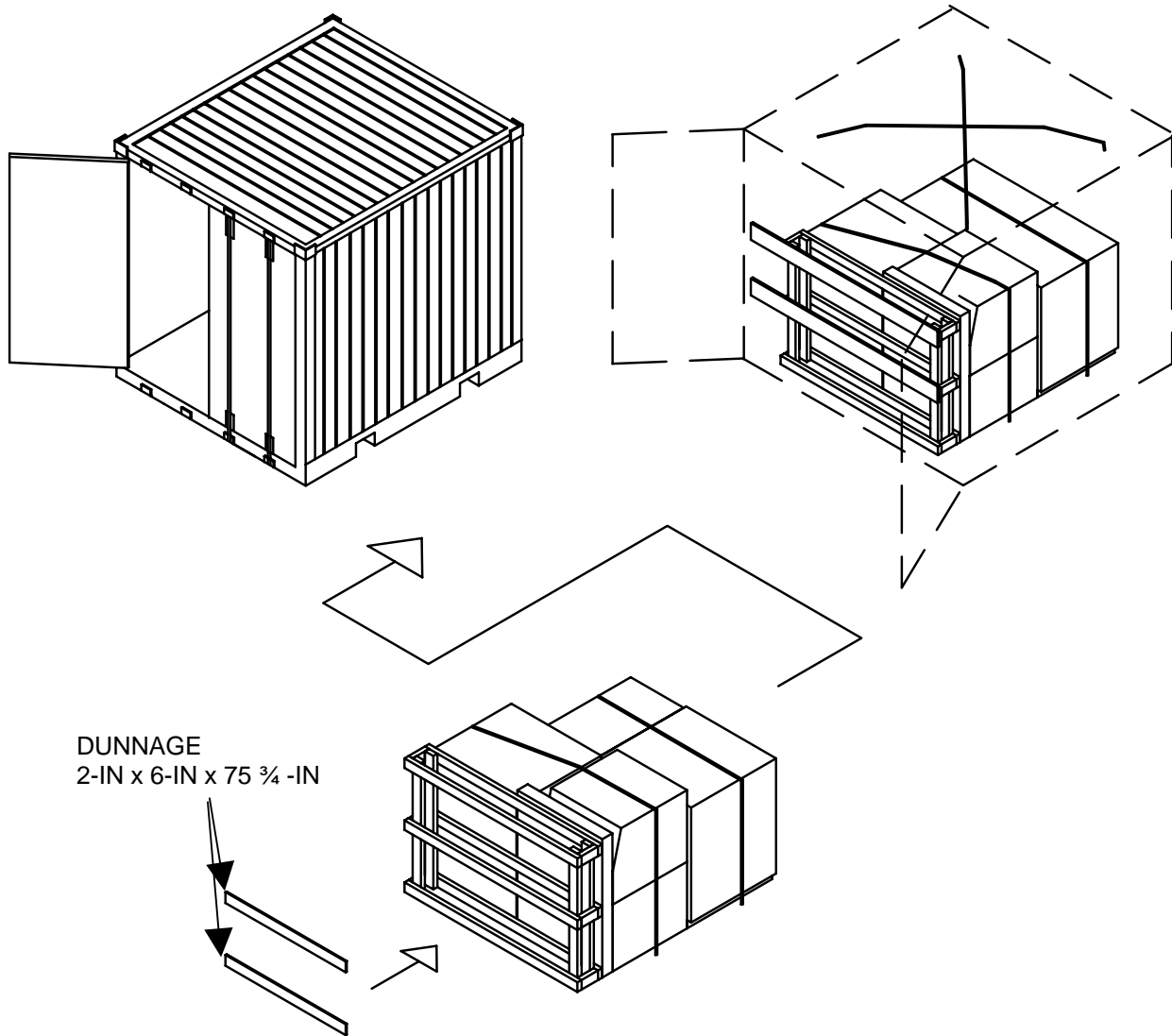
1. Locate two 20-gallon steam kettles.
  - a. Secure any loose items.
  - b. Close the lid and secure.
  - c. Place steam kettle in the reusable container.
2. Locate one mixing machine.
  - a. Wrap attachments in cushioning material and secure with tape.
  - b. Place the mixing machine and its attachments in the reusable container.
3. Locate one ice making machine (each machine comes in two parts).
  - a. Place cushioning material around the water fittings on each half of the ice machine and secure in place with tape.
  - b. Wrap the fittings on the bin in cushioning material and secure with tape.
  - c. Wrap cushioning material around the plug on the mechanical half of the machine and secure with tape.
  - d. Coil the power cable and secure to the machine.
  - e. Place the mechanical half of the machine into a fiberboard container.
  - f. Place the bin in a fiberboard container.

**Packing Procedures for TRICON 10P (standard FP configuration)****Bottom Layer**

1. Locate TRICON container with "FOOD SERVICE KITCHEN KIT PART D TYPE 10P..." stenciled on the left door (this container should be staged in the Food Service area).
2. Ensure plywood boxes, shelving and bracing are present and serviceable in TRICON. If no longer serviceable, these will have to be reproduced before packing.
3. Attach one tiedown strap to the back tiedown loops on the left side of the container. Connect another tiedown strap to the lower rear corner tiedown bar on the right side of the container.
4. Place one steam kettle crate in the container against the back right corner. Tighten and secure the two tiedown straps.
5. Place the second steam kettle crate on the left side of the container in front of the mixing machine.
6. Place the mechanical portion of the ice machine on the container floor. Place the bin on top.
7. Connect the tiedown straps to the corresponding tiedown loops and secure.
8. Place wood filler in front.
9. Close and secure TRICON doors.







DUNNAGE  
2-IN x 6-IN x 75 3/4 -IN

**FIELD PACKING FOOD SERVICE KITCHEN KIT TYPE 10P**

**END OF WORK PACKAGE**



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**OPERATOR MAINTENANCE  
FORCE PROVIDER FOOD SERVICE EQUIPMENT  
OPERATION UNDER USUAL CONDITIONS - FIELD PACKING FOOD SERVICE FPL**

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**GENERAL****NOTE**

This work package covers field packing the food service equipment for Force Provider (Lite) modules only. Do not use these instructions to field pack standard Force Provider modules.

**NOTE**

TRICON 10H, Kitchen Kit, Part B is not included in FP(L) modules.

Force Provider Food Service Equipment must be repacked in the correct TRICON containers before the Force Provider module may be moved or redeployed. The TRICONS covered in this TM include:

- 10B Kitchen Kit, Part A
- 10M Kitchen Kit, Part C
- 10N Kitchen Kit, Part D
- 10P Kitchen Kit, Part E

Information and packing plans for components and system outside of the scope of this TM are covered in TM 10-5419-206-13, "Operator's, Unit, and Direct Support Maintenance Manual for Force Provider".

**REPACKING INSTRUCTIONS**

Force Provider subsystem field packing instructions described in this and other WP provide procedures for packing equipment originally shipped for each subsystem. Due to consumption during operation, certain materials, spare parts, discretionary, and expendable items may not be available for return shipment at all, or in quantities other than indicated in the packing instructions. In addition, used cleaning implements should not be returned but locally disposed of. Also, originally shipped equipment items may have been replaced with new, and/or differently configured items.

Under these conditions, follow the packing instructions as closely as possible. Return-ship any new equipment received in place of the original, and, where necessary, fill empty spaces in TRICON with additional dunnage available.

**FIELD PACKING FOOD SERVICE KITCHEN KIT PART A TYPE 10B (FP (L) CONFIGURATION)**

This paragraph provides information to pack food service equipment into TRICON type 10B. Close adherence to these procedures is imperative to prevent equipment damage, and allow all equipment to fit into designated container. The following procedures are for field packing one TRICON type 10B.

Depot shelves, packaging, blocking, bracing, tiedowns, and dunnage retained during unpacking will be needed to repack equipment for storage or shipment.

Equipment must be clean, dry, and debris-free before packing. Prepare components for packing as follows:

1. Locate TRICON with "FOOD SERVICE KITCHEN KIT PART A TYPE 10B..." stenciled on the left door. This container should be staged in the Food Service area.
2. Ensure plywood boxes, shelving, and bracing are present and serviceable in TRICON. If no longer serviceable, these will have to be reproduced before packing.
3. Locate one oven and prepare for packing as follows:
  - a. Open the oven and remove the racks.
  - b. Tape the racks together and place back into the oven bottom.
  - c. Wrap the 60A connector in cushioning material and secure with tape.
  - d. Close the oven doors and secure with twine.
  - e. Place two pieces of fiberboard onto the skids of the reusable container.
  - f. Position the oven onto the skid and secure with tiedown straps. Criss-cross the straps over the oven and connect to the eyebolts on the skid.
  - g. Place cover on pallet and connect using locking fixtures.
4. Locate one steam table with accessories and sneeze guard and prepare for packing as follows:
  - a. Place the fiberboard cover sleeve on top of the table and secure with tape.
  - b. Locate the electrical power cord. Wrap the connector in cushioning material, and secure with tape.
  - c. Coil the cable and place it at the end of the cable assembly. Secure with tape.
  - d. Locate the drain hose. Neatly coil the hose and secure to table with wire ties.
  - e. Locate the sneeze guard and place it on top of the steam table.
5. Locate one griddle assembly and prepare for packing as follows:
  - a. Secure the grease trap draw with tape.
  - b. Wrap electrical cord connector in cushioning material and secure with tape.
  - c. Use nylon bands to secure the top to the bottom part of the griddle.
  - d. Cover the cooking surface with fiberboard, and place the griddle manual on top. Secure with tape.

- 6. Locate three insulated food containers, 48 sugar dispensers, 48 pepper shakers, and 48 salt shakers.
  - a. Wrap shakers and dispensers in cushioning material.
  - b. Place 48 of each type shakers/dispensers into a separate insulated food container.

7. Locate the following items:

Item	Quantity
Cookie Cutters	1
First Aid Kit	1
Craftsman Knife	2
2-qt Liquid Measure	2
15-in Food Service Spoon	4
Slotted Food Service Spoon	8
Food Preparation Fork	1
Type III Bi-Metal Thermometer	2

- a. Individually wrap each item in protective paper and secure with tape.
- b. Place items into a 10-gallon cooking pot.

8. Locate the following items:

Item	Quantity
Cookie Cutters	1
First Aid Kit	1
Craftsman Knife	2
2-qt Liquid Measure	2
15-in Food Service Spoon	4
Slotted Food Service Spoon	8
Food Preparation Fork	4
2-oz Kitchen Ladle	4
Pie and Cake Server	2
Scouring Pad	6
Type III Bi-Metal Thermometer	2

- a. Individually wrap each item in protective paper and secure with tape.
- b. Place items into a separate 10-gallon cooking pot.

9. Locate the following items:

Item	Quantity
Garden Hose Assembly	2
Spoon Measuring Sets	4
Hand Can Opener	4
Fork 21-in	6
Hand Potato Peeler	4
Pot Holder	8

- a. Individually wrap each item in protective paper and secure with tape.
- b. Place items into a 15-gallon cooking pot.

10. Locate six fire extinguishers and place them in fiberboard containers. Secure containers with tape.

11. Locate the following items:

Item	Quantity
10-Gal Pots	2
15-Gal Pot	2
Splash Plates	4
Rubber Dust Pans	2
Brushes	2
Hand Flour Sifter	2
5-qt Pitcher	3

- a. Individually wrap each item in protective paper or cushioning material and secure with tape.
- b. Pack the splash plates, sifters and pitchers in the bottom rack of a rack set, and place the second rack on top of the bottom one so they are nested

12. Locate the following items:

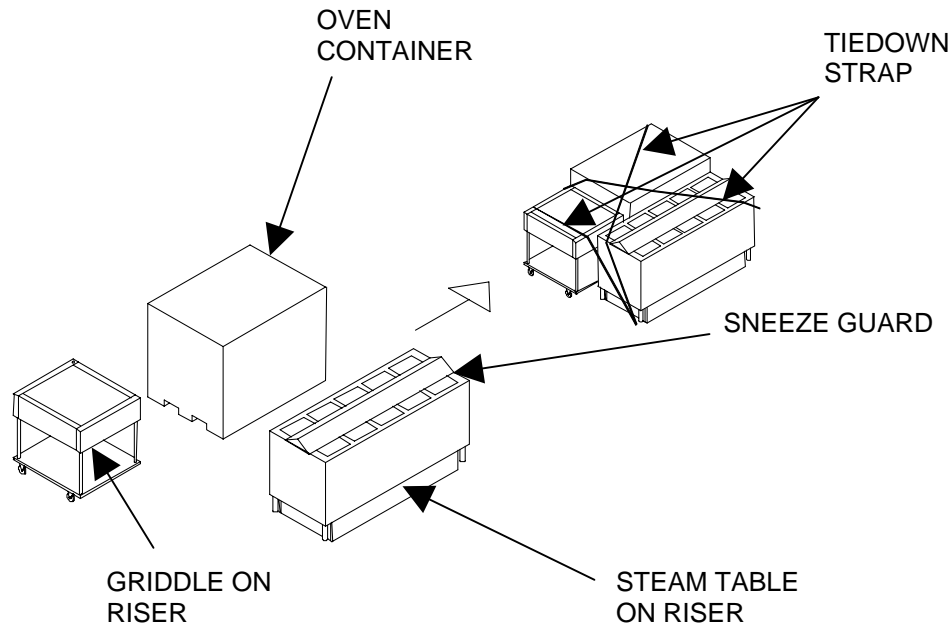
Item	Quantity
15-Gal Pots Previously packed	1
Cooking Pot Covers	4
Three Grid Section Sharpening Stone	1

- a. Wrap the pot covers and sharpening stone in cushioning material.
- b. Secure with tape.

13. Locate 27 food serving and storage pans, and three food serving pan covers (box of six, 18 total). Place these items into their fiberboard containers. Pack these items into a storage rack. Place the second rack on top of the bottom one so they are nested.

### Packing Procedures for TRICON 10B (FP (L) configuration)

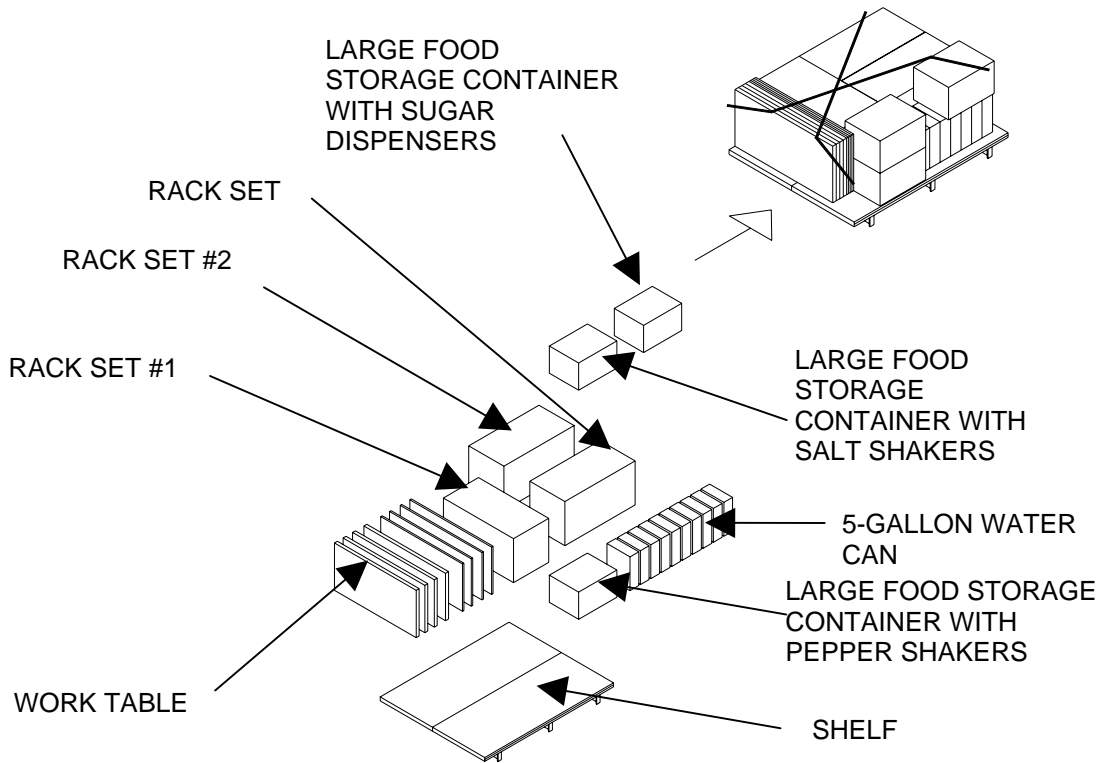
1. Place a 72½-inch by 30-inch piece of plywood on the TRICON floor.
2. Attach the non-ratchet end of a tiedown strap to the back tiedown loops on each side of the container.
3. Place the steam table riser on the floor against the right wall of the TRICON.
4. Position the steam table on top of the riser and move into the far right corner of the container.
5. Place the oven container lengthwise into the back left of the container
6. Place the griddle riser on the floor in front of the oven container. Position the griddle on the riser.
7. Connect the strap from behind the oven container to the tiedown loop in front of the steam table. Connect another tiedown strap from the from a tiedown loop next to the griddle, to the loop in front of the steam table.
8. Connect one strap each to the back corner tiedown bar on both sides of the container.



9. Install three TRICON shelf support brackets as marked on the vertical uprights. Install two modified shelf assemblies on top of the brackets.
10. Place one rack set length-wise in the back left corner of the shelf.
11. Place the second rack set to the right of the first rack set.
12. Place the food storage container with 48 sugar dispensers packed inside, in the back right corner of the container on top of the water cans.
13. Place the third rack set sideways in front of the other two racks.
14. Place the remaining two food storage containers in front of the water cans.

15. Place four tables sideways in front of the storage racks.

16. Place four shelf assemblies in front of the four tables.



17. Crisscross the straps over the shelf and connect to the restraint beam support bars.

18. Ensure straps are properly tightened and not twisted.

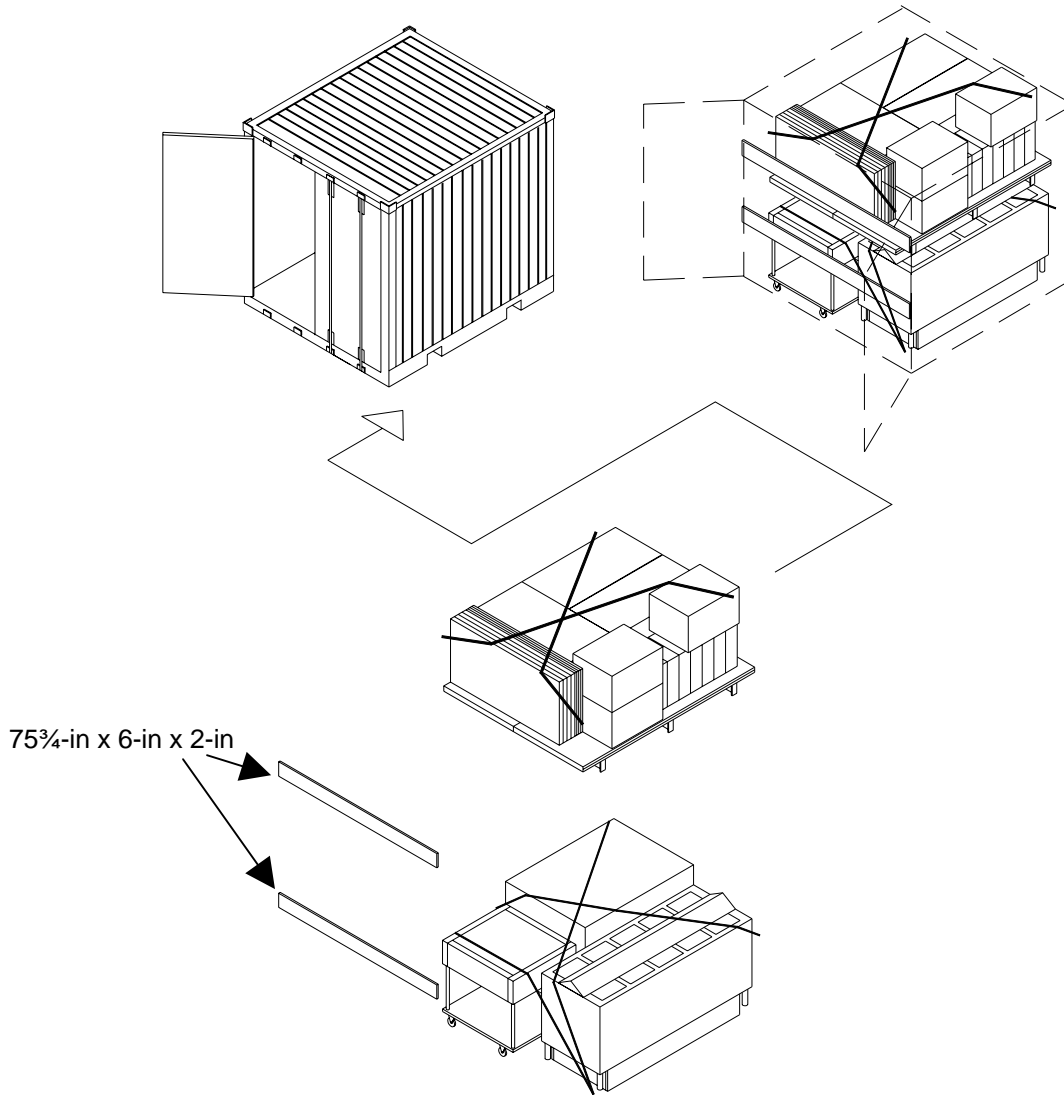
19. Place a 75¼-inch x 6-inch x 2-inch piece of lumber in front of the first layer so that it is in line with the top of the griddle.

20. Place a 75¼-inch x 6-inch x 2-inch piece of lumber in front of the second layer so that it is in the middle of the shelf assemblies.

21. Install honeycomb, cross boards, blocking and bracing as required to fill spaces and gaps between items.

22. Close and secure TRICON doors.





**FIELD PACKING FOOD SERVICE KITCHEN KIT PART A TYPE 10B**

**FIELD PACKING FOOD SERVICE KITCHEN KIT PART C TYPE 10M (FP (L) CONFIGURATION)**

This paragraph provides information to pack the food service equipment into TRICON type 10M. Close adherence to these procedures is imperative to prevent equipment damage, and allow all equipment to fit into designated container. The following procedures are for field packing one TRICON type 10M.

Depot shelves, packaging, blocking, bracing, tiedowns, and dunnage retained during unpacking will be needed to repack equipment for storage or shipment.

Equipment must be clean, dry, and debris-free before packing. Prepare components for packing as follows:

1. Locate the items listed below. Wrap each item in cushioning material and layer one by one in a fiberboard container (box #1).

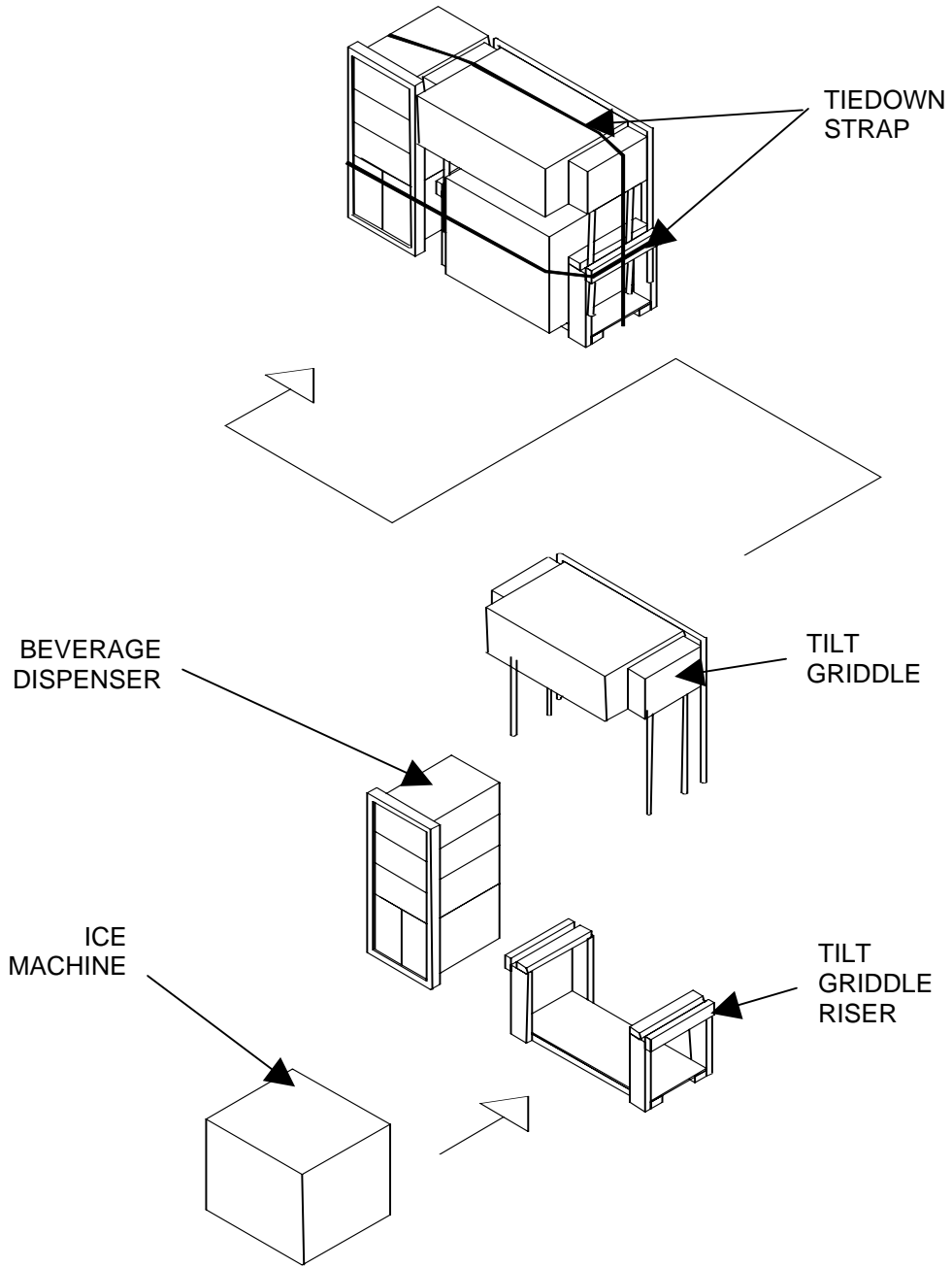
Item	Quantity
Stainless Steel Sponges, 12 pack (unused only)	6
Scouring Brick Holders	2
Cutlery Rolls	2
Rolling Pins	2
Flat Tip Screwdrivers	2
Cross Tip Screwdrivers	2
Adjustable Wrenches	2
Slicing Knives	4
Slip Joint Pliers	2

2. Place eight rolls of steel wool and two packs of baker's scrapers into a fiberboard container (Box #2).
3. Place box #1 and box #2 inside the tilt fry pan. Wrap the 60A connector in cushioning material and secure in place with tape.
4. Locate one 20 cubic foot refrigerator.
  - a. Remove evaporator holder from the bottom of the fridge and secure the hose coming down the back of the fridge.
  - b. Open the refrigerator and secure the evaporator, evaporator stand and any loose items inside.
  - c. Close door and secure.
  - d. Coil electrical cable and secure to the unit.
  - e. Secure skids to the bottom of the refrigerator using bolts.
  - f. Fasten top piece and side pieces using lag bolts.
5. Locate one ice making machine (each machine comes in two parts).
  - a. Place cushioning material around the water fittings on each half of the ice machine and secure in place with tape.
  - b. Wrap the fittings on the bucket half in cushioning material and secure with tape.
  - c. Wrap plug on the mechanical half of the machine with cushioning material and secure with tape.

- d. Coil the power cable and secure to the machine.
  - e. Place the mechanical half of the machine into a fiberboard container.
  - f. Place the bin in a fiberboard container.
6. Locate one electric toaster.
- a. Wrap cushioning material around the plug and secure with tape.
  - b. Neatly coil the cable and place it inside the toaster.
  - c. Place toaster in a reusable crate.
  - d. Close the crate and secure the latch using wire or wire tie.
7. Locate one mechanical beverage dispenser.
- a. Wrap plug with cushioning material and secure with tape.
  - b. Place dispenser into a reusable crate.
  - c. Close the crate and secure the latch using wire or wire tie.
8. Locate one meat slicing machine.
- a. Wrap cushioning material around the plug and secure in place with tape.
  - b. Place machine into a reusable crate along with the commercial manual.
  - c. Close the crate and secure the latch using wire or a wire tie.
9. Place five 5-gallon liquid dispensers back into their original cartons and close.

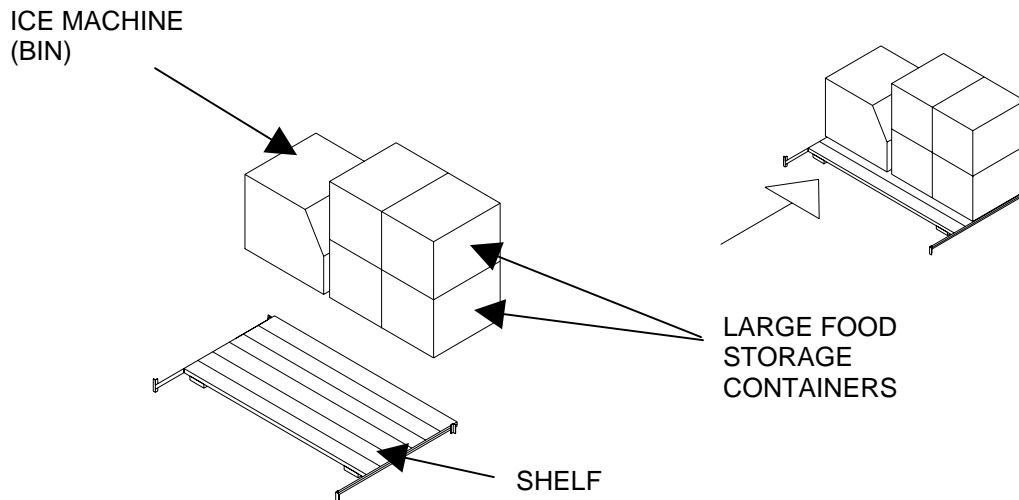
**Packing Procedures for TRICON 10M (FP (L) configuration)**

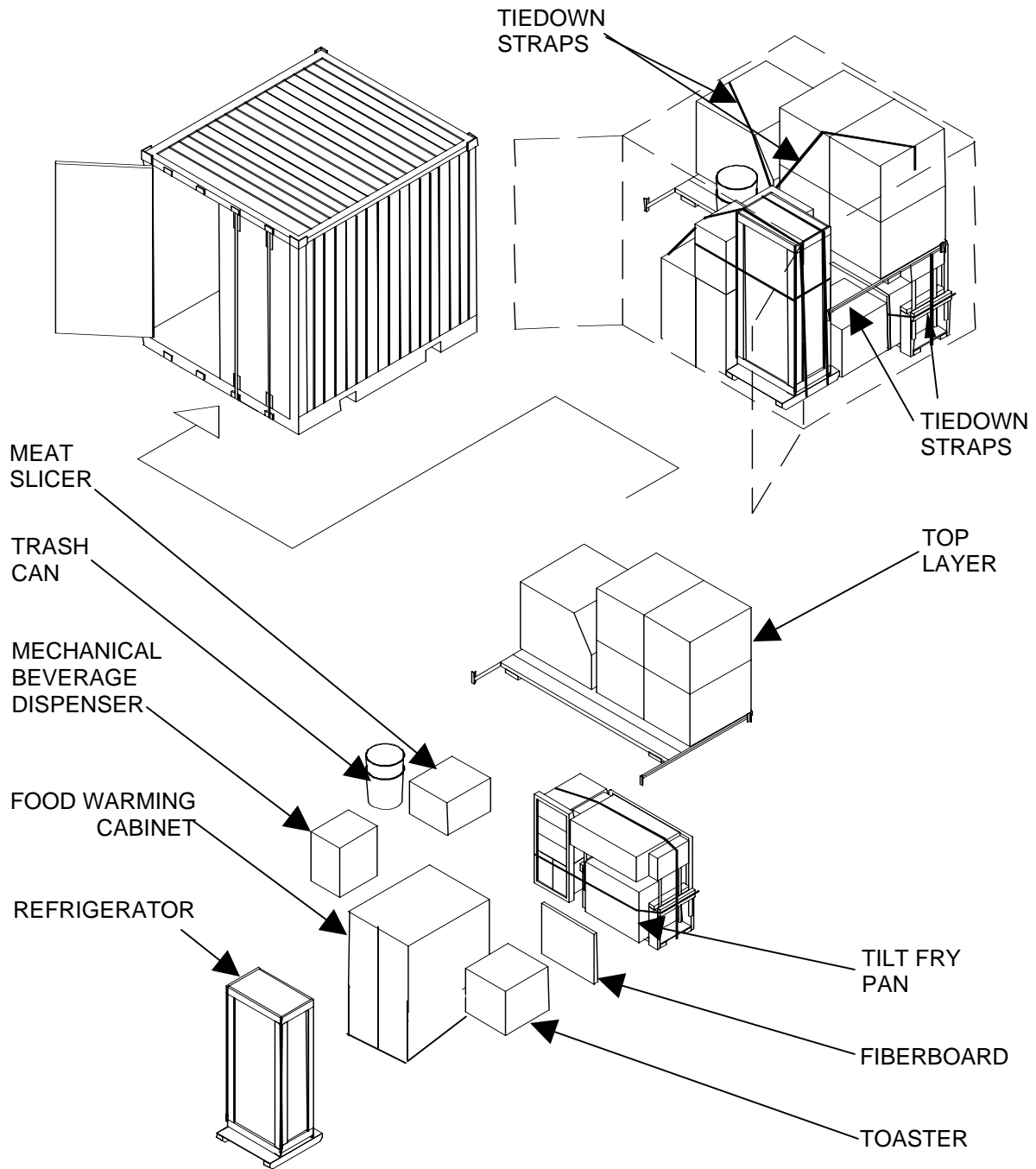
1. Locate TRICON container with "FOOD SERVICE KITCHEN KIT PART C TYPE 10M..." stenciled on the left door (this container should be staged in the Food Service area).
2. Ensure plywood boxes, shelving and bracing are present and serviceable in TRICON. If no longer serviceable, these will have to be reproduced before packing.
3. Attach one tiedown strap to the back tiedown loops on the left side of the container. Connect another tiedown strap to the lower rear corner tiedown bar on the right side of the container.
4. Place the tilt griddle riser in the container against the rear wall and place the griddle on top of it.
5. Place the mechanical portion of the ice machine on the shelf under the tilt griddle.
6. Stack the five beverage dispensers next to the griddle.
7. Connect the tiedown straps to the corresponding tiedown loops and secure.



**Top Layer**

1. Install two shelf assemblies on the wooden shelf supports.
2. Place the bucket portion of the ice machine in the back left corner of the shelf.
3. Place four insulated food containers stacked two high next to the ice machine.
4. Attach tiedown straps to the left wall.
5. Locate two trash cans with covers.
  - a. Nest the two cans and place the covers on the cans and secure the covers.
  - b. Place the nested cans on top of the oven container, against the shelf and left wall.
6. Place the meat slicer on the oven container in front of the trash cans.
7. Place the mechanical beverage dispenser on the oven container, in front of the meat slicer.
8. Connect tiedown straps.
9. Install honeycomb, cross boards, blocking and bracing as required to fill spaces for a tight pack.
10. Close and secure TRICON doors.





**FIELD PACKING FOOD SERVICE KITCHEN KIT PART C TYPE 10M**

**FIELD PACKING FOOD SERVICE KITCHEN KIT PART D TYPE 10N (FP (L) CONFIGURATION)**

This paragraph provides information to pack the food service equipment into TRICON type 10N. Close adherence to these procedures is imperative to prevent equipment damage, and allow all equipment to fit into designated container. The following procedures are for field packing one TRICON type 10N.

Depot shelves, packaging, blocking, bracing, tiedowns, and dunnage retained during unpacking will be needed to repack equipment for storage or shipment.

Equipment must be clean, dry, and debris-free before packing. Prepare components for packing as follows

1. Locate one reusable oven container and one oven.
  - a. Wrap racks together using cushioning material and position in oven.
  - b. Use filler to prevent movement.
  - c. Wrap the 60A connector in cushioning material and secure in place with tape.
  - d. Close oven doors and tie together using twine or wire tie.
  - e. Place two pieces of fiberboard on the skid on the reusable container.
  - f. Position the oven on the platform resting on the fiberboard.
  - g. Secure the oven to the skid using two tiedown straps.
  - h. Place the cover on the pallet and connect using locking fixtures.
2. Locate twelve half-size and twelve full-size steam table covers and place into fiberboard container.
3. Locate six large and twelve small steam table pans and place into fiberboard container.
4. Locate one insulated food container. Secure the lid.
5. Locate one insulated food container and one 5½ -quart strainer.
  - a. Wrap the strainer with cushioning material.
  - b. Place strainer inside insulated food container and secure the lid.
6. Locate the items listed below and two storage/drying rack assemblies.

Item	Quantity
26-in x 18-in Baking Sheet Pans	30
Food Chopping Boards	4
Baking and Roasting Pans	20
Cooking Pot Covers	4

- a. Wrap each baking sheet pan with cushioning material and place ten inside each of three fiberboard containers.
- b. Place four food chopping boards inside a 20¼ inch x 15½ inch x 3½ inch fiberboard container.



- c. Wrap twenty baking and roasting pans with cushioning material and place inside a 22-inch x 17-inch x 9-inch fiberboard container.
  - d. Wrap four cooking pot covers with a cushioning material and place inside a fiberboard container.
  - e. Place containers in the storage rack.
  - f. Fill empty space with cushioning material.
  - g. Nest the second rack over the first, using fiberboard to keep them from rubbing.
  - h. Secure racks together with twine or wire ties, (this assembly will be identified as rack set #1).
7. Locate the items listed below and two storage/drying rack assemblies.

Item	Quantity
16-qt Stainless Steel Colanders	2
Food Serving and Storage Pans	23
Food Serving Pan Covers	4

- a. Wrap each colander with cushioning material and place each inside a 16 ½-inch x 16 ½-inch x 6 ½-inch fiberboard container.
  - b. Wrap the food serving and storage pans, and the food serving pan covers with cushioning material.
  - c. Place containers, food serving and storage pans, and the food serving pan covers in the storage rack.
  - d. Fill empty space with cushioning material.
  - e. Nest the second rack over the first, using fiberboard to keep them from rubbing.
  - f. Secure racks together with twine or wire ties. This assembly will be identified as rack set #2.
8. Locate the items listed below and two storage/drying rack assemblies. Pack rack set #3 in the same manner as rack set #2.

Item	Quantity
Food Serving and Storage Pans	22
Food Serving Pan Covers	5

9. Locate ten baking and roast pans (bottom)
- a. Wrap baking and roast pans with cushioning material.
  - b. Place inside a 25¼-inch x 19½-inch x 14½-inch fiberboard container.
10. Locate ten baking and roast pans (tops) and pack in the same manner as above.

11. Locate ten baking and roast pans (tops) and pack in the same manner as above.

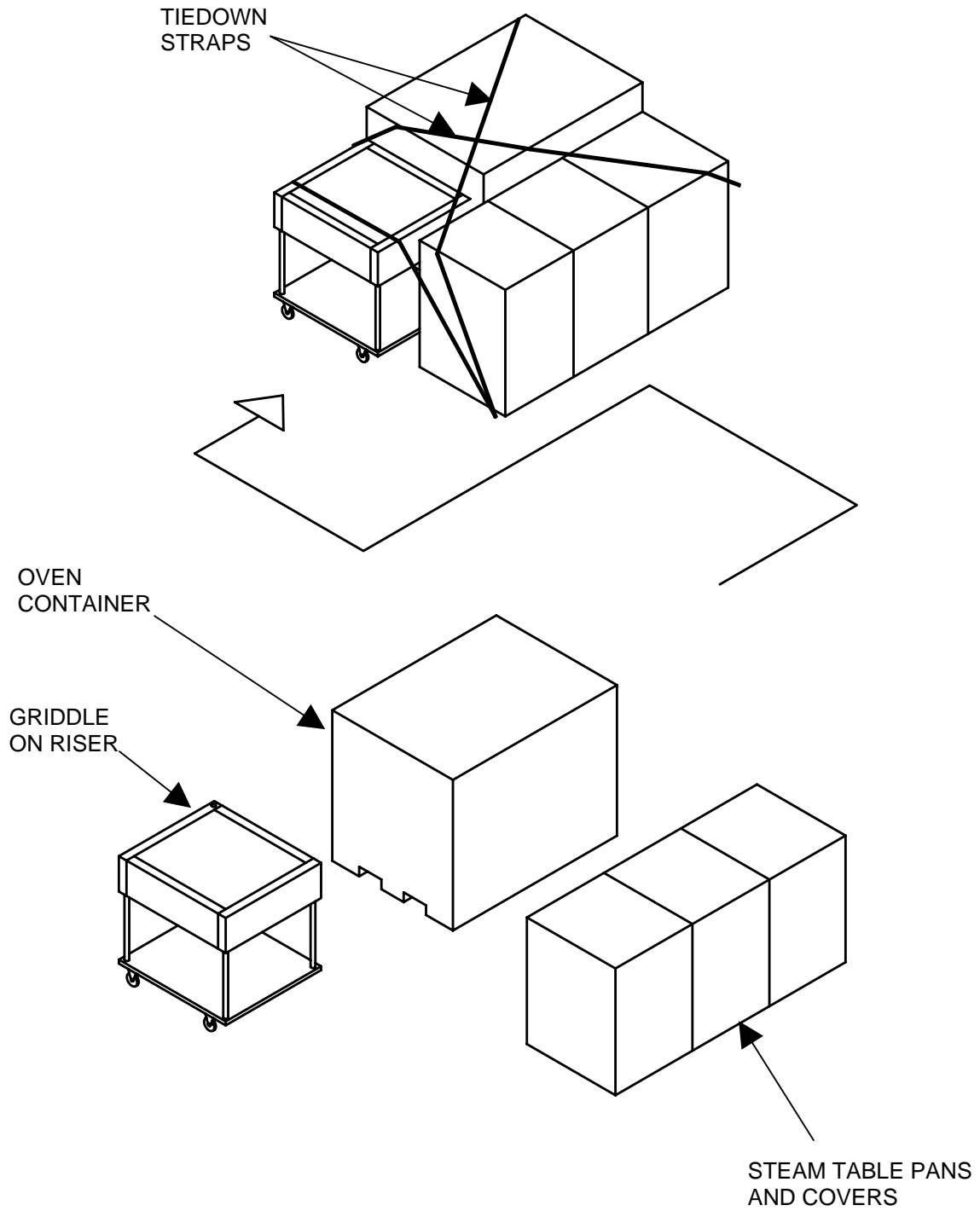
Item	Quantity
Dispenser, liquid, 5-Gal	15
Spatula	4
Skimmer, kitchen	4
Dipper, kitchen	4
Ladle, kitchen, 8-oz	4
Ladle, kitchen, 4-oz	3
Egg whip	2
Tongs, food turning	6
Ice pick	2
Butcher's steel	5
Knife, slicing	4
Knife, boning	4
Knife, steak	4
Knife, paring	4
Knife, cook's	4
Sponge, Cellulose (Unused only)	
Fork, food preparation, 15-in	6
Food turner	6
Stone, sharpening, medium grid	2
Spoon, food service 21-in	20
Food Serving Pan Covers	5

- a. Wrap items into cushioning material and pack into two 32-gallon trash cans.
- b. Place lids onto cans.

12. Locate the conveyor toaster, mechanical beverage dispenser, and four mounted can openers. Place items into original fiberboard boxes and seal with tape.

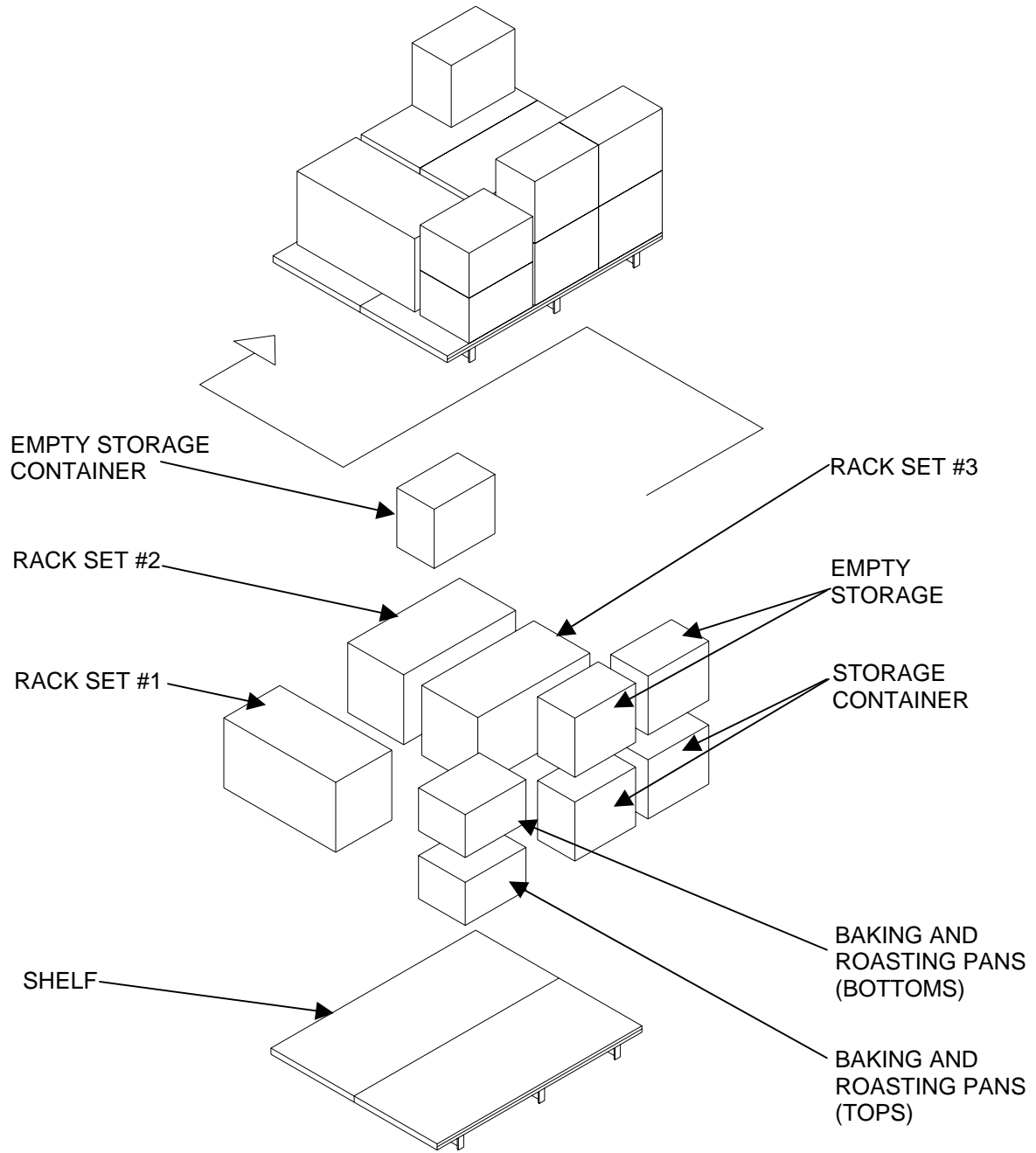
**Packing Procedures for TRICON 10N (FP (L) configuration)****Bottom Layer**

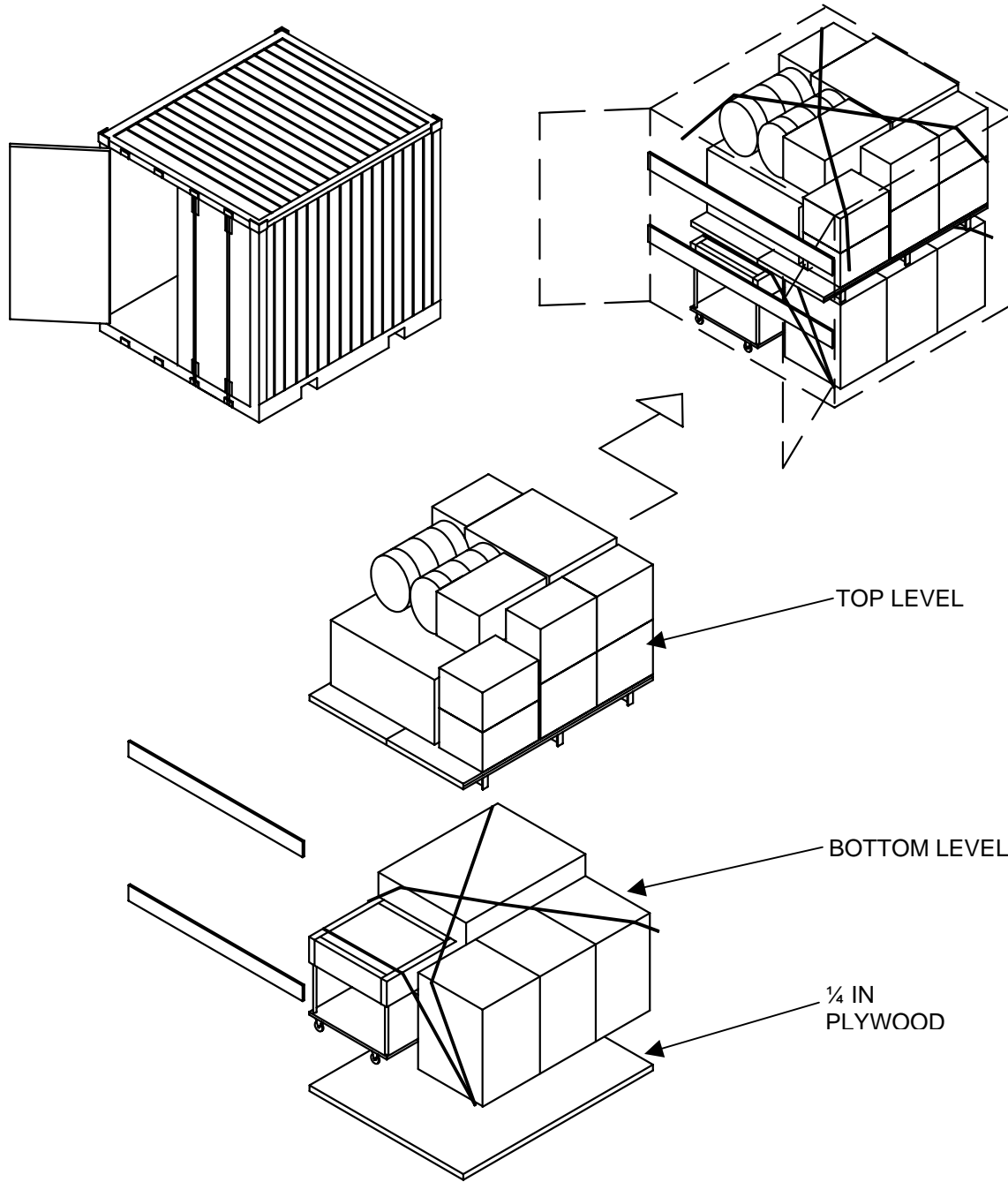
1. Locate TRICON container with "FOOD SERVICE KITCHEN KIT PART D TYPE 10N..." stenciled on the left door (this container should be staged in the Food Service area).
2. Ensure plywood boxes, shelving and bracing are present and serviceable in TRICON. If no longer serviceable, these will have to be reproduced before packing.
3. Attach one tiedown strap to the back tiedown loops on the left side of the container. Connect another tiedown strap to the lower rear corner tiedown bar on the right side of the container.
4. Place the oven container lengthwise into the back left corner of the container.
5. Connect the tiedown strap behind the steam table component boxes to tie down the loop in front of the oven.
6. Place one griddle riser on the floor of the container in front of the oven container.
7. Connect the tiedown strap from behind the oven container to tie down the loop in front of the steam table component boxes. Use a piece of fiberboard to protect the griddle from damage. Use another tiedown strap and connect it from the tiedown loop next to the griddle to the loop in front of the steam table.
8. Connect the tiedown straps to the corresponding tiedown loops and secure.
9. Place a cross board in front of the layer.



**Top Layer**

1. Install the two modified shelf assemblies on top of the existing brackets.
2. Place rack set #2 lengthwise in the back left corner of the shelf.
3. Place rack set #1 next to the right of rack set #2.
4. Place two food storage containers on the shelf next to the storage racks.
5. Stack two empty food storage containers on top of the food storage containers previously positioned.
6. Place the third empty food storage container on top of rack set #2 in the back left of the container.
7. Place rack set #1 sideways in front of the other two storage racks.
8. Place the two fiberboard containers with the roasting pans tops and bottoms in front of the storage containers.
9. Place the beverage dispenser, toaster, and can opener boxes to the rear of the pallet.
10. Place the packed 32-gallon trash cans onto the left side of the pallet.
11. Install honeycomb, crossboards, blocking and bracing as required to fill spaces and gaps to create a tight pack.
12. Install the special web tiedown straps as shown.
13. Close and secure TRICON doors.





**FIELD PACKING FOOD SERVICE KITCHEN KIT PART D TYPE 10N**

**FIELD PACKING FOOD SERVICE KITCHEN KIT PART E TYPE 10P (FP (L) CONFIGURATION)**

This paragraph provides information to pack the food service equipment into TRICON type 10P. Close adherence to these procedures is imperative to prevent equipment damage, and allow all equipment to fit into designated container. The following procedures are for field packing one TRICON type 10P.

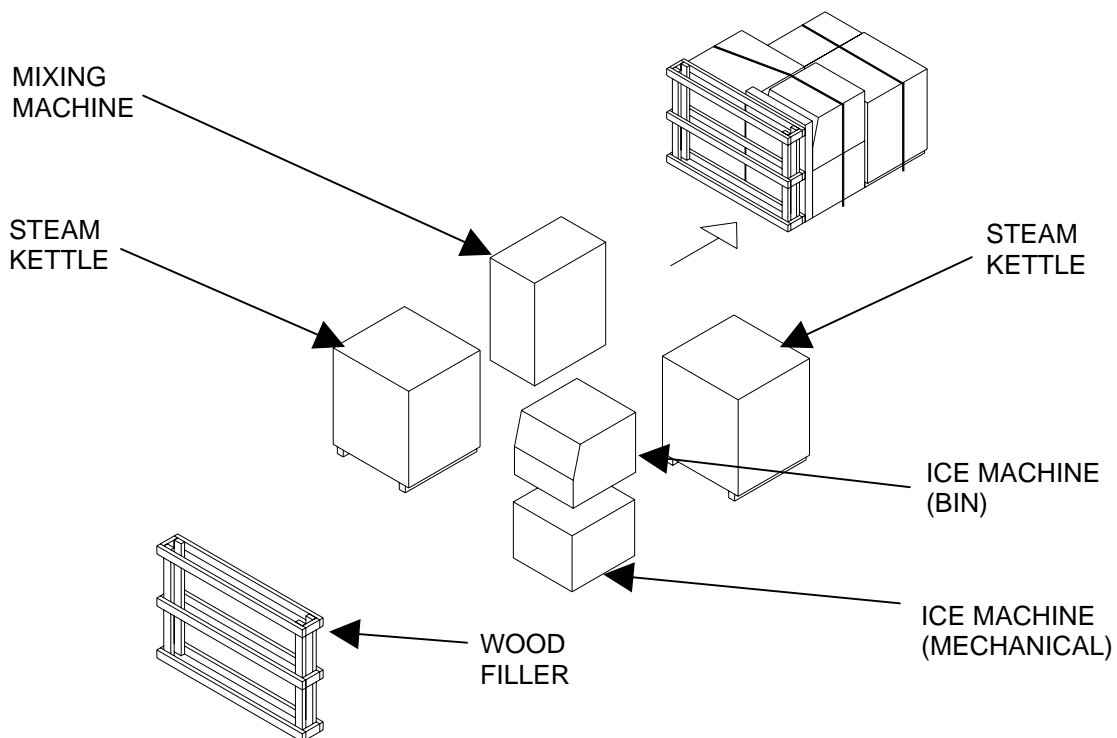
Equipment must be clean, dry, and debris-free before packing. Prepare components for packing as follows:

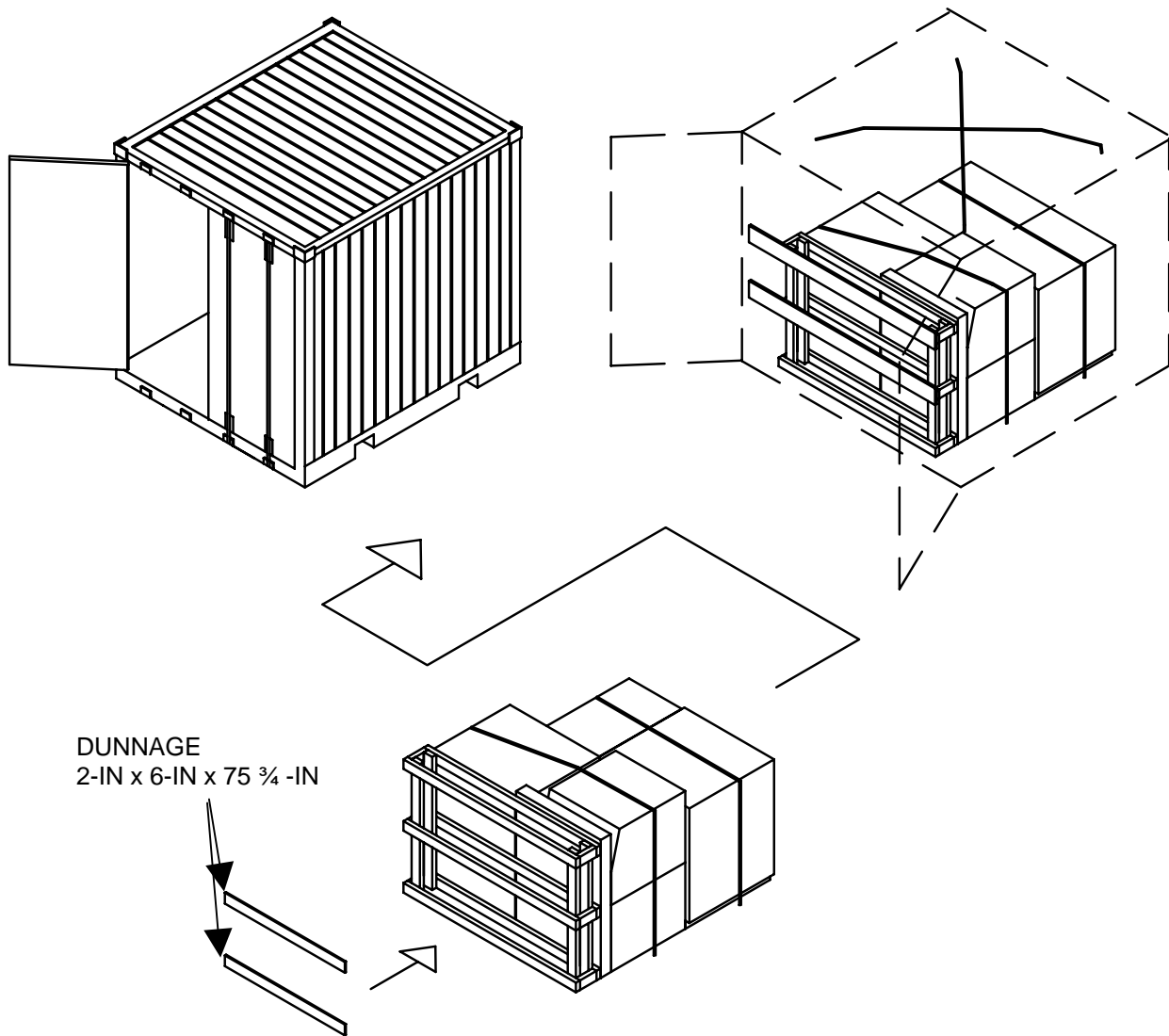
1. Locate one 6-gallon tabletop steam kettle and one 20-gallon steam kettle.
  - a. Secure any loose items.
  - b. Close the lid and secure.
  - c. Place each steam kettle in the reusable container.
2. Locate one mixing machine.
  - a. Wrap attachments in cushioning material and secure with tape.
  - b. Place the Mixing Machine and its attachments in the reusable container.
3. Locate one ice making machine (each machine comes in two parts).
  - a. Place cushioning material around the water fittings on each half of the ice making machine and secure in place with tape.
  - b. Wrap the fittings on the bin in cushioning material and secure with tape.
  - c. Wrap plug on the mechanical half of the machine with cushioning material and secure with tape.
  - d. Coil the power cable and secure to the machine.
  - e. Place the mechanical half of the machine into a fiberboard container.
  - f. Place the bin in a fiberboard container.



**Packing Procedures for TRICON 10P (FP (L) configuration)****Bottom Layer**

1. Locate TRICON container with "FOOD SERVICE KITCHEN KIT PART E TYPE 10P..." stenciled on the left door (this container should be staged in the Food Service area).
2. Ensure plywood boxes, shelving and bracing are present and serviceable in TRICON. If no longer serviceable, these will have to be reproduced before packing.
3. Attach one tiedown strap to the back tiedown loops on the left side of the container. Connect another tiedown strap to the lower rear corner tiedown bar on the right side of the container.
4. Place one steam kettle crate in the container against the back right corner. Tighten and secure the two tiedown straps.
5. Place the second steam kettle crate on the left side of the container in front of the mixing machine.
6. Place the mechanical portion of the ice machine on the floor of the container. Place the bin on top.
7. Connect the tiedown straps to the corresponding tiedown loops and secure.
8. Place wood filler in front.





**FIELD PACKING FOOD SERVICE KITCHEN KIT PART E TYPE 10P**

**END OF WORK PACKAGE**

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**OPERATOR MAINTENANCE  
FORCE PROVIDER FOOD SERVICE EQUIPMENT  
OPERATION UNDER UNUSUAL CONDITIONS**

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**OPERATION IN UNUSUAL ENVIRONMENT/WEATHER CONDITIONS****General**

Refer to Operation Under Usual Conditions (WP 0005 00 through WP 0024 00) for specific operating instructions, and use this work package for further instruction if operating the equipment in unusual conditions. Read all sections that apply to the conditions to which the equipment will be exposed.

Unusual conditions include severe weather, such as 90 to 100 percent humidity for a week or more; 32° Fahrenheit (0° centigrade) or below temperatures for a week or more; 100° Fahrenheit (38° centigrade) or above temperatures for a week or more; blowing sand or dust; heavy rain or snow.

**Operation in Extreme Heat (moist and dry) Conditions**

No specific requirements.

**Operation in Extreme Cold Conditions**

No specific requirements.

**Operation in Rainy and/or Humid Conditions.**

No specific requirements.

**Operation in Extreme Dry and Dusty Conditions**

No specific requirements.

**Operation in High Altitude**

Consult recipes for extended cooking times at high altitudes.

**Nuclear, Biological, and Chemical (NBC) Decontamination.** Perform interim decontamination procedures in accordance with FM 3-5 as the mission, resources, and tactical situation permit.



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**WARNING**

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For immediate decontaminating procedures use ONLY hot soapy water for spot decontamination of hot surfaces of the M-80 heater and stack. Shut down and cool the heater for any additional decontamination procedures. DO NOT spray DS2 or any other combustible decontamination solutions or compounds on an operating heater or stack. DO NOT spray DS2 or any other combustible decontamination solutions or compounds on any equipment surfaces or components where the operating temperatures reach or exceed the flashpoint of DS2 (160° Fahrenheit or 71.1° Celsius).



## **CHAPTER 3**

### **OPERATOR TROUBLESHOOTING PROCEDURES**

### **FORCE PROVIDER FOOD SERVICE EQUIPMENT**



**OPERATOR MAINTENANCE  
FORCE PROVIDER FOOD SERVICE EQUIPMENT  
OPERATOR TROUBLESHOOTING INDEX**

**GENERAL**

This chapter provides operator troubleshooting procedures. Refer to appropriate technical manuals for associated equipment maintenance instructions and item-specific troubleshooting instructions (Refer to WP 0040 00 for references). Troubleshooting instructions covered in this section are unique to the Force Provider Food Service Equipment.

**MALFUNCTION / SYMPTOM INDEX**

The malfunction / symptom index lists common malfunctions that may occur during inspection and operation. Find the malfunction to be eliminated and go to the indicated troubleshooting paragraph that follows. The index cannot list all malfunctions that may occur, all tests or inspections needed to find the fault, nor all actions required to correct the fault. If the existing malfunction is not listed, or cannot be corrected through this troubleshooting index, notify unit maintenance.

<b>Malfunction</b>	<b>Troubleshooting Table</b>
Food Warming Cabinet No Power Cabinet Loses Heat	Table 1, Item 1 Table 1, Item 2
Mechanically Cooled Beverage Dispenser No Power Does Not Agitate Does Not Cool Does Not Dispense	Table 2, Item 1 Table 2, Item 2 Table 2, Item 3 Table 2, Item 4
Griddle No Power Does Not Heat Heats Unevenly Excessive Heat or Excessive Cooking Time	Table 3, Item 1 Table 3, Item 2 Table 3, Item 3 Table 3, Item 4
Ice Making Machine No Power No Water Does Not Produce Enough Ice Water In Bin	Table 4, Item 1 Table 4, Item 2 Table 4, Item 3 Table 4, Item 4
Steam Kettle (all types) Tabletop Steam Kettle No Power Does Not Heat Safety Valve Relieving Steam	Table 5, Item 1 Table 5, Item 2 Table 5, Item 3
Meat Slicing Machine No Power Does Not Slice Excessive Effort Required to Slice	Table 6, Item 1 Table 6, Item 2 Table 6, Item 3

Malfunction	Troubleshooting Table
Mixing Machine No Power Motor Runs, Beater Does Not Speed Will Not Change Excessive Noise	Table 7, Item 1 Table 7, Item 2 Table 7, Item 3 Table 7, Item 4
Oven No Power Excessive Cooking Time Uneven Cooking Product Unevenly Browened No Interior Light	Table 8, Item 1 Table 8, Item 2 Table 8, Item 3 Table 8, Item 4 Table 8, Item 5
Tilt Fry Pan / Tilt Griddle No Power Excessive Cooking Time Heats Unevenly	Table 9, Item 1 Table 9, Item 2 Table 9, Item 3
Popcorn Machine Does Not Heat Burns Popcorn	Table 10, Item 1 Table 10, Item 2
Reach-in Refrigerators (Refrigerator, 20 Cubic Foot) (Refrigerator, 2 Section) (Refrigerator, 3 Section) Does Not Cool Excessive Running Water In Cabinet	Table 11, Item 1 Table 11, Item 2 Table 11, Item 3
Steam Table Does Not Heat	Table 12, Item 1
Tabletop Steam Kettle	See above "Steam Kettle (all types)"
Electric Toaster Does Not Heat Toasts One Side Only Burns Toast	Table 13, Item 1 Table 13, Item 2 Table 13, Item 3
Single Coffee Urn No Power Does Not Brew Coffee Weak	Table 14, Item 1 Table 14, Item 2 Table 14, Item 3



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**OPERATOR MAINTENANCE  
FORCE PROVIDER FOOD SERVICE EQUIPMENT  
OPERATOR TROUBLESHOOTING PROCEDURES**

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**TROUBLESHOOTING PROCEDURES**

The troubleshooting procedures contain tables listing the malfunctions, tests or inspections, and corrective action required to return Force Provider Food Service Equipment to normal operation. Perform the steps in the order they appear in the tables. **DO NOT START THE TASK UNTIL:**

- You understand the task
- You understand what you are to do
- You understand what is needed to do the work
- You have the things you need

**Table 1. Food Warming Cabinet Troubleshooting Procedures.**

<b>MALFUNCTION</b>	<b>TEST OR INSPECTION</b>	<b>CORRECTIVE ACTION</b>
1. No Power	Step 1. Check settings at control panel.	Mode selector should be set to ON or HUMIDITY
	Step 2. Check that all external power connections have been made.	Establish or reestablish power connections. Consult with facilities electricians if necessary.
		If condition persists, notify unit maintenance.
2. Cabinet Loses Heat	Step 1. Check settings at control panel.	Mode selector should be set to ON or HUMIDITY. Thermostat or humidity control should be set to highest setting.
	Step 2. Check that all external power connections have been made.	Establish or reestablish power connections. Consult with facilities electricians if necessary.
	Step 3. Inspect door gasket condition.	Notify unit maintenance.
	Step 4. Inspect door fit when closed.	Notify unit maintenance.
		If condition persists, notify unit maintenance.

**Table 2. Mechanically Cooled Beverage Dispenser Troubleshooting Procedures.**

<b>MALFUNCTION</b>	<b>TEST OR INSPECTION</b>	<b>CORRECTIVE ACTION</b>
1. No Power	Step 1. Check settings at control switches.	Switches should be ON.
	Step 2. Check that all external power connections have been made.	Establish or reestablish power connections. Consult with facilities electricians if necessary.
		If condition persists, notify unit maintenance.
2. Does Not Agitate	Step 1. Check settings at control switches.	Switches should be ON.
	Step 2. Inspect pump cover and impeller for obstructions, such as undiluted powdered drink mix. Refer to WP 0008 00. "Cleaning".	Dispose of beverage batch, clean dispenser, and start new batch. Ensure that powdered drink mix is thoroughly diluted into water before turning agitator ON.
		If condition persists, notify unit maintenance.
3. Does Not Cool	Step 1. Check settings at control switches.	Switches should be ON.
	Step 2. Inspect pump cover, impeller, and cooling coil for obstructions, such as undiluted powdered drink mix. Refer to WP 0008 00, "Cleaning".	Dispose of beverage batch, clean dispenser, and start new batch. Ensure that powdered drink mix is thoroughly diluted into water before turning agitator ON.
	Step 3. Inspect dispenser location for obstructions to cooling louvers.	Remove obstructions, and ensure that there is at least 6 inches of clearance around the chassis of the dispenser. Turn Cooling Switch OFF, wait 15 minutes, and turn Cooling Switch ON.
	If condition persists, notify unit maintenance.	
4. Does Not Dispense	Inspect valve or pinch tube, as applicable, for obstructions, such as undiluted powdered drink mix. Refer to WP 0008 00, "Cleaning".	Dispose of beverage batch, clean dispenser, and start new batch. Ensure that powdered drink mix is thoroughly diluted into water before turning agitator ON.
		If condition persists, notify unit maintenance.

**Table 3. Griddle Troubleshooting Procedures.**

<b>MALFUNCTION</b>	<b>TEST OR INSPECTION</b>	<b>CORRECTIVE ACTION</b>
1. No Power	Step 1. Check settings at thermostats.	Thermostats should be ON.
	Step 2. Check that all external power connections have been made.	Establish or reestablish power connections. Consult with facilities electricians if necessary.
		If condition persists, notify unit maintenance.
2. Does Not Heat	Step 1. Check indicator lights.	Indicator lights should be ON.
	Step 2. Check settings at thermostats.	Thermostats should be ON.
	Step 3. Check that all external power connections have been made.	Establish or reestablish power connections. Consult with facilities electricians if necessary.
		If condition persists, notify unit maintenance.
3. Heats Unevenly	Step 1. Check indicator lights.	Indicator lights should be ON.
	Step 2. Check settings at thermostats.	Thermostats should be ON and set to desired temperatures.
		If condition persists, notify unit maintenance.
4. Excessive Heat Or Excessive Cooking Time	Step 1. Check indicator lights.	Indicator lights should be ON.
	Step 2. Check settings at thermostats.	Thermostats should be ON and set to desired temperatures.
		If condition persists, notify unit maintenance.

**Table 4. Ice Machine Troubleshooting Procedures.**

<b>MALFUNCTION</b>	<b>TEST OR INSPECTION</b>	<b>CORRECTIVE ACTION</b>
1. No Power	Step 1. Check indicator panel.	Indicator panel should be lit.
	Step 2. Check that all external power connections have been made.	Establish or reestablish power connections. Consult with facilities electricians if necessary.
		If condition persists, notify unit maintenance.
2. No Water	Step 1. Check water manifold shutoff valve. Refer to TM 10-5419-206-13 (Operator, Unit, and Direct Support Maintenance for Force Provider).	Valve should be on.
	Step 2. Ensure water line is not frozen or otherwise obstructed or kinked.	Remove, thaw, and reinstall a frozen water line. Remove obstructions or kinks from water lines.
		If condition persists, notify unit maintenance.
3. Does Not Produce Enough Ice	Step 1. Monitor harvest cycle.	Ice maker should produce a complete harvest in approximately 20 minutes. If not, notify unit maintenance.
	Step 2. Ensure that there is sufficient airflow around ice maker.	Clear obstructions from ice maker cabinet, and relocate ice maker if necessary. Relocate ice maker to ECU discharge vent.
	Step 3. Check bin door for fit or damage.	Notify unit maintenance. Use approved field expedient closure
	Step 4. Check fit of ice maker to bin.	Reinstall ice maker onto bin.
	Step 5. Monitor volume of ice used.	More ice will be used in hot climates. Ensure that all available ice makers are in operation.
	If condition persists, notify unit maintenance.	
4. Water in Bin	Check bin drain.	Remove all ice from bin. Clear drain mechanically or chemically (with bleach solution) from bin to drain. Clean and sanitize bin, and operate normally.
		If condition persists, notify unit maintenance.

**Table 5. Steam Kettle Troubleshooting Procedures.**

<b>MALFUNCTION</b>	<b>TEST OR INSPECTION</b>	<b>CORRECTIVE ACTION</b>
1. No Power	Step 1. Check indicator lights.	Indicator panel should be lit.
	Step 2. Check that all external power connections have been made.	Establish or reestablish power connections. Consult with facilities electricians if necessary.
	Step 3. Check fuses.	Replace a visible burned fuse.
		If condition persists, notify unit maintenance.
2. Does Not Heat	Step 1. Check thermostat setting.	Thermostat should be set at desired temperature.
	Step 2. Check indicator lights.	Indicator lights should be on if kettle is heating.
	Step 3. Check water level, if equipped with sight glass.	Water level should be at mid point on the glass. Notify unit maintenance if level is low.
	Step 4. Check pressure gauge.	If no pressure shows on gauge, notify unit maintenance.
		If condition persists, notify unit maintenance.
3. Safety Valve Relieving Steam	Observe release of steam from safety valve.	Turn thermostat to OFF, disconnect power, and notify unit maintenance.

**Table 6. Meat Slicing Machine Troubleshooting Procedures.**

<b>MALFUNCTION</b>	<b>TEST OR INSPECTION</b>	<b>CORRECTIVE ACTION</b>
1. No Power	Step 1. Check indicator lights.	Indicator light should be lit.
	Step 2. Check that all external power connections have been made.	Establish or reestablish power connections. Consult with facilities electricians if necessary.
		If condition persists, notify unit maintenance.
2. Does Not Slice	Step 1. Ensure that slicer is ON.	Check power connection, turn power switch ON, and check indicator light.
	Step 2. Check slice thickness adjustment.	Turn slice thickness adjustment to midpoint, slice, and adjust as desired.
		If condition persists, notify unit maintenance.
3. Excessive Effort Required To Slice	Step 1. Ensure that slicer is ON.	Check power connection, turn power switch ON, and check indicator light.
	Step 2. Check slice thickness adjustment.	Turn slice thickness adjustment to midpoint, slice, and adjust as desired.
	Step 3. Inspect product for slice quality. If slice appears uneven or torn, knife is dull.	Sharpen and sanitize knife.
		If condition persists, notify unit maintenance.

**Table 7. Mixing Machine Troubleshooting Procedures.**

<b>MALFUNCTION</b>	<b>TEST OR INSPECTION</b>	<b>CORRECTIVE ACTION</b>
1. No Power	Step 1. Check timer (if fitted).	Set timer.
	Step 2. Check that all external power connections have been made.	Establish or reestablish power connections. Consult with facilities electricians if necessary.
	Step 3. Check placement of bowl and safety guard.	Place bowl in highest position. Close safety guard.
		If condition persists, notify unit maintenance.
2. Motor Runs, Beater Does Not	Step 1. Adjust speed while motor is operating.	Adjustment will reset belt.
	Step 2. Open cover and inspect belt	Replace belt.
		If condition persists, notify unit maintenance.
3. Speed Will Not Change	Step 1. Adjust speed while motor is operating.	Adjustment will reset belt.
	Step 2. Open cover and inspect belt	Replace belt.
		If condition persists, notify unit maintenance.
4. Excessive Noise	Determine type of noise. Squealing indicates a loose belt. Grinding indicates a lack of lubrication.	Replace a squealing belt. Lubricate operating shafts.
		If condition persists, notify unit maintenance.



**Table 8. Oven Troubleshooting Procedures.**

<b>MALFUNCTION</b>	<b>TEST OR INSPECTION</b>	<b>CORRECTIVE ACTION</b>
1. No Power	Step 1. Check ON/OFF switch.	Set switch to ON.
	Step 2. Check settings on toggle switches.	Set switch to ON.
	Step 3. Check door closure.	Ensure doors are fully shut.
	Step 4. Check that all external power connections have been made.	Establish or reestablish power connections. Consult with facilities electricians if necessary.
	Step 5. Check fuses.	Replace a visibly burned fuse.
		If condition persists, notify unit maintenance.
2. Excessive Cooking Time	Step 1. Check thermostat setting.	Set thermostat to setting indicated in recipe.
	Step 2. Check settings on toggle switches.	Set switches to ON.
	Step 3. Monitor door use.	Ensure that product inspections are done through oven door windows.
	Step 4. Check fuses.	Replace a visibly burned fuse.
		If condition persists, notify unit maintenance.
3. Uneven Cooking	Step 1. Check settings on toggle switches.	Set switches to ON.
	Step 2. Monitor door use.	Ensure that product inspections are done through oven door windows.
		If condition persists, notify unit maintenance.
4. Product Unevenly Browning	Monitor door use.	Ensure that product inspections are done through oven door windows.
		If condition persists, notify unit maintenance.
5. No Interior Light	Step 1. Check settings on light switch.	Set switch to ON.
	Step 2. Secure oven, and check on the security of both light bulbs in sockets. (Both lights go out if one fails.)	Tighten both bulbs.
	Step 3. Secure oven, and check both light bulbs in functioning lamp. (Both lights go out if one burns out.)	Replace burnt out light bulb.
		If condition persists, notify unit maintenance.

**Table 9. Tilt Fry Pan / Tilt Griddle Troubleshooting Procedures.**

<b>MALFUNCTION</b>	<b>TEST OR INSPECTION</b>	<b>CORRECTIVE ACTION</b>
1. No Power	Step 1. Check settings at function switch.	Function switch should be ON.
	Step 2. Check settings at thermostats.	Thermostats should be ON.
	Step 3. Check that all external power connections have been made.	Establish or reestablish power connections. Consult with facilities electricians if necessary.
		If condition persists, notify unit maintenance.
2. Excessive Cooking Time	Step 1. Check indicator light.	Indicator light should be cycling ON and OFF.
	Step 2. Check settings at thermostats.	Thermostat(s) should be ON and set to desired temperatures.
	Step 3. If using for baking or braising, check lid.	Close lid.
	Step 4. Check high temperature indicator light.	Allow griddle to cool, and monitor for normal operation. If indicator light continues to come ON, notify unit maintenance.
		If condition persists, notify unit maintenance.
3. Heats Unevenly	Step 1. Check indicator lights.	Indicator lights should be ON.
	Step 2. Check settings at thermostats.	Thermostat(s) should be ON and set to desired temperatures.
		If condition persists, notify unit maintenance.

**Table 10. Popcorn Machine Troubleshooting Procedures.**

<b>MALFUNCTION</b>	<b>TEST OR INSPECTION</b>	<b>CORRECTIVE ACTION</b>
1. Does Not Heat	Step 1. Check kettle switch.	Kettle switch should be ON.
	Step 2. Check power cord.	Power cord should be connected.
		If condition persists, notify unit maintenance.
2. Burns Popcorn	Step 1. Check agitate switch.	Agitate switch should be ON.
	Step 2. Check agitator.	Agitator shaft and arms should be connected.
		If condition persists, notify unit maintenance.

**Table 11. Reach-in Refrigerator Troubleshooting Procedures.**

<b>MALFUNCTION</b>	<b>TEST OR INSPECTION</b>	<b>CORRECTIVE ACTION</b>
1. Does Not Cool	Step 1. Check power cord connection.	Connect power cord.
	Step 2. Check door fit and condition of door gasket.	Adjust misaligned door.
		If condition persists, notify unit maintenance.
2. Excessive Running	Check door fit and condition of door gasket.	Adjust misaligned door.
		If condition persists, notify unit maintenance.
3. Water In Cabinet	Check door fit and condition of door gasket.	Adjust misaligned door.
		If condition persists, notify unit maintenance.

**Table 12. Steam Table Troubleshooting Procedures.**

<b>MALFUNCTION</b>	<b>TEST OR INSPECTION</b>	<b>CORRECTIVE ACTION</b>
1. Does Not Heat	Step 1. Check thermostat setting.	Thermostat should be ON.
	Step 2. Check water level.	Fill water to approximately 2 inches over heating elements.
	Step 3. Check power cord.	Power cord should be connected.
		If condition persists, notify unit maintenance.

**Table 13. Electric Toaster Troubleshooting Procedures.**

<b>MALFUNCTION</b>	<b>TEST OR INSPECTION</b>	<b>CORRECTIVE ACTION</b>
1. Does Not Heat	Step 1. Check ON/OFF switch	ON/OFF switch should be ON.
	Step 2. Check thermostat setting.	Thermostat should be at midposition.
	Step 3. Check power cord.	Power cord should be connected.
		If condition persists, notify unit maintenance.
2. Toasts One Side Only	Check BUN/TOAST switch.	BUN/TOAST switch should be set on TOAST.
		If condition persists, notify unit maintenance.
3. Burns Toast	Step 1. Check thermostat setting.	Thermostat should be at midposition.
	Step 2. Check conveyor speed.	Adjust conveyor speed on models with speed control.
	Step 3. Check product.	Ensure that item is not so big as to hang up or jam in toaster.
		If condition persists, notify unit maintenance.

**Table 14. Single Coffee Urn Troubleshooting Procedures.**

<b>MALFUNCTION</b>	<b>TEST OR INSPECTION</b>	<b>CORRECTIVE ACTION</b>
1. No Power	Step 1. Check thermostat setting.	Thermostat should be at BREW or HIGH position.
	Step 2. Check ON/OFF switch (if fitted).	Switch should be ON.
	Step 3. Check circuit breaker.	Reset circuit breaker.
	Step 4. Check power cord connection.	Reconnect power cord.
		If condition persists, notify unit maintenance.
2. Does Not Brew	Step 1. Check brew indicator lights.	Press START / BREW button to initiate brew cycle - indicator is not lit.
	Step 2. Check ON/OFF switch (if fitted).	Switch should be ON.
	Step 3. Check thermostat setting.	Thermostat should be at BREW or HIGH position.
	Step 4. Check circuit breaker.	Reset circuit breaker.
	Step 5. Check water level.	Add water.
	If condition persists, notify unit maintenance.	
3. Coffee Weak	Step 1. Check thermostat setting.	Thermostat should be at BREW or HIGH position.
	Step 2. Check batch switch	If making a half batch, switch should be set on HALF.
	Step 3. Check water temperature.	Allow at least 45 minutes for jacket water to heat.
	Step 4. Check coffee grounds.	Make sure that the correct measure of grounds have been placed in the filter.
	If condition persists, notify unit maintenance.	





## **CHAPTER 4**

### **OPERATOR MAINTENANCE INSTRUCTIONS FORCE PROVIDER FOOD SERVICE EQUIPMENT**



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**OPERATOR MAINTENANCE  
FORCE PROVIDER FOOD SERVICE EQUIPEMENT  
LUBRICATION INSTRUCTIONS**

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**GENERAL**

This work package contains lubrication instructions specific to equipment covered in this TM. Unless indicated here, no other lubrication is necessary.

**Food Warming Cabinet**

One drop food grade lubricating oil to door hinges as necessary.

Three to five drops light machine oil to wheels as necessary.

**Steam Kettle (Tilting and Tabletop)**

Food grade grease to operating screw annually.

**Meat Slicing Machine**

Three to five drops food grade lubricating oil to all sliding surfaces and shafts as necessary.

Three to five drops food grade lubricating oil to threads of equipment feet semi-annually.

**Mixing Machine**

Food grade grease to beater shaft as required.

Three to five drops food grade lubricating oil to all sliding surfaces as required.

**Tilt Griddle / Tilt Fry Pan**

Food grade grease to operating worm and gear monthly.

Food grade lubricating oil to pivot shaft as needed.



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**OPERATOR MAINTENANCE  
FORCE PROVIDER FOOD SERVICE EQUIPMENT  
OPERATOR PREVENTATIVE MAINTENANCE CHECKS AND SERVICES (PMCS)**

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**THIS SECTION COVERS:**

PMCS Procedures

**INITIAL SETUP**

Force Provider Food Service Equipment set up and in operation

**Maintenance Level**

Operator

**INTRODUCTION**

Preventive Maintenance Checks and Services (PMCS) are performed to keep the Force Provider Food Service Equipment in good operating condition and ready for its primary mission. The checks are used to find, correct, and report problems. PMCS is performed every day the Force Provider Food Service Equipment is in operation, and is done according to the PMCS table provided. Pay attention to **WARNING**, **CAUTION**, and **NOTE** statements. A **WARNING** indicates that someone could be hurt or killed. A **CAUTION** indicates that equipment could be damaged. A **NOTE** may make your maintenance or repair task easier.

Be sure to perform scheduled PMCS. Always perform PMCS in the same order so it becomes habit. With practice, you will quickly recognize problems with the equipment.

Use DA Form 2404, Equipment Inspection and Maintenance Worksheet, to record any discovered faults. Do not record faults that you fix!

**PMCS PROCEDURES**

Table 1 lists inspections and care required to keep your equipment in good operating condition. It is arranged so that you can perform before operation checks as you walk around the equipment.

**Explanation of Table 1 columns****Item Number**

Indicates the reference number. When completing DA Form 2404, Equipment Inspection and Maintenance Worksheet, include the item number for the item to check/service indicating a fault. Item numbers appear in the order you must perform the checks/services listed.

**Interval**

Indicates when you must perform the procedure in the procedure column.

**Before** - perform before equipment operation

**During** - perform during equipment operation

**After** - perform after equipment has been operated

**Weekly** - perform every week

**Monthly** - perform each month

**Item to Check/Service**

Indicates the item to be checked or serviced.

**Procedure**

Indicates the procedure you must perform on the item listed in Item to Check/Service column. You must perform the procedure at the time specified in the Interval column.

**Not Fully Mission Capable If:**

Indicates faults which will prevent your equipment from performing its primary mission. If you perform procedures listed in Procedure column, which show faults listed in this column, do not operate the equipment. Follow standard procedures for maintaining the equipment or reporting equipment failure.

**Other Special Entries**

Observe all special information and notes that appear in Table 1.

When a check/service procedure is required for both weekly and before intervals, it is not necessary to perform the procedure twice if the equipment is operated during the weekly period.

**COMMON CHECKS AND CLEANING****Cleaning**

Always keep the equipment clean. Remove dirt, sand, and debris from all circuit breakers and hose connections.

**Bolts, Nuts, and Screws**

Check them for obvious looseness, missing, bent, or broken condition on equipment. If you find a bolt, nut, or screw you think is loose, tighten it or report it to your supervisor.

**Hoses**

Look for wear, damage, and leaks. Ensure clamps are tight. Wet spots show leaks, but a stain around a fitting or connector can also mean a leak. If a leak comes from a loose fitting or coupling, tighten it. If something is broken or worn out, report it to your supervisor.

**LEAKAGE DEFINITION FOR PERFORMING PMCS**

It is necessary for you to know how fluid leakage affects the status of the equipment. The following are the types/classes of leakage an operator needs to know to be able to determine the status of the water system. Learn these leakage definitions and remember - when in doubt, notify your supervisor.

**CAUTION**

Equipment operation is allowable with minor leakages (Class I or II). Of course, consideration must be given to fluid capacity in the system, when in doubt, notify your supervisor. When operating Class I or II leaks, continue to check fluid levels as required in your PMCS. Class III leaks should be reported immediately to your supervisor.

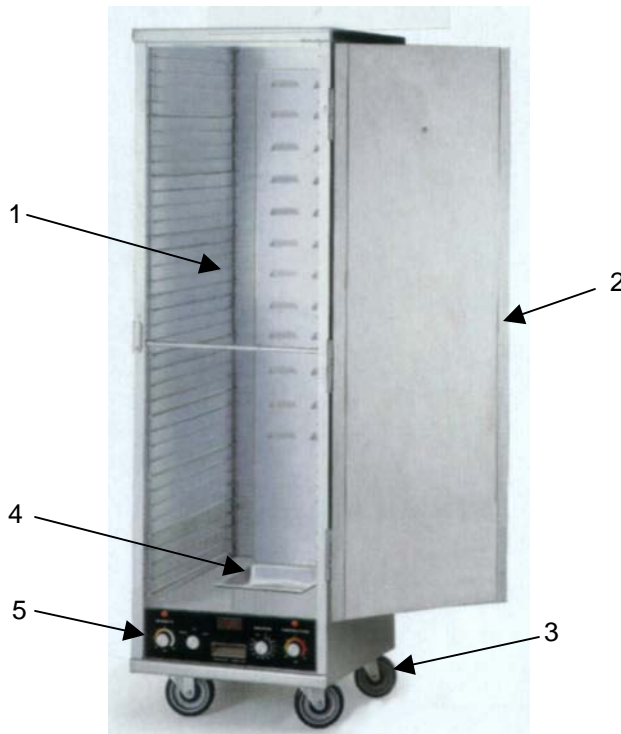
Class I - Seepage of fluid (as indicated by wetness or discoloration) not great enough to form drops.

Class II - Leakage of fluid great enough to form drops but not enough to cause drops to drip from item being checked/inspected.

Class III - Leakage of fluid great enough to form drops that fall from items being checked/inspected.

**Table 1. Preventive Maintenance Checks And Services (PMCS).**

Item Number	Interval	Item to check/service	Procedure	Not Fully Mission Capable If:
1	Before, After	Food Warming Cabinet	Clean and sanitize cabinet interior <b>(1)</b> .	Cabinet not cleaned.
2	Before	Food Warming Cabinet	Inspect for material damage to cabinet exterior. Inspect door(s) <b>(2)</b> for fit, seal, and ease of operation.	Cabinet dented or damaged. Door(s) misaligned or malfunctioning
3	Before	Food Warming Cabinet	Inspect wheels <b>(3)</b> for damage and freedom of movement.	Wheels missing or unserviceable.
4	Before	Food Warming Cabinet	Inspect wheel locks (if fitted) for proper operation.	Wheel locks inoperative.
5	Before	Food Warming Cabinet	Inspect power cord and plug for damage, such as chafed or cut insulation and exposed wires.	Power cord unserviceable.
6	During	Food Warming Cabinet	Inspect water level <b>(4)</b> .	Replenish water as necessary to maintain humidity.
7	During	Food Warming Cabinet	Inspect and monitor controls <b>(5)</b> for proper operation.	Inoperative indicator lights, switches, or thermostats.



**Table 1. Preventive Maintenance Checks And Services (PMCS) - Continued.**

Item Number	Interval	Item to check/service	Procedure	Not Fully Mission Capable If:
8	Before, After	Mechanically Cooled Beverage Dispenser	Clean and sanitize bowl (1), pump components, dispensing valve (2), and all components in contact with beverage.	Components not cleaned and sanitized.
9	Before	Mechanically Cooled Beverage Dispenser	Inspect for material damage to chassis (3).	Chassis dented or damaged.
10	Before	Mechanically Cooled Beverage Dispenser	Inspect power cord and plug for damage, such as chafed or cut insulation and exposed wires.	Power cord unserviceable.
11	During	Mechanically Cooled Beverage Dispenser	Inspect louvers (4) for cleanliness or obstructions.	Louvers obstructed.
12	During	Mechanically Cooled Beverage Dispenser	Inspect bowl (1) and dispensing valve (2) for leaks.	Class III leakage.
13	During	Mechanically Cooled Beverage Dispenser	Inspect and monitor controls (5) for proper operation.	Inoperative switches.
14	During	Mechanically Cooled Beverage Dispenser	Monitor bowl (1) for beverage level; monitor spray tube for discharge.	Bowl less than ¼ full; no spray discharge.





Table 1. Preventive Maintenance Checks And Services (PMCS) - Continued.

Item Number	Interval	Item to check/service	Procedure	Not Fully Mission Capable If:
15	Before	Griddle	Inspect for material damage to griddle (1) and leg assembly (2).	Griddle or leg assembly damaged.
16	Before, After	Griddle	Clean and oil grill cooking surface (3).	Components not cleaned and oiled.
17	Before	Griddle	Inspect power cord and plug for damage, such as chafed or cut insulation and exposed wires.	Power cord unserviceable.
18	Before, During, After	Griddle	Empty and clean grease drawer (4).	Grease and residue accumulation in grease drawer
19	During	Griddle	Inspect and monitor controls (5) for proper operation.	Inoperative indicators, switches, and thermostats.
20	Weekly	Griddle	Scour cooking surface (3) with grill brick.	Cooking surface with food residue accumulation.
21	Weekly	Griddle	Season cooking surface (3) (after scouring).	Cooking surface unseasoned.

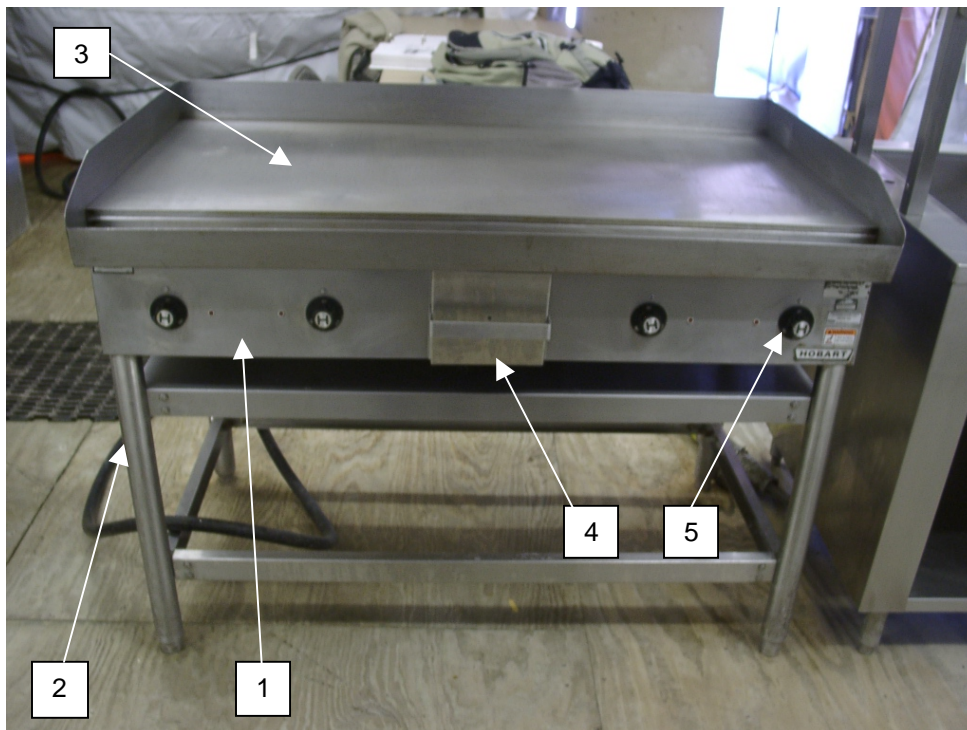
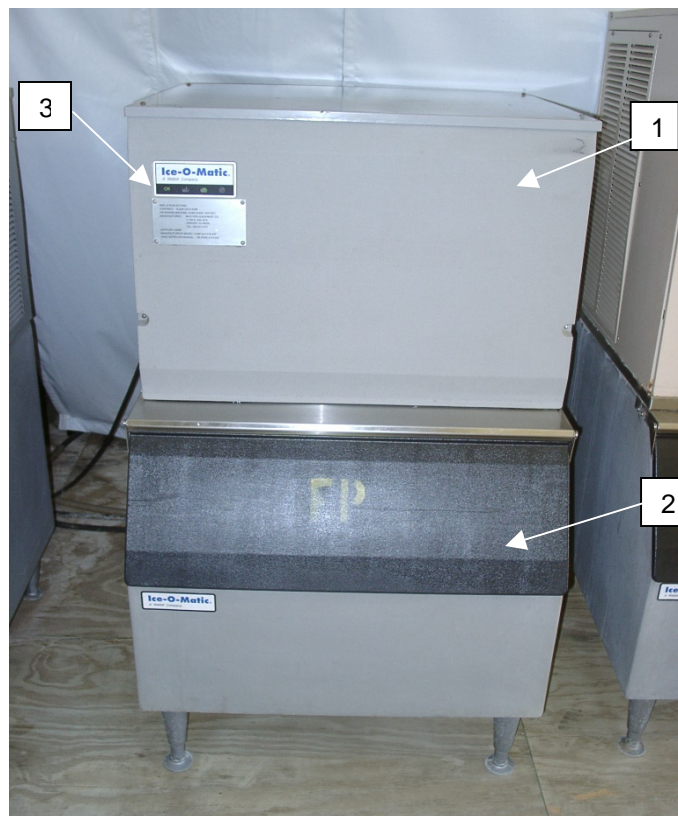


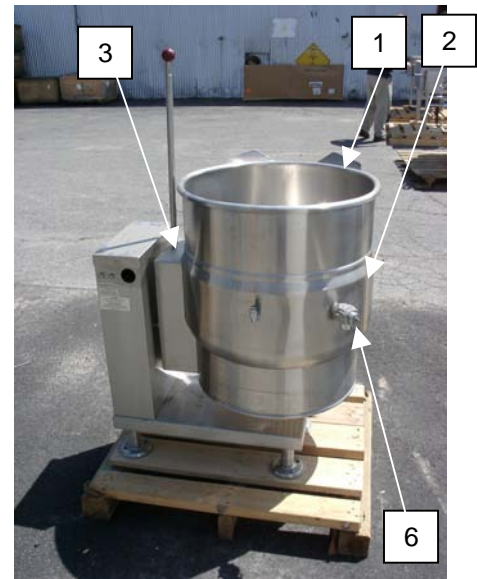
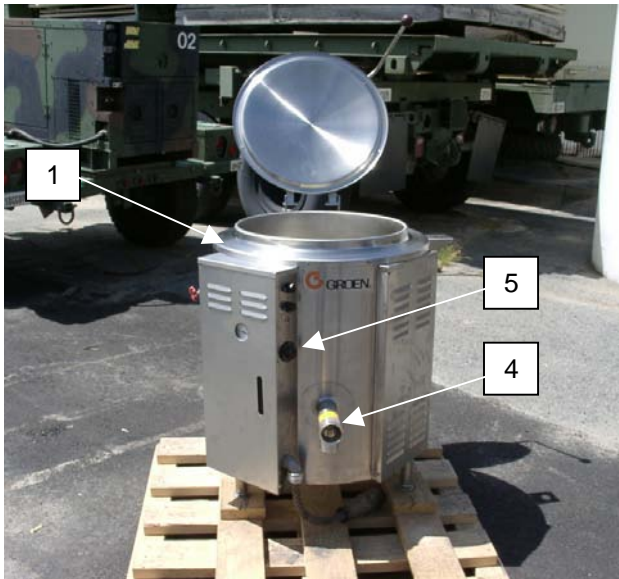
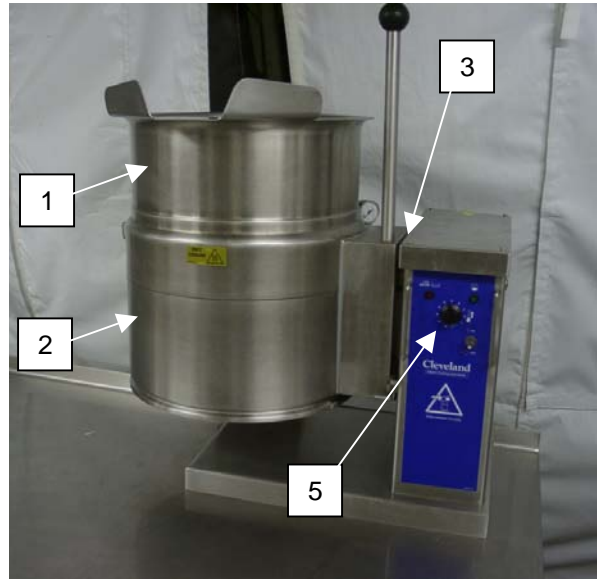
Table 1. Preventive Maintenance Checks And Services (PMCS) - Continued.

Item Number	Interval	Item to check/service	Procedure	Not Fully Mission Capable If:
22	Before	Ice Making Machine	Inspect for material damage to ice maker <b>(1)</b> and bin <b>(2)</b> .	Ice maker or bin damaged.
23	Before	Ice Making Machine	Inspect power cord and plug for damage, such as chafed or cut insulation and exposed wires.	Power cord unserviceable.
24	Before	Ice Making Machine	Inspect water connection for leakage and material damage to hose.	Class III leakage; hose chafed or cut.
25	Before, During, After	Ice Making Machine	Inspect cooling louvers for cleanliness and obstructions.	Cooling louvers obstructed.
26	Before, During, After	Ice Making Machine	Inspect bin drain for obstructions.	Bin drain obstructed.
27	Before, Weekly, After	Ice Making Machine	Clean and sanitize ice maker <b>(1)</b> and bin <b>(2)</b> .	Ice maker or bin not sanitized
28	During	Ice Making Machine	Inspect indicator panel <b>(3)</b> for proper operation.	Indicators inoperative



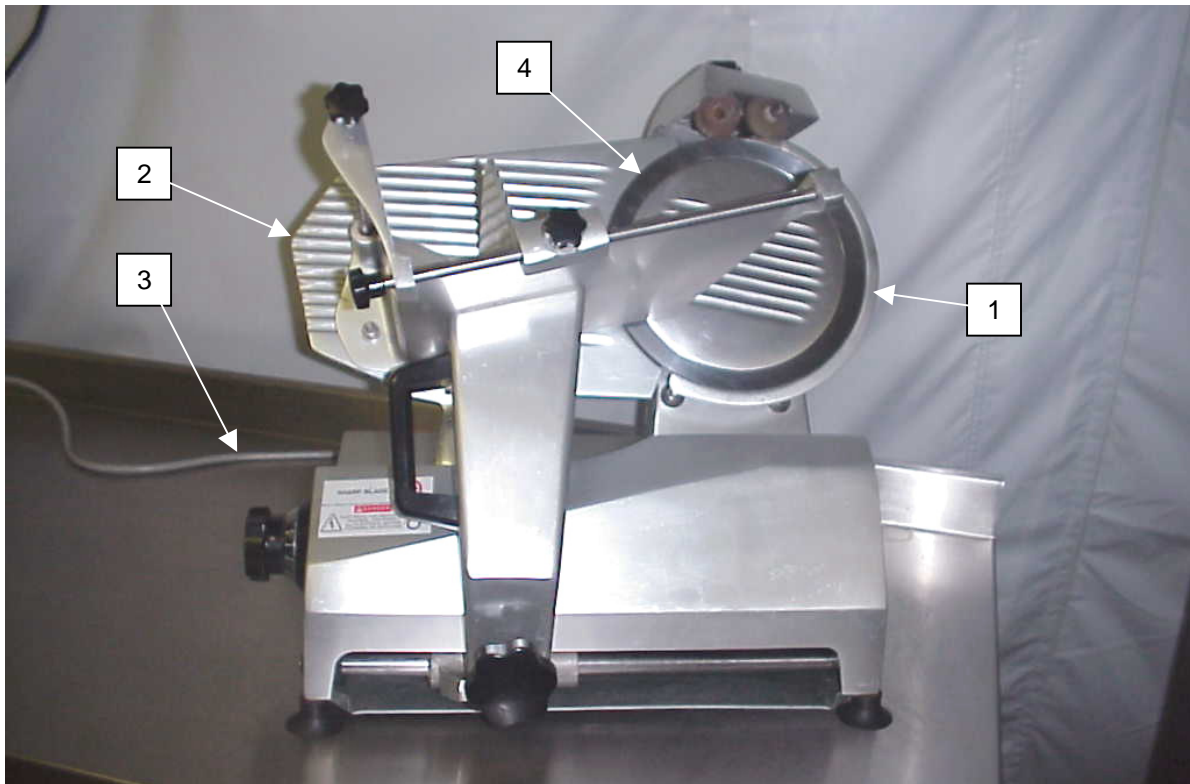
**Table 1. Preventive Maintenance Checks And Services (PMCS) - Continued.**

Item Number	Interval	Item to check/service	Procedure	Not Fully Mission Capable If:
29	Before	Steam Kettle (all types, including Tabletop Steam Kettle)	Inspect for material damage to kettle <b>(1)</b> .	Kettle damaged.
30	Before	Steam Kettle (all types, including Tabletop Steam Kettle)	Inspect power cord and plug for damage, such as chafed or cut insulation and exposed wires.	Power cord unserviceable.
31	Before, During, After	Steam Kettle (all types, including Tabletop Steam Kettle)	Inspect water jacket <b>(2)</b> for leakage.	Class I leakage.
32	Before	Steam Kettle (all types, including Tabletop Steam Kettle)	Inspect water connections (if fitted) for leakage and damage.	Class III leakage; cut or chafed hoses; bent, dented, or corroded tubing.
33	Before, During, After	Steam Kettle (all types, including Tabletop Steam Kettle)	Inspect kettle pivot <b>(3)</b> (if fitted) for ease of operation.	Kettle binding or immovable; operating bar missing
34	Before, After	Steam Kettle (all types, including Tabletop Steam Kettle)	Inspect draw off valve <b>(4)</b> (if fitted) for proper operation.	Draw off valve inoperable.
35	Before, After	Steam Kettle (all types, including Tabletop Steam Kettle)	Clean and sanitize kettle <b>(1)</b> .	Kettle not sanitized
36	During	Steam Kettle (all types, including Tabletop Steam Kettle)	Inspect indicators and controls <b>(5)</b> for proper operation.	Indicators, switches, or thermostats inoperative
37	During	Steam Kettle (all types, including Tabletop Steam Kettle)	Monitor safety valve <b>(6)</b> .	Safety valve relieving



**Table 1. Preventive Maintenance Checks And Services (PMCS) - Continued.**

Item Number	Interval	Item to check/service	Procedure	Not Fully Mission Capable If:
38	Before, During, After	Meat Slicing Machine	Ensure that knife guard <b>(1)</b> is in place.	Knife guard missing.
39	Before	Meat Slicing Machine	Inspect for material damage to slicer <b>(2)</b> .	Slicer visibly damaged.
40	Before	Meat Slicing Machine	Inspect power cord <b>(3)</b> and plug for damage, such as chafed or cut insulation and exposed wires.	Power cord unserviceable.
41	Before, Daily, After	Meat Slicing Machine	Clean and sanitize slicer <b>(2)</b> .	Slicer not sanitized
42	During	Meat Slicing Machine	Ensure that knife <b>(4)</b> is sharp.	Knife dull or damaged.



**Table 1. Preventive Maintenance Checks And Services (PMCS) - Continued.**

Item Number	Interval	Item to check/service	Procedure	Not Fully Mission Capable If:
43	Before, Daily, After	Mixing Machine	Clean and sanitize mixer <b>(1)</b> .	Mixer not sanitized
44	Before	Mixing Machine	Inspect power cord and plug for damage, such as chafed or cut insulation and exposed wires.	Power cord unserviceable.
45	Before	Mixing Machine	Inspect for material damage to mixer <b>(1)</b> .	Mixer visibly damaged.
46	Before	Mixing Machine	Inspect clearance of beater attachment <b>(2)</b> to bottom of bowl <b>(3)</b> .	Beater is within one inch of bowl.
47	Before	Mixing Machine	Inspect operation of bowl lift <b>(4)</b> .	Bowl lift stiff or inoperable.
48	During	Mixing Machine	Inspect operation of speed adjustment <b>(5)</b> .	Speed adjustment stiff or inoperable.
49	During	Mixing Machine	Monitor sounds from mixer <b>(1)</b> .	Mixer emitting squealing or loud grinding.

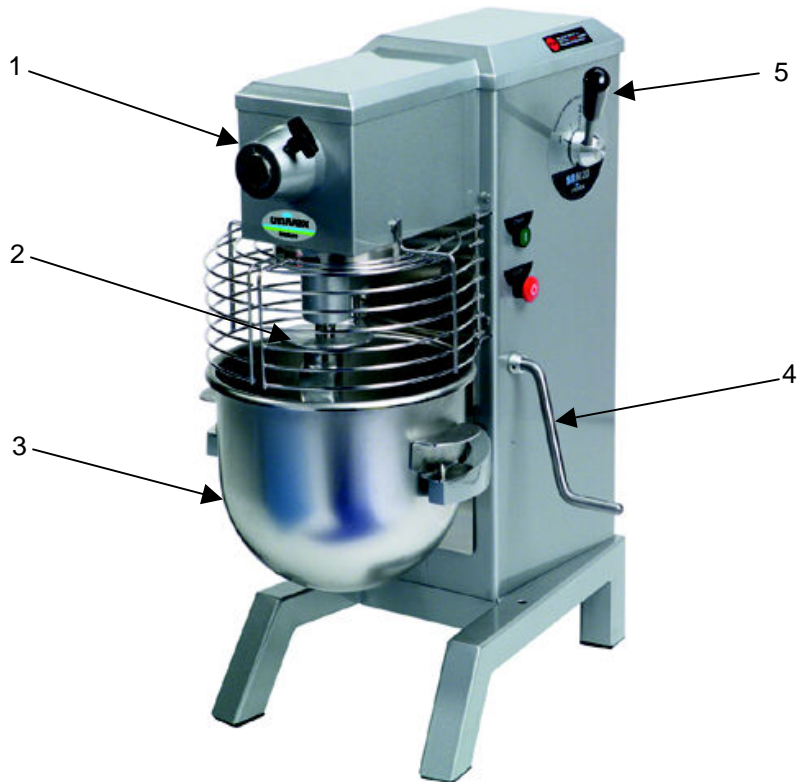
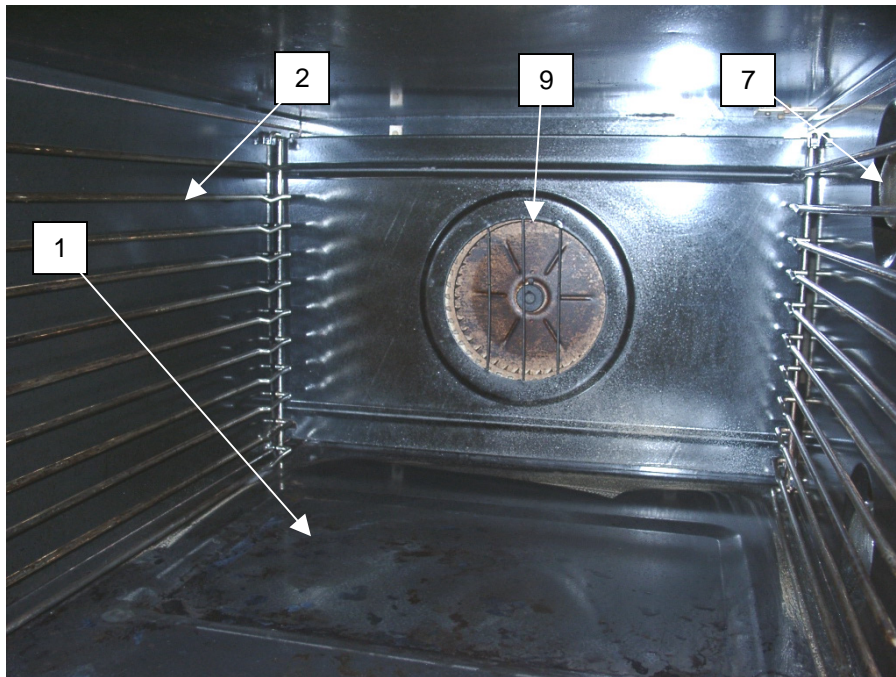


Table 1. Preventive Maintenance Checks And Services (PMCS) - Continued.

Item Number	Interval	Item to check/service	Procedure	Not Fully Mission Capable If:
50	Before, Daily, After	Oven	Inspect oven for cleanliness.	Burnt food or ash residue in oven cavity (1) or on racks (2). Windows (3) clouded or stained. Controls (4) soiled, gummed, or greasy.
51	Before	Oven	Inspect power cord (5) and plug for damage, such as chafed or cut insulation and exposed wires.	Power cord unserviceable.
52	Before	Oven	Inspect for material damage to oven.	Oven visibly damaged.
53	Before, After	Oven	Inspect operation of doors (6).	Doors stiff, inoperable, or misaligned.
54	Before, During	Oven	Inspect operation of lights (7).	Lights inoperative.
55	Before, During	Oven	Inspect operation of damper (8).	Damper stiff or inoperable
56	Before, During	Oven	Inspect operation of blowers (9).	Blowers inoperative.



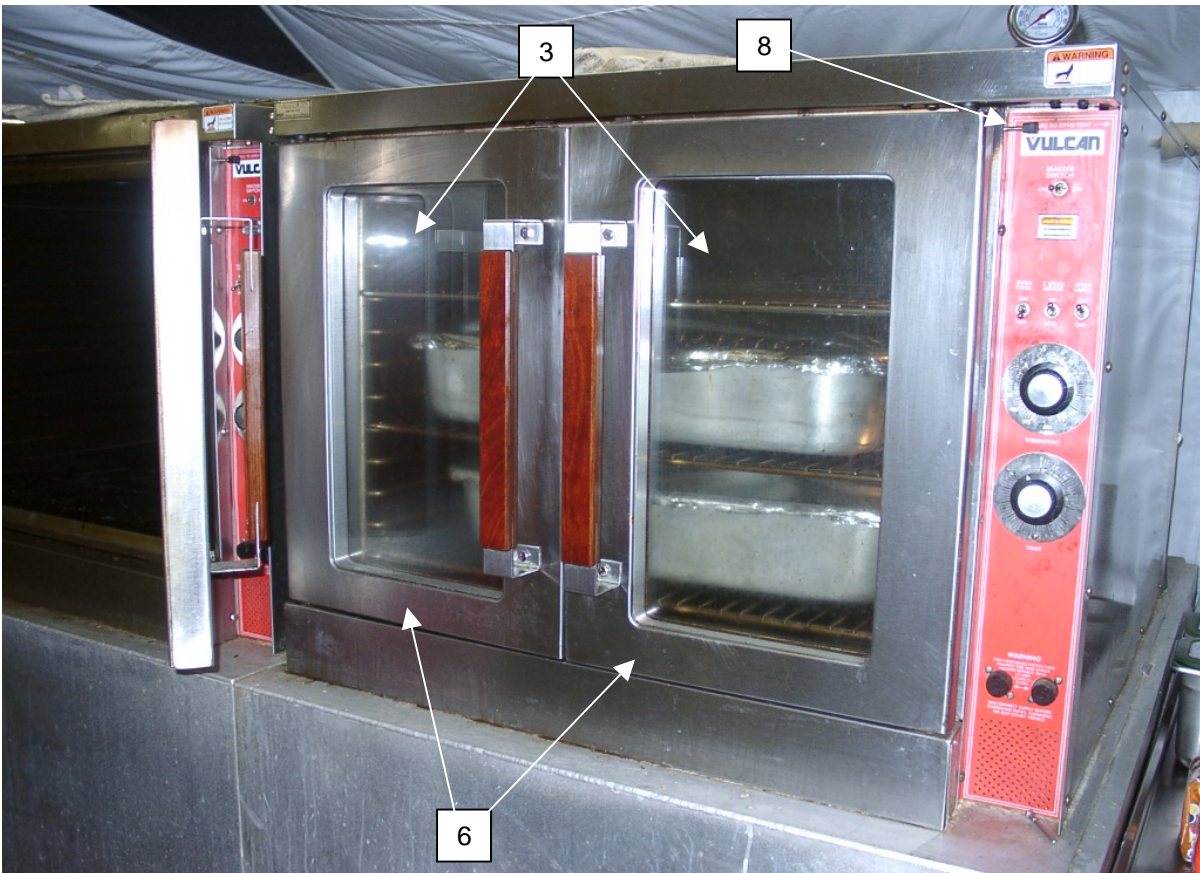
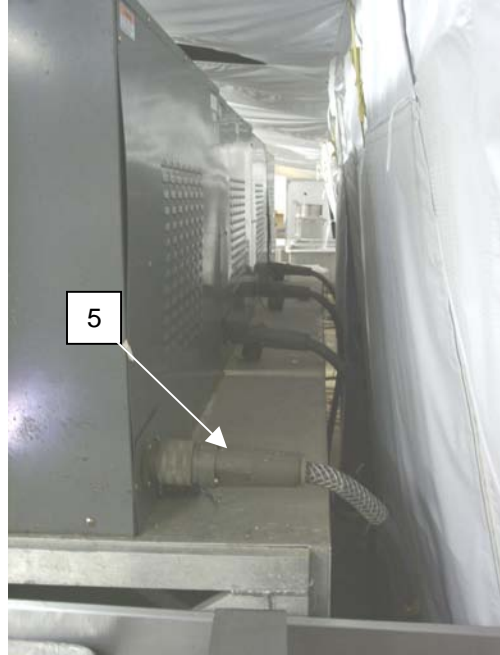




Table 1. Preventive Maintenance Checks And Services (PMCS) - Continued.

Item Number	Interval	Item to check/service	Procedure	Not Fully Mission Capable If:
57	Before, Daily, After	Tilt Fry Pan / Tilt Griddle	Clean tilt fry pan <b>(1)</b> .	Cooking surface soiled with food residue. Exterior greasy or unclean.
58	Before	Tilt Fry Pan / Tilt Griddle	Inspect power cord and plug for damage, such as chafed or cut insulation and exposed wires.	Power cord unserviceable.
59	Before	Tilt Fry Pan / Tilt Griddle	Inspect for material damage to tilt fry pan <b>(1)</b> .	Oven visibly damaged.
60	Before, During	Tilt Fry Pan / Tilt Griddle	Inspect operation of lid <b>(2)</b> .	Lid stiff, inoperable, or misaligned.
61	Before, During, After	Tilt Fry Pan / Tilt Griddle	Inspect operation of tilting mechanism <b>(3)</b> .	Tilting mechanism stiff or inoperable.
62	Monthly	Tilt Fry Pan / Tilt Griddle	Lubricate tilting worm <b>(4)</b> and gear <b>(5)</b> with food grade grease.	Tilting mechanism stiff or inoperable.

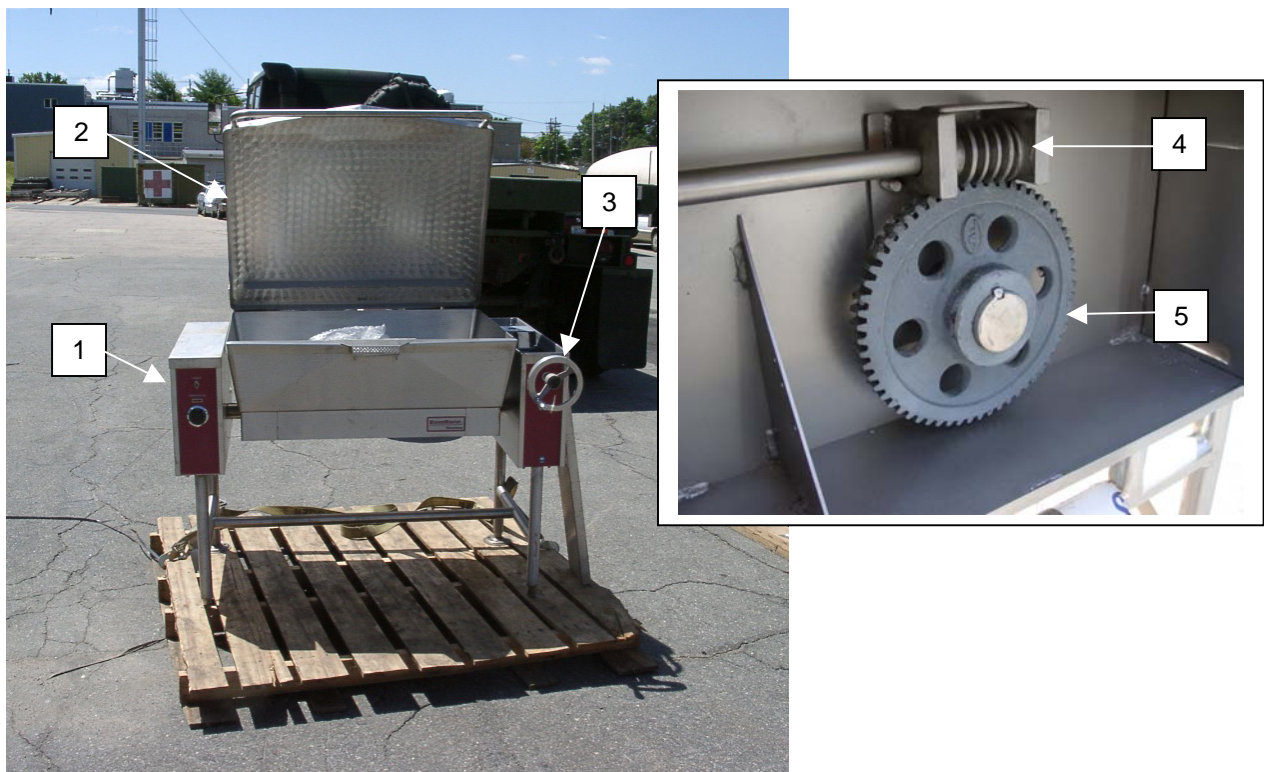
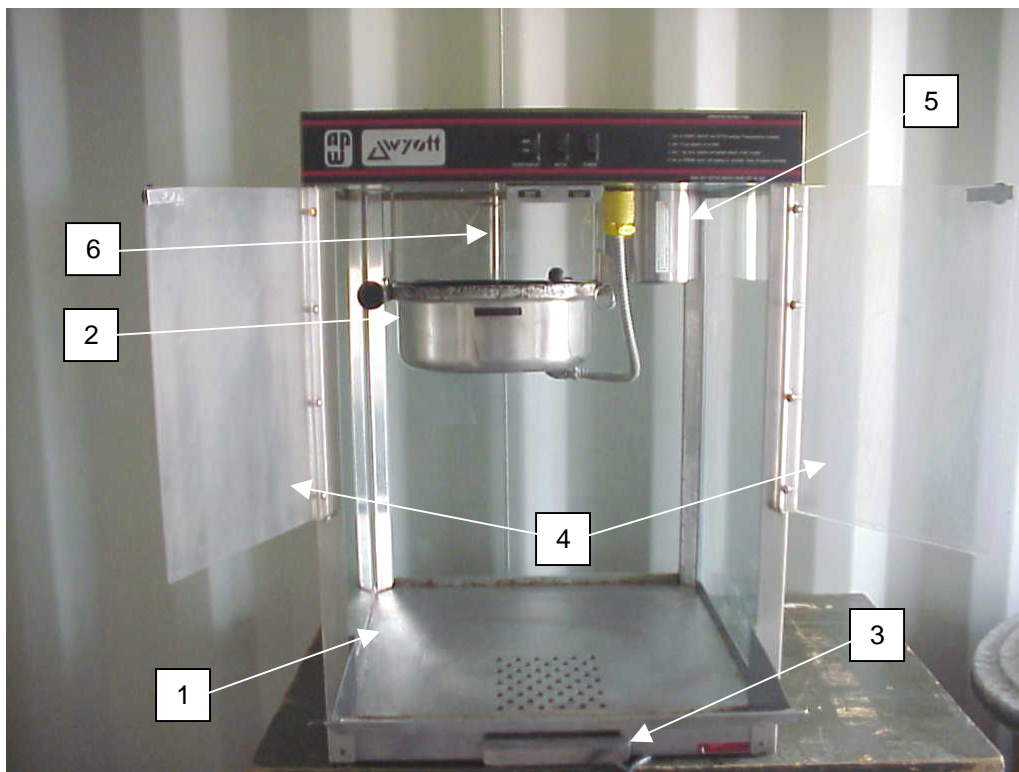


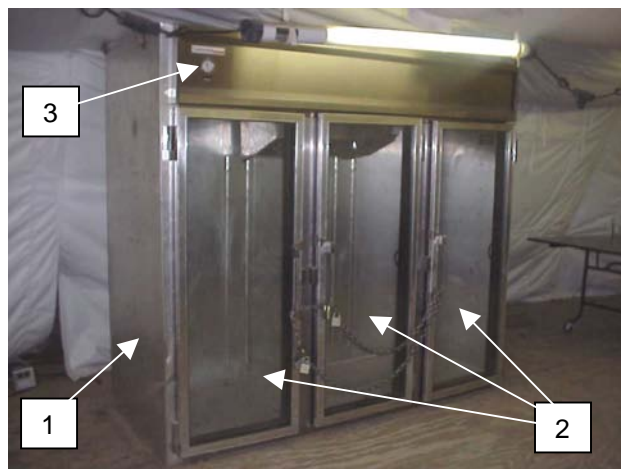
Table 1. Preventive Maintenance Checks And Services (PMCS) - Continued.

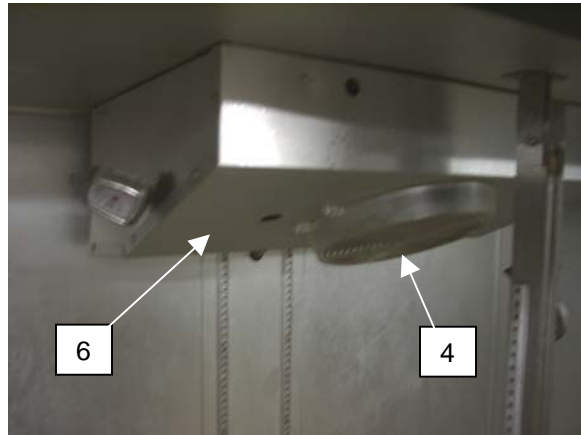
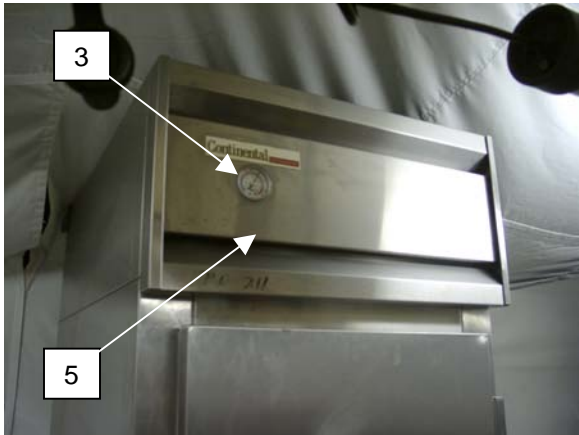
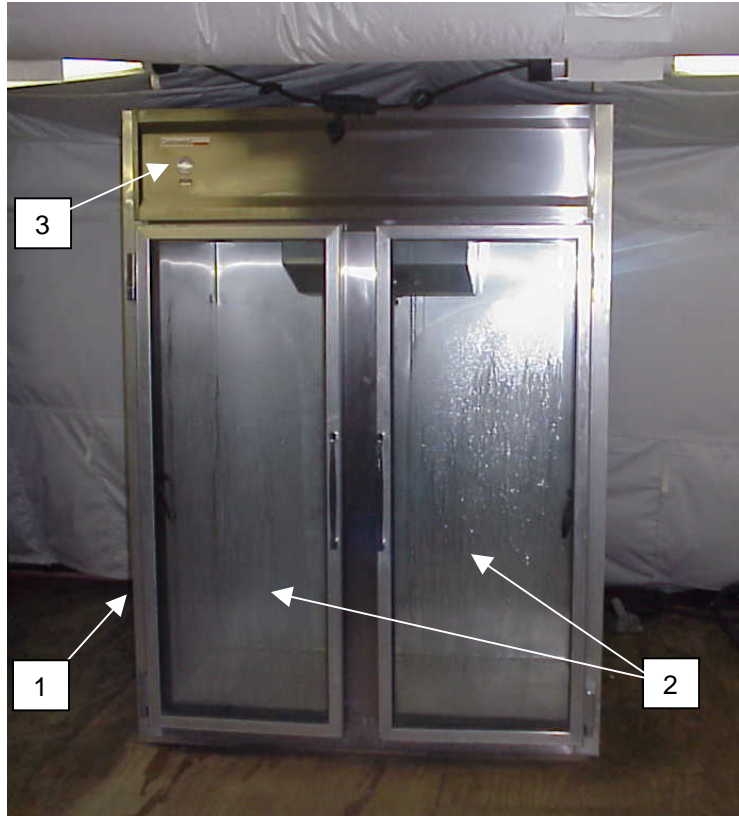
Item Number	Interval	Item to check/service	Procedure	Not Fully Mission Capable If:
63	Before, Daily, After	Popcorn Machine	Clean Popcorn Machine (1).	Kettle (2) soiled with food residue. Interior and exterior greasy or unclean. Popcorn kernels in drawer (3).
64	Before	Popcorn Machine	Inspect power cord and plug for damage, such as chafed or cut insulation and exposed wires.	Power cord unserviceable.
65	Before	Popcorn Machine	Inspect for material damage to Popcorn Machine (1).	Popcorn Machine visibly damaged.
66	Before, During	Popcorn Machine	Inspect operation of doors (4).	Doors stiff, inoperable, or misaligned.
67	Before, During	Popcorn Machine	Inspect operation of display lights (5).	Display lights inoperative.
68	During	Popcorn Machine	Inspect operation of kettle (2).	Kettle inoperable.
69	During	Popcorn Machine	Inspect operation of agitator (if fitted) (6).	Agitator inoperable.



**Table 1. Preventive Maintenance Checks And Services (PMCS) - Continued.**

Item Number	Interval	Item to check/service	Procedure	Not Fully Mission Capable If:
70	Before, Daily, After	Reach-in Refrigerators	Clean refrigerator <b>(1)</b> interior and exterior.	Refrigerator soiled with food residue. Interior and exterior greasy or unclean.
71	Before	Reach-in Refrigerators	Inspect power cord and plug for damage, such as chafed or cut insulation and exposed wires.	Power cord unserviceable.
72	Before	Reach-in Refrigerators	Inspect for material damage to refrigerator <b>(1)</b> .	Refrigerator visibly damaged.
73	Before, During	Reach-in Refrigerators	Inspect operation of doors <b>(2)</b> .	Doors stiff, inoperable, or misaligned.
74	Before, During	Reach-in Refrigerators	Inspect thermometer <b>(3)</b> .	Thermometer damaged or inoperative
75	Before, During	Reach-in Refrigerators	Inspect air space surrounding refrigerator <b>(1)</b> .	Air flow blocked by improperly stored equipment or improperly discarded packaging or food items.
76	During	Reach-in Refrigerators	Monitor operation of evaporator fans <b>(4)</b> .	Evaporator fans inoperative.
77	During	Reach-in Refrigerators	Monitor operation of condensing unit <b>(5)</b> .	Condensing unit inoperative, or runs excessively.
78	Daily	Reach-in Refrigerators	Inspect evaporator <b>(6)</b> for icing.	Ice visible on evaporator coil.





**Table 1. Preventive Maintenance Checks And Services (PMCS) - Continued.**

Item Number	Interval	Item to check/service	Procedure	Not Fully Mission Capable If:
79	Before, Daily, After	Steam Table	Clean steam table <b>(1)</b> interior and exterior.	Steam table soiled with food residue. Interior and exterior greasy or unclean.
80	Before	Steam Table	Inspect power cord and plug for damage, such as chafed or cut insulation and exposed wires.	Power cord unserviceable.
81	Before	Steam Table	Inspect for material damage to steam table <b>(1)</b> .	Steam table visibly damaged or Class III leakage.
82	Before, During	Steam Table	Inspect operation of sneeze guard <b>(2)</b> .	Sneeze guard stiff, inoperable, or missing.
83	During	Steam Table	Monitor operation of heating system.	Heating system inoperative.

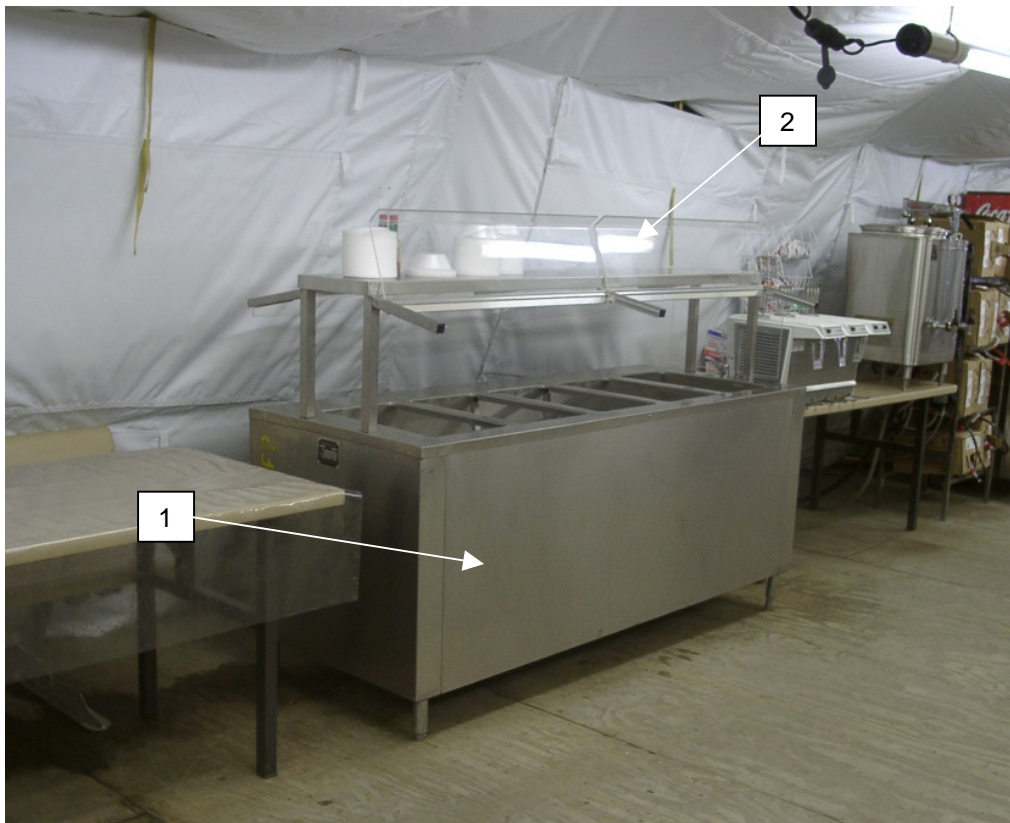
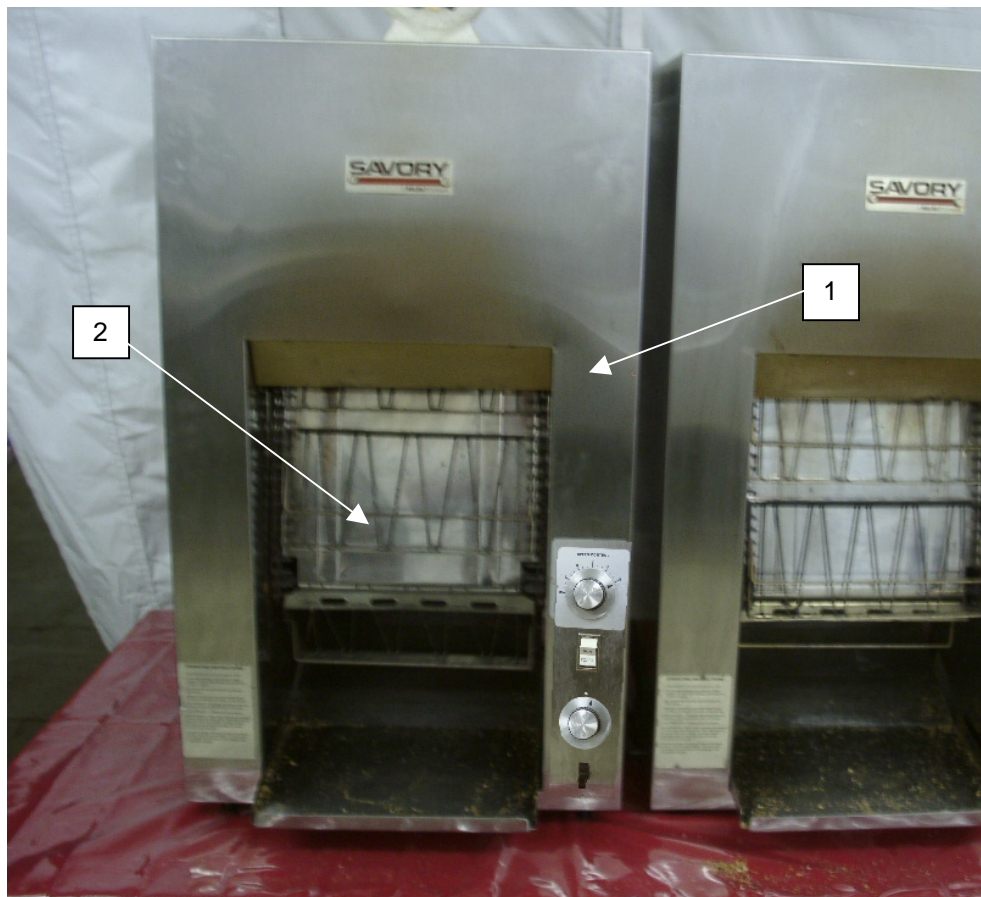


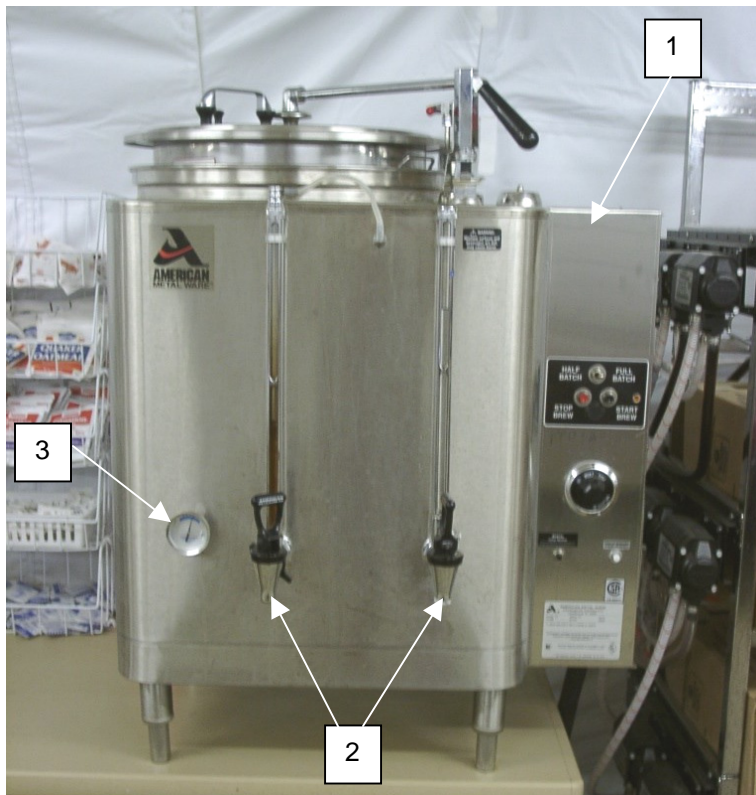
Table 1. Preventive Maintenance Checks And Services (PMCS) - Continued.

Item Number	Interval	Item to check/service	Procedure	Not Fully Mission Capable If:
84	Before, Daily, After	Electric Toaster	Clean toaster (1) interior and exterior.	Toaster soiled with food residue. Interior and exterior greasy or unclean.
85	Before	Electric Toaster	Inspect power cord and plug for damage, such as chafed or cut insulation and exposed wires.	Power cord unserviceable.
86	Before	Electric Toaster	Inspect for material damage to toaster (1).	Toaster visibly damaged.
87	During	Electric Toaster	Monitor operation of conveyer (2).	Conveyer stiff or inoperable.
88	During	Electric Toaster	Monitor operation of heating elements.	Heating elements inoperative.



**Table 1. Preventive Maintenance Checks And Services (PMCS) - Continued.**

Item Number	Interval	Item to check/service	Procedure	Not Fully Mission Capable If:
89	Before, Daily, After	Coffee Urn	Clean urn <b>(1)</b> liner and exterior.	Liner stained with coffee residue. Exterior greasy or unclean.
90	Before	Coffee Urn	Inspect power cord and plug for damage, such as chafed or cut insulation and exposed wires.	Power cord unserviceable.
91	Before	Coffee Urn	Inspect for material damage to urn <b>(1)</b> .	Urn visibly damaged or leaking.
92	Before	Coffee Urn	Inspect faucets <b>(2)</b> for leaks and normal operation.	Faucets inoperative or leaking.
93	During	Coffee Urn	Monitor jacket water temperature <b>(3)</b> .	Water temperature too cool (less than 140°F).
94	During	Coffee Urn	Monitor operation.	Excessive brew time (greater than 15 minutes).







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**OPERATOR MAINTENANCE  
FORCE PROVIDER FOOD SERVICE EQUIPMENT  
OPERATOR MAINTENANCE PROCEDURES**

---

**INTRODUCTION TO OPERATOR MAINTENANCE**

This section contains Operator Maintenance applicable to the Force Provider Food Service Equipment.

**NOTE**

Maintenance programs must be followed in the applicable technical manuals. It is very important to adhere to maintenance procedures in order to prolong the serviceable life of these items.

**NOTE**

The items in any given Force Provider module may differ slightly from those described in this TM. If you are unsure as to whether a maintenance item can be performed, refer to the item to unit maintenance.

Refer to appropriate technical manuals for associated equipment maintenance instructions (Refer to WP 0040 00 for references).

One person can perform all maintenance procedures in this section unless otherwise indicated. Read all **WARNINGS, CAUTIONS**, and **NOTES** carefully before attempting the procedures. This includes the warnings at the front of this manual.

**INSPECT**

Refer to Preventative Maintenance Checks and Services (PMCS), previous WP, for items to inspect.

**CLEAN**

Clean Force Provider Food Service Equipment as directed in the Operating Instructions for the individual item.



**OPERATOR MAINTENANCE  
FORCE PROVIDER FOOD SERVICE EQUIPMENT  
FOOD WARMING CABINET  
(NSN 7310-01-229-2155)  
SERVICE, REPLACE**

---

**INITIAL SETUP****Tools**

N/A

**Personnel Required**

One

**Materials/Parts**

Detergent (Item 12, WP 0043 00)

Sponge (Items 27 and 28, WP 0043 00)

**Equipment Condition**

Cooled, power disconnected

---

**SERVICE**

---

**WARNING**

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The cabinet interior is hot. Use care when operating, cleaning and servicing the food warming cabinet. Failure to observe safety precautions may result in serious burn injury to personnel.

**Clean the Food Warming Cabinet**

1. Open the cabinet door(s), and allow the cabinet to fully cool.
2. Thoroughly clean the interior of the cabinet with detergent and water, or as specified by unit SOP.
3. Thoroughly clean the door gaskets with detergent and water.
4. Apply a light coat of cooking oil to the door gaskets, and wipe dry.
5. Thoroughly clean the exterior of the cabinet with detergent and water.
6. Allow the cabinet to dry completely before placing back into service.

**REPLACE****WARNING**

The cabinet interior is hot. Use care when operating, cleaning and servicing the food warming cabinet. Failure to observe safety precautions may result in serious burn injury to personnel.

**NOTE**

Not all cabinets supplied under this NSN have operator serviceable plug-in type heating elements. Check your cabinet thoroughly before proceeding. If your cabinet requires any tools to perform this maintenance task, refer this task to unit maintenance.

**Replace the Humidifier Assembly**

1. Open the cabinet door.
2. Remove the water pan from the cabinet interior.

**WARNING**

Ensure the cabinet is disconnected from any power source. Place the plug end of the power cord in plain sight, or in your pocket while performing this maintenance item. Failure to observe safety precautions may result in serious injury or death to personnel.

3. Remove the heating element from the cabinet interior, and save for unit maintenance to test.
4. Install the replacement element in the cabinet interior.
5. Install the water pan.
6. Close the cabinet door.
7. Connect power, and test for normal operation.

**END OF WORK PACKAGE**

**OPERATOR MAINTENANCE  
FORCE PROVIDER FOOD SERVICE EQUIPMENT  
MECHANICALLY COOLED BEVERAGE DISPENSER  
(NSN 7310-00-428-4082)  
(NSN 7310-01-504-4061)  
(NSN 7310-01-386-5951)  
REPLACE**

**INITIAL SETUP****Tools**

N/A

**Personnel Required**

One

**Materials/Parts**

N/A

**Equipment Condition**

Drained, power disconnected

**REPLACE****WARNING**

Ensure the dispenser is disconnected from any power source. Place the plug end of the power cord in plain sight, or in your pocket while performing this maintenance item. Failure to observe safety precautions may result in serious injury or death to personnel.

**Replace Operator Serviceable Components**

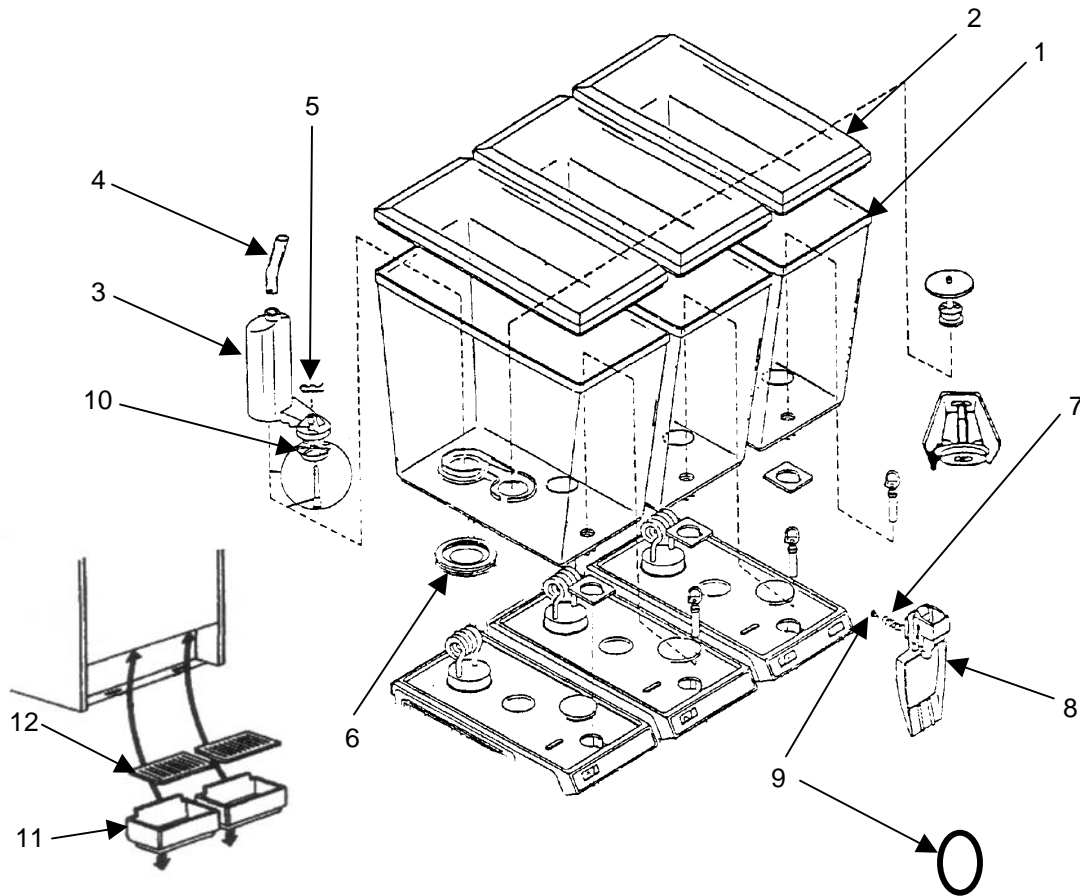
1. Disconnect power cord, and drain all remaining beverage mix from the bowls **(1)**.
2. Remove covers **(2)**, and replace as necessary.
3. Remove pump cover **(3)** and spray tube **(4)** as an assembly.

**NOTE**

Use only a direct replacement clip pin. Do not use a steel or galvanized clip or cotter pin, or any other clip or cotter pin not intended for food service use.

4. Replace the clip pin **(5)**, pump cover **(3)**, and the spray tube **(4)** as necessary.
5. Release bowl **(1)**, and remove. Replace the bowl and bowl gasket **(6)** as necessary
6. Remove valve **(7)** and handle **(8)** from bowl **(1)**. Replace the valve, valve gasket **(9)**, and handle as necessary (Crathco D-25 series only).
7. Remove impeller **(10)**, and replace the impeller as necessary.
8. Install the impeller **(10)**.
9. Install the valve **(7)** with valve gasket **(9)** and handle **(8)** onto the bowl **(1)**.
10. Install the bowl gasket **(6)** onto the bowl **(1)**.
11. Install the bowl **(1)**.

12. Install the spray tube (4) onto the pump cover (3).
13. Install the pump cover (3), and retain with clip pin (5).
14. Install the covers (2).
15. To replace the drip pan (11) or cup rest (12), simply remove the damaged component and install the replacement.



END OF WORK PACKAGE

**OPERATOR MAINTENANCE  
FORCE PROVIDER FOOD SERVICE EQUIPMENT  
ICE MACHINE  
(NSN 4110-00-837-6442)  
SERVICE**

**INITIAL SETUP**

**Tools**  
N/A

**Personnel Required**  
One

**Materials/Parts**  
N/A

**Equipment Condition**  
Ice Machine operating.

**SERVICE****WARNING**

Components behind the front panel are energized and present an electrical safety hazard. Failure to observe safety precautions may result in serious injury or death to personnel.

**NOTE**

The following procedure should be performed daily to remove mineral deposits from the water system.

**Purge the Water System**

1. Remove front panel.
2. Locate purge / harvest initiate switch **(1)**, and set switch to PURGE.
3. Allow system to purge for approximately 1 minute.
4. Set purge / harvest initiate switch to HARVEST INTIATE.
5. Install front panel, and monitor for normal operation.

**END OF WORK PACKAGE**





**OPERATOR MAINTENANCE  
FORCE PROVIDER FOOD SERVICE EQUIPMENT  
STEAM KETTLE  
(NSN 7310-01-364-6312)  
STEAM KETTLE (TILTING TYPE)  
(NSN 7310-01-374-8676)  
TABLETOP STEAM KETTLE  
(NSN 7310-00-205-1557)  
REPLACE**

**INITIAL SETUP**

**Tools**  
N/A

**Personnel Required**  
One

**Materials/Parts**  
N/A

**Equipment Condition**  
Power OFF

**REPLACE****WARNING**

Electrical components are energized and present an electrical safety hazard. Failure to observe safety precautions may result in serious injury or death to personnel.

**NOTE**

Follow this procedure only if the kettle has operator serviceable fuses, accessible from the exterior of the control panel. Only unit maintenance personnel must replace fuses within the control panel.

**Replace Fuse**

1. Turn thermostat **(1)** to OFF.
2. Unscrew fuse holder **(2)**.
3. Remove fuse **(3)** from fuse holder **(2)**.

**CAUTION**

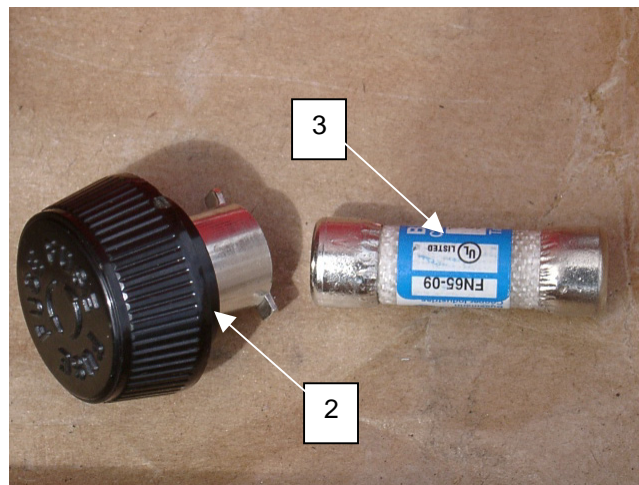
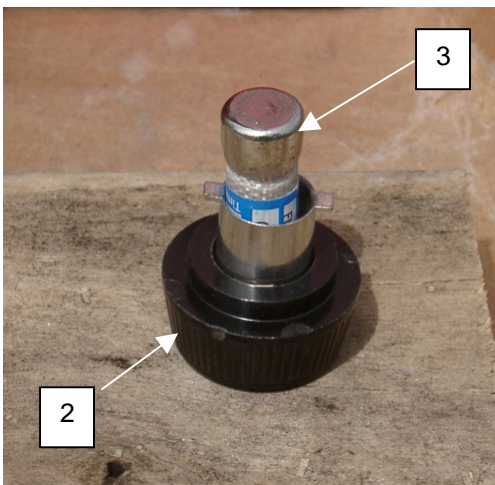
Use only fuses of the same rating (in amperes). Installation of a higher rated fuse may cause a fire or damage other components.

4. Install replacement fuse **(3)** into fuse holder **(2)**.
5. Install fuse holder **(2)** and lock into place.
6. Reset thermostat **(1)** to desired temperature.

**NOTE**

If fuse blows again, notify unit maintenance.

- 7. Verify that indicator light (4) comes on.



**END OF WORK PACKAGE**

**OPERATOR MAINTENANCE  
FORCE PROVIDER FOOD SERVICE EQUIPMENT  
MEAT SLICING MACHINE  
(NSN 7320-01-097-3163)  
(NSN 7320-01-454-0871)  
REPLACE**

---

**INITIAL SETUP**

**Tools**  
N/A

**Personnel Required**  
One

**Materials/Parts**  
N/A

**Equipment Condition**  
Power OFF, power disconnected

---

**REPLACE**

**WARNING**

The rotary knife used by the meat slicing machine is extremely sharp, and can cause severe cuts even when not rotating. Wear steel mesh gloves whenever using or maintaining the meat slicing machine. Failure to observe safety precautions may result in serious injury to personnel.

**Replace Knife**

1. Disconnect electrical power cord.
2. Loosen sharpener lock pin **(1)**.
3. Lift and remove sharpening unit. Set aside.
4. Remove knife guard knob **(2)** and carefully remove knife guard **(3)**.
5. Use caution to avoid the sharp knife edge, and remove the screws **(4)** that secure knife **(5)**. Some models may have four screws.



**WARNING**

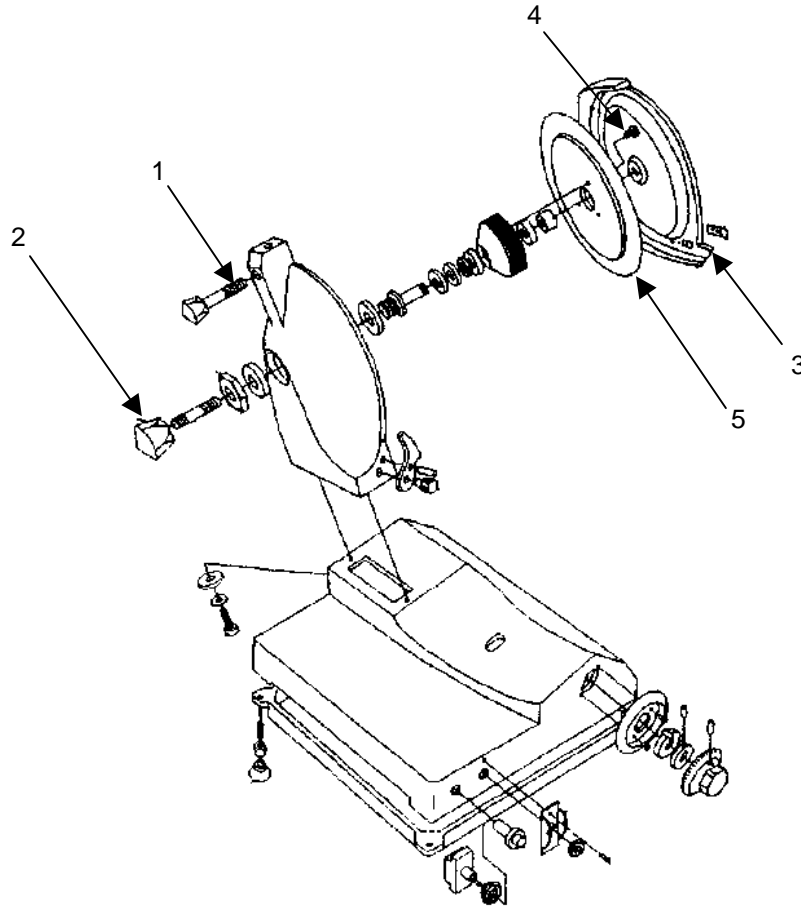
A worn knife should be disposed of in a safe, responsible way, showing concern for others who may handle it. It is recommended that the edge of the knife is carefully wrapped several times with heavy tape and that a caution (CAUTION, SHARP EDGE) be written on both sides of the knife.

6. Carefully remove knife **(5)** and set aside with its flat side down flush on a bench so the edge is not exposed.
7. Install replacement knife **(5)**, and retain with screws **(4)**.
8. Install knife guard **(3)**, and retain with knife guard knob **(2)**.
9. Install sharpening unit, and retain with sharpener lock pin **(1)**.

**NOTE**

Even though a new knife is very sharp, the sharpening procedure should be performed to true the new knife's bevel to the slicer.

10. Sharpen the replacement knife **(5)** as described in WP 0013 00.



**END OF WORK PACKAGE**

**OPERATOR MAINTENANCE  
FORCE PROVIDER FOOD SERVICE EQUIPMENT  
OVEN  
(NSN 7310-01-420-6851)  
(NSN 7310-01-420-7103)  
REPLACE**

---

**INITIAL SETUP**

**Tools**  
N/A

**Personnel Required**  
One

**Materials/Parts**  
N/A

**Equipment Condition**  
Power OFF, oven cool.

---

**REPLACE**

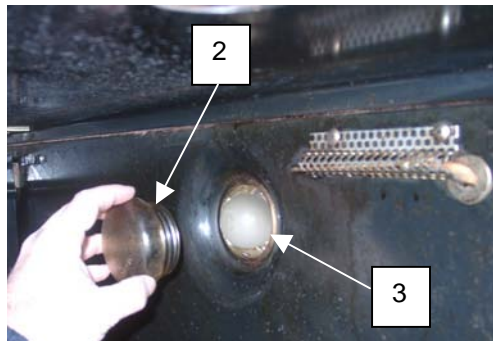
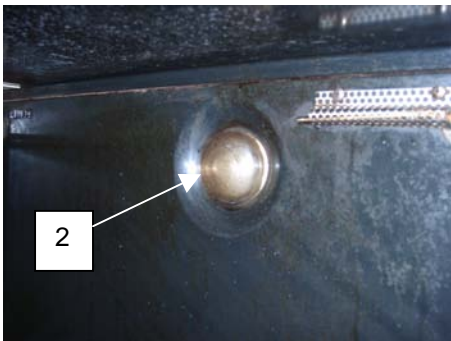
**WARNING**

The oven operates at high temperatures. Oven ON/OFF switch set to OFF, door open, and allowed to cool to touch. Failure to observe safety precautions may result in serious burns or death to personnel.

**Replace Light Bulb****NOTE**

The light bulbs may be wired in series; that is, if one burns out, they both will go out. It is recommended to replace both bulbs at the same time and maintain oven efficiency, as oven operation deteriorates with the increased door openings required to check food if the lights are inoperative.

1. Switch oven and light ON/OFF switch to OFF, and allow oven to cool for at least 30-minutes with doors open.
2. Remove oven racks and channels **(1)**.
3. Remove lens **(2)**.
4. Remove light bulb **(3)**, and replace with light bulb of same wattage.
5. Install lens **(2)**.
6. Install oven racks and channels **(1)**.
7. Switch light ON/OFF switch to ON, and check lights for normal operation.





## WARNING

The oven operates at high temperatures. Oven ON/OFF switch set to OFF. Failure to observe safety precautions may result in serious electrical shocks and possible death to personnel.

### Replace Fuse

1. Turn ON/OFF switch **(1)** to OFF.
2. Unscrew fuse holder **(2)**.
3. Remove fuse **(3)** from fuse holder **(2)**.

## CAUTION

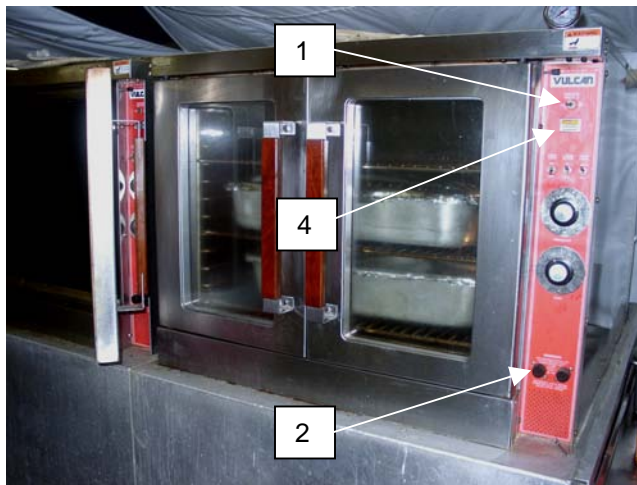
Use only fuses of the same rating (in amperes). Installation of a higher rated fuse may cause a fire or damage other components.

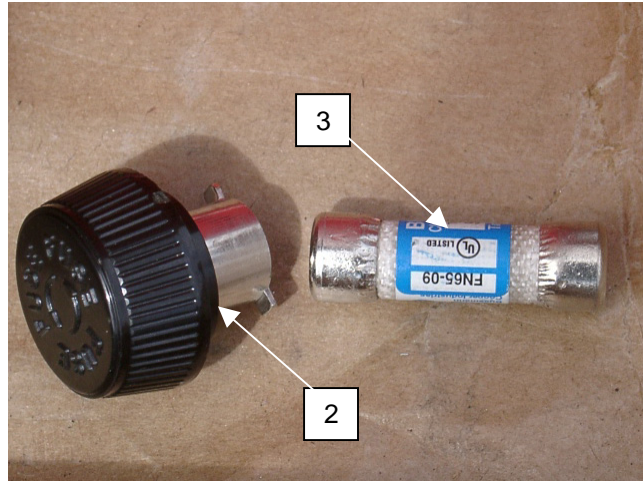
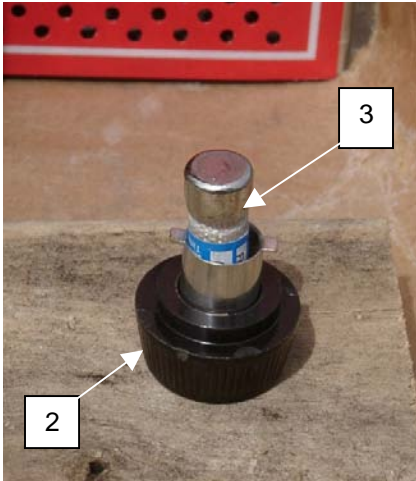
4. Install replacement fuse **(3)** into fuse holder **(2)**.
5. Install fuse holder **(2)** and lock into place.
6. Turn ON/OFF switch **(1)** to ON.

## NOTE

If fuse blows again, notify unit maintenance.

7. Verify that indicator light **(4)** comes on.





END OF WORK PACKAGE



**OPERATOR MAINTENANCE  
FORCE PROVIDER FOOD SERVICE EQUIPMENT  
POPCORN MACHINE  
(NSN 7310-01-302-1173)  
REPLACE**

**INITIAL SETUP**

**Tools**  
N/A

**Personnel Required**  
One

**Materials/Parts**  
N/A

**Equipment Condition**  
Power OFF, kettle cool.

**REPLACE****WARNING**

The popcorn machine operates at high temperatures. Failure to observe safety precautions may result in serious burns or death to personnel.

**Replace Light Bulb**

1. Turn OFF all switches **(1)**, and allow unit to cool at least 30-minutes.
2. Disconnect power cord.
3. Remove bulb(s) **(2)** and replace with bulb(s) of same rating and wattage.
4. Reconnect power and monitor for normal operation.





### **WARNING**

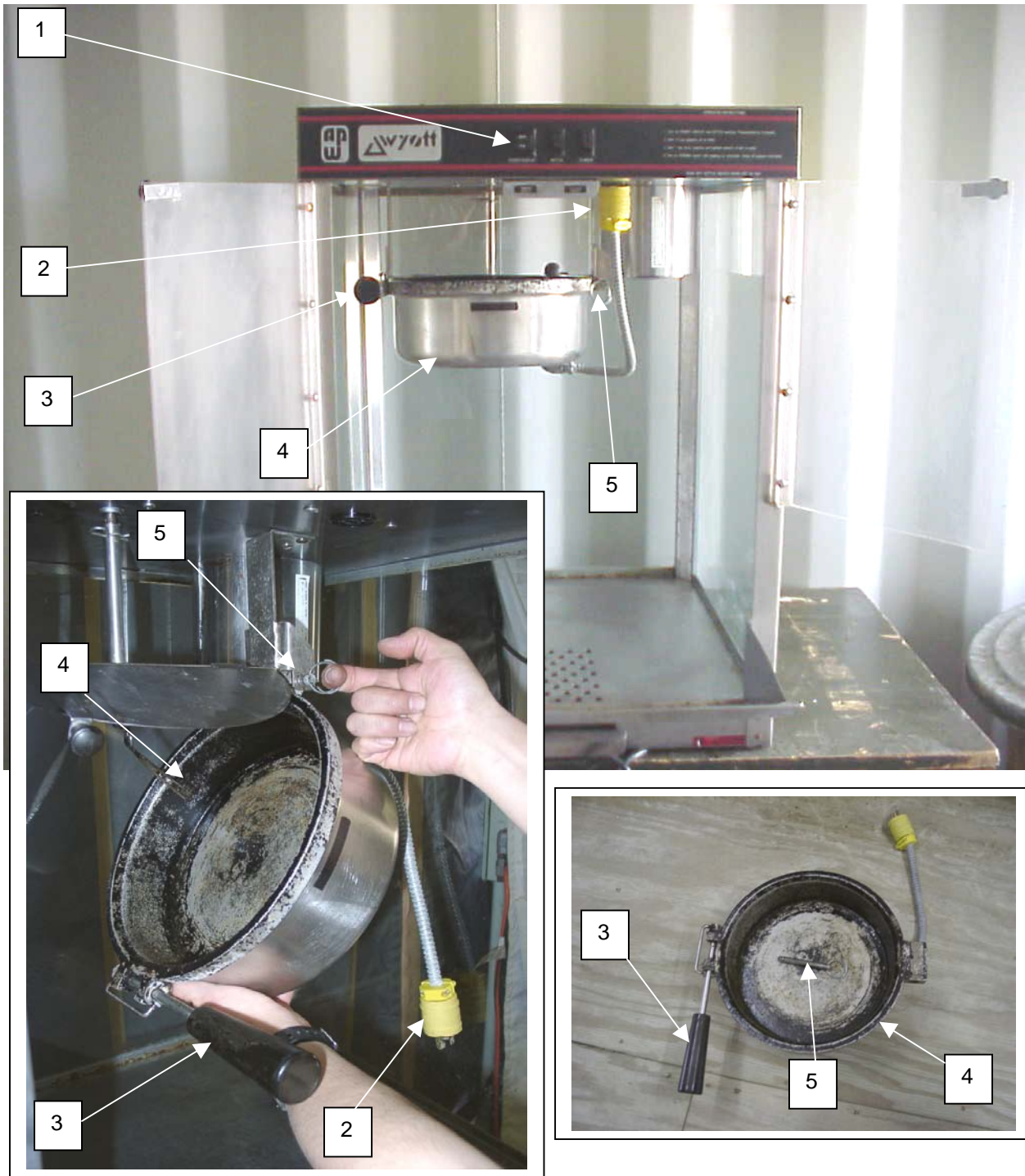
The popcorn machine operates at high temperatures. Failure to observe safety precautions may result in serious burns to personnel.

### **NOTE**

At least three different models of popcorn machine are furnished with individual Force Provider modules. Thoroughly examine your popcorn machine to determine whether you can replace the kettle with tools provided with the Force Provider Electric Kitchen or MWR.

#### **Replace Kettle**

1. Turn OFF all switches **(1)**, and allow unit to cool at least 30 minutes.
2. Disconnect the power cord.
3. Disconnect the twistlock plug **(2)** at the end of the kettle conduit.
4. Turn kettle handle **(3)** clockwise 90° to unlatch the kettle.
5. Hold the kettle **(4)** and pull out the hinge pin **(5)**.
6. Remove the kettle **(4)**.
7. Hold the replacement kettle **(4)** in position, and retain with hinge pin **(5)**.
8. Turn kettle handle **(3)** counter clockwise 90° to latch.
9. Connect the twistlock plug **(2)** at the end of the kettle conduit.
10. Connect the power cord, and operate in accordance with the operating instructions given in WP 0017 00.



END OF WORK PACKAGE



**OPERATOR MAINTENANCE  
FORCE PROVIDER FOOD SERVICE EQUIPMENT  
REACH-IN REFRIGERATORS  
20 CUBIC FOOT REFRIGERATOR  
(NSN 4110-01-412-3996)  
2 SECTION REFRIGERATOR  
(NSN 4110-01-412-8896)  
3 SECTION REFRIGERATOR  
(NSN 4110-01-471-3543)  
REPLACE**

---

**INITIAL SETUP**

**Tools**  
N/A

**Personnel Required**  
One

**Materials/Parts**  
N/A

**Equipment Condition**  
Reach-in refrigerator operating normally.

---

**REPLACE****Replace Light Bulb****NOTE**

Use only appliance rated or inside frosted bulbs.

1. Remove lens(es) **(1)**.
2. Remove bulb(s) and replace with bulbs of same rating and wattage.
3. Install lens(es) **(1)**.



**END OF WORK PACKAGE**



**OPERATOR MAINTENANCE  
FORCE PROVIDER FOOD SERVICE EQUIPMENT  
COFFEE URN  
(NSN 7310-01-374-5832)  
SERVICE, REPLACE**

**INITIAL SETUP****Tools**

Nylon Bristle Brush, ½ in diameter (Item 8, WP 0043 00)

**Personnel Required**

One

**Materials/Parts**

N/A

**Equipment Condition**

Power disconnected, urn cool

**SERVICE****WARNING**

Use caution while operating the coffee urn. The urn operates at a high temperature, and presents a hot exterior. Both the jacket water and coffee are capable of producing scalding injuries. Failure to observe safety precautions may result in serious injury or death to personnel.

**CAUTION**

Do not disconnect water supply until power is disconnected. Urn will fill with water as soon as power connection is made.

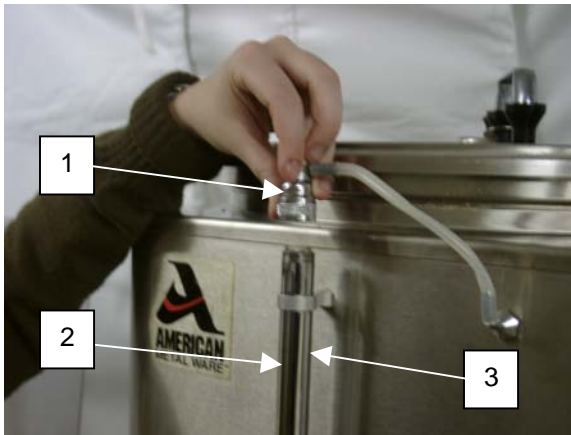
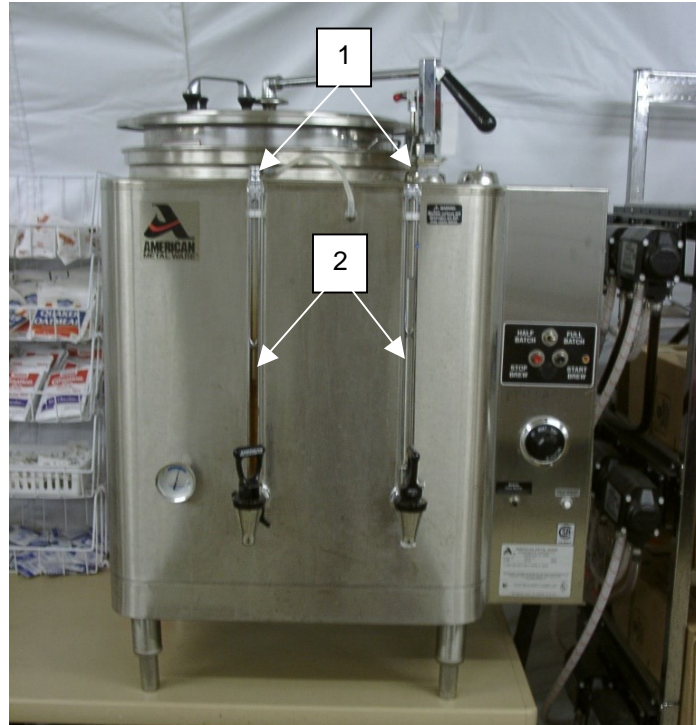
**NOTE**

Clean both sight glasses at the same time.

**Service the Sight Glass**

1. Disconnect the power cord.
2. Drain all coffee and water from the urn.
3. Allow the urn to cool for at least one hour.
4. Locate and remove the knurled retaining nut **(1)** on the top of the sight glass **(2)**.
5. Withdraw the sight glass **(2)** from the sight glass guard **(3)**.
6. Use a narrow nylon bristle brush to gently clean coffee residue and hard water deposits from sight glass **(2)**.
7. Rinse the sight glass **(2)** in hot soapy water, then clear potable water.
8. Install the sight glass **(2)** in the sight glass guard **(3)**.
9. Install the knurled retaining nut **(1)** onto the sight glass **(2)**. Do not over tighten.
10. Restore water service to urn.

11. Restore power to urn.
12. Allow urn to come up to temperature, then run urn through one brewing cycle with water only.
13. Discard water, and operate urn in accordance with the operating procedures given in WP 0022 00.





**REPLACE****WARNING**

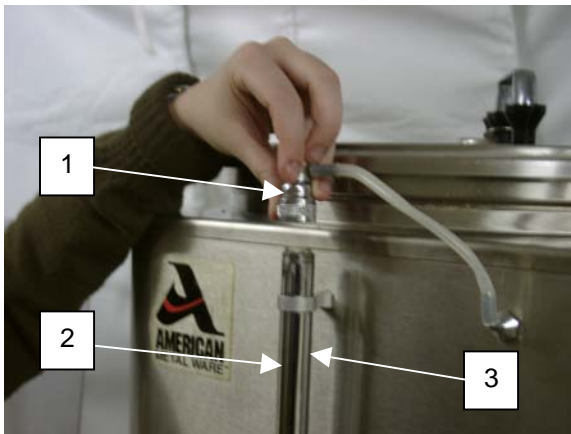
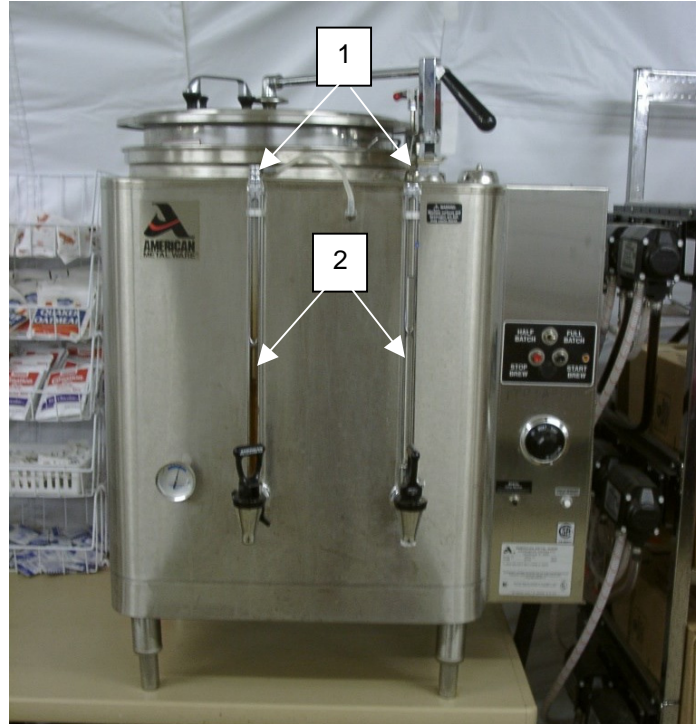
Use caution while operating the coffee urn. The urn operates at a high temperature, and presents a hot exterior. Both the jacket water and coffee are capable of producing scalding injuries. Failure to observe safety precautions may result in serious injury to personnel.

**CAUTION**

Do not disconnect water supply until power is disconnected. Urn will fill with water as soon as power connection is made.

**Replace the Sight Glass**

1. Disconnect the power cord.
2. Drain all coffee and water from the urn.
3. Allow the urn to cool for at least one hour.
4. Locate and remove the knurled retaining nut **(1)** on the top of the sight glass **(2)**.
5. Withdraw the sight glass **(2)** from the sight glass guard **(3)**.
6. Install the replacement sight glass **(2)** in the sight glass guard **(3)**.
7. Install the knurled retaining nut **(1)** onto the sight glass **(2)**. Do not over tighten.
8. Restore water service to urn.
9. Restore power to urn.
10. Allow urn to come up to temperature, then run urn through one brewing cycle with water only.
11. Discard water, and operate urn in accordance with the operating procedures given in WP 0022 00.



END OF WORK PACKAGE

**CHAPTER 5**  
**SUPPORTING INFORMATION**  
**FORCE PROVIDER FOOD SERVICE EQUIPMENT**



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**OPERATOR MAINTENANCE  
FORCE PROVIDER FOOD SERVICE EQUIPMENT  
REFERENCES**

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**SCOPE**

This Work Package lists all pamphlets, field manuals, forms, technical manuals, Army regulations, and military standards referenced throughout this manual.

**DA PAMPHLETS**

Functional Users Manual for The Army Maintenance Management System (TAMMS) ....DA PAM 738-750

**FIELD MANUALS**

Nuclear Contamination Avoidance..... FM 3-3-1  
 NBC Decontamination..... FM 3-5/FM 11-10  
 Chemical Operations Principles and Fundamentals..... FM 3-100  
 NBC Protection ..... FM 3-4/FM 11-9  
 Quartermaster, Force Provider Company..... FM 42-424  
 Artificial Respiration ..... FM 21-11  
 Basic Doctrine for Army Field Feeding ..... FM 10-23

**FORMS**

Transportation Discrepancy Report ..... SF 361  
 Equipment Inspection and Maintenance Worksheet ..... DA Form 2404  
 Product Quality Deficiency Report ..... SF 368  
 Recommended Changes to Equipment Technical Publications ..... DA Form 2028  
 Report of Packaging and Handling Deficiencies..... SF 362  
 Report of Discrepancy..... SF 364

**TECHNICAL MANUALS**

Preservation, Packaging, and Packing of  
 Military Supplies and Equipment..... TM 38-230-2  
 Administrative Storage of Equipment..... TM 740-90-1  
 Destruction of Army Materiel to Prevent Enemy Use ..... TM 750-244-3  
 Operator's and Unit Maintenance Manual (Including RPSTL) for  
 Tank, Fabric, Self Supporting, 3000 Gallon Water ..... TM 5-5430-227-12&P  
 Operator, Unit and Direct Support Maintenance Manual for  
 Distribution Illumination Systems, Electrical (DISE), and  
 Power Distribution Illumination Systems, Electrical (PDISE)  
 Consisting of Electrical Feeder System M200 (6150-01-208-9755),  
 M200 A/P (6150-01-308-5672), M100 (6150-01-208-9754),  
 M100 A/P (6150-01-308-5671), M40 (6150-01-208-9753),  
 M40 A/P (6150-01-307-9466, M60 (6150-01-208-9752),  
 M60 P/P (6150-01-307-9445) and  
 Electrical Utility Assembly M46 (6150-01-208-9751)..... TM 9-6150-226-13  
 Operator's, Unit, Direct Support and Maintenance Manual for Force Provider ..... TM 10-5419-206-13  
 Water Distribution System Model WDS 20K; Model WDS 40K;  
 Model WDS 300K; Model WDS 800K; Model WDS 1,000K..... TM 5-4610-228-13

**MISCELLANEOUS**

Army Medical Department Expendable/Durable Items..... CTA 8-100  
Expendable/Durable Items..... CTA 50-970

**OPERATOR MAINTENANCE  
FORCE PROVIDER FOOD SERVICE EQUIPMENT  
COMPONENTS OF END ITEM (COEI) AND BASIC ISSUE ITEMS (BII) LIST**

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**INTRODUCTION****Scope**

This work package lists COEI and BII for the Force Provider Food Service Equipment contained in TRICON 10B, 10H (FP only), 10M, 10N, and 10P to help you inventory these items for safe and efficient operation of the equipment.

**General**

The COEI and BII information is divided into the following lists:

**Components of End Item (COEI).** This list is for information purposes only and is not authority to requisition replacements. These items are part of the Force Provider System. As part of the end item, these items must be with the end item whenever it is issued or transferred between property accounts. Items of COEI are removed and separately packaged for transportation or shipment only when necessary. Illustrations are furnished to help you find and identify the items.

**Basic Issue Items (BII).** These essential items are required to place the Force Provider System in operation, operate it, and to do emergency repairs. Although shipped separately packaged, BII must be with the Force Provider System during operation and when it is transferred between property accounts. Listing these items is your authority to request/requisition them for replacement based on authorization of the end item by the TOE/MTOE. Illustrations are furnished to help you find and identify the items.

**Explanation of Columns in the COEI List and BII List**

Column (1) - Illus Number. Gives you the number of the item illustrated.

Column (2) - National Stock Number (NSN). Identifies the stock number of the item to be used for requisitioning purposes.

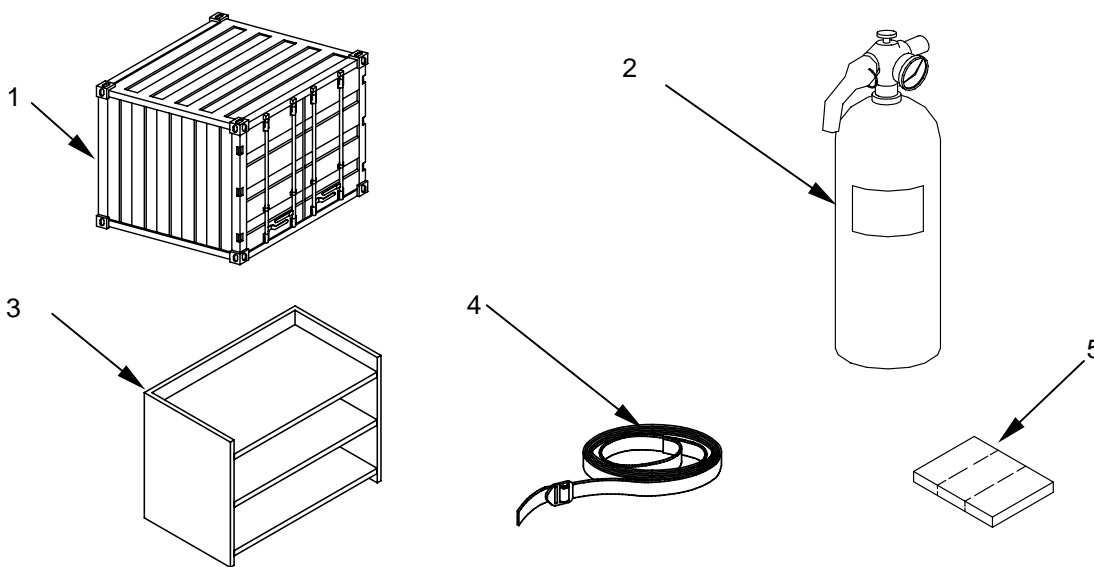
Column (3) - Description, CAGEC, and Part Number. Identifies the Federal item name (in all capital letters) followed by a minimum description when needed. The stowage location of COEI and BII is also included in this column. The last line below the description is the CAGEC (commercial and Government entity code) (in parentheses) and the part number.

Column (4) - Usable on Code. When applicable, gives you a code if the item you need is not the same for different models of equipment. These codes are identified below.

<u>Code</u>	<u>Used On</u>
FSM	Force Provider Standard (Green)
FSN	Force Provider Lite (Green)
FSP	Force Provider Standard (Tan)
FSQ	Force Provider Lite (Tan)

Column (5) - Unit of Measure (U/M). Indicates the physical measurement or count of the item as issued per the National Stock Number shown in column (2).

Column (6) - Qty Rqr. Indicates the quantity required.



**Table 1. Components of End Item List.**

(1) ILLUS NUMBER	(2) NATIONAL STOCK NUMBER	(3) DESCRIPTION, CAGEC, AND PART NUMBER	(4) USABLE ON CODE	(5) U/M	(6) QTY RQR
1	8145-01-475-9570	CONTAINER, SHIPPING AND STORAGE- TRIPLE (TRICON) WITH CONNECTORS, 10B, 10M, 10N, 10P, BXTPCGATPD0003 – Green / BXTPCTATPD0003 – Tan (09PDO)	FSN, FSQ	EA	4
1	8145-01-475-9570	CONTAINER, SHIPPING AND STORAGE- TRIPLE (TRICON) WITH CONNECTORS, 10H, BXTPCGATPD0003 – Green / BXTPCTATPD0003 – Tan (09PDO)	FSM, FSP	EA	1
2	4210-00-889-2491	FIRE EXTINGUISHER, ABC, DRY CHEMICAL, 10 POUND, 10B, A-A-393, TYPE 1, CLASS 1, SIZE 10 (80244)		EA	6
3	5340-01-333-8486	SHELF ASSEMBLY, 10B, 5-13-4257 (81337)		EA	4
4	3990-01-204-3009	SPECIAL PURPOSE WEB, TIEDOWN, 10B, 10M, 10N, 10P, FDC5770-5 (98313)		EA	24
5	5345-00-215-1881	STONE, SHARPENING, 10B, 10N, B-122794-4 (28873)		EA	3



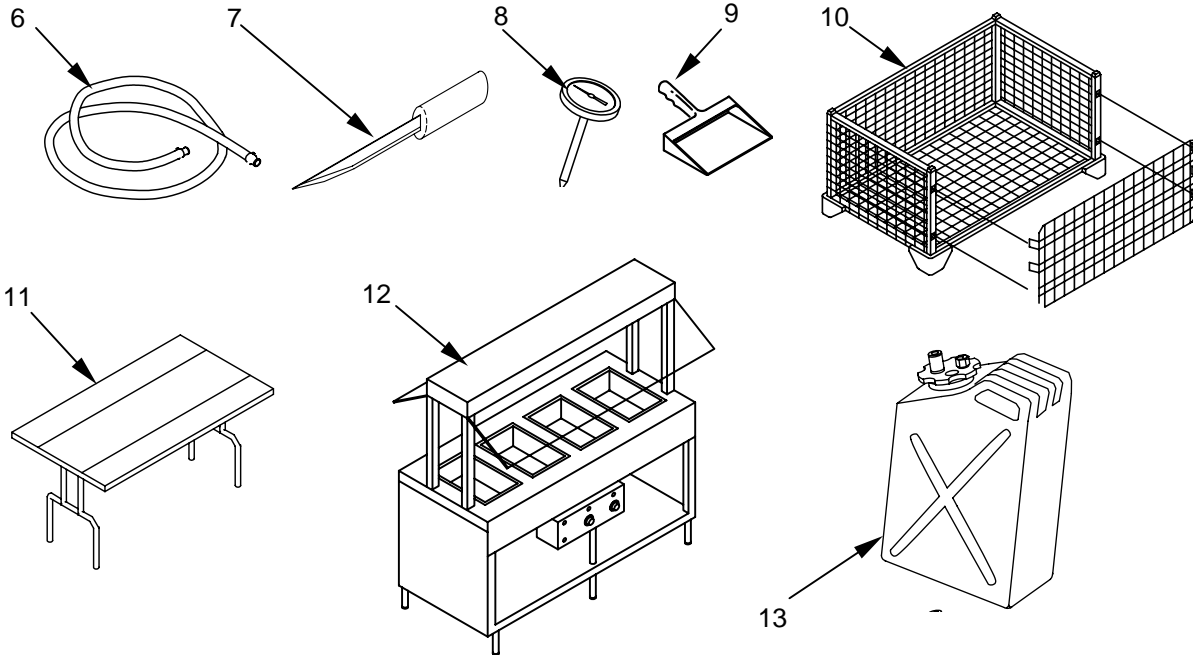


Table 1. Components of End Item List (Continued).

(1) ILLUS NUMBER	(2) NATIONAL STOCK NUMBER	(3) DESCRIPTION, CAGEC, AND PART NUMBER	(4) USABLE ON CODE	(5) U/M	(6) QTY RQR
6	4720-00-729-5334	HOSE ASSEMBLY, NONMETALLIC (GARDEN HOSE, 10B, A-A-59270 (58536)		EA	2
7	5110-00-892-5071	KNIFE, CRAFTSMAN 1 AND 2), 10B, GGG-K-494, TYPE 2 (80244)		EA	4
8	6685-01-092-3911	THERMOMETER, BI-METAL, TYPE III (ONE EACH PER 10 GAL POT IN RACK SET 1 AND 2), 10B, GG-T-353 (81348)		EA	4
9	7290-00-616-0109	DUST PAN, RUBBER, 10B, A-A-300, TYPE 1 (80244)		EA	2
10	7250-01-334-3159	RACK ASSY, STORAGE/DRYING, 10B, 10N, 5-13-4050 (81337)		EA	12
11	7305-01-333-8493	TABLE, FOLDING LEGS, 10B, 5-13-4242 (81337)		EA	4
12	7310-00-205-1557	STEAM TABLE ELECTRIC, 10B, STE-E2, (55392)		EA	1
13	7240-01-365-5317	CAN, WATER, MILITARY, GREEN, 10B, MIL-C-43613 TY2 (81349)	FSM, FSN	EA	10
13	7240-00-089-3827	CAN, WATER, MILITARY, TAN, 10B, MIL-C-43613 TY1 (81349)	FSP, FSQ	EA	10

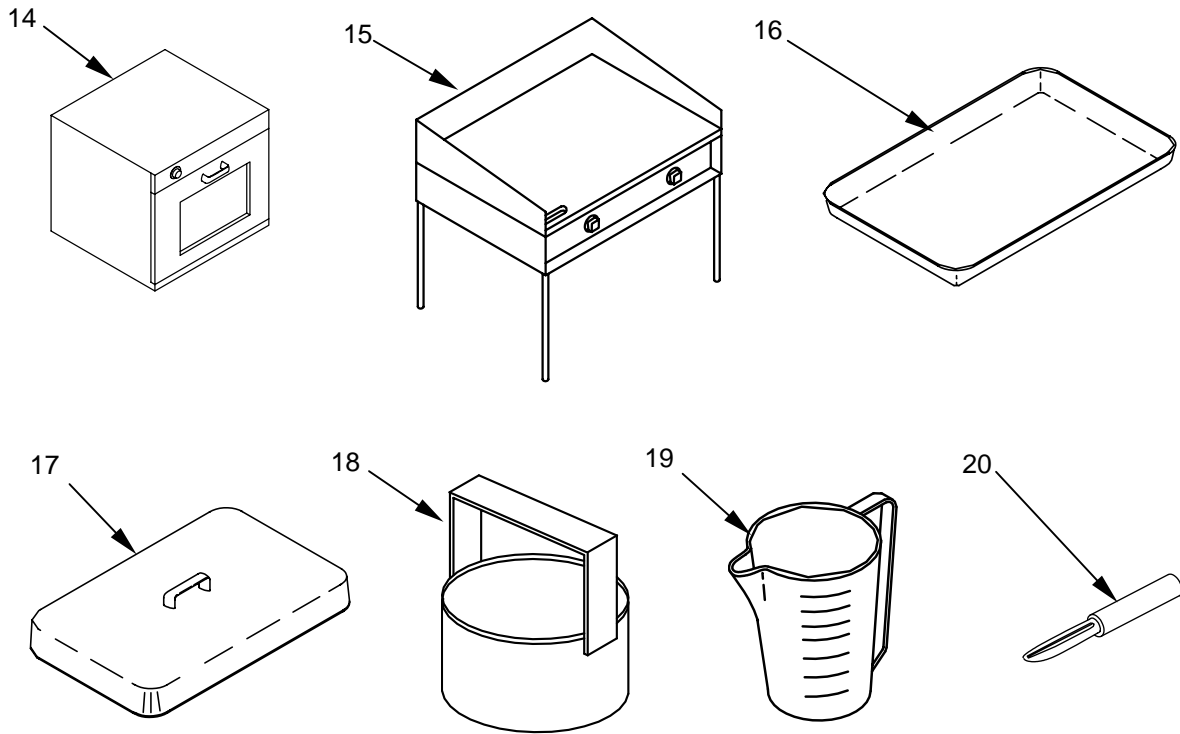


Table 1. Components of End Item List (Continued).

(1) ILLUS NUMBER	(2) NATIONAL STOCK NUMBER	(3) DESCRIPTION, CAGEC, AND PART NUMBER	(4) USABLE ON CODE	(5) U/M	(6) QTY RQR
14	7310-01-420-7103	OVEN BAKING AND ROASTING, 10B, 10N, ECO6D 208V/SS, (89564)		EA	2
15	7310-01-034-6041	GRIDDLE, LARGE (48" X 24"), 10B, LG-36, (34931)		EA	1
16	7310-01-234-2189	PAN, FOOD SERVING AND STORAGE, 10B, 10N, MP36 (21669)		EA	72
17	7310-01-235-0922	COVER, PAN, FOOD SERVING (RECTANGULAR), 10B, 10N, MP-C-30-H (21669)		EA	12
18	7330-00-184-0089	SIFTER, FLOUR, HAND, 10B, A-A-467 (58536)		EA	2
19	7330-00-205-3096	MEASURE, LIQUID, 2-QT, 10B, A-A-1751 (58536)		EA	4
20	7330-00-238-8316	PEELER, POTATO, HAND, 10B, W8079 (85812)		EA	4

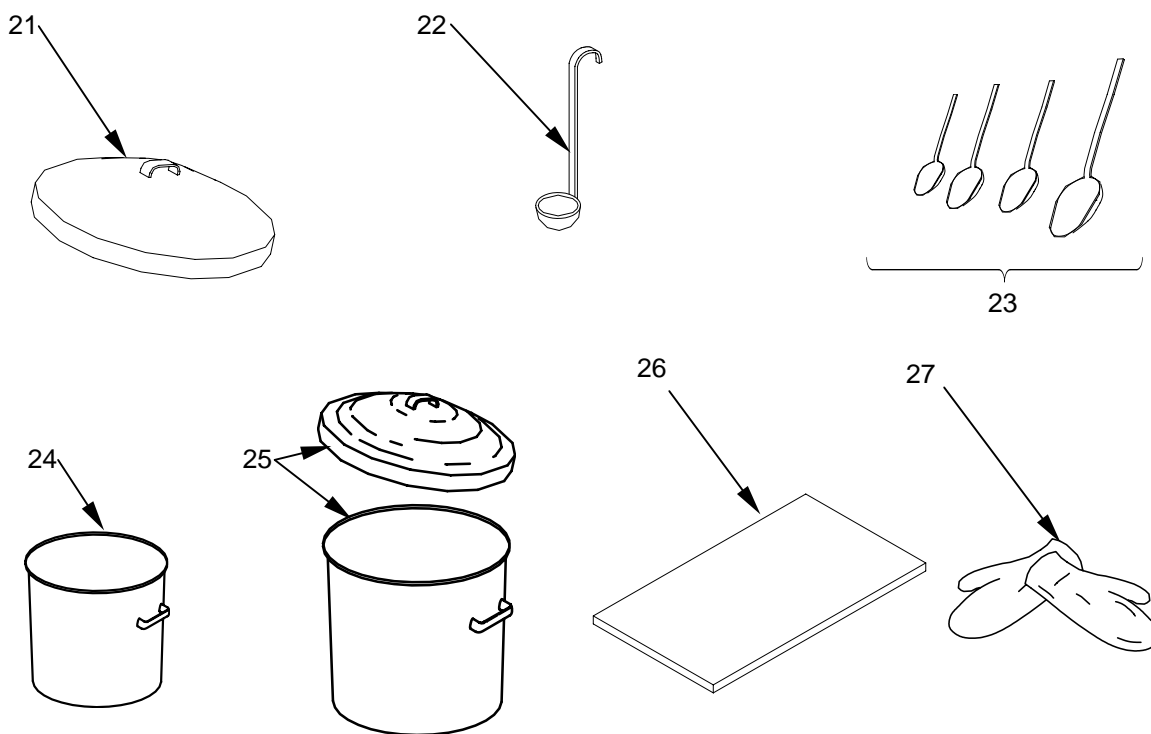


Table 1. Components of End Item List (Continued).

(1) ILLUS NUMBER	(2) NATIONAL STOCK NUMBER	(3) DESCRIPTION, CAGEC, AND PART NUMBER	(4) USABLE ON CODE	(5) U/M	(6) QTY RQR
21	7330-00-250-6300	COVER, COOKING POT, 10B, 10N MIL-P-1735 (81349)		EA	4
22	7330-00-254-4793	LADLE, KITCHEN, 2 OZ, 10B, A-A-1956 (58536)		EA	4
23	7330-00-248-1153	MEASURING SET, SPOON, 10B, A-A-1954 (57536)		EA	4
24	7330-00-292-2306	POT, COOKING, 10 GALLON, WITH OUT COVER, 10B, MIL-P-1735 SZ1, (80244)		EA	4
25	7330-00-292-2307	POT, COOKING, 15 GALLON WITH COVER, 10B, MIL-P-1735 SZ2, (80244)		EA	4
26	7330-00-379-2544	SPLASH PLATE, 10B, 2-9-120PT224 (81337)		EA	4
27	7330-00-379-4439	POT HOLDER, 10B, A-A-867 (58536)		EA	8

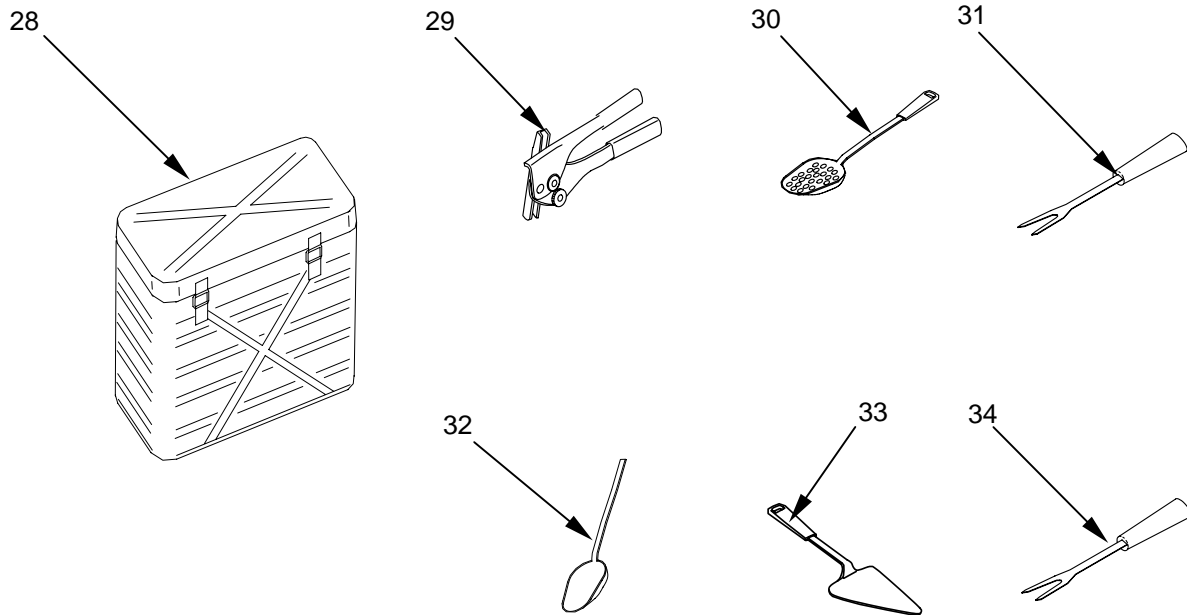


Table 1. Components of End Item List (Continued).

(1) ILLUS NUMBER	(2) NATIONAL STOCK NUMBER	(3) DESCRIPTION, CAGEC, AND PART NUMBER	(4) USABLE ON CODE	(5) U/M	(6) QTY RQR
28	7330-01-234-2163	FOOD CONTAINER, INSULATED, 10B, 10M, 10N, 200MPC1-G (21669)		EA	12
29	7330-01-245-0201	OPENER, CAN, HAND, 10B, 5-13-3971 (81337)		EA	4
30	7340-00-205-1421	SPOON, FOOD SERVICE, SLOTTED, 10B, A-A-1082 (58536)		EA	16
31	7340-00-223-7792	FORK, 21", FOOD PREPARATION, 10B, 10N, MIL-U-10815, TYPE 1, SIZE 2 (80244)		EA	12
32	7340-00-240-7080	SPOON, FOOD SERVICE, 15", 10B, A-A-1082 (58536)		EA	8
33	7340-00-272-9586	SERVER, PIE AND CAKE, 10B, GGG-C-746, TYPE 21, GRADE D (80244)		EA	2
34	7340-00-292-9487	FORK, FOOD PREPARATION, 10B, GGG-C-746, TYPE 2, GRADE D (80244)		EA	4

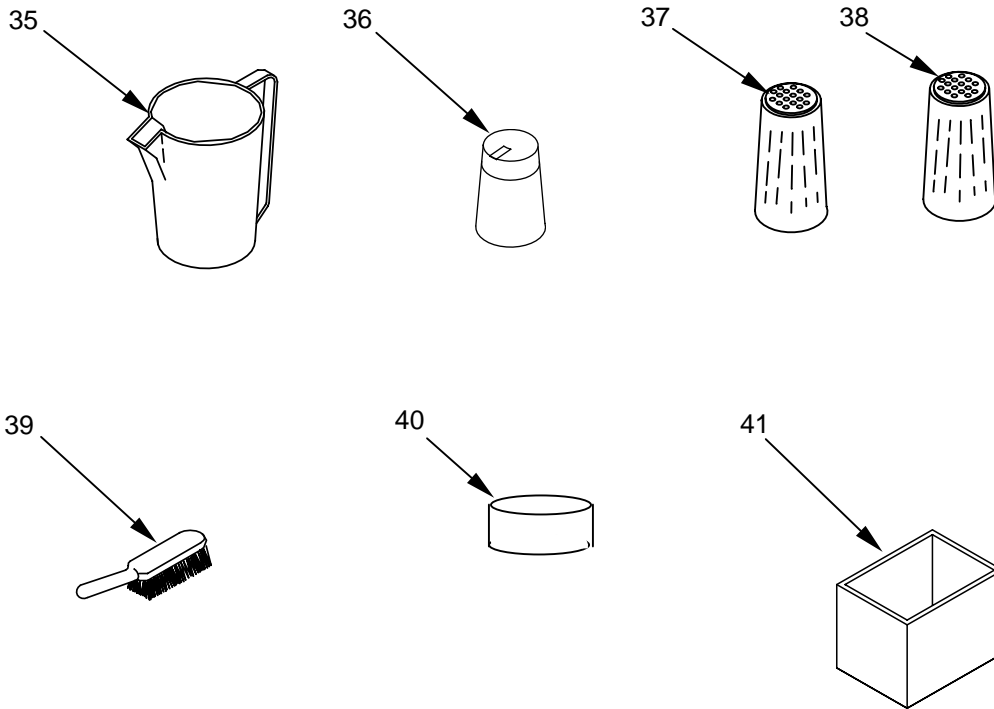


Table 1. Components of End Item List (Continued).

(1) ILLUS NUMBER	(2) NATIONAL STOCK NUMBER	(3) DESCRIPTION, CAGEC, AND PART NUMBER	(4) USABLE ON CODE	(5) U/M	(6) QTY RQR
35	7350-00-170-8333	PITCHER, 5 QT, 10B, A-A-424, SIZE 4 (80244)		EA	3
36	7350-00-641-6050	DISPENSER, SUGAR, 12 OZ, 10B, A-A-1060 (58536)		EA	48
37	7350-00-655-5254	SHAKER, PEPPER, 3 OZ, 10B, DD-S-50, TYPE 1, STYLE A (80244)		EA	48
38	7350-00-680-2630	SHAKER, SALT, 2 OZ, 10B, A-A-1060 (58536)		EA	48
39	7920-00-240-6358	BRUSH, 10B, H-B-00190, TYPE 1, STYLE 1, CLASS 2 (81348)		EA	2
40	7330-01-411-9787	CUTTER, COOKIE, 10B, 13005 (84096)		EA	2
41	8145-01-469-6087	REUSABLE OVEN CONTAINER, 10B, 10N, 9-1-0550 (81337)		EA	2

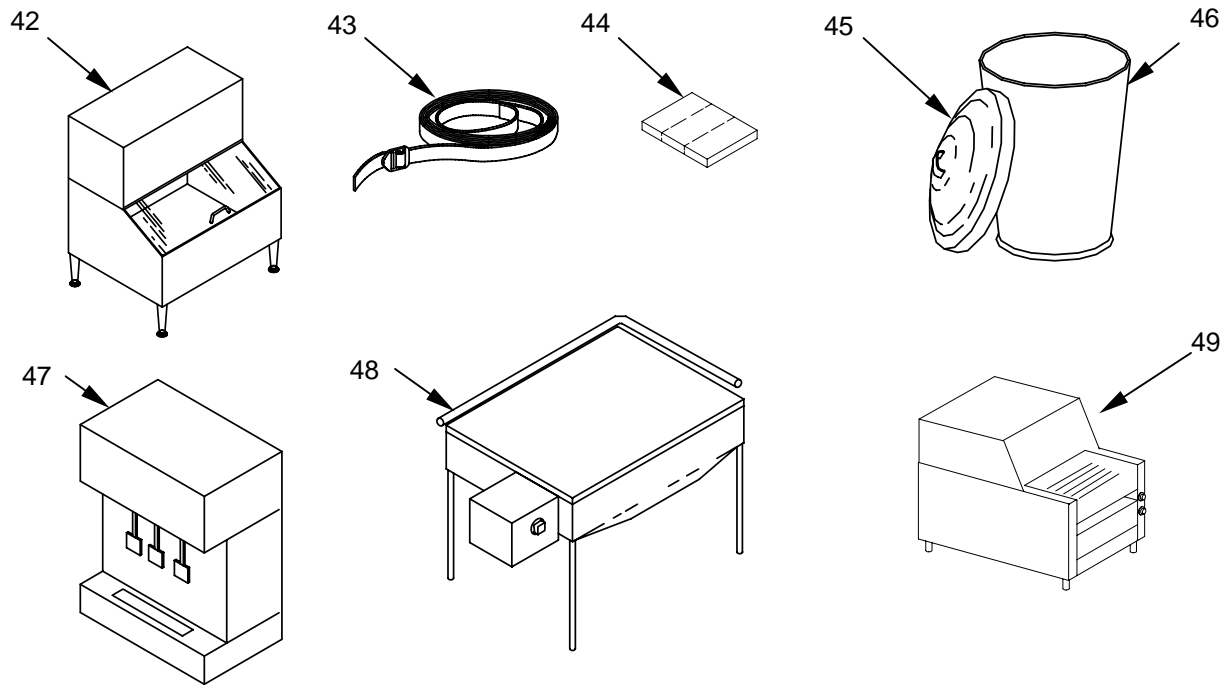


Table 1. Components of End Item List (Continued).

(1) ILLUS NUMBER	(2) NATIONAL STOCK NUMBER	(3) DESCRIPTION, CAGEC, AND PART NUMBER	(4) USABLE ON CODE	(5) U/M	(6) QTY RQR
42	4110-00-837-6442	ICE MAKING MACHINE, 500 LB., 208 VOLT, 10H, CME650AS-32D (49524)	FSM, FSP	EA	2
43	3990-01-204-3009	SPECIAL PURPOSE WEB, TIEDOWN, 10H, FDC5770-5 (81337)	FSM, FSP	EA	7
44	5345-00-198-8040	STONE, SHARPENING, 10H, C69M (70752)	FSM, FSP	EA	2
45	7240-00-160-0440	CAN, ASH AND GARBAGE, 32 GALLON, STEEL, GALV., 10H, A-A-1069 (58536)	FSM, FSP	EA	2
46	7240-00-161-1143	COVER, CAN, ASH AND GARBAGE, 10H, A-A-1069 (58536)	FSM, FSP	EA	2
47	7310-01-386-5951	DISPENSER, MECHANICAL, BEVERAGE, 10H, D25-4 134A, (53214)	FSM, FSP	EA	1
48	7310-00-758-8564	TILT FRY PAN, 10H, LGAR106-SPEC (35550)	FSM, FSP	EA	1
49	7310-01-382-3014	TOASTER, ELECTRIC, CONVEYOR RACK, 10H, RT-2 NSU (208V) (53205)	FSM, FSP	EA	1

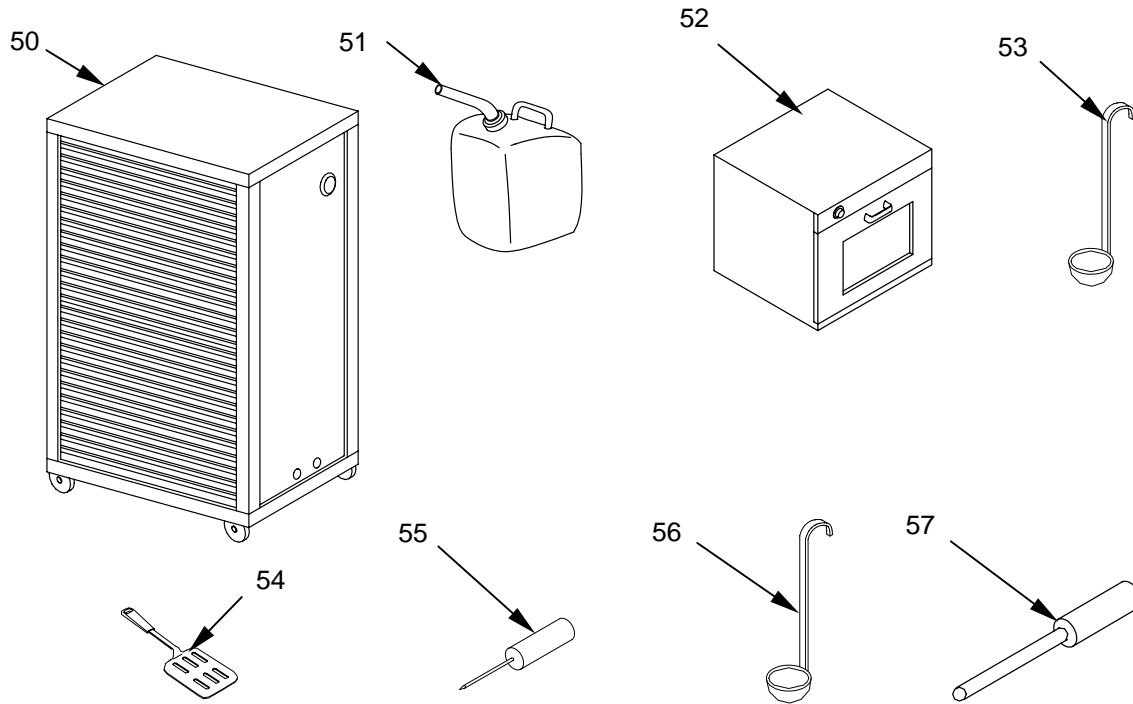


Table 1. Components of End Item List (Continued).

(1) ILLUS NUMBER	(2) NATIONAL STOCK NUMBER	(3) DESCRIPTION, CAGEC, AND PART NUMBER	(4) USABLE ON CODE	(5) U/M	(6) QTY RQR
50	7310-01-229-2155	CABINET, FOOD WARMING, 120 VOLT WITH POWER CABLE, 10H, 1034-DD, (67213)	FSM, FSP	EA	1
51	7310-01-245-6937	DISPENSER, LIQUID, 5 GALLON, 10H, 500LDC-G (21669)	FSM, FSP	EA	15
52	7310-01-420-7103	OVEN BAKING AND ROASTING, 10H, ECO6D 208V/SS, (89565)	FSM, FSP	EA	1
53	7330-00-248-1153	LADLE, KITCHEN, 8 OZ, 10H, A-A-1956, SZ3 (80244)	FSM, FSP	EA	4
54	7330-00-256-2158	FOOD TURNER, 10H, MIL-U-10815, TY4, SZ2 (80244)	FSM, FSP	EA	6
55	7330-00-257-4822	PICK, ICE, 10H, A-A-631 (58536)	FSM, FSP	EA	2
56	7330-00-272-2489	DIPPER, KITCHEN, 10H, A-A-1077 (80244)	FSM, FSP	EA	4
57	7330-00-550-7592	BUTCHERS STEEL, 10H, GGG-C-746, TY12, GRC (80244)	FSM, FSP	EA	2

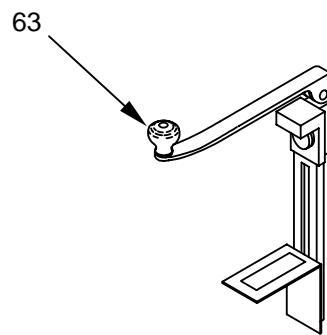
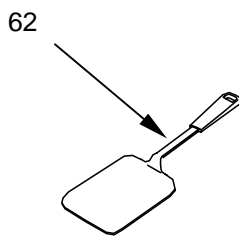
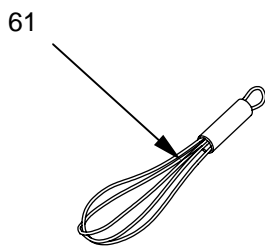
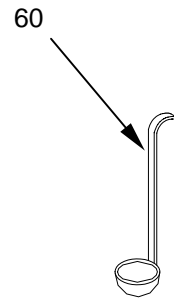
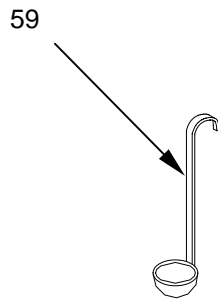
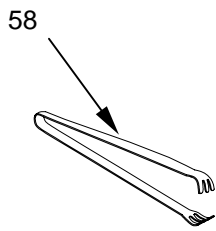


Table 1. Components of End Item List (Continued).

(1) ILLUS NUMBER	(2) NATIONAL STOCK NUMBER	(3) DESCRIPTION, CAGEC, AND PART NUMBER	(4) USABLE ON CODE	(5) U/M	(6) QTY RQR
58	7330-00-616-0997	TONGS, FOOD SERVICE (PAN FRY BOX 2), 10H, A-A-52117, SZ3 (80244)	FSM, FSP	EA	6
59	7330-00-680-0865	LADLE, KITCHEN, 4 OZ, 10H, A-A-1956 (58536)	FSM, FSP	EA	3
60	7330-00-680-2635	SKIMMER, KITCHEN, 10H, A-A-1072 (58536)	FSM, FSP	EA	4
61	7330-00-815-1458	EGG WHIP, 10H, A-A-394 (58536)	FSM, FSP	EA	2
62	7330-00-849-5194	SPATULA, 10H, 7330-00-849-5194 (80244)	FSM, FSP	EA	4
63	7330-01-236-3155	OPENER, CAN, MOUNTED, 10H, 5-13-3969 (81337)	FSM, FSP	EA	4



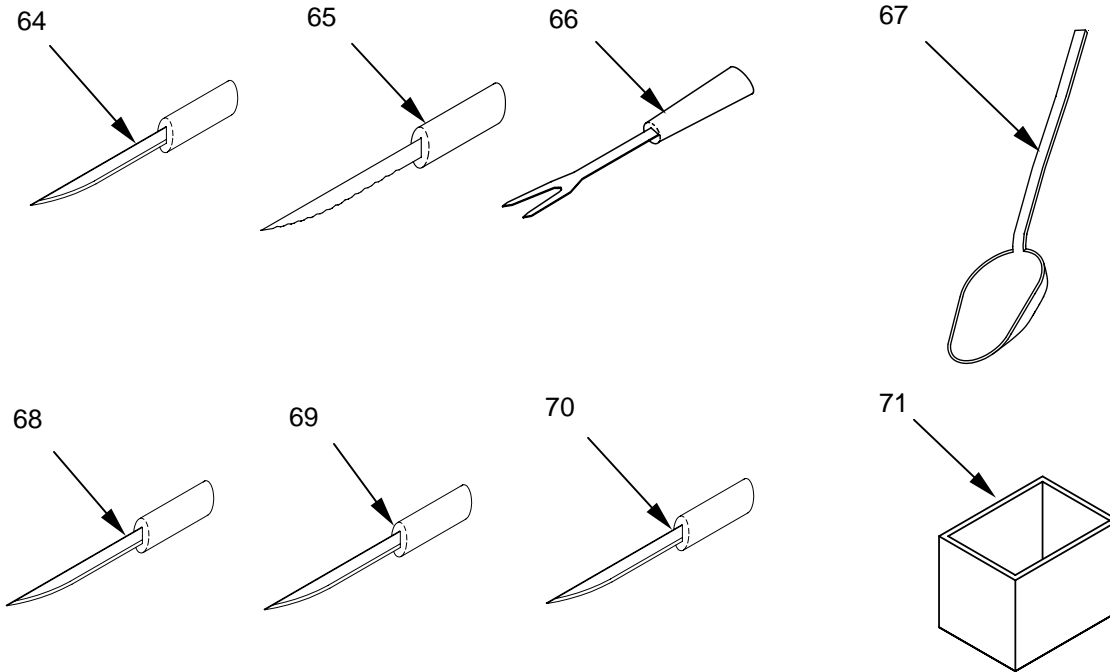


Table 1. Components of End Item List (Continued).

(1) ILLUS NUMBER	(2) NATIONAL STOCK NUMBER	(3) DESCRIPTION, CAGEC, AND PART NUMBER	(4) USABLE ON CODE	(5) U/M	(6) QTY RQR
64	7340-00-197-1271	KNIFE, BONING, 10H, GGG-C-746, TY3, GRD, CL3 (80244)	FSM, FSP	EA	4
65	7340-00-197-1274	KNIFE, STEAK, 10H, GGG-C-746, TYPE 7, GRADE D (80244)	FSM, FSP	EA	4
66	7340-00-223-7791	FORK, FOOD PREP, LONG, 10H, MIL-U-10815, TY1, SZ1 (80244)	FSM, FSP	EA	6
67	7340-00-223-7800	SPOON, FOOD SERVICE, 21", 10H, MIL-U-10815, TY2, SZ2, (80244)	FSM, FSP	EA	20
68	7340-00-488-7939	KNIFE, PARING, 10H, GGG-C-746, TY5, GRD (80244)	FSM, FSP	EA	4
69	7340-00-488-7950	KNIFE, COOKS, 10H, GGG-C-746, TY20, GRD (80244)	FSM, FSP	EA	4
70	7340-00-680-0863	KNIFE, SLICING, 10H, GGG-C-746, TY17, GRD (80244)	FSM, FSP	EA	4
71	8145-01-469-6087	REUSABLE OVEN CONTAINER, 10H, 9-1-0550 (81337)	FSM, FSP	EA	1

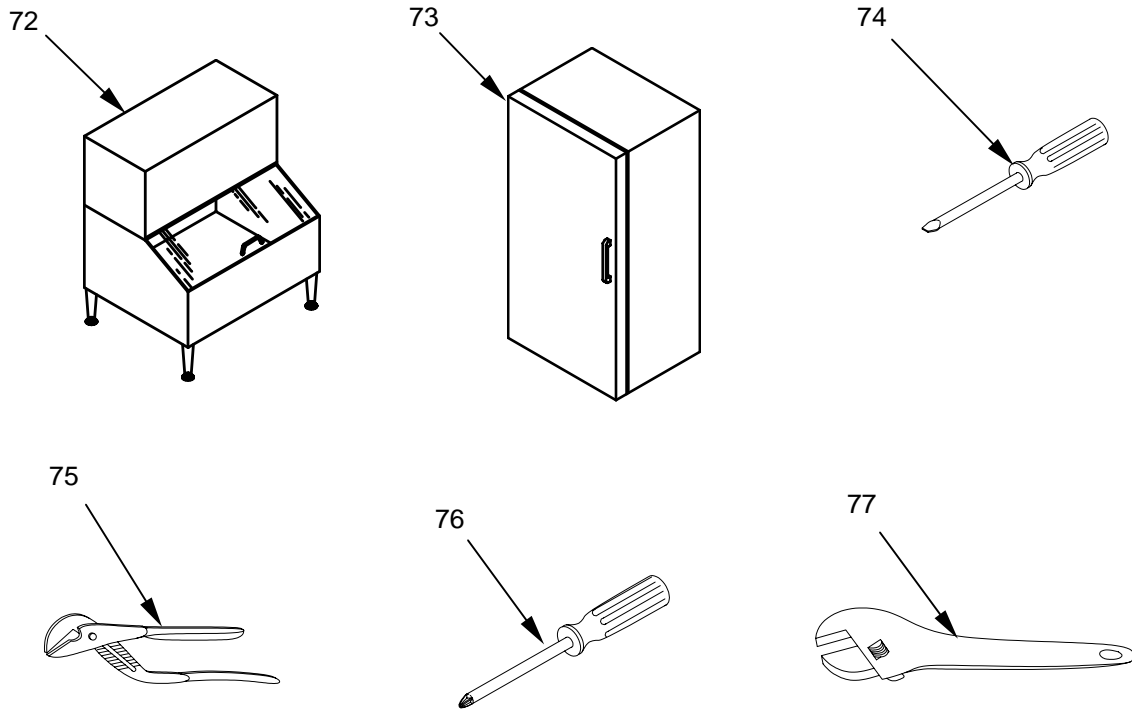


Table 1. Components of End Item List (Continued).

(1) ILLUS NUMBER	(2) NATIONAL STOCK NUMBER	(3) DESCRIPTION, CAGEC, AND PART NUMBER	(4) USABLE ON CODE	(5) U/M	(6) QTY RQR
72	4110-00-837-6442	ICE MAKING MACHINE, 500 LB., 208 VOLT, 10M, 10P CME650AS-32D (49524)		EA	2
73	4110-01-412-3996	REFRIDGERATOR, MECHANICAL, FOOD, 20 CUBIC FOOT, 120 VOLT, 10M, 1R-SS, (28233)		EA	1
74	5120-00-222-8852	SCREWDRIVER, FLAT TIP, 10M, GGG-S-121 TYPE 1, CLASS 5, DE A (80244)		EA	2
75	5120-00-223-7397	PLIERS, SLIP JOINT, 10M, GGG-P-471 TYPE 2, CLASS 2, STYLE A (80244)		EA	2
76	5120-00-234-8913	SCREWDRIVER, CROSS TIP, 4", 10M, GGG-S-121 TYPE 6, CLASS 1 (80244)		EA	2
77	5120-00-240-5328	WRENCH, ADJUSTABLE, 10M, GGG-W-631 TYPE 1, CLASS 1 (80244)		EA	2

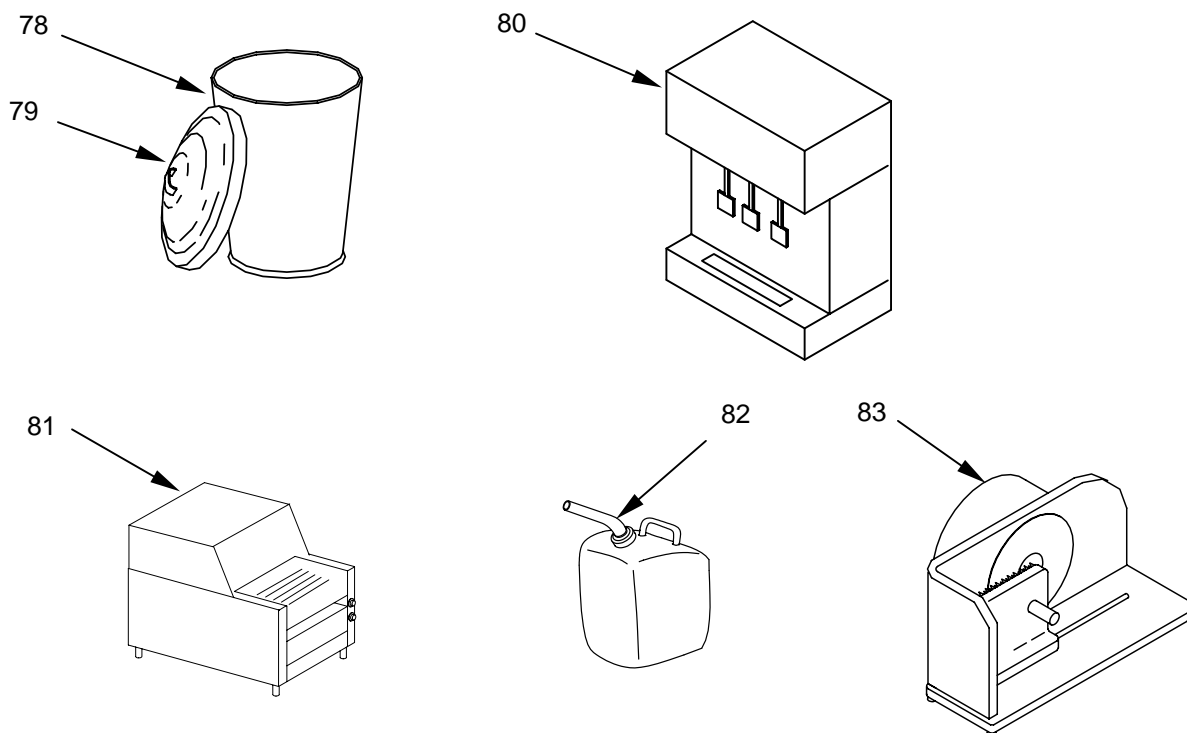


Table 1. Components of End Item List (Continued).

(1) ILLUS NUMBER	(2) NATIONAL STOCK NUMBER	(3) DESCRIPTION, CAGEC, AND PART NUMBER	(4) USABLE ON CODE	(5) U/M	(6) QTY RQR
78	7240-00-160-0440	CAN, ASH AND GARBAGE, 32 GALLON, STEEL, GALV., 10M, 10N, A-A-1069 (58536)		EA	4
79	7240-00-161-1143	COVER, CAN, ASH AND GARBAGE, 10M, 10N A-A-1069 (58536)		EA	4
80	7310-01-386-5951	DISPENSER, MECHANICAL, BEVERAGE, 10M, 10N, D25-4 134A, (56214)		EA	2
81	7310-01-287-5313	TOASTER, ELECTRIC, CONVEYOR RACK, 10M, 10N, RT-2 NSU (208V) (5299)		EA	2
82	7310-01-245-6937	DISPENSER, LIQUID, 5 GALLON, 10M, 10N, 500LDC-G (21669)		EA	20
83	7320-01-454-0871	MEAT SLICING MACHINE, 10M, 500(115V, ST3), (25168)		EA	1

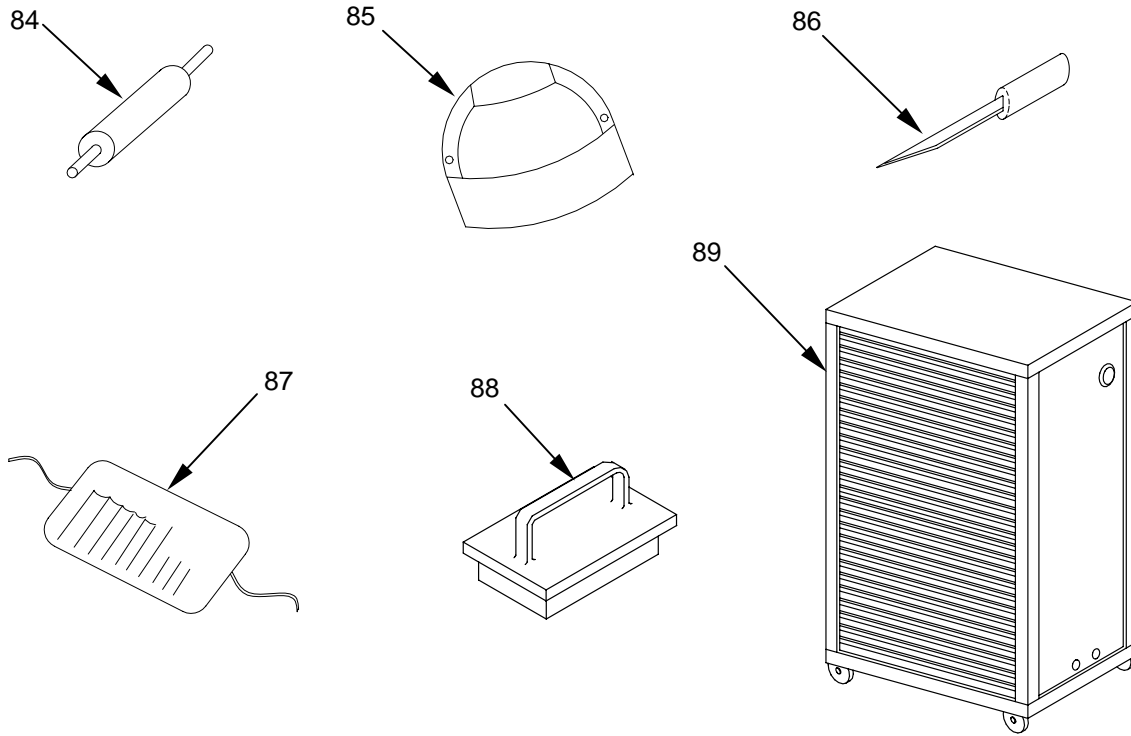


Table 1. Components of End Item List (Continued).

(1) ILLUS NUMBER	(2) NATIONAL STOCK NUMBER	(3) DESCRIPTION, CAGEC, AND PART NUMBER	(4) USABLE ON CODE	(5) U/M	(6) QTY RQR
84	7330-00-153-9749	ROLLING PIN (PAN FRY BOX 1), 10M, A-A-2368 (58536)		EA	2
85	7330-00-205-1950	BAKERS SCRAPER, 10M, MIL-S-17531 (81349)		EA	2
86	7340-00-406-6531	KNIFE, SLICING, 10M, GGG-C-746, TYPE 6, GRADE D (80244)		EA	4
87	7360-00-274-7088	CUTLERY ROLL, 10M, MIL-R-1982 (81349)		EA	2
88	7920-00-058-2242	HOLDER, SCOURING BRICK, 10M, A-A-217 (58536)		EA	2
89	7310-01-229-2155	CABINET, FOOD WARMING, 120 VOLT WITH POWER CABLE, 10M, 1034-DD, (67213)		EA	1

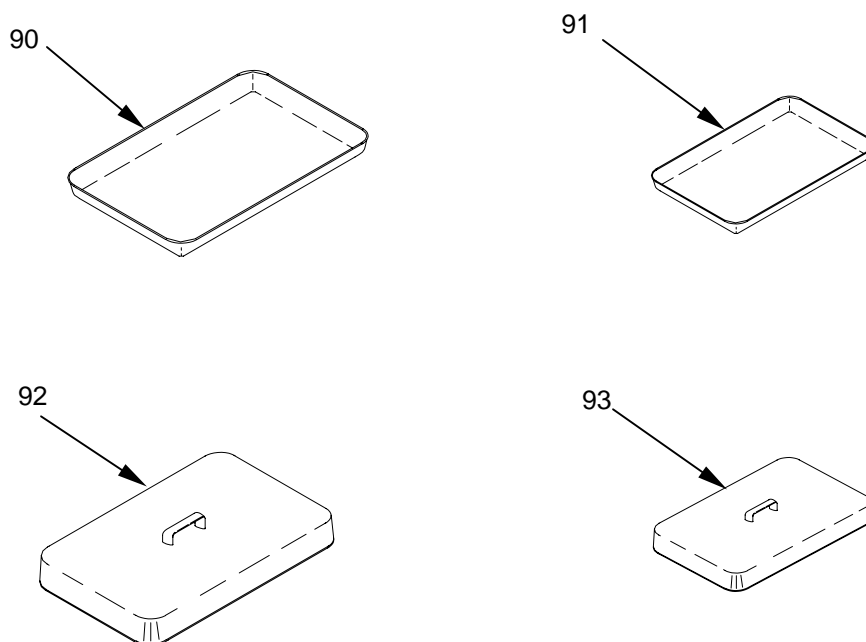


Table 1. Components of End Item List (Continued).

(1) ILLUS NUMBER	(2) NATIONAL STOCK NUMBER	(3) DESCRIPTION, CAGEC, AND PART NUMBER	(4) USABLE ON CODE	(5) U/M	(6) QTY RQR
90	7310-00-238-5164	PAN, STEAM TABLE, LARGE, 10N, MIL-P-43940, ST1, SZ3, MDA (81349)		EA	6
91	7310-00-576-4614	PAN, STEAM TABLE, SMALL, 10N, MIL-P-43940, ST1, SZ6, (81349)		EA	12
92	7310-00-834-4480	COVER, STEAM TABLE, FULL SIZE, 10N, MIL-P-43940, (81349)		EA	12
93	7310-01-107-1281	COVER, STEAM TABLE, HALF SIZE, 10N, MIL-P-43940, (81349)		EA	12

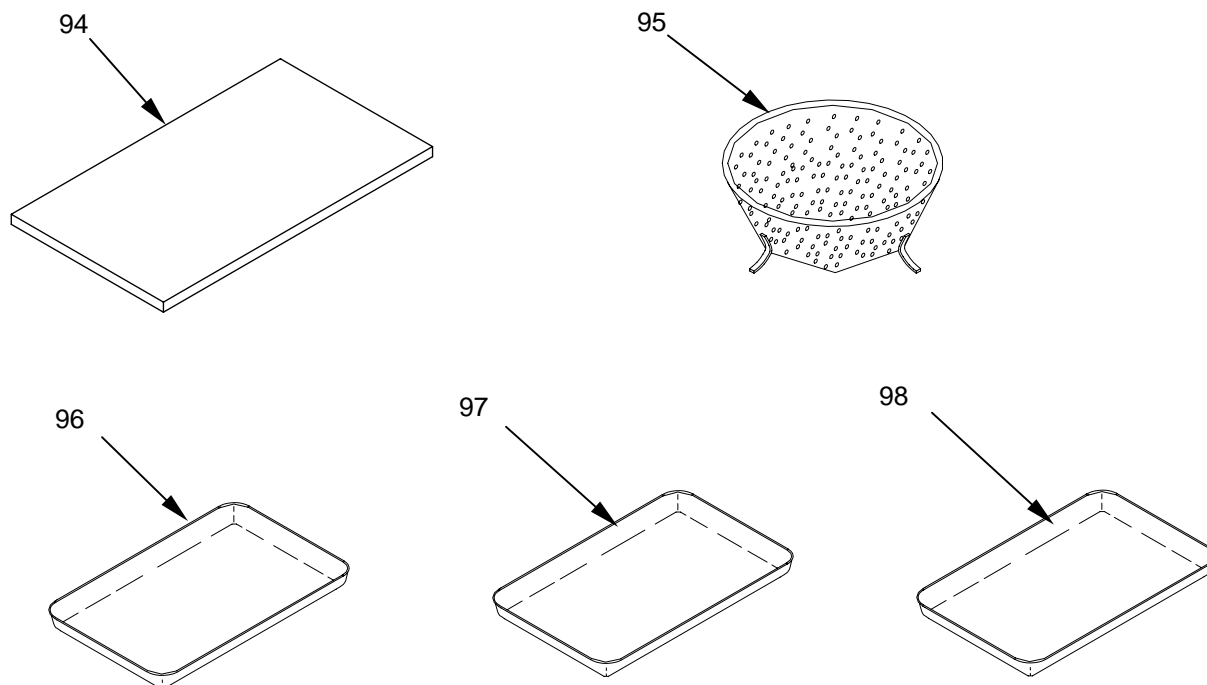


Table 1. Components of End Item List (Continued).

(1) ILLUS NUMBER	(2) NATIONAL STOCK NUMBER	(3) DESCRIPTION, CAGEC, AND PART NUMBER	(4) USABLE ON CODE	(5) U/M	(6) QTY RQR
94	7330-00-078-5706	BOARD, FOOD CHOPPING, 10N, A-A-391 (58536)		EA	4
95	7330-00-266-7453	COLANDER, STAINLESS STEEL, 16-QT, 10N, A-A-469, TY2, (80049)		EA	2
96	7330-00-272-2589	PAN, BAKING AND ROASTING, 10N, MIL-P-12851 (81349)		EA	20
97	7330-00-286-8069	PAN, BAKING AND ROAST, TOP, 10N, C36793B (95027)		EA	10
98	7330-00-634-4494	PAN, BAKING AND ROAST, BOTTOM. 10N, A-A-388, SZ5, (80224)		EA	10

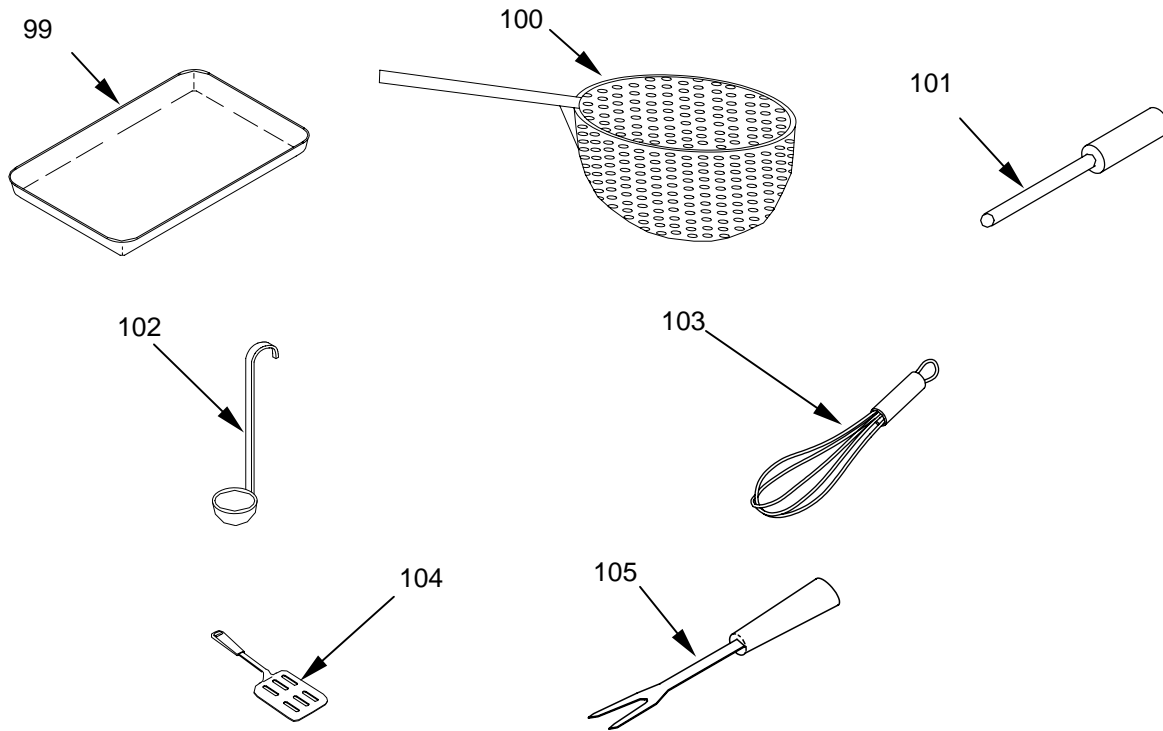


Table 1. Components of End Item List (Continued).

(1) ILLUS NUMBER	(2) NATIONAL STOCK NUMBER	(3) DESCRIPTION, CAGEC, AND PART NUMBER	(4) USABLE ON CODE	(5) U/M	(6) QTY RQR
99	7330-00-633-8905	PAN, BAKING SHEET, AL, 26 X 18", 10N, A-A-388 (80244)		EA	30
100	7330-00-815-1456	STRAINER, 5-1/2 QT, 10N, A-A-1755 (58536)		EA	1
101	7330-00-550-7592	BUTCHERS STEEL, 10N, GGG-C-746, TY12, GRC (80244)		EA	2
102	7330-00-272-2489	DIPPER, KITCHEN, 10N, A-A-1077 (80244)		EA	4
103	7330-00-815-1458	EGG WHIP, 10N, A-A-394 (58536)		EA	2
104	7330-00-256-2158	FOOD TURNER, 10N, MIL-U-10815, TY4, SZ2 (80244)		EA	6
105	7340-00-223-7791	FORK, FOOD PREP, LONG, 10N, MIL-U-10815, TY1, SZ1 (80244)		EA	6

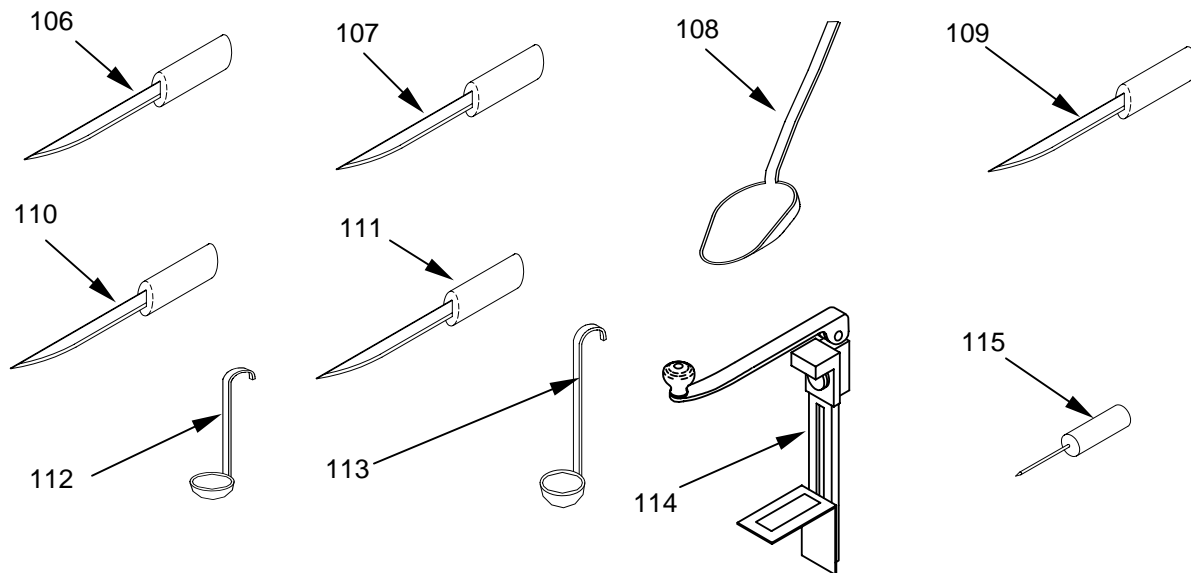
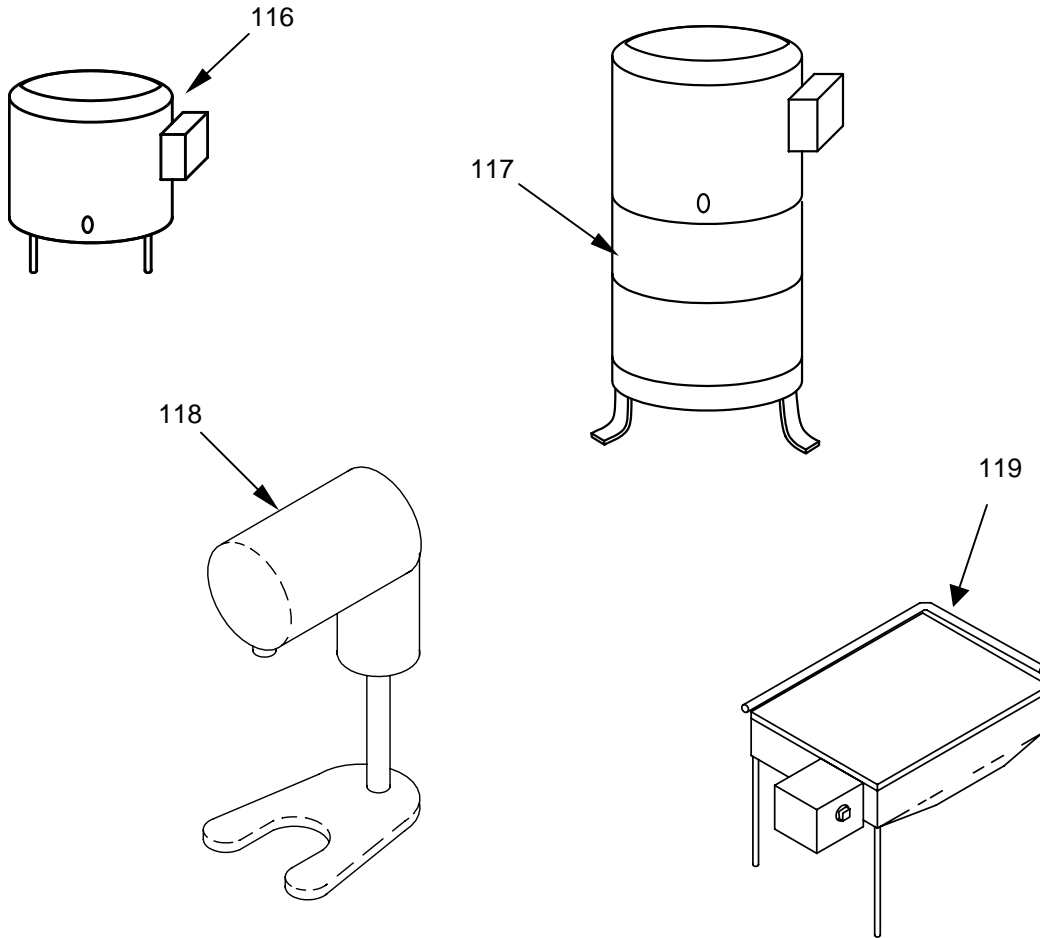


Table 1. Components of End Item List (Continued).

(1) ILLUS NUMBER	(2) NATIONAL STOCK NUMBER	(3) DESCRIPTION, CAGEC, AND PART NUMBER	(4) USABLE ON CODE	(5) U/M	(6) QTY RQR
106	7340-00-197-1271	KNIFE, BONING, 10N, GGG-C-746, TY3, GRD, CL3 (80244)		EA	4
107	7340-00-197-1274	KNIFE, STEAK, 10N, GGG-C-746, TYPE 7, GRADE D (80244)		EA	4
108	7340-00-223-7800	SPOON, FOOD SERVICE, 21", 10N, MIL-U-10815, TY2, SZ2, (80244)		EA	20
109	7340-00-488-7939	KNIFE, PARING, 10N, GGG-C-746, TY5, GRD (80244)		EA	4
110	7340-00-488-7950	KNIFE, COOKS, 10N, GGG-C-746, TY20, GRD (80244)		EA	4
111	7340-00-680-0863	KNIFE, SLICING, 10N, GGG-C-746, TY17, GRD (80244)		EA	4
112	7330-00-680-0865	LADLE, KITCHEN, 4 OZ, 10N, A-A-1956 (58536)		EA	3
113	7330-00-248-1153	LADLE, KITCHEN, 8 OZ, 10N, A-A-1956, SZ3 (80244)		EA	4
114	7330-01-236-3155	OPENER, CAN, MOUNTED, 10N, 5-13-3969 (81337)		EA	4
115	7330-00-257-4822	PICK, ICE, 10N, A-A-631 (58536)		EA	2





**Table 1. Components of End Item List (Continued).**

(1) ILLUS NUMBER	(2) NATIONAL STOCK NUMBER	(3) DESCRIPTION, CAGEC, AND PART NUMBER	(4) USABLE ON CODE	(5) U/M	(6) QTY RQR
116	7310-01-374-9972	STEAM KETTLE, TABLE TOP, 6 GALLON, 10P, VEC-6, (89565)		EA	1
117	7310-01-364-6312	STEAM KETTLE, FLOOR STANDING, 20 GALLON, 10P, EE20, (2J864)		EA	1
118	7320-00-205-2776	MIXING MACHINE, FOOD, ELECTRIC, 115 V, WITH ATTACHMENTS, 10P, OO-M-38, MDI, ST1, SZ20, (81348)		EA	1
119	7310-00-758-8564	TILT FRY PAN, 10P, LGAR106-SPEC (35550)		EA	1

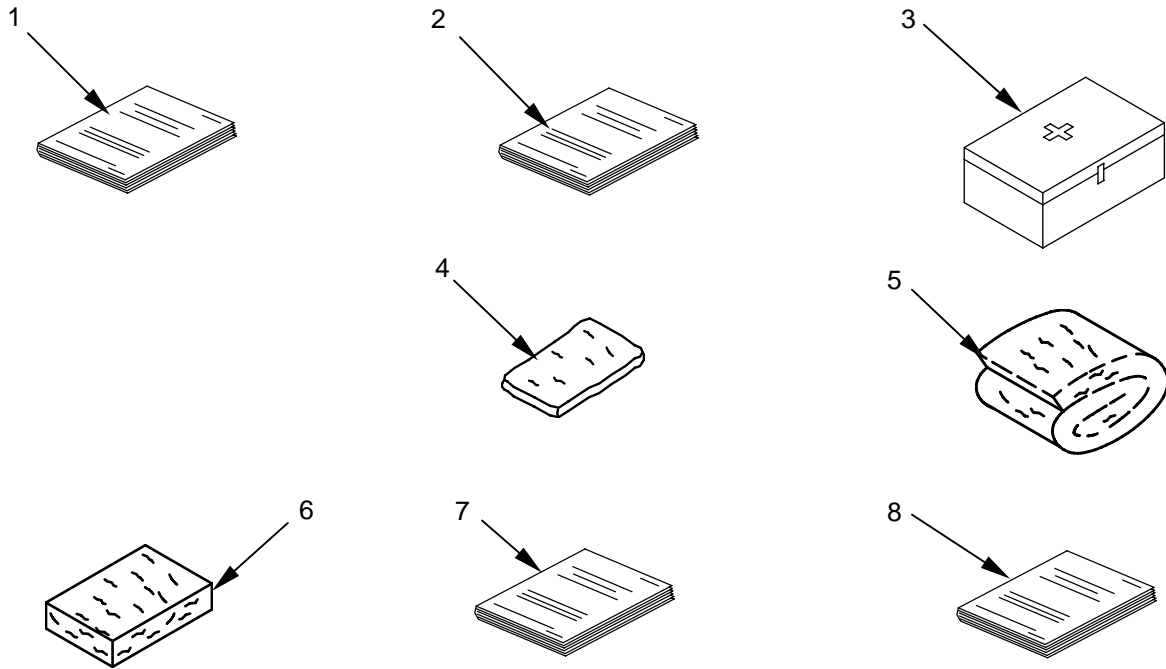


Table 2. Basic Issue Items List.

(1) ILLUS NUMBER	(2) NATIONAL STOCK NUMBER	(3) DESCRIPTION, CAGEC, AND PART NUMBER	(4) USABLE ON CODE	(5) U/M	(6) QTY RQR
1		MODULAR FIELD KITCHEN, 10B, 10H, TM 10-7360-208-13&P		EA	1
2		FOOD SERVICE EQUIPMENT, FORCE PROVIDER, 10B, TM 10-7310-282-10		EA	4
3	6545-00-919-6650	FIRST AID KIT, GENERAL PURPOSE, 10B, IRR A-6882 (64616)		EA	2
4	7920-00-926-5176	STAINLESS STEEL SPONGE, QTY 12, 10M, A- A-973, TYPE A (80244)		EA	6
5	5350-00-242-4404	STEEL WOOL, 1 POUND ROLL, 10M, A-A-1043, TYPE 3, CLASS 1 (80244)		EA	8
6	7920-00-884-1116	SPONGE, CELLULOSE, 10N, L-S-00626, TYPE II, CLASS 1, SIZE S, POR A (80244)		EA	60
7		FORCE PROVIDER, 10B TM 10-5419-206-13		EA	1
8		FORCE PROVIDER, 10B TM 10-5419-206-23P		EA	1

**OPERATOR MAINTENANCE  
FORCE PROVIDER FOOD SERVICE EQUIPMENT  
ADDITIONAL AUTHORIZATION LIST (AAL)**

---

**INTRODUCTION**

**Scope**

This work package lists additional items you are authorized for the support of the Force Provider Food Service Equipment.

**General**

This list identifies items that do not have to accompany the Force Provider Food Service Equipment and that do not have to be turned in with it. These items are authorized to you by CTA, MTOE, TDA, or JTA.

**Explanation Of Columns in the AAL**

Column (1) - National Stock Number (NSN). Identifies the stock number of the item to be used for requisitioning purposes.

Column (2) – Description, Commercial and Government Entity Code (CAGEC), and Part Number (P/N). Identifies the Federal item name (in all capital letters) followed by a minimum description when needed. The last line below the description is the CAGEC (in parentheses) and the part number.

Column (3) – Usable On Code. When applicable, gives you a code if the item you need is not the same for different models of equipment. *These codes are identified below:*

<u>Code</u>	<u>Used On</u>
FSM	Force Provider Module - Green
FSN	Force Provider Module – Green (Lite)
FSP	Force Provider Module – Tan
FSQ	Force Provider Module – Tan (Lite)

Column (4) – Unit of Measure (U/M). Indicates the physical measurement or count of the item as issued per the Nation Stock Number shown in column (1).

Column (5) - Qty Recm. Indicates the quantity recommended.

Table 1. Additional Authorized List.

(1) NATIONAL STOCK NUMBER	(2) DESCRIPTION, CAGEC, AND PART NUMBER	(3) USABLE ON CODE	(4) U/M	(5) QTY RECM
7920-00-018-7052	BRISTLE BRUSH (K6766)1127-0002		EA	1
8145-00-292-9229	GLOVE, MEAT CUTTER'S (81349) MIL-G 20587 S		EA	2
8145-00-292-9230	GLOVE, MEAT CUTTER'S (81349) MIL-G 20587 M		EA	2
8145-00-292-9231	GLOVE, MEAT CUTTER'S (81349) MIL-G 20587 L		EA	2

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**OPERATOR MAINTENANCE  
FORCE PROVIDER FOOD SERVICE EQUIPMENT  
EXPENDABLE/DURABLE ITEMS LIST**

---

**INTRODUCTION**

This work package lists expendable and durable items that you will need to operate and maintain the Force Provider Food Service Equipment. This list is for information only and is not authority to requisition the listed items. These items are authorized to you by CTA 50-970, Expendable/Durable Items (Except Medical, Class V Repair Parts, and Heraldic Items), or CTA 8-100, Army Medical Department Expendable/Durable Items.

**Explanations of Columns in the Expendable/Durable Items List**

Column (1)-Item Number. This number is assigned to each entry in the list and is referenced in the narrative instructions to identify the item (e.g., Use brake fluid ( Item 5, WP 0098 00)).

Column (2)-Level. This column identifies the lowest level of maintenance that requires the listed item. *(include as applicable: C = Operator/Crew, O = Unit/AVUM, F = Direct Support/AVIM, H = General Support, D = Depot).*

Column (3)-National Stock Number (NSN). This is the NSN assigned to the item which you can use to requisition it.

Column (4)-Item Name, Description, Commercial and Government Entity Code (CAGEC), and Part Number (P/N). This column provides the other information you need to identify the item.

Column (5)-Unit of Measure (U/M). This code shows the physical measurement or count of an item, such as gallon, dozen, gross, etc.”

Table 1. Expendable and Durable Items.

(1) ITEM NUMBER	(2) LEVE L	(3) NATIONAL STOCK NUMBER (NSN)	(4) ITEM NAME, DESCRIPTION, CAGEC, AND PART NUMBER	(5) U/M
1	C	7920-01-339-6928	ABSORBENT MATERIAL, SPILL CLEANUP (66735) F91D248	EA
2	C	8415-00-281-7814	APRON, TOXICOLOGICAL AGENTS PROTECTIVE, MED (81349) MIL-A-2334	EA
3	C	8415-00-281-7813	APRON, TOXICOLOGICAL AGENTS PROTECTIVE, SM (81349) MIL-A-2334	EA
4	C	8105-01-221-3239	BAG, PLASTIC, CONTAMINATED WASTE, SIZE 3 (58536) A-A-2299	RL
5	C	8105-00-285-4744	BAG, SAND, BURLAP (80244) MIL-B-12233, CLASS A, COLOR 1	HD
6	C	6810-00-598-7316	BLEACH, SODIUM HYPOCHLORITE A-A-1427 (58536)	GL
7	C	7920-00-291-8305	BROOM, UPRIGHT (80244) H-B-0051, TYPE 2	EA
8	C	7920-00-018-7052	BRUSH, BRISTLE (17794) 1127-0002	EA
9	C	7920-00-772-5800	BRUSH, SANITARY (80244) A-A-3069 TYPE 1, CLASS1, AA3069/1A	EA
10	C	7920-00-240-7174	BRUSH, SCRUB (80244) 7920-00-240-7174	EA
11	O	7920-00-292-9204	CLOTH, WIPING, 100 EA (58536) A-A-162	EA
12	C	7930-00-985-6911	DETERGENT, GENERAL PURPOSE, MILD (81349) MIL-D-16791	GL
13	C	6545-00-919-6650	FIRST AID KIT, GENERAL PURPOSE (64616) IRR A-6882	EA
14	C	6545-00-656-1094	FIRST AID KIT, GENERAL PURPOSE (80244) GG-K-391, TYPE 3	EA
15	C	8415-01-033-3519	GLOVE SET, CHEMICAL PROTECTIVE (81349) MIL-G-43976	PR
16	C	8415-01-033-3517	GLOVE SET, CHEMICAL PROTECTIVE (81349) MIL-G-43976	PR
17	C	8415-01-033-3518	GLOVE SET, CHEMICAL PROTECTIVE (81349) MIL-G-43976	PR
18	C	8415-00-268-8353	GLOVES, MEN'S, MED (81349) MIL-G-3866	PR
19	C	8415-00-258-8354	GLOVES, MEN'S, SM (81349) MIL-G-3866	PR

Table 1. Expendable and Durable Items- Continued.

(1) ITEM NUMBER	(2) LEVE L	(3) NATIONAL STOCK NUMBER (NSN)	(4) ITEM NAME, DESCRIPTION, CAGEC, AND PART NUMBER	(5) U/M
20	C	8415-00-753-6552	GLOVES, TOXICOLOGICAL AGENTS PROTECTIVE (81349) MIL-G-12223	PR
21	C	4240-00-190-6432	GOGGLES, INDUSTRIAL (58536) A-A-1110	PR
22	C	7920-00-141-5550	MOP HEAD, WET (80244) T-M-561, TYPE 1, STYLE 1, CLASS 15	BX
23	C	7920-00-659-9175	PAD, SCOURING (80244) L-P-0050TY1SZ1	PK
24	C	7240-00-773-0975	PAIL, UTILITY (81348) RRP53	EA
25	C	7920-00-205-1711	RAGS, WIPING (58536) A-A-2522	LB
26	O	7930-00-965-4868	SOAP, CAKE, HAND (58536) A-A-1375	BX
27	C	7920-00-884-1115	SPONGE CELLULOSE (58536) A-A-2073	BX
28	C	7920-00-884-1116	SPONGE, CELLULOSE (80244) L-S-00626 TYPE 2 POROSITY A CLASS Z3	BX
29	C	5350-00-242-4404	STEEL WOOL (80244) A-A-1043 TY3CL1	LB
30	C	7930-00-103-2254	TAPE, DUCT (07124) C-519	RL





**OPERATOR MAINTENANCE  
FORCE PROVIDER FOOD SERVICE EQUIPMENT  
GLOSSARY**

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<b><u>Term</u></b>	<b><u>Definition</u></b>
Alligator Clip	Spring clip on the end of a test lead used to make a temporary connection.
Alternating Current (AC)	A flow of electricity which reaches maximum in one direction, decreases to zero, then reverses itself and reaches maximum in the opposite direction. The cycle is repeated continuously. The number of cycles per second is equal to the frequency.
Ambient Temperature	The temperature of the atmosphere of surrounding environment. Typically defined by industry standards as 25° C.
Amp (Ampere)	A unit that measures the strength/rate of flow of electrical current.
Anode	The positive electrode or terminal of a device. The "P" material of a diode.
Armature	The portion of the magnetic structure of a DC or universal motor which rotates.
Capacitor	An electrical device used to store electrical energy, and to release it back into the power system when required.
Cathode	The negative terminal electrode of a device. The "N" material in a junction diode.
Chassis	Metal box or frame into which components are mounted.
Compressor	A hermetically sealed motor which pumps refrigerant throughout system.
Condenser	A tubing coil, which refrigerant flows through, that is designed to remove heat from the refrigerant, changing its state from a high pressure vapor to a high pressure liquid.
Diode	A two terminal device that conducts in only one direction.
Direct Current (DC)	A constant value current that flows in only on direction.
Double-Pole, Double-Throw (DPDT) Switch	A switch that makes or breaks the connection of two conductors to two separate circuits. This switch has six terminal screws and is available in both momentary and

	maintained contact versions, and may also have a center OFF position.
Double-Pole, Single-Throw (DPST) Switch	A switch that makes or breaks the connection of two circuit conductors in a single branch circuit. This switch has four terminal screws and ON/OFF markings.
Dual Voltage	Some motors can operate on two different voltages, depending upon how it is built and connected. The voltages are either multiples of two or the 3 of one another.
Electrode	The terminal in electric apparatus that conducts electricity in or out.
Element	An electrical resistance assembly used to create heat
Evaporator	Part of the refrigeration system where refrigerant vaporizes and absorbs heat from water flowing over the front of the evaporator plate, turning it to ice.
Expansion Valve	A metering device which reduces the pressure of the liquid refrigerant flowing into the evaporator, causing it to boil and absorb heat.
Filter-Drier	Filters liquid refrigerant, keeping system dean. Desiccant traps small quantities of moisture, keeping the system dry. Must be replaced any time the refrigeration system is opened.
Force Provider	A deployable system of shelters and services which can be prepositioned and quickly set up in any theater of operation.
GFCI or GFI (Ground Fault Circuit Interrupter)	A specific type of circuit protection (commonly required in kitchens & bathrooms) that helps safeguard against shocks. GFCI protection can come from an outlet or a breaker.
Ground or Grounding	Connecting one side or neutral of a circuit to the earth through low resistance or low impedance paths, to help prevent transmitting shocks to personnel.
Hertz (Hz)	Expression of AC frequency in cycles per second, e.g., 60 Hz.
Hot Gas Valve	Solenoid valve which is energized during defrost allowing hot gas refrigerant to enter the evaporator(s), warming it to break the bond of the ice slab to the evaporator.
Kilowatt (kW)	Real power delivered to a load (W x 1,000 VA).

Knockout	A removable piece of an electrical box or panel that's "knocked out" to allow cable to enter the box.
Lead	The short length of a conductor that hangs free in a box or service panel. (i.e. a wire end)
Low-Voltage Switch	A switch rated for use on low-voltage circuits of 50 volts or less.
Ohm	The unit of measure for resistance.
Ohm's Law	Voltage (V) equals resistance (R) multiplied by current (I). ( $V=R \times I$ )
Overload Protection	Protective device such as a fuse or circuit breaker that automatically disconnects a load when current exceeds a predetermined value.
Phase	Classification of an ac circuit; usually single-phase, two wire or three wire; two-phase, three wire or four wire; or three-phase, three wire or four wire.
Potable Water	Clean, uncontaminated, treated water suitable for drinking.
Rotary Switch	A switch where rotating the actuator in a clockwise direction makes the circuit connection, and then rotating the actuator in either the same or opposite direction breaks the connection.
Single-Pole, Double-Throw (SPDT) Switch	A switch that makes or breaks the connection of a single conductor with either of two other single conductors. This switch has 3 terminal screws, and is commonly used in pairs and called a "Three-Way" switch.
Single-Pole, Single-Throw (SPST) Switch	A switch that makes or breaks the connection of a single conductor in a single branch circuit. This switch has two screw terminals and ON/OFF designations. It is commonly referred to as a "Single-Pole" Switch.
Stator	That part of an AC induction motor's magnetic structure which does not rotate. It usually contains the primary winding. The stator is made up of laminations with a large hole in the center in which the rotor can turn; there are slots in the stator in which the windings for the coils are inserted.
Switch, Limit	A switch that is operated by some part or motion of a power-driven machine or equipment to alter the electric circuit associated with the machine or equipment.

TEMPER	Tent, Expandable, Modular, <b>PER</b> sonnel.
Thermistor	Temperature sensitive semiconductor that has a negative temperature coefficient of resistance. As temperature increases, resistance decreases.
Thermocouple	Temperature transducer consisting of two dissimilar metals welded together at one end to form a junction that when heated will generate a voltage.
Thermostat	Device that opens or closes a circuit in response to changes in temperature.
Three Phase Power	Three separate outputs from a single source. There is a phase difference of 120° between any two of the three voltages and currents.
Thrust Bearings	Special bearings used to handle higher than normal axial forces exerted on the shaft of the motor as is the case with some fan or pump blade mountings.
Timer	A switch with an integral mechanism or electronic circuit that can be set to switch an electrical load ON at a predetermined time.
Toggle Switch	A switch with a lever-type actuator that makes or breaks switch contact as its position is changed.
Torque	Turning force delivered by a motor or gearmotor shaft, usually expressed in lbs. ft, derived by completing $H.P. \times 5250/RPM = \text{full load torque}$ .
Transducer	Device that converts energy from one form to another.
Transformer	A static electrical device which by electromagnetic induction transfers electrical energy from one circuit to another circuit usually with changed values of voltage and current in the process.

TRICON	<b>TRI</b> ple Storage <b>CON</b> tainer
TXV	see "Expansion Valve"
Volt	Unit of potential difference or electromotive force. One volt is the potential difference needed to produce one ampere of current through a resistance of one ohm.
Volt-Amperes (VA)	The current flowing in a circuit multiplied by the voltage of that circuit. An expression of the output rating of a transformer.
Watt	Unit of electrical power required to do work at the rate of one joule per second. One watt of power is expended when one ampere of direct current flows through a resistance of one ohm. In an AC circuit, true power is the product of effective volts and effective amperes, multiplied by the power factor. One horsepower is equal to 746 watts.



**FORCE PROVIDER FOD SERVICE EQUIPMENT  
ALPHABETICAL INDEX**

**Subject** **WP Sequence No. – Page No.**

**A**

Abbreviations and Acronyms .....0001 00-3  
 Additional Authorization List (AAL) .....0042 00-1

**B**

Basic Issue Items (BI) List.....0041 00-20

**C**

Coffee Urn, Controls and Indicators..... 0004 00-17  
 Coffee Urn, Operation Under Usual Conditions.....0022 00-1  
 Coffee Urn, Operator Maintenance.....0039 00-1  
 Components Of End Item (COEI) And Basic Issue Items (BI) List.....0041 00-1  
 Controls and Indicators, Coffee Urn..... 0004 00-17  
 Controls and Indicators, Electric Toaster ..... 0004 00-16  
 Controls and Indicators, Food Warming Cabinet ..... 0004 00-2  
 Controls and Indicators, Griddle ..... 0004 00-4  
 Controls and Indicators, Ice Machine..... 0004 00-5  
 Controls and Indicators, Meat Slicing Machine..... 0004 00-8  
 Controls and Indicators, Mechanically Cooled Beverage Dispenser ..... 0004 00-3  
 Controls and Indicators, Mixing Machine ..... 0004 00-9  
 Controls and Indicators, Oven ..... 0004 00-10  
 Controls and Indicators, Popcorn Machine ..... 0004 00-12  
 Controls and Indicators, Reach-in Refrigerators..... 0004 00-13  
 Controls and Indicators, Steam Kettle (Tilting) ..... 0004 00-7  
 Controls and Indicators, Steam Kettle ..... 0004 00-6  
 Controls and Indicators, Steam Table..... 0004 00-15  
 Controls and Indicators, Tabletop Steam Kettle ..... 0004 00-14  
 Controls and Indicators, Tilt Fry Pan / Tilt Griddle ..... 0004 00-11  
 Corrosion Prevention and Control (CPC).....0001 00-1  
 Cross Reference List, Nomenclature .....0001-00-2

**D**

Decals and Instruction Plates.....0004 00-18  
 Description and Use of Operator's Controls and Indicators.....0004 00-1  
 Description of Major Components.....0002 00-1  
 Destruction of Army Materiel to Prevent Enemy Use .....0001 00-1

**Subject** **WP Sequence No. – Page No.**

**E**

Electric Toaster, Controls and Indicators ..... 0004 00-16  
 Electric Toaster, Operation Under Usual Conditions .....0021 00-1  
 Equipment Description And Data .....0002 00-1  
 Expendable And Durable Items List.....0043 00-1

**F**

Field Packing Food Service FP .....0023 00-1  
 Field Packing Food Service FP(L) .....0024 00-1  
 Food Warming Cabinet, Controls and Indicators ..... 0004 00-2  
 Food Warming Cabinet, Operation Under Usual Conditions .....0007 00-1  
 Food Warming Cabinet, Operator Maintenance .....0031 00-1  
 Fuse, Kettle, Replace ..... 0034 00-1  
 Fuse, Oven, Replace ..... 0036 00-3

**G**

General Information .....0001 00-1  
 Glossary ..... Glossary 1  
 Griddle, Controls and Indicators ..... 0004 00-4  
 Griddle, Operation Under Usual Conditions.....0009 00-1

**H**

How To Use This Manual ..... iii  
 Humidifier Assembly, Replace ..... 0031 00-2

**I**

Ice Machine, Controls and Indicators..... 0004 00-5  
 Ice Machine, Operation Under Usual Conditions.....0010 00-1  
 Ice Machine, Operator Maintenance.....0033 00-1  
 Inventory FP Food Service.....0005 00-1  
 Inventory FP(L) Food Service .....0006 00-1

**K**

Kettle, Popcorn Machine, Replace..... 0037 00-2  
 Knife, Meat Slicer, Replace..... 0035 00-1

**L**

Light Bulb, Oven, Replace ..... 0036 00-1  
 Light Bulb, Popcorn Machine, Replace..... 0037 00-1  
 Light Bulb, Refrigerator, Replace ..... 0038 00-1  
 List of Abbreviations/Acronyms.....0001 00-3



Subject

WP Sequence No. – Page No.

**L - continued**

List of Effective Pages.....A  
 Lubrication Instructions .....0028 00-1

**M**

Maintenance Checks and Services, Preventive.....0029 00-1  
 Maintenance Forms Records And Reports.....0001 00-1  
 Maintenance Procedures .....0030 00-1  
 Malfunction Symptom Index, Operator .....0026 00-1  
 Meat Slicing Machine, Controls and Indicators.....0004 00-8  
 Meat Slicing Machine, Operation Under Usual Conditions.....0013 00-1  
 Meat Slicing Machine, Operator Maintenance.....0035 00-1  
 Mechanically Cooled Beverage Dispenser, Controls and Indicators.....0004 00-3  
 Mechanically Cooled Beverage Dispenser, Operation Under Usual Conditions.....0008 00-1  
 Mechanically Cooled Beverage Dispenser, Operator Maintenance.....0032 00-1  
 Mixing Machine, Controls and Indicators.....0004 00-9  
 Mixing Machine, Operation Under Usual Conditions.....0014 00-1

**O**

Operation Under Unusual Conditions .....0025 00-1  
 Operation Under Usual Conditions – Coffee Urn.....0022 00-1  
 Operation Under Usual Conditions – Electric Toaster .....0021 00-1  
 Operation Under Usual Conditions – Field Packing Food Service FP .....0023 00-1  
 Operation Under Usual Conditions – Field Packing Food Service FP(L).....0024 00-1  
 Operation Under Usual Conditions – Food Service Inventory FP .....0005 00-1  
 Operation Under Usual Conditions – Food Service Inventory FP(L).....0006 00-1  
 Operation Under Usual Conditions – Food Warming Cabinet.....0007 00-1  
 Operation Under Usual Conditions – Griddle.....0009 00-1  
 Operation Under Usual Conditions – Ice Machine.....0010 00-1  
 Operation Under Usual Conditions – Meat Slicing Machine.....0013 00-1  
 Operation Under Usual Conditions – Mechanically Cooled Beverage Dispenser .....0008 00-1  
 Operation Under Usual Conditions – Mixing Machine .....0014 00-1  
 Operation Under Usual Conditions – Oven.....0015 00-1  
 Operation Under Usual Conditions – Popcorn Machine .....0017 00-1  
 Operation Under Usual Conditions – Reach-In Refrigerators.....0018 00-1  
 Operation Under Usual Conditions – Steam Kettle (Tilting Type) .....0012 00-1  
 Operation Under Usual Conditions – Steam Kettle .....0011 00-1  
 Operation Under Usual Conditions – Steam Table.....0020 00-1  
 Operation Under Usual Conditions – Tabletop Steam Kettle .....0019 00-1  
 Operation Under Usual Conditions – Tilt Fry Pan / Tilt Griddle .....0016 00-1  
 Operator Controls And Indicators .....0004 00-1  
 Operator Maintenance – Coffee Urn.....0039 00-1  
 Operator Maintenance – Food Warming Cabinet .....0031 00-1  
 Operator Maintenance – Ice Machine.....0033 00-1  
 Operator Maintenance – Meat Slicing Machine.....0035 00-1  
 Operator Maintenance – Mechanically Cooled Beverage Dispenser .....0032 00-1  
 Operator Maintenance – Oven.....0036 00-1  
 Operator Maintenance – Popcorn Machine .....0037 00-1

Subject

WP Sequence No. – Page No.

**O - continued**

Operator Maintenance – Reach-In Refrigerators..... 0038 00-1  
 Operator Maintenance – Steam Kettle (All Types) ..... 0034 00-1  
 Operator Malfunction Symptom Index ..... 0026 00-1  
 Operator Preventive Maintenance Checks and Services (PMCS) ..... 0029 00-1  
 Operator Troubleshooting Procedures..... 0027 00-1  
 Oven, Controls and Indicators ..... 0004 00-10  
 Oven, Operation Under Usual Conditions..... 0015 00-1  
 Oven, Operator Maintenance..... 0036 00-1

**P**

Plates, Decal and Instruction ..... 0004 00-18  
 Popcorn Machine, Controls and Indicators ..... 0004 00-12  
 Popcorn Machine, Operation Under Usual Conditions ..... 0017 00-1  
 Popcorn Machine, Operator Maintenance ..... 0037 00-1  
 Preparation for Storage and Shipment ..... 0001 00-2  
 Preventive Maintenance Checks and Services..... 0029 00-1

**R**

Reach-in Refrigerators, Controls and Indicators..... 0004 00-13  
 Reach-In Refrigerators, Operation Under Usual Conditions..... 0018 00-1  
 Reach-In Refrigerators, Operator Maintenance..... 0038 00-1  
 References..... 0040 00-1  
 Repacking Instructions FP ..... 0024 00-1  
 Repacking Instructions FP(L)..... 0023 00-1  
 Reporting Equipment Improvement Recommendations (EIRs)..... 0001 00-1

**S**

Safety, Care and Handling, Warnings, Cautions and Notes..... 0001 00-3  
 Shipping or Storage, Preparation for ..... 0001 00-2  
 Sight Glass, Coffee Urn, Replace ..... 0036 00-1  
 Steam Kettle (All Types), Operator Maintenance ..... 0034 00-1  
 Steam Kettle (Tilting Type), Operation Under Usual Conditions ..... 0012 00-1  
 Steam Kettle (Tilting), Controls and Indicators ..... 0004 00-7  
 Steam Kettle, Controls and Indicators ..... 0004 00-6  
 Steam Kettle, Operation Under Usual Conditions ..... 0011 00-1  
 Steam Table, Controls and Indicators..... 0004 00-15  
 Steam Table, Operation Under Usual Conditions..... 0020 00-1  
 Supporting Information for Repair Parts, Special Tools, and Support Equipment..... 0001 00-3

**Subject**

**WP Sequence No. – Page No.**

**T**

Table of Contents ..... i  
Tabletop Steam Kettle, Controls and Indicators ..... 0004 00-14  
Tabletop Steam Kettle, Operation Under Usual Conditions .....0019 00-1  
Theory Of Operation .....0003 00-1  
Tilt Fry Pan / Tilt Griddle, Controls and Indicators ..... 0004 00-11  
Tilt Fry Pan / Tilt Griddle, Operation Under Usual Conditions .....0016 00-1  
Troubleshooting Procedures, Operator.....0027 00-1

**U**

Unpacking and Inventory FP .....0005 00-1  
Unpacking and Inventory FP(L) .....0006 00-1

**W**


Warnings ..... a  
Warnings, Cautions and Notes .....0001 00-3  
Warranty Information.....0001 00-2



By Order of the Secretary of the Army:

PETER J. SCHOOMAKER  
General, United States Army  
*Chief of Staff*

Official:

  
SANDRA R. RILEY  
*Administrative Assistant to the  
Secretary of the Army*  
0510403

**Distribution:** To be distributed in accordance with initial distribution number (IDN) 256820 requirements for TM 10-7310-282-10.



## ***These are the instructions for sending an electronic 2028***

The following format must be used if submitting an electronic 2028. The subject line must be exactly the same and all fields must be included; however only the following fields are mandatory: 1, 3, 4, 5, 6, 7, 8, 9, 10, 13, 15, 16, 17, and 27.

From: "Whomever" <whomever@avma27.army.mil>  
To: amssbriml@natick.army.mil

Subject: DA Form 2028

1. From: Joe Smith
2. Unit: home
3. Address: 4300 Park
4. City: Hometown
5. St: MO
6. Zip: 77777
7. Date Sent: 19-OCT-93
8. Pub no: 55-2840-229-23
9. Pub Title: TM
10. Publication Date: 04-JUL-85
11. Change Number: 7
12. Submitter Rank: MSG
13. Submitter FName: Joe
14. Submitter MName: T
15. Submitter LName: Smith
16. Submitter Phone: 123-123-1234
17. Problem: 1
18. Page: 2
19. Paragraph: 3
20. Line: 4
21. NSN: 5
22. Reference: 6
23. Figure: 7
24. Table: 8
25. Item: 9
26. Total: 123
27. Text:

This is the text for the problem below line 27.





<b>RECOMMENDED CHANGES TO PUBLICATIONS AND BLANK FORMS</b> For use of this form, see AR 25-30; the proponent agency is ODISC4.						Use Part II (reverse) for Repair Parts and Special Tool Lists (RPSTL) and Supply Catalogs/Supply Manuals (SC/SM).	<b>DATE</b> 21 October 2003
<b>TO:</b> (Forward to proponent of publication or form) (Include ZIP Code) COMMANDER U.S. ARMY TANK-AUTOMOTIVE AND ARMAMENT COMMAND ATTN: AMSTA-LC-CECT 15 KANSAS STREET NATICK, MA 01760-5052						<b>FROM:</b> (Activity and location) (Include ZIP Code)  <i>PFC Jane Doe</i> <i>CO A 3<sup>rd</sup> Engineer BR</i> <i>Ft. Leonardwood, MO 63108</i>	
<b>PART I – ALL PUBLICATIONS (EXCEPT RPSTL AND SC/SM) AND BLANK FORMS</b>							
<b>PUBLICATION/FORM NUMBER</b> TM 10-1670-296-23&P				<b>DATE</b> 30 October 2002	<b>TITLE</b> Unit Manual for Ancillary Equipment for Low Velocity Air Drop Systems		
<b>ITEM NO.</b>	<b>PAGE NO.</b>	<b>PARA-GRAPH</b>	<b>LINE NO. *</b>	<b>FIGURE NO.</b>	<b>TABLE NO.</b>	<b>RECOMMENDED CHANGES AND REASON</b> <i>(Provide exact wording of recommended changes, if possible).</i>	
	0036 00-2				1	<i>In table 1, Sewing Machine Code Symbols, the second sewing machine code symbol should be MD ZZ not MD 22.</i>  <i>Change the manual to show Sewing Machine, Industrial: Zig-Zag; 308 stitch; medium-duty; NSN 3530-01-181-1421 as a MD ZZ code symbol.</i>	
<small>*Reference to line numbers within the paragraph or subparagraph.</small>							
<b>TYPED NAME, GRADE OR TITLE</b>  Jane Doe, PFC				<b>TELEPHONE EXCHANGE/AUTOVON, PLUS EXTENSION</b>  508-233-4141		<b>SIGNATURE</b>  Jane Doe <i>Jane Doe</i>	

<b>TO:</b> <i>(Forward direct to addressee listed in publication)</i> COMMANDER U.S. ARMY TANK-AUTOMOTIVE AND ARMAMENT COMMAND ATTN: AMSTA-LC-CECT 15 KANSAS STREET NATICK, MA 01760-5052	<b>FROM:</b> <i>(Activity and location) (Include ZIP Code)</i> <i>PFC Jane Doe</i> <i>CO A 3<sup>rd</sup> Engineer BR</i> <i>Ft. Leonardwood, MO 63108</i>	<b>DATE</b> <i>21 October 2003</i>
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**PART II – REPAIR PARTS AND SPECIAL TOOL LISTS AND SUPPLY CATALOGS/SUPPLY MANUALS**

<b>PUBLICATION NUMBER</b> TM 10-1670-296-23&P	<b>DATE</b> 30 October 2002	<b>TITLE</b> Unit Manual for Ancillary Equipment for Low Velocity Air Drop Systems
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PAGE NO.	COLM NO.	LINE NO.	NATIONAL STOCK NUMBER	REFERENCE NO.	FIGURE NO.	ITEM NO.	TOTAL NO. OF MAJOR ITEMS SUPPORTED	RECOMMENDED ACTION
0066 00-1					4			<i>Callout 16 in figure 4 is pointed to a <u>D-Ring</u>. In the Repair Parts List key for figure 4, item 16 is called a <u>Snap Hook</u>. Please correct one or the other.</i>

SAMPLE

**PART III – REMARKS** *(Any general remarks or recommendations, or suggestions for improvement of publications and blank forms. Additional blank sheets may be used if more space is needed.)*

TYPED NAME, GRADE OR TITLE	TELEPHONE EXCHANGE/AUTOVON, PLUS EXTENSION	SIGNATURE
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<p align="center"><b>RECOMMENDED CHANGES TO PUBLICATIONS AND BLANK FORMS</b></p> <p>For use of this form, see AR 25-30; the proponent agency is ODISC4.</p>						Use Part II (reverse) for Repair Parts and Special Tool Lists (RPSTL) and Supply Catalogs/Supply Manuals (SC/SM).	DATE
<b>TO:</b> (Forward to proponent of publication or form) (Include ZIP Code) Commander U.S. Army Tank-automotive and Armament Command ATTN: AMSTA-LC-CECT Kansas Street, Natick, MA 01760-5052.						<b>FROM:</b> (Activity and location) (Include ZIP Code)	
<b>PART I – ALL PUBLICATIONS (EXCEPT RPSTL AND SC/SM) AND BLANK FORMS</b>							
PUBLICATION/FORM NUMBER TM 10-7310-282-10				DATE 15 May 2005		TITLE Operator's Manual for Force Provider Food Service Equipment	
ITEM NO.	PAGE NO.	PARA-GRAPH	LINE NO. *	FIGURE NO.	TABLE NO.	RECOMMENDED CHANGES AND REASON <i>(Provide exact wording of recommended changes, if possible).</i>	
*Reference to line numbers within the paragraph or subparagraph.							
TYPED NAME, GRADE OR TITLE				TELEPHONE EXCHANGE/AUTOVON, PLUS EXTENSION		SIGNATURE	

<b>TO:</b> <i>(Forward direct to addressee listed in publication)</i> Commander U.S. Army Tank-automotive and Armament Command ATTN: AMSTA-LC-CECT Kansas Street, Natick, MA 01760-5052.	<b>FROM:</b> <i>(Activity and location) (Include ZIP Code)</i>	<b>DATE</b>
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**PART II – REPAIR PARTS AND SPECIAL TOOL LISTS AND SUPPLY CATALOGS/SUPPLY MANUALS**

PUBLICATION NUMBER TM 10-7310-282-10	DATE 15 May 2005	TITLE Operator's Manual for Force Provider Food Service Equipment
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PAGE NO.	COLM NO.	LINE NO.	NATIONAL STOCK NUMBER	REFERENCE NO.	FIGURE NO.	ITEM NO.	TOTAL NO. OF MAJOR ITEMS SUPPORTED	RECOMMENDED ACTION

**PART III – REMARKS** *(Any general remarks or recommendations, or suggestions for improvement of publications and blank forms. Additional blank sheets may be used if more space is needed.)*

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TYPED NAME, GRADE OR TITLE	TELEPHONE EXCHANGE/AUTOVON, PLUS EXTENSION	SIGNATURE
----------------------------	--	-----------

<p align="center"><b>RECOMMENDED CHANGES TO PUBLICATIONS AND BLANK FORMS</b></p> <p>For use of this form, see AR 25-30; the proponent agency is ODISC4.</p>						Use Part II (reverse) for Repair Parts and Special Tool Lists (RPSTL) and Supply Catalogs/Supply Manuals (SC/SM).	DATE
<b>TO:</b> (Forward to proponent of publication or form) (Include ZIP Code) Commander U.S. Army Tank-automotive and Armament Command ATTN: AMSTA-LC-CECT Kansas Street, Natick, MA 01760-5052.						<b>FROM:</b> (Activity and location) (Include ZIP Code)	
<b>PART I – ALL PUBLICATIONS (EXCEPT RPSTL AND SC/SM) AND BLANK FORMS</b>							
PUBLICATION/FORM NUMBER TM 10-7310-282-10				DATE 15 May 2005		TITLE Operator's Manual for Force Provider Food Service Equipment	
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TYPED NAME, GRADE OR TITLE				TELEPHONE EXCHANGE/AUTOVON, PLUS EXTENSION		SIGNATURE	

<b>TO:</b> <i>(Forward direct to addressee listed in publication)</i> Commander U.S. Army Tank-automotive and Armament Command ATTN: AMSTA-LC-CECT Kansas Street, Natick, MA 01760-5052.	<b>FROM:</b> <i>(Activity and location) (Include ZIP Code)</i>	<b>DATE</b>
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**PART II – REPAIR PARTS AND SPECIAL TOOL LISTS AND SUPPLY CATALOGS/SUPPLY MANUALS**

PUBLICATION NUMBER TM 10-7310-282-10	DATE 15 May 2005	TITLE Operator's Manual for Force Provider Food Service Equipment
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PAGE NO.	COLM NO.	LINE NO.	NATIONAL STOCK NUMBER	REFERENCE NO.	FIGURE NO.	ITEM NO.	TOTAL NO. OF MAJOR ITEMS SUPPORTED	RECOMMENDED ACTION

**PART III – REMARKS** *(Any general remarks or recommendations, or suggestions for improvement of publications and blank forms. Additional blank sheets may be used if more space is needed.)*

--

TYPED NAME, GRADE OR TITLE	TELEPHONE EXCHANGE/AUTOVON, PLUS EXTENSION	SIGNATURE
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# The Metric System and Equivalents

## Linear Measure

1 centimeter = 10 millimeters = .39 inch  
 1 decimeter = 10 centimeters = 3.94 inches  
 1 meter = 10 decimeters = 39.37 inches  
 1 dekameter = 10 meters = 32.8 feet  
 1 hectometer = 10 dekameters = 328.08 feet  
 1 kilometer = 10 hectometers = 3,280.8 feet

## Weights

1 centigram = 10 milligrams = .15 grain  
 1 decigram = 10 centigrams = 1.54 grains  
 1 gram = 10 decigrams = .035 ounce  
 1 dekagram = 10 grams = .35 ounce  
 1 hectogram = 10 dekagrams = 3.52 ounces  
 1 kilogram = 10 hectograms = 2.2 pounds  
 1 quintal = 100 kilograms = 220.46 pounds  
 1 metric ton = 10 quintals = 1.1 short tons

## Liquid Measure

1 centiliter = 10 milliliters = .34 fl. ounce  
 1 deciliter = 10 centiliters = 3.38 fl. ounces  
 1 liter = 10 deciliters = 33.81 fl. ounces  
 1 dekaliter = 10 liters = 2.64 gallons  
 1 hectoliter = 10 dekaliters = 26.42 gallons  
 1 kiloliter = 10 hectoliters = 264.18 gallons

## Square Measure

1 sq. centimeter = 100 sq. millimeters = .155 sq. inch  
 1 sq. decimeter = 100 sq. centimeters = 15.5 sq. inches  
 1 sq. meter (centare) = 100 sq. decimeters = 10.76 sq. feet  
 1 sq. dekameter (are) = 100 sq. meters = 1,076.4 sq. feet  
 1 sq. hectometer (hectare) = 100 sq. dekameters = 2.47 acres  
 1 sq. kilometer = 100 sq. hectometers = .386 sq. mile

## Cubic Measure

1 cu. centimeter = 1000 cu. millimeters = .06 cu. inch  
 1 cu. decimeter = 1000 cu. centimeters = 61.02 cu. inches  
 1 cu. meter = 1000 cu. decimeters = 35.31 feet

## Approximate Conversion Factors

<i>To change</i>	<i>To</i>	<i>Multiply by</i>	<i>To change</i>	<i>To</i>	<i>Multiply by</i>
inches	centimeters	2.540	ounce-inches	newton-meters	.007062
feet	meters	.305	centimeters	inches	.394
yards	meters	.914	meters	feet	3.280
miles	kilometers	1.609	meters	yards	1.094
square inches	square centimeters	6.451	kilometers	miles	.621
square feet	square meters	.093	square centimeters	square inches	.155
square yards	square meters	.836	square meters	square feet	10.764
square miles	square kilometers	2.590	square meters	square yards	1.196
acres	square hectometers	.405	square kilometers	square miles	.386
cubic feet	cubic meters	.028	square hectometers	acres	2.471
cubic yards	cubic meters	.765	cubic meters	cubic feet	35.315
fluid ounces	milliliters	29.573	cubic meters	cubic yards	1.308
pints	liters	.473	milliliters	fluid ounces	.034
quarts	liters	.946	liters	pints	2.113
gallons	liters	3.785	liters	quarts	1.057
ounces	grams	28.349	liters	gallons	.264
pounds	kilograms	.454	grams	ounces	.035
short tons	metric tons	.907	kilograms	pounds	2.205
pound-feet	newton-meters	1.356	metric tons	short tons	1.102
pound-inches	newton-meters	.11296			

## Temperature (Exact)

  °F Fahrenheit temperature  $\times \frac{5}{9}$  (after subtracting 32) = Celsius temperature   °C

**PIN:081961-000**