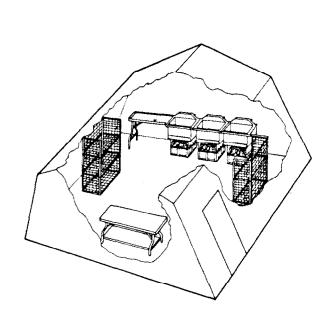
#### TECHNICAL MANUAL

# OPERATOR'S, UNIT AND DIRECT SUPPORT MAINTENANCE MANUAL INCLUDING REPAIR PARTS AND SPECIAL TOOLS LIST FOR

# FOOD SANITATION CENTER (FSC) NSN 7360-01-277-2558

Approved for public release: Distribution is unlimited.



This copy is a reprint which includes current pages from Changes 1 and 2.

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### WARNING

#### CARBON MONOXIDE GAS CAN KILL YOU

- **D** Carbon monoxide gas is not visible and it has no smell, but it can kill you. Breathing air with carbon monoxide produces symptoms of headache, dizziness, loss of muscular control, a sleepy feeling, and coma. Brain damage or death can result from heavy exposure.
- **D** OPEN vents to provide ventilation and prevent the accumulation of carbon monoxide gas.
- **D** BE ALERT at all times during FSC operation for exposure symptoms. IMMEDIATELY VENTILATE the tent. If symptoms persist, move affected crew to fresh air and keep warm..

#### DO NOT PERMIT PHYSICAL EXERCISE:

if necessary, give artificial respiration.

#### FOR ARTIFICIAL RESPIRATION REFER TO FM 21-11

### THE BEST DEFENSE AGAINST CARBON MONOXIDE POISONING IS GOOD VENTILATION.

- **D** Carbon monoxide occurs in exhaust fumes of fuel-burning equipment such as the Burner Units, and internal. combustion engines. Carbon monoxide can reach dangerous concentrations under conditions of no air movement. Precautions must be followed to insure crew safety when you operate this equipment.
- **D** Flammable liquids are used in the operation of the FSC. Death or severe injury may result from explosion or fire if personnel fail to observe the correct operating procedures for burner units..
- **D** Do not pressurize fuel tanks with anything other than the hand air pump to obtain starting pressure. If a fuel leak is detected, shut the unit off immediately. Do not operate the unit again until the deficiency has been corrected.
- **D** If the flame goes out for any reason during operation, immediately close the generator flame valve to prevent accumulation of fuel and possible explosion..
- **D** Allow burner units and lanterns to cool before releasing air pressure from fuel tanks. Do not smoke and make sure there is no open flame in the vicinity. Fuel fumes are explosive and highly flammable.
- **D** If the pressure gage reaches the red area, immediately shut off the burner unit and remove it from the food sanitation equipment. Allow unit to cool before placing back in operation.
- **D** To prevent fires do not use flammable material as a base for the FSC. Fire may cause injury or death to personnel or damage the equipment.
- **D** Establish a safe lighting area that is a minimum of 50 feet from the servicing, refueling, fuel storage, cooking and sanitizing area..
- **D** When filling the fuel tank, always provide a metal to metal contact between the container and the fuel tank to avoid explosion from static electricity.
- **D** Extreme heat will cause tank pressure to increase because of fuel expansion. Make sure you start with prescribed pressure in accordance with TM 10–7360–204–13&P. For the M2/M2A and TM 10–7310–281–13&P for the Modern Burner Unit (MBU).

- Do not fill the burner unit fuel tanks unless the burner unit is turned off and has been allowed to cool..
- **D** The burner units should be moved a minimum of 50 feet (15.3 meters) from the FSC and the fuel storage area prior to servicing. Do not smoke and ensure that there is no open flame in vicinity; fire or explosion may result.
- **D** Do not install an operating burner unit under a sink that is not filled with water..
- **D** Make sure you leave enough air space between the tent wall and the food sanitation equipment. When the burner units are lit, they get hot; frequently check for heating of the tent wall while the burner units are in use. Move the burner units further away from the tent wall if necessary. If hey are too close to the tent wall, they could ignite the tent..
- D Gasoline should be suspended only from a tent frame member. Lanterns should be located where the header and arch are seared together. Allow a minimum of 12 inches (30.5 cm) between the top of the lantern and the tent liner fabric. (See TM 10–8340–224–13). Place lanterns so that they will not be knocked down by or cause injury to personnel walking through the tent. Using 0.25 inch rope (manila) or wire secure the lantern and the liner or any fabric. After the lantern is in place fasten the hook and pile connecting finer sections together.
- **D** Allow lanterns to cool before releasing air pressure from the fuel tank. Do not smoke and make sure there is no open flame in the vicinity. Fuel fumes are explosive and highly flammable..
- **D** Do not add fuel to lanterns inside the FSC tent.
- D Do not hang fire extinguisher where you would have to walk through a possible fire to reach it...
- **D** Do not hang the fire extinguisher in an extremely hot or cold location (The nameplate on the unit tells you the exact temperatures it can withstand). Never throw it in a fire as it could explode.
- **D** Familiarize yourself with the location of the fire extinguisher and FSC exits. Make sure that a fire extinguisher is at hand when operating or servicing the burner units.
- **D** Bleed all burner units and lanterns of air before storage...
- **D** Drain all fuel from equipment into fuel can before movement or storage.
- Dry cleaning solvent. AA711 TY 1, used to clean parts is potentially dangerous to person and property. Avoid repeated and prolonged skin contact by wearing rubber or nonporous gloves when handling the solvent or material wet with dry cleaning solvent. Wash hands immediately after exposure with soap and water and use a lanolin based skin cream to prevent skin drying. Do not use near open flame or excessive heat. Rash point of solvent is 100 F (380C). Do not work with solvent in a closed room. Be sure there is good ventilation or the solvent vapors will build up in the air and become a poisonous mixture which can cause physical injury or even death.
- **D** Serious injury could occur if heavy equipment is moved/tilted without sufficient personnel to do the job. Use proper physical lifting procedures or use a suitable lifting device or dolly. Wear safety shoes, gloves, and other suitable protective clothing.

HEADQUARTERS
DEPARTMENT OF THE ARMY
WASHINGTON, DC, 30 SEPTEMBER 2005

CHANGE NO. 8

#### TECHNICAL MANUAL

# OPERATOR'S, UNIT AND DIRECT SUPPORT MAINTENANCE MANUAL (INCLUDING REPAIR PARTS AND SPECIAL TOOLS LIST)

# FOR FOOD SANITATION CENTER (FSC)

(NSN: 7360-01-277-2558)

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Sample 2028 Front/Back	Sample 2028 Front/Back
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2028 Front/Back	2028 Front/Back
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CHANGE NO. 7

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#### **TECHNICAL MANUAL**

# OPERATOR'S, UNIT, AND DIRECT SUPPORT MAINTENANCE MANUAL, INCLUDING REPAIR PARTS AND SPECIAL TOOLS LIST FOR THE

## FOOD SANITATION CENTER (FSC) MODEL FSC-90 NSN 7360-01-277-2558 (EIC: YCE) MODEL FSC-99 NSN 7360-01-467-0508 (EIC:

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1-3 through 1-6	1-3 through 1-6	B-3 through B-5/(6 Blank)	B-3 through B-5/(6 Blank)
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3-3 through 3-4	3-3 through 3-4	Blank 2028	Blank 2028
4-1 through 4-8	4-1 through 4-8		

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HEADQUARTERS
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Operator's, Unit and Direct Support Maintenance Manual Including Repair parts and Special Tools List

For

FOOD SANITATION CENTER (FSC)
MODEL FSC-90 NSN 7360-01-277-2558 (EIC: YCE)
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For

#### FOOD SANITATION CENTER (FSC) NSN 7360-01-277-2558 (EIC; YCE)

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4-5 and 44-6	4-5 and 4-6
5-1 and 5-2	5-1 and 5-2
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Operator's, Unit and Direct Support
Maintenance Manual
Including Repair Parts and Special Tools List
for
FOOD SANITATION CENTER (FSC)
NSN 7360-01-277-2558 (EIC: YCE)

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Operator's, Unit and Direct Support Maintenance Manual Including Repair Parts and Special Tools List for

#### **FOOD SANITATION CENTER (FSC)** NSN 7360-01-277-2558 (EIC: YCE)

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Dates of issue for original and changed pages are:

Original 0	30 May 1991	Change 5	30 September 1996
Change 1	2 September 1992	Change 6	29 October 1999
Change 2	1 February 1994	Change 7	30 May 2003
Change 3	31 October 1994	Change 8	30 September 2005
Change 4	3 August 1995		

#### TOTAL NUMBER OF PAGES IN THIS PUBLICATION IS 152, CONSISTING OF THE FOLLOWING:

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**TECHNICAL MANUAL** NO. 10-7360-211-13&P

HEADQUARTERS DEPARTMENT OF THE ARMY WASHINGTON, D.C., 30 May 1991

#### OPERATOR'S, UNIT, AND DIRECT SUPPORT, MAINTENANCE MANUAL INCLUDING REPAIR PARTS AND SPECIAL TOOLS LIST For

FOOD SANITATION CENTER (FSC)
MODEL FSC-90 NSN 7360-01-277-2558 (EIC: YCE)
MODEL FSC-99 NSN 7360-01-467-0508 (EIC: )
Current as of 1 November 1995

#### 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 these procedures, please let us know. Mail your letter or 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, US Army Soldier, Biological and Chemical Command, ATTN: AMSSB-RIM-L(N), Kansas St., Natick, MA 01760. 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.

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# CHAPTER 1 INTRODUCTION

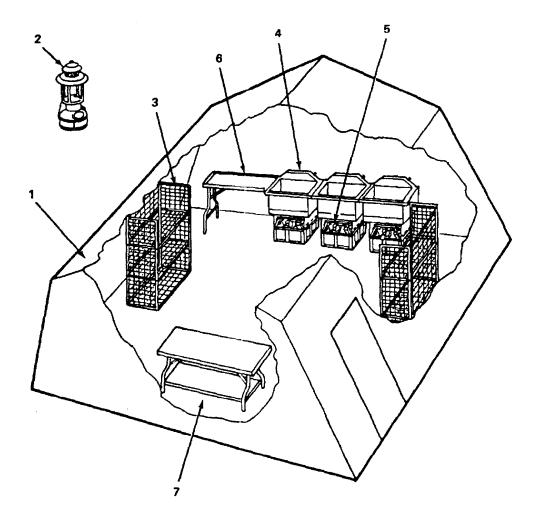
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#### SECTION I. GENERAL INFORMATION

- 1-1. SCOPE.
- a. Type of Manual. Operator's, Unit, and Direct Support Maintenance Manual.
- b. Model Number and Equipment Name. Food Sanitation Center (FSC) NSN 7360-01-277-2558,
- c. <u>Purpose of Equipment.</u> For sanitizing utensils and equipment used with the Modular Field Kitchen (MFK) which is covered in TM 10-7360-208-13&P. It is also used with the Trailer Mounted Field Kitchen, which is covered in TM 10-7360-206-13.
- d. Equipment Requirements.
  - (1) The FSC includes the equipment required by Military Occupational Specialty (MOS) 94B/94F personnel for sanitizing pots, pans, and utensils used to feed troops in the field.
  - (2) The FSC requires water and gasoline to operate.
  - (3) To support the sanitizing requirements of the Modular Field Kitchen the tools and ancillary items supplied with the MFK will be used jointly to service and support the FSC and MFK.
  - (4) To support the sanitizing requirements of the Trailer Mounted Field Kitchen the tools and ancillary items authorized to the Kitchen will be used jointly to service and support the FSC and MFK.
- 1-2. MAINTENANCE FORMS AND RECORDS. Department of the Army forms and procedures used for equipment maintenance will be those prescribed by DA PAM 738-751, The Army Maintenance Management Systems (TAMMS).
- 1-3. REPORTING EQUIPMENT IMPROVEMENT OR RECOMMENDATIONS (EIR'S). If your Food Sanitation Center needs improvement, let us know. Send us an EIR. 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 an SF 368 (Quality Deficiency Report). Mail it to us at Commander, U.S. Army Soldier, Biological and Chemical Command, A'TTN: AMSSB-RIM-E(N), Kansas St., Natick, MA 01760. We will send you a reply.
- 1-4. DESTRUCTION OF ARMY MATERIAL TO PREVENT ENEMY USE. Refer to TM 750-244-3 for procedures covering the destruction of Army material to prevent enemy use.
- 1-5. PREPARATION FOR STORAGE OR SHIPMENT. Refer to para 4-15 for procedures used to prepare the FSC for storage or shipment.
  - a. Administrative Storage.
    - (1) Placement of equipment in administrative storage should be for short periods of time when a shortage of maintenance efforts exists. Items should be in mission readiness within 24 hours or within the time factors as determined by the directing authority. During the storage period appropriate maintenance records will be kept.
    - (2) Before placing equipment in administrative storage, current Preventive Maintenance Checks and Services (PMCS) should be completed, shortcomings and deficiencies should be corrected, and all Modification Work Orders (MWO's) should be applied.
  - b. <u>Storage Site Selection.</u> Inside storage is preferred for items selected for administrative storage. If inside storage is not available, trucks, vans, conex containers and other containers may be used.

1-6. NOMENCLATURE/COMMON NAME CROSS-REFERENCE LIST. A cross-reference list of the common names used throughout this manual to the official nomenclature is provided below:

COMMON NAME	OFFICIAL NOMENCLATURE
Cable Assembly	Cable, Assembly, Power, Electrical
Electrical Light	Light, Extension
Extension Cord	Extension Cord, Short 25-Foot
Tent	Tent, Extendable, Modular (16' x 20' Utility) or Modular General
	Purpose Tent System (MGPTS) Type I, Small
Lantern	Lantern, Gasoline
Work Table	Table Assembly, Folding Legs
Drain Table	Table Assembly, Sink Drain
M2 Burner Unit	Burner Unit, Gasoline, Model M2/M2A
MBU	Modern Burner Unit
Modular Field Kitchen	Kitchen, Field, Modular



- 1. TENT
- 2. LANTERN, GASOLINE OR ELECTRIC LIGHT
- 3. STORAGE RACK ASSEMBLY 4. SINK ASSEMBLY
- 5. BURNER UNITS
- 6. DRAIN TABLE
- 7. WORK TABLE

Figure 1-1. Food Sanitation Center, Major Components/Equipment Orientation (tent cut-away).

#### Section II. EQUIPMENT DESCRIPTION AND DATA

#### 1-7. EQUIPMENT CHARACTERISTICS, CAPABILITIES, AND FEATURES.

Characteristics, capabilities, and features of the Food Sanitation Center Include:

- a. Used with the Modular Field Kitchen.
- b. Used with the Trailer Mounted Field Kitchen.
- c. Sanitize pots, pans and utensils used to feed troop units in the field.
- d. Protects personnel, performing sanitizing activities from weather.
- e. Major components are portable by two soldiers.
- f. Sets-up on-site within 1-hour by four soldiers and prepares for movement within 30-minutes.
- g. Provides sanitizing services for kitchens serving up to 400 troops on a sustaining basis.
- h. Two FSC's may be combined to double capacity.
- i. Day and night operation.
- j. Transported on 5-ton tactical cargo vehicle, or 2-1/2 ton tactical cargo vehicle.
- 1-8. LOCATION AND DESCRIPTION OF MAJOR COMPONENTS (FIG. 1-1).
  - TENT (1) Contains all food sanitation equipment and protects personnel from weather.

LANTERN (2) Two gasoline lanterns used for night operations. ELECTRIC LIGHT (2) Two electric light assemblies used for night operations. The electrical lights are used in place of the lanterns.

STORAGE RACK ASSEMBLY (3) Two storage rack assembly sets (each set formed by stacking three rack assemblies).

SINK ASSEMBLY (4) Three sink assemblies held together by two adapters over edge of sinks. Includes base and burner racks for installation of burners.

M2 BURNER UNIT/MODERN BURNER UNIT (MBU) (5) Three burner units are used to heat water In sink assemblies.

DRAIN TABLE (6) One drain table hooked to end of sink assembly: inclined for draining water.

WORK TABLE (7) Used as work area.

- 1-9. EQUIPMENT DATA (CONT).
  - a. Capabilities.
    - (1) Tent
- (a) Frame supported, 16 feet x 20 feet or MGPTS, small with internal Y pole
- (b) Provided with doorways on each side
- (c) Screened roof vents with flaps
- (d) Windows on each side
- (e) One stove pipe opening in roof, the MGPTS small will have 2 stove pipe openings
- (f) Equipped with cotton liner for cold weather operations.
- (g) Provided with tent fly to minimize the solar load In hot environments, and to permit the roof vents to be opened in bad weather.

#### TM 10-7360-211-13&P

- (h) Can be expanded In 8-foot sections to form a shelter of any length.
- (I) Refer to TM 10-8340-224-13 or TM 10-8340-240-12&P for additional tent data.

#### (2) LANTERN OR ELECTRICAL LIGHT

- (a) Provides artificial light.
- (b) Refer to FM-1 0-23 for lantern data only. See operator and unit maintenance for the electrical light.

#### (3) STORAGE RACK ASSEMBLIES

- (a) Used to hold, store or dry items (pots, pans, etc.) until their next required use.
- (b) Used as a shipping container for nested smaller items.
- (c) One side removable and can be used as a shelf when rack is used as a storage rack.
- (c) Three storage rack assemblies combined, form a set.

#### (4) SINK ASSEMBLIES

- (a) Heats water to boiling point (212 F/1 00 'C)
- (b) Covers available to hold heat.
- (c) For sanitizing pots, pans, and utensils.
- (d) Fills with up to 20-gallons (75.7 liters) of water.

#### (5) BURNER UNIT

- (a) M2 Bums fuel at rate of 0.5 gallons (1-9 liters) per hour.
- (b) Refer to TM 10-7360-204-13&P for additional M2 burner unit data.
- (c) Modern Burner Unit burns fuel at rate of 0.5 gallons (1.9 liters) per hour.
- (e) Refer to TM 10-7310-281-13&P for additional MBU burner unit data.

#### (6) DRAIN TABLE

- (a) Used for either scrubbing/stacking items needing sanitation.
- (b) Or used for partially drying sanitized items.

#### (7) WORK TABLE

Used for stacking pots and for pre-cleaning pans and utensils.

#### (8) ADDITIONAL FSC COMPONENTS

- (a) Sink immersion racks.
- (b) Thermometer and thermometer bracket for each sink.
- (c) Single sink drain hose assembly.
- (d) Three sink drain hose assembly.
- (e) Shelf for the work table or drain table.
- (f) Waste receptacles.
- (g) See Appendix C for illustration

#### 1-9. EQUIPMENT DATA (CONT).

(b) Specifications. Dimensions and weights for FSC equipment and accessories are listed In Table 1-1.

Table 1-1. FSC Major Components, Dimensions, and Weights

Component	Height In. mm		Width in. mm		Depth in. mm		Weight lbs. kg	
Storage Rack Assembly	26.00	660.0	48.00	1219.0	24.00	610.0	43.90	19.95
Sink Assembly	18.91	480.0	28.29	718.0	29.31	744.0	60.15	27.28
Burner Rack	14.97	380.0	20.68	525.0	23.92	607.0	16.43	7.45
Base Rack	11.23	285.0	23.84	605.0	25.02	635.0	9.31	4.22
Sink Immersion Rack	8.00	203.0	15.00	381.0	10.00	254.0	7.00	3.20
M2 Burner Unit	9.69	246.0	18.75	476.0	23.01	584.0	43.28	19.63
Modern Burner Unit	9.75	248.0	23.00	584.0	19.00	483.0	41.5	19.00
Drain Table	38.00	965.0	48.25	1255.0	27.00	685.0	41.12	18.65
Work Table	38.00	965.0	56.00	1422.0	26.00	660.0	57.44	26.05

#### Section III. TECHNICAL PRINCIPLES OF OPERATION

- 1-10. M2 BURNER UNITS/MBU. The M2 Burner Units use gasoline that Is pressurized by a hand pump. The pressurized fuel is filtered through a hot generator. The hot generator changes the fuel into a vapor. The vapor is united to produce heat under the sink assemblies. Modern Burner Unit (MBU). The MBU uses JP8 fuel, or alternate approved diesel fuel. The MBU can be refueled either manually or by the built in powered fueling function.
- 1-11. SINK ASSEMBLIES. The three sink assemblies are filled with up to 20 gallons (75.7 liters) of water each. The water is heated by the burner units to appropriate temperatures for washing, sanitizing, and rinsing of pots, pans, and other kitchen utensils.
- t-12. DRAIN HOSE ASSEMBLIES (SINGLE OR THREE SINK). The drain hose assemblies drain water away from the tent area. The single drain hose assembly is used for an optional single sink assembly usage.
- 1-13. DRAIN TABLES. A drain table is connected to one of the outer sink assemblies. The drain table is used either to hold the accumulated items that need washing and sanitizing or to partially air dry the washed items.
- 1-14. STORAGE RACK ASSEMBLY. These racks are used to complete the air-drying process of sanitized items and as storage until further use.

#### CHAPTER 2

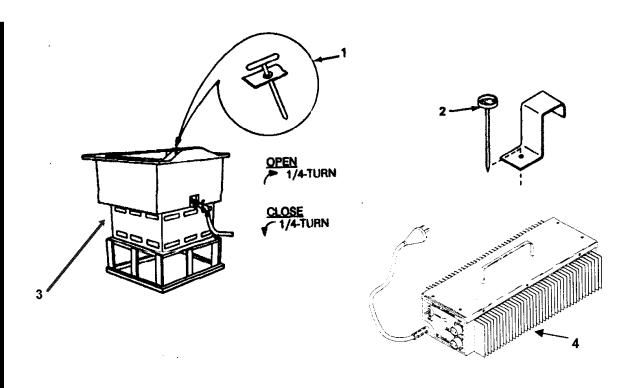
#### **OPERATING INSTRUCTIONS**

	SECTION/PARAGRAPH
Description and Use of Operator's Controls and Indicators	
General	
Controls and Indicators	2-2
Operator's Preventative Maintenance Checks and Services (PMCS)	II
PMCS Introduction.	2-3
PMCS Procedures	2-3b
Operation Under Usual Conditions	III
General	
Site Selection	2-5
Assembly and Preparation for Use	2-6
Operating Procedures	
Disassembly and Preparation for Movement	2-8
Operation Under Unusual Conditions	
General	
Operation in Extreme Cold	
Operation Under Rainy or Humid Conditions	
Operation in Salt Water Areas	
Operations at High Altitudes	2-13
Operations in Windy Conditions	2-14
Operations in Extreme Heat	2-15
Operation in Dusty or Sandy Areas	2-16

#### Section I. DESCRIPTION AND USE OF OPERATOR'S CONTROLS AND INDICATORS

**2-1. GENERAL.** The FSC has been designed for use in forward combat areas and has few moving parts, with the exception of the M2 burner unit, which is the heat source for heating water. FSC components have no electrical controls and indicators. The sinks are equipped with drain knobs and thermometers.

#### 2-2. CONTROLS AND INDICATORS.



KEY	COMPONENT/ ASSEMBLY	CONTROL OR INDICATOR	FUNCTION
1	SINK ASSEMBLY	Drain Knob	Closes/Opens Drains.
2	THERMOMETER	Temperature Dial	Reads Temperature from 0° to 220°F.
3	MODERN BURNER UNIT	Refer to appropriate TM the burner unit and pow TM 10-7310-281-13&P	for controls and indicators of er convertor, refer to
4	POWER CONVERTOR (MBU ONLY)		

#### Section II. OPERATOR PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS)

2-3. PMCS INTRODUCTION. Operator preventive maintenance checks and services are to be done to be sure the equipment is ready to use at all times. PMCS helps you find and fix defects before the equipment is damaged or fails

#### a. General.

- (1) Before you operate, always keep in mind the WARNINGS and CAUTIONS. Perform your before (B) PMCS prior to the equipment performing is intended mission.
- (2) While you operate always keep in mind the CAUTIONS and WARNINGS. Perform your during (D) PMCS when the equipment is being used in its intended mission.
- (3) After you operate, be sure to perform your after (A) PMCS after the equipment has been taken out of its mission mode.
- (4) If your equipment falls to operate, troubleshoot with proper equipment. Report any deficiencies using DA Form 2404, Equipment Inspection and Maintenance Worksheet. See DA PAM 738-750.

#### b. PMCS Procedures.

- (1) The purpose of the PMCS table is to indicate the order in which checks are to be done, as well as to indicate when they are to be done.
- (2) The first column of the table provides the item number (order) for accomplishment of checks and services. Column two (interval) provides when they are to be done. Application intervals are before (B), during (D), and after (A) use.
- (3) The "Equipment Is Not Ready/Available" if column contains the criteria that will cause the equipment to be classified as not ready/available because of inability to perform its combat mission.
- (4) Report deficiencies in accordance with DA PAM 738-750. Correct deficiencies in accordance with the "Procedures/Check for and have Repaired or Adjust as Necessary" column and trouble-shooting procedures contained in Table 3-1.
  - (5) Perform PMCS for the tent in accordance with TM 10-8340-224-13 or TM 10-8340-240-12&P.
  - (6) Perform PMCS on the M2 burner units in accordance with TM 10-7360-204-13&P.
  - (7) Perform PMCS on the MBU in accordance with TM 10-7310-281-13&P.

#### NOTE

Use Table 2-2 item number column to get the numbers for the "TM Item Number" column of DA Form 2404, Equipment Inspection and Maintenance Worksheet in recording results of your PMCS.

Table 2-2. Operator's Preventive Maintenance Checks and Services

		B-E	Before	e Operation	D-During Operation A-After Operation	
Item No.		rval		Item to be inspected	Procedure	Equipment Not Ready/Available If:
1	<u>В</u>	D	A •	Tent	IAW TM 10-8340-224-13 or TM 10-8340-240-12&P.	
2	•			Lantern/ Electrical Light	Check for leaks, dents, broken glass and safety of operation. Ensure the electrical light tube is not cracked or broken. Ensure the cable ties on the light are secure.	Light tube is cracked or Broken. Replace light Tube. Cable assembly is torn/cut.
					Visually ensure the light bulb is not cracked or broken.	Light bulb is cracked or broken. Notify unit maintenance.
					Ensure that the light bulb is working. Inspect the light-hanging strap for tears or fraying. Ensure cable assembly is not torn/cut. Ensure the extension cord does is not torn or cut.	Light-hanging straps are torn or frayed. Extension cord is torn/cut.
3	•			Storage Rack Assembly	Inspect for damaged frame or front cover. Check that rack units stack properly. Check wire mesh for bends, breaks or broken welds at the tabs. Check that front cover/shelf is not warped.	
4	•	•		Sink Assembly	Check assembly for leaks or clogged drains. Check for damage or deformation that would prevent installation, assembly or operation of components.	Sinks leak or do not drain. Components will fit not together or are damaged.
					Ensure the rear of the sink is aligned with the rear of the burner rack.	
5			•	Sink Drain Hose Assembly	Check assemblies for leaks or clogged hoses. Check coupling halves for free operation. Check to insure that each hose end is securely attached with a hose clamp. Insure that hose clamp is tight.	
6	•			Sink Immersion Rack	Check for corrosion, bent or broken mesh. Check for loose wire ends.	
7	•			Thermometer	Check thermometer for damage. Insure the stem is not bent and the dial is legible. Inspect the glass for breaks. Check the hex nut on top of stem for tightness.	
8a	•			M2 Burner Unit	Perform PMCS IAW TM 10-7360-204-13&P.	
8b	•			MBU	Perform PMCS IAW TM 10-7310-281-13&P.	
9	•			Drain Table	Check to ensure drain table is secure and sufficiently inclined to permit water to drain off. Check for bent or damaged parts.	
10	•			Work Table	Check to ensure tables are level and secure. Check for broken welds, loose or missing rivets, clamps and brackets.	
11	•			Fire Extinguisher	Check to ensure charge reading is in the green and that the seal is not broken.	Fire extinguisher or seal is missing or broken, or charge is reading in the red.

## Section III. OPERATION UNDER USUAL CONDITIONS

#### 2-4. GENERAL

- a. The instructions in this section are for personnel who operate the FSC. Refer to TM 10-8340-232-13 or TM 10-8340-240-12&P for tent instructions. Refer to TM 10-23 for lantern instructions. Refer to TM 10-7360-204-13&P for M2 burner unit instructions. Refer to TM 10-7310-281-13&P for MBU instructions.
  - b. The basic operational configuration for the FSC is shown in Figure 2-1.
  - c. All equipment required for this configuration arrives in one truck packed as specified in FM 10-23.

#### 2-5. SITE SELECTION.

#### WARNING

To prevent fires do not use flammable material as a base for the FSC. Fire may cause injury to personnel or damage the equipment.

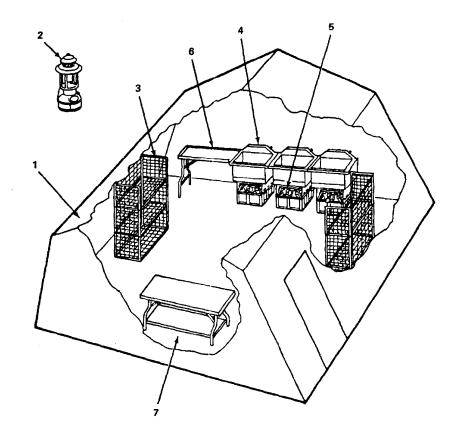
- a. Choose a site clear of large rocks and trees with firm ground and good water drainage.
- b. You need approximately 600 square feet (56 square meters) to set-up the TEMPER tent or 1156 square feet for the MGPTS.
- c. If possible avoid dusty or sandy conditions.
- d. Use gravel or the other suitable material for base where ground is wet.
- e. An additional 600 square feet (56 square meters) is needed for the MFK if used with the FSC.
- f. An additional 900 square feet (83 square meters) is needed for the trailer mounted field kitchen if used with the FSC.

#### 2-6. ASSEMBLY AND PREPARATION FOR USE.

- a. Preparation procedures.
- (1) Remove all items that were packaged in the major components of the FSC and place them in a convenient location.
- (2) Refer to TM 10-8340-224-13 or TM 10-8340-240-12&P for set-up of tent, FM 10-23 for lantern instructions, and below for operating the electrical light.

#### WARNING

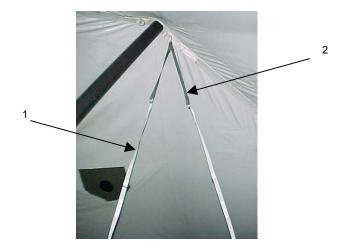
- Do not hang fire extinguisher where you would have to walk through a possible fire to reach it.
- Do not hang the fire extinguisher in an extremely hot or cold location. (Check unit nameplate for exact temperature limitations). Never throw it in a fire as it could explode.



- 1. TENT
- 2. LANTERN (GASOLINE) OR ELECTRICAL LIGHT 3. STORAGE RACK ASSEMBLY
- 4. SINK ASSEMBLY
- 5. BURNER UNITS
- 6. DRAIN TABLE
- 7. WORK TABLE

Figure 2-1. Food Sanitation Center - Basic Operational Configuration.

(2.1) See instructions below to operate the electrical light.



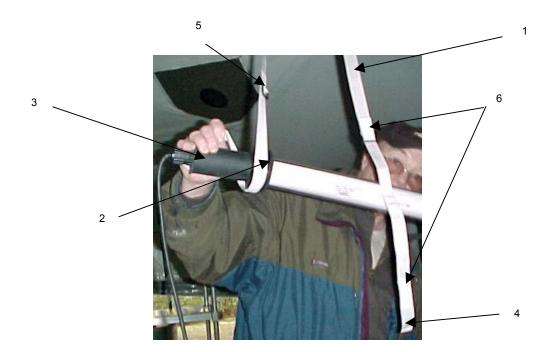
#### 2-6. ASSEMBLY AND PREPARATION FOR USE (CONTD).

#### WARNING

- ELECTRIC SHOCK. HIGH VOLTAGE is used in the operation
  of this equipment. DEATH ON CONTACT may result if
  personnel fail to observe safety precautions. Never work on
  electrical equipment unless there is at least one other person
  nearby who is familiar with the operation and hazards of the
  equipment. That person should also be competent in giving
  first aid.
- Disconnect equipment from power source before performing any maintenance. Be careful not to contact high voltage connections when removing, installing, or operating this equipment. Whenever possible, keep one hand away from the equipment to reduce the hazard of current flowing through vital organs of the body. Voltages as low as 50 volts may cause death.
- For artificial respiration, refer to FM 21-11. Do not stand in
  water while handling live power cords or electrical shock may
  result. Position all power cables so that they are out of the way
  during operation and are not lying in water. Prior to
  installation, assure power cables are not damaged or frayed.
  Prior to installation, assure power cables outer jackets are not
  cut or damaged and there are no exposed wires.
- 1. Insert one light-hanging strap (1) through the loop in the tent light hanger (2).
- 2. Insert one end of that light-hanging strap (1) through the loop in the other end of the same light-hanging strap (1).
- 3. Pull the light-hanging strap (1) tightly through until it knots at the loop of the tent light hanger (2). Repeat this procedure for the second strap.

## NOTE

Ensure the bulb is facing the ground and the reflector is on top.

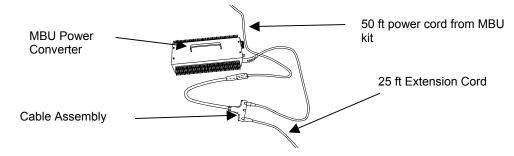


## TM 10-7360-211-13&P

- 2-6. ASSEMBLY AND PREPARATION FOR USE (CONTD).
- 4. Secure the light-handing strap (1) around the lip (2) of the light (3) on both sides.
- 5. Insert the loose end of the strap (4) through the "D" ring (5) and secure with the hook and pile fasteners (6).
- 6. Repeat procedure for the other light.

## **NOTE**

When connecting the electric light, connect the cable assembly to the 50 ft extension cord, then connect the MBU power converter and the 25 ft extension cord to the cable assembly. Plug the 25 ft extension cord into the electric light.



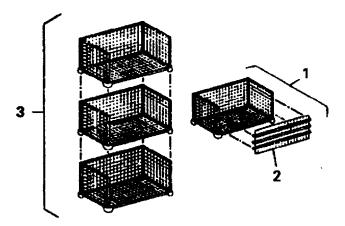
7. Insert plug from the second light into the first. Connect the 50 ft power cord from the MBU kit to the power source.

## 2-6 ASSEMBLY AND PREPARATION FOR USE (CONTD).

(3) Hang the fire extinguisher in an acceptable location with the top 3-1/2 to 5 feet (1.25 to 1.75 meters) above the floor near an exit.

## **WARNING**

- The burner units should be moved a minimum of 50 feet (15.3 meters) from the FSC and the fuel storage area prior to servicing. Do not smoke and ensure that there is no open flame in vicinity; fire or explosion may result.
- The gasoline lantern must be suspended from a frame member of the tent. Allow a minimum of 12 inches (305 mm) between the top of the lantern and the tent liner or fabric. (See TM 10-8340-224-13). Place lanterns so that they will not be knocked down by, or cause injury to personnel walking through the tent.
- (4) For night operation place the lantern in a convenient location as follows:
  - (a) In the area selected for the lantern, locate a position in the tent where a header and an arch are secured together.
  - (b) Allow a minimum of 12 inches (305 mm) between the top of the lantern and liner or fabric, and secure the lantern to the header.



(c) When the lantern is not required, turn it off let it cool down.

b. Storage Rack Assembly. The storage rack assembly (1) may be used as a single rack unit with a front cover (2) or as a set (3) stacked in two or three units with the front cover (2) used as a shelf piece.

## 2-6 ASSEMBLY AND PREPARATION FOR USE (CONTD).

c. Assembly of Sink Assemblies. Assemble the sinks as follows:

#### **WARNING**

Serious injury could occur if heavy equipment is moved/lifted without sufficient personnel to do the job. Use proper physical lifting procedures or use a suitable lifting device or dolly. Wear safety shoes, gloves and other suitable protective clothing.

#### WARNING

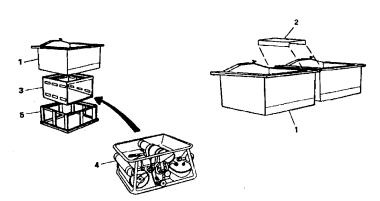
The sink assembly must sit correctly on the burner rack. If the sink assembly is not installed correctly, the improper placement will block the flue and cause the heat guard and sink assembly to overheat. Keep body parts away from the heat guard. Failure to do so may cause serious injury to personnel.

#### **CAUTION**

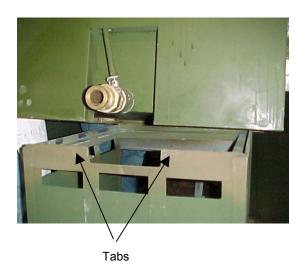
Ensure the burner unit is pushed all the way back into the burner rack. Ensure the back of the sink assembly is aligned with the back of the burner rack and the burner rack tabs are inserted in the flue on the sink. When the sink assembly is properly placed on the burner rack, it will help prevent the burner from overheating. Failure to do so will shorten the life span of the equipment.

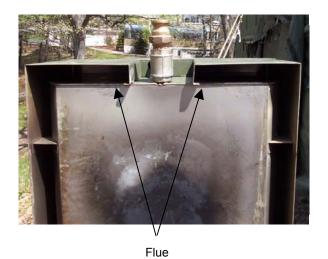
#### **CAUTION**

Make sure you leave enough air space between the tent wall and the sink assemblies. Frequently check for heating of the tent wall while the burner units are in use. Move the burner units further away from the tent wall if necessary to prevent possible ignition of the tent.



- (1) Move three sink body assemblies (1), sink adapters (2), burner racks (3), with burner units in place (4), and base racks (5) to the sink locations.
- (2) Place the base rack (5) in position; place the burner rack (3) with burner unit (4) on top of base rack (5). Ensure the burner unit is pushed all the way into the burner rack.
  - (3) Place the sink body assembly (1) on top of burner rack (3).





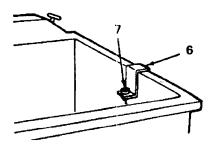
(4) Ensure the cut-out on the back of the burner rack (3) is inserted in the cut-out of the sink body assembly (1).



NOTE

Notice the rear wall of the sink is aligned with the rear of the burner rack.

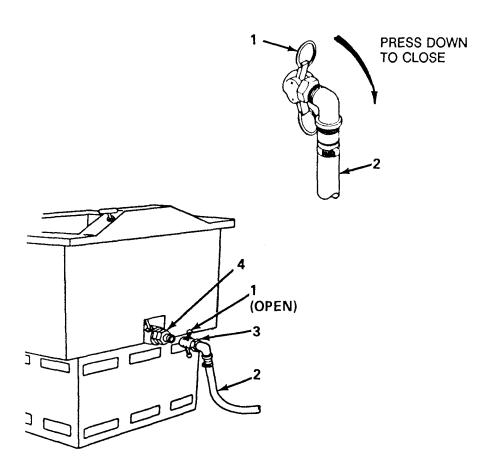
(5) Connect sinks with adapters (2).



(6) Attach thermometer bracket (6) to front or side; install thermometer (7) in sink assemblies to be used.

# 2-6. ASSEMBLY AND PREPARATION FOR USE (CONT).

d. Assembly of Sink Drain Hoses.



- (1) Open each of the clamps (1) on the sink drain hose assembly (2)
- (2) Insert each drain hose assembly coupling (3) over each sink drain coupling (4).
- (3) Close each clamp (1).

## NOTE

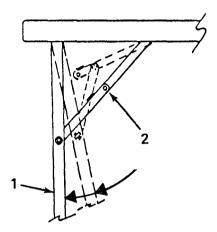
Place the drain hose output end in a position where minimum mud will form. If excess mud forms during use, relocate the drain hose output end.

# NOTE

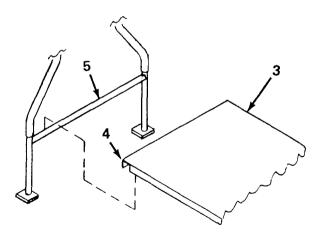
If required, use single sink drain hose assembly for a single sink installation.

# 2-6. ASSEMBLY AND PREPARATION FOR USE (CONT).

e. Drain Table and Work Table.



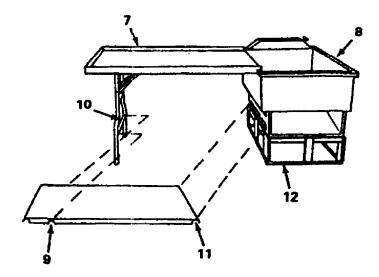
(1) Pull out the leg assemblies (1) until the linkage (2) snaps into place in the fully extended position.



(2) Place the shelf (3) so that the end lips (4) rest on the leg crossbars (5).

## 2-6. ASSEMBLY AND PREPARATION FOR USE (CONTD).

(3) Take the work table to the operating location (Figure 2-1).



- (4) Attach lip of the drain table (7) to the end of sink body assembly (8).
- (5) If used with drain table, position the shelf inner cutout (9) across the leg crossbar (10) and place the opposite lip (11) of the shelf on the base rack (12).

#### d. Optional Configurations.

- (1) General. To sanitize the pots, pans, and utensils used with two or three consolidated MFK's, two FSC's can be consolidated as shown in Figure 2-2. To operate in the consolidated configurations, the site must be large enough to accommodate the combined feeding area for the MFK's as well as the 32 x 20 foot (9.8 x 6.1 meters) sanitation area.
- (2) Two FSC's Consolidated. When two FSC's are consolidated and used with two MFK's, the equipment is packed, transported, and unloaded from four standard 2-1/2 ton or 5-ton tactical vehicles, or two vehicles with 1-1/2 ton cargo trailers as described in FM 10-23. To operate in this consolidated configuration, the following FSC major components are required:
  - (a) One tent, expandable modular (four 8 foot sections) or one MGPTS Type I Small.

#### NOTE

Additional tents, if available, can be used for food storage.

- (b) Four storage rack sets (12 storage rack assemblies).
- (c) Six sink assemblies.
- (d) Six burner units.
- (e) Two drain tables.
- (f) Two work tables.

## (2) Procedure.

(a) Upon arrival at the selected site, set up the tent(s) as directed in TM 10-8340-224-13 or TM 10-8340-240-12&P.

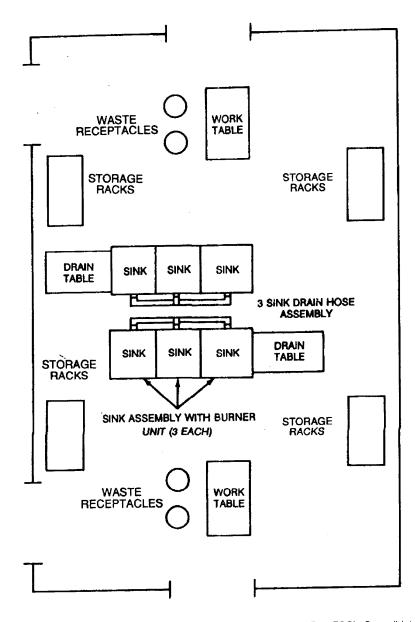


Figure 2-2. Food Sanitation Center - Optional Configuration, Two FSC's Consolidated

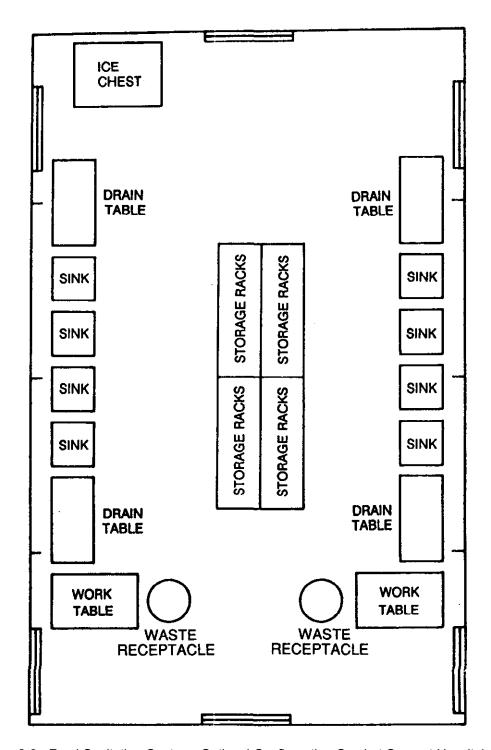


Figure 2-3. Food Sanitation Center – Optional Configuration Combat Support Hospital, Deployable Medical Systems

#### TM 10-7360-211-13&P

- 2-6. ASSEMBLY AND PREPARATION FOR USE (CONTD).
- (b) Assemble and set up remaining equipment In accordance with procedures in paragraph 2-6 and as shown In Figure 2-2.
- (c) Prepare the M2 burner units in accordance with TM 10-7360-204-13&P or the MBU IAW TM 10-7310-281-13&P.
- (4) Deployable Medical Systems. An optional configuration, 32 x 20 foot (9.8 x 6.1 meters), used by DEPMED's personnel in a combat support hospital is shown in Figure 2-3. Refer to Deployable Medical Systems User's Manual for Instructions.

# 2-7. OPERATING PROCEDURES. WARNING

Familiarize yourself with the location of the fire extinguishers and FSC exits. Make sure that a fire extinguisher is at hand when operating or servicing the burner units.

- a. <u>General</u>. Before operating the FSC you must be familiar with the operating procedures and Instructions for all of the equipment to avoid Injury to personnel or damage to the equipment. While operating the FSC, additional Items are required. See Appendix D and E for a complete listing.
- b. <u>Preparing Water</u>. Water is required to operate the FSC. Water must be treated in accordance with TB Med 530. Water must have a residual chlorine content of five parts per million (PPM). Additional guidance may be found In FM 10-23 and FM 10-52.

## **WARNING**

- Establish a safe area for lighting burner unit that Is a minimum of
   50 feet from the refueling, fuel storage, cooking and sanitizing area.
- Extreme heat will cause burner unit tank pressure to increase because
   of fuel expansion, insure you start with prescribed pressure IAW
   TM 10-7360-204-13&P.
- Fuel M2 burner units in servicing area only. When filling the fuel tank, always provide metal to metal contact between the container and the fuel tank. Remove spilled fuel immediately. Keep fuel tank and fuel container caps tight at all times. Do not smoke and ensure that there is no open flame in the vicinity; fire or explosion may result. Do not operate the M2 burner units if fuel or other flammable material is on or near the M2 burner units.
- Frequently check for heating of the tent or shelter wall while burner units are In use. Move the burner units if necessary to prevent possible ignition of the tent.
  - c. Burner Units. Proceed as follows when preparing the burner units for use:
- (1) Following all precautions, and instructions in TM 10-7360-204-13&P (M2) or TM 10-7310-281-13&P (MBU), start the burner unit. Monitor the burner unit for proper flame color.

## WARNING

Do not install an operating burner unit under a sink that is not filled with water.

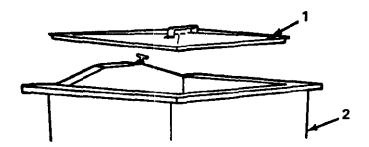
## 2-7. OPERATING PROCEDURES (CONTD).

(2) When the M2 burner unit has reached a stable operating state, carefully slide it into the burner rack under the sink. Do not use force.

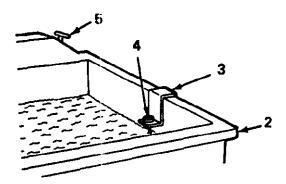
## WARNING

Allow burner units and lanterns to cool before releasing air pressure from fuel tanks. Do not smoke and make sure there is no open flame in the vicinity. Fuel fumes are explosive and highly flammable.

- (3) When no longer required for operation, turn off the burner unit and allow it to cool.
- d. <u>Sink Assemblies.</u> Proceed with the operation of the sinks as follows:



(1) Remove the covers (1) from the sink assemblies (2) to be used.



(2) Ensure the thermometer brackets (3) and thermometer (4) are attached to the sink assemblies (2).

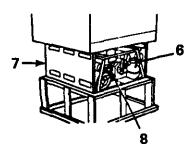
## **CAUTION**

Do not over tighten the drain knobs (5) when rotating counterclockwise to close the drains. Very little pressure is required to close the drain. Over tightening can damage the drain valves.

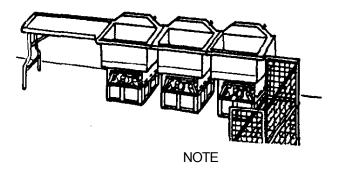
- (3) Close the drains on the sink assemblies (2) by rotating the drain knobs (5) ½ turn counterclockwise.
- (4) Fill the sink assemblies (2) with 20 gallons (75.7 liters) of water, approximately 8 inches (203 mm) deep.
- (5) Light the burner units IAW paragraph 2-7c.

#### TM 10-7360-211-13&P

## 2-7. OPERATING PROCEDURES (CONTD).



- (6) Raise the heat guard and carefully slide the M2 burner unit (6) in the burner rack (7). Do not force.
- e. Manual Cleaning and Sanitizing.
  - (1) Water must be prepared IAW TB Med 530.
  - (2) Clean all sinks before use.
  - (3) Pre-scrape items to remove food.
- (4) Wash in one sink with <u>HOT</u> (120°F to 125°, 49°C, to 52°C) detergent solution. Change water when too dirty.
  - (5) Scrub items until free of all food and dirt.
  - (6) Rinse off detergents with HOT (120°F to 140°F, 49°C to 60°C) clean water in second tank.



Be sure all items are completely covered with water.

- (7) Lower loaded sink immersion rack (Appendix C, Item 7) into <u>CLEAN HOT WATER</u> (170°F, 77°C minimum) in a third sink.
  - (8) Leave racks in water for at least 30 seconds.
  - (9) Remove, air dry, and store sanitized items.
  - f. Stopping Equipment.
- (1) Upon completion of washing and sanitizing operations, shut off the M2 burner unit IAW TM 10-7360-204-3&P or the MBU IAW TM 10-7310-281-13&P.
  - (2) Remove water from the sinks by rotating the drain knobs 1/4 turn clockwise.

#### 2-6. DISASSEMBLY AND PREPARATION FOR MOVEMENT.

a. Disassembly.

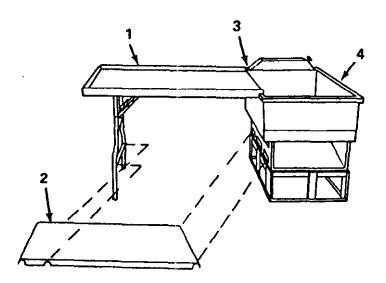
## **WARNING**

- Allow the burner units and lanterns to cool before releasing air pressure
   from fuel tanks. Do not smoke and make sure there is no open flame in
   the vicinity. Fuel fumes are explosive and highly flammable.
- Bleed all burner units and lanterns of air before storage.
- Drain all fuel from equipment into fuel can before movement or storage.

## NOTE

As required, clean all FSC components in hot soapy water. Rinse with clean water and dry thoroughly prior to assembly, packaging, and packing.

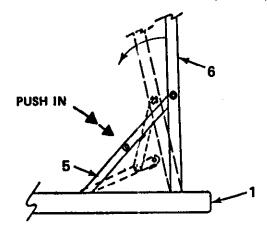
- (1) Burner Units.
- (a) Remove the burner units from the sink assemblies. Drain the fuel tanks and prepare the burner unit for movement IAW TM 10-7360-204-13&P or TM 10-7310-281-13&P.
  - (b) Return burner units to the sink assembly burner racks.
  - (2) Drain table.



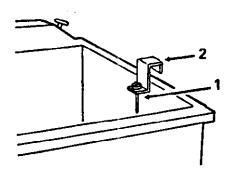
(a) Remove shelf (2) and detach the drain table (1) from the rim (3) of the sink assembly (4).

## TM 10-7360-211-13&P

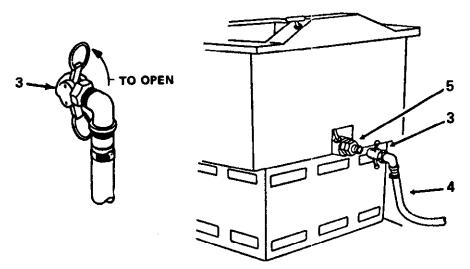
2-8. DISASSEMBLY AND PREPARATION FOR MOVEMENT (CONTD).



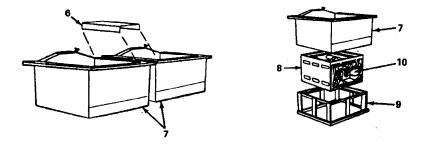
- (b) Turn the drain table (1) upside down and push-in the linkage (5) from its fully extended position. Fold the table legs (6).
  - (3) Sink Assemblies



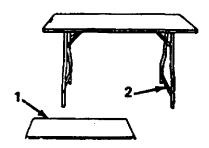
- (a) Remove the thermometers (1) and thermometer brackets (2) from the sinks.
- (b) Drain sinks.



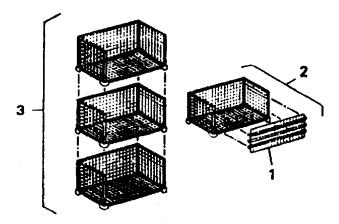
(c) Open the couplings (3) on the drain hose assemblies (4) and disconnect the couplings from a single or three sink drains (5). Drain all water from the hose.



- (d) Remove sink adapter (6) to separate the sink body assemblies (7), burner rack (8), and base rack (9); leave the burner units (10) in the burner racks (8).
  - (4) Work Table.



- (a) Remove the shelf (1) from the work table crossbars (2).
- (b) Turn the table upside down.
- (c) Push-in the linkage of each table leg from its fully extended position, and fold the table legs to lie flat against the bottom of the table top. Refer to illustration on drain table, paragraph 2-8a(2).
  - (5) Storage Racks Assembly.



- (a) Remove the shelves (front cover) (1) from the storage rack assembly (2).
- (b) Disassemble the stacked rack units (3) and place the front cover (1) on each storage rack assembly (2).

## 2-8. DISASSEMBLY AND PREPARATION FOR MOVEMENT (CONTD).

#### WARNING

Bleed air and drain gasoline into fuel can prior to storage.

(6) Lantern.

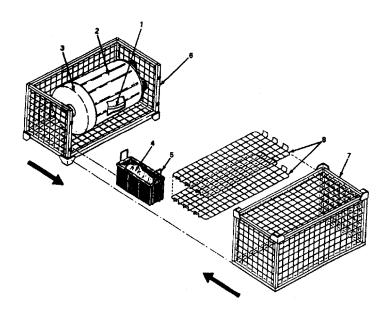
Remove from its position in tent.

## (6.1) Electrical Light.

#### NOTE

Ensure that one person secures the light while the second person disassembles it.

- (a) Disconnect the power cord from the power source.
- (b) Disconnect the hook and pile fasteners and pull the strap out from the "D" ring.
- (c) Release the light-hanging strap from the lip of the light on both sides.
- (d) Release the knot that connects the light-hanging strap to the tent light hanger and disconnect. Repeat this procedure for the second strap.
  - (f) Repeat procedure for the other light.
  - (7) Tent. Prepare the tent for movement by striking it IAW TM 10-8340-224-13 or TM 10-8340-240-12&P.
- b. <u>Packaging</u>. Equipment and items that require packaging prior to loading into the truck are listed in Appendix C. Package these items, using space available in the sinks and the storage rack assemblies to accommodate smaller items.



# 2-8. DISASSEMBLY AND PREPARATION FOR MOVEMENT (CONTD).

- (1) Sink Assemblies.
  - (a) Place the burner unit of each sink assembly into the burner rack.
  - (b) Place the base rack, with the bottom facing down, over the burner rack.
  - (c) Place this assembly Into the sink body assembly.
  - (d) Wrap the thermometer and it's bracket In barrier material (Item 1. Appendix E) and place on top of the burner units.
  - (e) Place the sink cover on the sink body assembly.
- (2) Storage Rack Assembly (Two-piece Set No. 1).
  - (a) Place the single sink drain hose assembly (1) into one waste receptacle (2) and cover with lid (3).
  - (b) Place two gasoline lanterns (4), in cartons or barrier material (Item 1, Appendix E), into one immersion rack (5).
  - (c) Place the nested waste receptacle and nested immersion rack into one storage rack assembly (6).
  - (d) Position another empty storage rack assembly (7) close to the packaged one.
  - (e) Install as low as possible, two shelves (8) into the empty storage rack assembly (7).

## **WARNING**

Serious injury could occur if heavy equipment is moved/lifted without sufficient personnel to do the Job. Use proper physical lilting procedures or use a suitable lifting device or dolly. Wear safety shoes, gloves and other suitable protective clothing.

- (f) Use two-man lift (one man each end), carefully rotate the two-shelved storage rack (7) and (8). The bottom is now top.
  - (g) Position each of the storage rack assemblies so that each of its empty sides face each other.
  - (h) Slide each storage rack assembly together to form a box.
- (3) Storage Rack Assembly (Two-Piece Set No. 2)
- (a) Perform same procedure as in paragraph 2-8b(2), packaging three sink drain assembly into waste receptacle, and fire extinguisher In carton or barrier material (item 1, Appendix E) into one immersion rack.
- (4) Storage Rack Assembly (Two-Piece Set No. 3).

Perform same procedure as in paragraph 2-8b(2), packaging miscellaneous equipment.

#### Section IV. OPERATION UNDER UNUSUAL CONDITIONS

2-9. GENERAL This section contains instructions for operation of the FSC in unusual environmental conditions of extreme cold, extreme heat, dusty or sandy areas, rainy and humid conditions, salt water areas, high altitudes, and under windy conditions. Refer to TM 10-7360-204-13&P for M2 burner unit operation under unusual conditions or TM 10-7310-281-13&P for MBU.

2-10. OPERATION IN EXTREME COLD (BELOW 0°F/-18°C).

## **WARNING**

- CARBON MONOXIDE GAS CAN KILL YOU.
- Carbon monoxide gas is not visible and has no smell, but it can kill you.

Breathing air with carbon monoxide produces symptoms of headache, dizziness, loss of muscular control, a sleepy feeling, and coma. Brain damage or death can result from heavy exposure. Carbon monoxide occurs in exhaust fumes of fuel-burning equipment such as the burner units. Carbon monoxide can become dangerously concentrated under conditions of no air movement. Precautions must be followed to ensure safety of personnel when you operate the burner units. Open vents in the tent to provide ventilation and prevent the accumulation of carbon monoxide gas.

- Be ALERT at all times during FSC operation for symptoms of exposure.
   IMMEDIATELY VENTILATE the tent. If symptoms persist, move affected personnel to fresh air and keep warm. DO NOT PERMIT PHYSICAL EXERCISE.
   If necessary, give artificial respiration.
- FOR ARTIFICIAL RESPIRATION REFER TO FM 21-11.
- THE BEST DEFENSE AGAINST CARBON MONOXIDE POISONING IS GOOD VENTILATION.
- Operators be aware of signs of dangerous combustion products. Report any signs of headache, distress, dizziness, nausea and weakness.
- Do not touch the FSC equipment metal parts when temperatures are below freezing without gloves, as injury may result.

#### NOTE

In extreme cold allow a longer period of time than normal to heat water to the desired temperature.

- a. Operate the burner units in extreme cold conditions IAW TM 10-7360-204-13&Pfor the M2 and TM 10-7310-281-13&P for the MBU.
- b. Vent tent as often as possible. It is best to leave doors, windows, and roof vents open slightly. If this is not possible, open doors and roof vents periodically to remove stuffiness. At high altitudes do this more often. Operators should periodically leave the tent for a brief time.
- c. If any eye, nose, or throat irritation is noted vent the tent and adjust burners IAW the appropriate burner TM to obtain a clean flame.
- d. To reduce the environmental effects of extreme cold, use of the cold weather components shown in Appendix D. is recommended.

#### 2-11. OPERATION UNDER RAINY OR HUMID CONDITIONS.

- a. When not in the tent, burner units must be covered with canvas or other waterproof material. Remove the cover during dry periods, expose to open air, and allow units to dry.
- a. Operate the burner units under rainy or humid conditions IAW TM 10-7360-204-13&P for the M2 and TM 10-7310-281-13&P for the MBU.

#### 2-12. OPERATION IN SALT WATER AREAS.

- a. Keep equipment free from contact with salt water whenever possible. If contact is made, or if equipment is exposed to salt spray, wash equipment frequently with clean fresh water.
- b. Operate the M2 burner units in salt water areas IAW TM 10-7360-204-13&P for the M2 and TM 10-7310-281-13&P for the MBU.

## 2-13. OPERATION AT HIGH ALTITUDES.

Operate the burner units at high altitudes IAW TM 10-7360-204-13&P for the M2 and TM 10-7310-281-13&P for the MBU.

#### 2-14. OPERATION IN WINDY CONDITIONS.

- a. Whenever possible, take advantage of natural barriers to block the wind.
- b. Close the doors and windows of the tent on the windward side and open the tent on the leeward (downwind) side.
- c. Operate the burner units in windy conditions IAW TM t0-7360-204-13&P for the M2 and TM 10-7310-281-13&P for the MBU.

## 2-15. OPERATION IN EXTREME HEAT.

#### **WARNING**

- Extreme heat will cause tank pressure to increase because of fuel expansion. Make sure you start with prescribed pressure IAW TM 10-7360-204-13&P for the M2 and TM 10-7310-281-13&P for the MBU.
- Check air pressure frequently during burner unit operation.
- Operators be aware of signs of heat stress. Use maximum ventilation. All windows, doors, and roof vents should be opened.
- a. Operate the burner units in extreme heat IAW TM 10-7360-204-13&P for the M2 and TM 10-7310-281-13&P for the MBU.
  - b. The tent should be operated with maximum ventilation. All windows, doors, and roof vents should be opened.

## TM 10-7360-211-13&P

# 2-16. OPERATION IN DUSTY OR SANDY AREAS.

- a. Take advantage of any natural barriers that may be available when selecting the site.
- b. Where water is available, keep the immediate area wetted down. Keep all equipment as clean as possible.
- c. Keep dirt and grit out of the burner unit fuel system and reserve fuel supply.
- d. Operate the burner in dusty or sandy areas IAW TM 10-7360-204-13&P for the M2 and TM 10-7310-281-13&P for the MBU.

# **CHAPTER 3**

# OPERATOR MAINTENANCE INSTRUCTIONS

# SECTION/PARAGRAPH

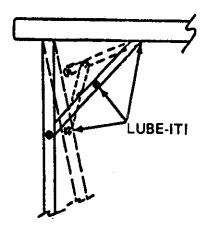
Lubrication Instructions	
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Lubrication Procedures	
Operator Troubleshooting Procedures	II
General	3-3
Burner Unit and Tent	
Operator Maintenance Procedures	III
General	
Maintenance Procedures	
Cleaning and Sanitation	3-7

#### Section I. LUBRICATION INSTRUCTIONS

3-1. GENERAL. The FSC equipment has only a limited number of moving parts that require lubrication. Perform these lubrication functions whenever equipment is being prepared for storage or the indicated parts are not moving freely. All specified lubrication materials are listed in Appendix E.

## 3-2. LUBRICATION PROCEDURES.

- a. <u>Drain Table.</u> Lubricate linkage of the leg adapter and brace joint with general purpose oil. (Item 3, Appendix E).
- b. Work Table. Lubricate linkage of each leg adapter and brace joint with general purpose oil. (Item 3, Appendix E).



Section II. OPERATOR TROUBLESHOOTIN PROCEDURES.

3-3. GENERAL. Table 3-1 lists common malfunctions that you may find during the operation or maintenance of the FSC or its components. You should perform the tests and inspections and corrective actions in the order listed.

## NOTE

This manual cannot list all malfunctions that may occur nor all tests, inspections, or corrective actions. If a malfunction is either not listed or is not corrected by listed corrective actions, notify unit maintenance.

3-4. BURNER UNIT AND TENT. Perform operator's troubleshooting on the burner units IAW TM 10-7360-204-13&P for the M2 and TM 10-7310-281-13&P for the MBU.

## **Table 3-1. Operator Troubleshooting**

#### **MALFUNCTION**

# **TEST OR INSPECTION**

#### **CORRECTIVE ACTION**

## 1. SINK ASSEMBLY IS NOT STABLE.

Step 1. Check burner rack and base rack for stability.

If not stable, move equipment to level ground.

If not stable, ensure the tabs on the burner rack are inserted in the flue of the sink.

## 2. SINK ASSEMBLY DOES NOT HEAT WATER PROPERLY.

Step 1. Check to see if the burner flame is on.

Light the burner in accordance with TM 10-7360-204-13&P.

Step 2. Check to see if burner flame is green.

Adjust the burner in accordance with TM 10-7360-204-13&P.

Step 3. Check to see if the burner flame is the proper height for the desired water temperature.

Adjust the burner for the temperature desired in accordance with TM 10-7360-204-13&P.

#### 3. WATER IN SINK DOES NOT DRAIN.

Step 1. Observe water drainage and check for clogged drain.

Remove obstruction from sink drain or drain hose. Thaw if frozen.

Step 2. Check for excessive mud at drain hose output.

Relocate drain hose output end.

## 4. DRAIN TABLE IS UNSTEADY.

Step 1. Check for proper locking of legs.

Lock legs properly (para 2-6f).

Step 2. Check for bent or broken parts.

Notify unit maintenance.

## 5. WORK TABLE IS UNSTEADY.

Step 1. Check table for proper locking of legs.

Lock legs properly (para 2-6f).

Step 2. Check for bent or broken parts.

Notify unit maintenance.

#### 6. ELECTRIC LIGHT NOT FUNCTIONING.

Step 1. Check to see the light is working properly.

Connect the light to the power source.

If the bulb is not functioning, replace the bulb.

If the electric light is not working, replace the whole light.

Step 2. Check for cuts or tears in the cable assembly and extension cord.

Replace cable assembly.

## Section III. OPERATOR MAINTENANCE PROCEDURES

3-5. GENERAL. This section contains operator's maintenance procedures for the FSC equipment.

#### 3-6. MAINTENANCE.

- a. Tent. Procedures to maintain the tent are contained in either TM 10-8340-224-13 or TM 10-8340-240-12&P.
- Lantern or Electrical Light. Refer to FM 10-23 for the Lantern. Refer equipment to unit maintenance for maintenance procedures of the Electrical Light.
- c. M2 Burner Unit. Procedures to maintain the M2 Burner Units are contained in TM 10-7360-204-13&P.
- Modern Burner Unit (MBU) Procedures to maintain the MBU are contained in TM 10-7310-281-13&P.

#### 3-7. CLEANING AND SANITATION.

#### WARNING

Dry cleaning solvent, A-A-771 TY 1, used to clean parts is potentially dangerous to personnel and property. Avoid repeated and prolonged skin contact by wearing rubber or non-porous gloves when handling the solvent or material wet with dry cleaning solvent. Wash hands immediately after exposure with soap and water and use a lanolin based skin cream to prevent skin drying. Do not use near open flame or excessive heat. Flash point of solvent is  $100^0 \, \text{F}(38^0 \text{C})$ . Do not work with solvent in a closed room. Be sure there is good ventilation or the solvent vapors will build up in the air end become a poisonous mixture which can cause physical injury or even death.

#### CAUTION

Do not use abrasive cleaners or wire brushes on components or accessories. You may damage the finish.

- a. Clean storage rack assemblies, sink assemblies, drain table, work table and accessories such as sink immersion racks with soap and water.
  - b. Use a nonabrasive scouring pad (Item 4, Appendix E) for removing corrosion.
- c. Check for signs of corrosion and peeling. The coating over the metal may show spots. Remove spots with soap and hot water or dry cleaning solvent A-A-711 TY1 (Item 2, Appendix E) using a nonabrasive scouring pad.
  - d. After cleaning, check that all parts are secure.

# **CHAPTER 4**

# UNIT MAINTENANCE INSTRUCTIONS

# SECTION/PARAGRAPH

Repair Parts, Special Tools, TMDE and Support Equipment	1
Common Tools and Equipment	
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Preparation for Storage or Shipment	
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#### Section I. REPAIR PARTS, SPECIAL TOOLS, TMDE AND SUPPORT EQUIPMENT

- **4-1. COMMON TOOLS AND EQUIPMENT.** Refer to your unit's Modified Table of Organization and Equipment, (MTOE) to determine the common tools and equipment authorized and available at your unit.
- **4-2. SPECIAL TOOLS, TEST, MEASUREMENT, AND DIAGNOSTIC EQUIPMENT (TMDE), AND SUPPORT EQUIPMENT.** The special tools required to maintain the FSC are listed in Appendix F, and Section III, Appendix B. No TMDE, or special support equipment is required at the unit level to maintain the FSC.
- 4-3. REPAIR PARTS. Repair parts authorized for unit maintenance are listed in Appendix F.

#### Section II. SERVICE UPON RECEIPT

**4-4. UNPACKING.** The FSC, with components, will be packaged in wooden crates strapped to wooden pallets. Check crates for indication of damage. Report any damage to your supervisor.

#### CAUTION

Unpack components carefully. Improper or hasty handling may result in damage to the FSC components and accessories.

- a. Procedure. Unpack the equipment in the following sequence:
  - (1) Position crate or carton to be unpacked with the top facing up.
  - (2) Cut and remove retaining straps. Do not cut, rip, or otherwise damage packing material.
  - (3) Open the carton, remove the corrugated padding material, and set it aside.
  - (4) Lift the equipment from the carton.
- b. Shipping Material. Save the shipping carton and padding material so it can be re-used.

#### 4-5. CHECKING UNPACKED EQUIPMENT.

- a. <u>Damage</u>. Inspect the equipment for damage incurred during shipment. Report any damage on SF Form 364, Report of Discrepancy. Also note damage on DA Form 2404, Equipment Inspection and Maintenance Worksheet and initiate corrective maintenance procedures.
- b. <u>Completeness</u>. Check equipment against the packing slip to see if the shipment is complete. Report all discrepancies on SF Form 364. The equipment can be placed in service even though a minor assembly or part, which does not affect proper functioning, is missing.
- c. <u>Modifications</u>. Check DA PAM 25-30 to see if there is any Modification Work Order applicable to the FSC components you are unpacking. If an MWO is listed, check to see if it has been applied to the equipment. The MWO number will be shown on the case near the equipment nomenclature. If a current MWO is listed in DA PAM 25-30 but there is no evidence that it has been applied to the equipment you are unpacking, note discrepancy on DA Form 2404, Equipment Inspection and Maintenance Worksheet.

#### Section III. UNIT PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS)

- 4-6. GENERAL PMCS is performed upon receipt and quarterly thereafter. Record all defects found during the performance of PMCS and, if applicable, the steps taken to correct them, on DA Form 2404, Equipment Inspection and Maintenance Worksheet. Instructions for reporting/correcting noted deficiencies are contained in DA PAM 738-750.
- 4-7. UNIT PMCS PROCEDURES. Table 4-1 lists the specific PMCS that must be performed by unit maintenance personnel on a guarterly schedule.
- a. <u>Purpose.</u> PMCS is accomplished to ensure that the equipment is ready for use at all times and all deficiencies are corrected promptly. These checks and services are designed to help you find and correct defects before the equipment is damaged or fails to operate.
- <u>b. Item No. Column.</u> Item numbers in the first column indicate the order in which things are to be done. Use the PMCS table item number column to get the numbers for the TM Item No. column of DA Form 2404, Equipment Inspection and Maintenance Worksheet.
  - c. Item To Be Inspected/Serviced Column. A description of the item to be inspected or serviced.
  - d. Procedure Column. Procedure to be performed by unit maintenance personnel.
- e. <u>Equipment is Not Ready/Available Column.</u> Contains the criteria that will cause the equipment to be classified as not ready/available because of inability to perform its combat mission.

Table 4-1. Unit Preventive Maintenance Checks and Services (PMCS)

## Quarterly Schedule

Item	Item To Be	Procedure	Equipment Not
No.	Inspected/Serviced		Ready/Available If:
1	M2 Burner Unit	Refer to TM 10-7360-204-13&P	
2	Modern Burner Unit (MBU)	Refer to TM 10-7310-281-13&P	

#### Section IV. UNIT TROUBLESHOOTING

4-8. GENERAL Table 4-2 lists common malfunctions of the equipment and contains instructions for unit personnel diagnosing and correcting each malfunction. Perform the indicated steps in the order listed.

#### NOTE

This manual cannot list all malfunctions that may occur. If a malfunction is either not listed or cannot be corrected by the indicated corrective actions, notify your supervisor.

Unit troubleshooting procedures for the M2 burner unit are outlined in TM 10-7360-204-13&P for the M2 and TM 10-7310-281-13&P for the MBU.

#### Table 4-2. Unit Troubleshooting

#### **MALFUNCTION**

# TEST OR INSPECTION CORRECTIVE ACTION

## 1. STORAGE RACK IS NOT STURDY OR SIDES DO NOT FIT.

Check for bent or loose wire mesh, or bent brackets.

If bent, straighten bent mesh or brackets with hand tools. If welding is required notify direct support maintenance.

#### 2. SINK ASSEMBLY IS NOT STABLE.

Check for bends or breaks.

If bent, repair using hand tools. If major straightening of metal or welding is required, refer to direct support maintenance.

## 3. SINK DRAIN LEAKS.

Step 1. Check for proper drain hose connection.

Connect drain hose properly and tighten connections (para 2-6e).

Step 2. Check for split seams, holes or cracks in drain hose or sink.

Replace or repair drain hose (para 4-12).

#### 4. SINK DOES NOT DRAIN.

Check drain valve operation.

Replace drain valve.

## 5. DRAIN TABLE IS UNSTEADY.

Check table legs for bends, breaks or missing hardware.

If bent, repair using hand tools. Replace missing hardware. If broken, replace table leg.

## 6. WORK TABLE IS UNSTEADY.

Check table legs for bends, breaks or missing hardware.

If bent, repair using hand tools. Replace missing hardware. If broken, replace table legs.

## 7. FIRE EXTINGUISHER IS NOT FULLY CHARGED.

Check gage on fire extinguisher for status of charge.

Replace fire extinguisher.

## 8. ELECTRICAL LIGHT NOT WORKING

Check for cuts or tears in the cable assembly, extension cord, and power cord.

Replace cable assembly, extension cord, and power cord if necessary.

Ensure light bulb is working properly.

Replace light bulb. Or replace the entire electrical light if necessary.

## 4-4 Change 7

#### Section V. Unit Maintenance Procedures

#### 4-9. GENERAL.

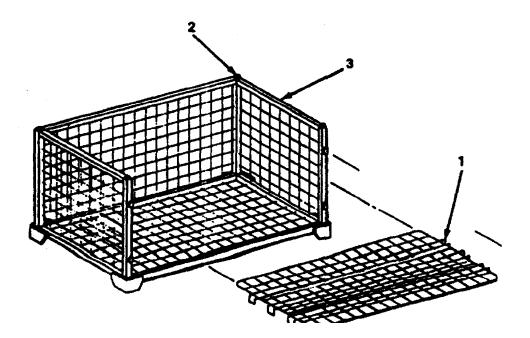
- a. This section contains unit maintenance procedures as authorized by the Maintenance Allocation Chart (MAC), Appendix B of this manual. The following topics are included as applicable: a. Remove b. Repair c. Replace. All maintenance procedures in this section will be performed by one person unless otherwise indicated in the initial setup.
- b. Read all warnings, cautions, notes, and instructions carefully before operating or working on this unit. Read and understand all warnings listed in the front of this manual.
  - c. Refer to TM 10-8340-224-13 or TM 10-8340-240-12&P for maintenance procedures on the tent.
  - d. Refer to TM 10-7360-204-13&P for maintenance procedures on the M2 Burner Unit.
  - e. Refer to TM 10-7310-281-13&P for maintenance procedures on the MBU.

## 4-10. REPAIR OF STORAGE RACK ASSEMBLY.

## **INITIAL SET UP**

Tools

General Mechanic's Tool Kit (Item 1, Section III, Appendix B)



## REMOVAL AND REPLACE

- 1. Remove and replace defective or missing shelf/cover (1).
- 2. Remove and replace defective or missing tube plug (2).
- 3. Replace defective storage rack (3).

## 4-11. REPAIR OF SINK ASSEMBLY

## **INITIAL SET UP**

#### **Tools**

General Mechanic's Tool Kit (Item 1, Section III, Appendix B) Wrench, Adjustable (Item 12, Section III, Appendix B)

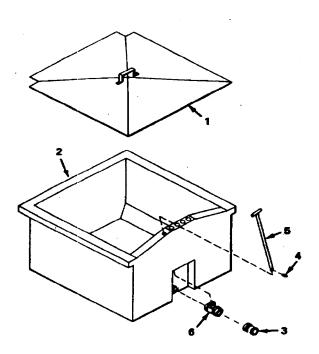
## Materials/Parts

Sealing Compound

## **Equipment Condition**

Sink cover (1) removed.

Drain hoses removed (para 2-8a(3)(c)).



# REMOVAL

- 1. Remove cotter pin (4) from bottom of valve handle (5).
- 2. Remove valve handle (5).
- 3. Unscrew the coupling (3) from drain valve (6) at rear of sink body (2).
- 4. Unscrew the drain valve (6) from sink body (2).

# REPLACE

- 1. Replace defective parts.
- 2. Place sealing compound (Item 5, Appendix E) on all threads to ensure a leak proof seal.
- 3. Install drain valve (6) by threading onto sink body (2).
- 4. Align drain valve (6) with valve handle (5) stem and slide into place.
- 5. Install cotter pin (4) through valve handle (5) and drain valve (6).
- 6. Thread coupling (3) into drain valve (6) and tighten.

## 4-12. REPAIR OF DRAIN HOSES (SINGLE OR THREE SINK).

## **INITIAL SET UP**

#### Tools

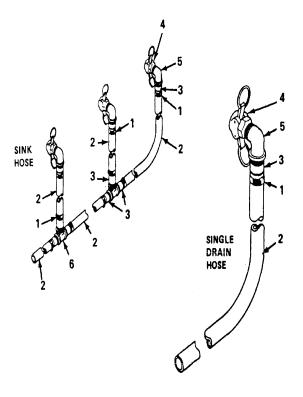
General Mechanic's Tool Kit (Item I, Section III, Appendix B) Knife, Pocket (Item 5, Section III, Appendix B) Wrench, Adjustable (Item 12, Section III, Appendix B) Wrench, Pipe (Item 14, Section III, Appendix B)

#### Materials/Parts

Hose (Bulk Material) Sealing Compound

# **Equipment Condition**

Drain hoses removed (para 2-8a(3)(c)).



# REMOVAL AND REPLACEMENT OF HOSES

- 1. Loosen hose clamps (1).
- 2. Slide the defective hoses (2) off nipples (3).
- 3. Measure and cut bulk hose to size.
- 4. Slide hose end (2) over nipple (3).
- 5. Position hose clamps (1); tighten.

## REMOVAL AND REPLACEMENT OF COUPLING, STREET ELBOW, NIPPLE OR TEE

- 1. Unscrew coupling (4) from street elbow (5).
- 2. Remove hoses (2) per steps 1 and 2 above.
- 3. Unscrew nipple (3) from street elbow (5) or tee (6).
- 4. Inspect for defective threads. Replace defective parts.
- 5. Place Sealing Compound (Item 5, Appendix E) on threads to ensure leakproof seal.
- 6. Thread nipples (3) into tee (6) and street elbow (5).
- 7. Thread coupling (4) onto street elbow (5).
- 8. Install hoses and clamps.

## 4-13. REPAIR OF DRAIN TABLE OR WORKTABLE.

# INITIAL SET UP

Tools

General Mechanic's Tool Kit (Item 1, Section III, Appendix B)

Materials/Parts

Lock Washer

General Purpose Lubricating Oil (Item 3, Appendix E)

## NOTE

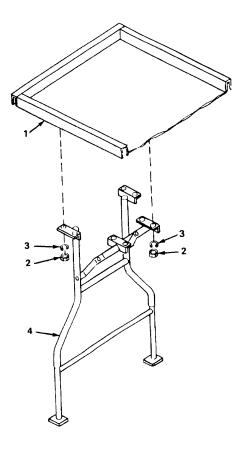
- If table hinges are bent or difficult to use repair by straightening hinge link with hand tools.
- Lubricate friction areas, if necessary with general purpose lubricating oil.

# REMOVAL

- 1. Remove eight nuts (2) and lock washers (3).
- 2. Remove table leg (4) off table.

## REPLACE

- 1. Install table leg (4) on table top (1).
- Install eight lock washers (3) and nuts (2) on studs and tighten.



## 4-13.1 REPAIR OF LIGHT, EXTENSION

## **INITIAL SET UP**

Tools

General Mechanic's Tool Kit (Item 1, Section III, Appendix B)

Materials/Parts

Kit, Relamping (Item 4, Group 2, Appendix F), gloves, goggles

**Equipment Condition** 

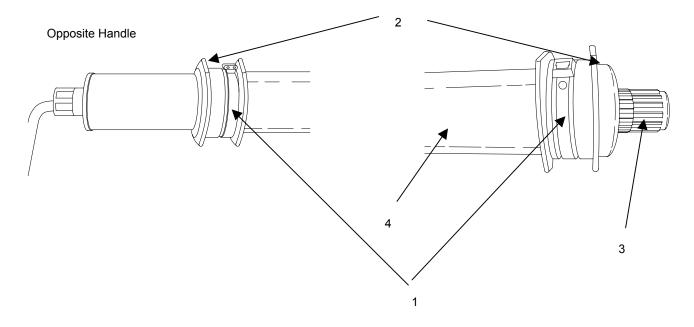
Unplugged from power source

#### **WARNING**

Protect your eyes and hands from possible glass fragments from the light bulb. Wear hand and eye protection. Failure to do so may result in serious injury to personnel.

# REMOVAL

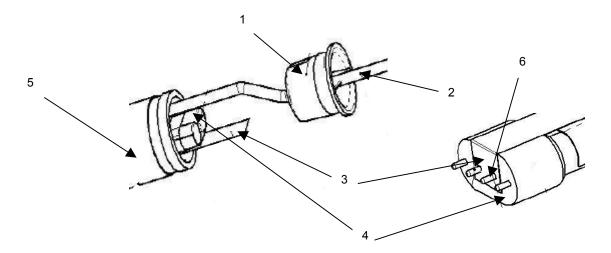
- 1. Remove the cable tie (1) from the smaller end cap (2) located on the opposite handle. Do not remove handle.
- 2. Remove strain relief nut (3) and sleeve from strain relief then remove end cap (2) by gently prying off tube (4) with a screwdriver or similar tool.



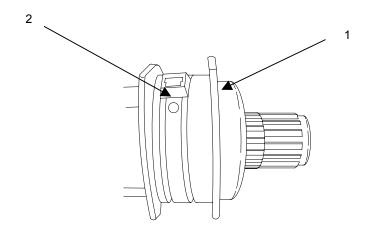
NOTE

Do not loosen jam nut.

- 3. Carefully remove shock (1), using care not to pull on the power cord (2).
- 4. Grasp the bulb puller (3) and gently, but firmly, pull the bulb (4) out of the socket and remove from the tube (5). Take care since the bulb (4) is tightly wedged in the socket.
- 5. Remove bulb puller (3) from old bulb (4) and dispose of bulb (4) properly. If old bulb (4) is not broken, there is a vacuum inside and breaking the bulb (4) can be dangerous.
- 6. Clean inside of the tube (5) if necessary.
- 7. Install the bulb puller (3) on the new bulb (4) as shown. This will assist in removing the bulb (4) the next time.
- 8. Slide the new bulb/bulb puller (3) into the tube (5) and align so the pins (6) will intersect with the receiver holes in the socket.
- 9. Gently push the bulb (4) down into the socket and seat the pins (6) into the receiver holes.
- 10. Plug light in and activate switch. Ensure bulb (4) is seated properly and that it illuminates.
- 11. Replace shock (1), using care not to pull on the power cord or screen.



12. Replace end cap (1), ensure the cap (1) is completely seated in the groove of the tube. Secure with the cable tie (2).



#### Section VI. PREPARATION FOR STORAGE OR SHIPMENT

# 4-14. ADMINISTRATIVE STORAGE.

- a. Placement of equipment in administrative storage should be for short periods of time when a shortage of maintenance effort exists. Items should be in mission readiness within 24 hours or within the time factors as determined by the directing authority. During the storage period appropriate maintenance records will be kept.
- b. Before placing equipment in administrative storage, current maintenance services and equipment serviceable criteria (ESC) evaluations should be completed, shortcomings and deficiencies should be corrected, and all modification work orders (MWO's) should be applied.
- c. Storage site selection. Inside storage is preferred for items selected for administrative storage. If inside storage is not available, trucks, vans, convex containers and other containers may be used.
- **4-15. PREPARATION FOR STORAGE OR SHIPMENT.** Prepare the equipment for movement as described in paragraph 2-8. Preservation, packaging, and packing of military supplies and equipment are described in TM 38-230-2.

Storage.

#### NOTE

Be sure the storage location is on firm, level ground and at a well drained site.

Store the equipment in a building, shed, or under cover. If the equipment is to be stored outside, place on a pallet or planking; place a canvas tarp or waterproof cover over it.

**4-16. PACKING FOR SHIPMENT.** If available, use packing materials and shipping cartons in which the equipment was received, or similar material, to pack equipment for shipment.

# CHAPTER 5

# DIRECT SUPPORT MAINTENANCE INSTRUCTIONS

GENERAL	SECTION/PARAGRAPH
Scope of Direct Support Maintenance	
DIRECT SUPPORT MAINTENANCE PROCEDURES	

# Section I. GENERAL

**5-1. SCOPE OF DIRECT SUPPORT MAINTENANCE**. Direct support maintenance identified in appendix B consists of repairing or replacing components that are riveted or welded. Refer to TC 9-510 for information on metal body repairs. Direct support maintenance of the Tent, Extended Modular is covered in TM 10-340-224-13.

#### Section II. DIRECT SUPPORT MAINTENANCE PROCEDURES

**5-2. WELDING**. FSC components, such as the Storage Rack Assembly, Shelf/Cover, Sink Assembly, Sink Cover, Sink Body Assembly, Burner Rack, Base Rack and Tables may require repair by welding. Refer to TM 9237 for information on welding theory and application.

5-2 Change 5

# **APPENDIX A**

# **REFERENCES**

A-1. SCOPE. This appendix lists all forms, pamphlets, field manuals, technical manuals, Army Regulations, military specifications, and military standards referenced in the manual.

Discrepancy in Shipment Report SE guipment Daily or Monthly Log DA Form 2448-1 Equipment Inspection and Maintenance Worksheet	A-2. FORMS	
Equipment Inspection and Maintenance Worksheet         DA Form 2407           Report of Discrepancy         SF Form 364           Product Quality Deficiency Report         SF 868           Recommended Changes to Equipment Technical Publications         DA Form 2407           Report of Packaging and Handling Deficiencies         SF 368           A-3. FIELD MANUALS         FM 10-23           Army Troop Feeding Operations         FM 21-11           General Fabric Repair         FM 10-16           Field Water Supply         FM 10-16           Field Water Supply         FM 10-16           Inspections and Preventive Maintenance         Services: Ranges, Bake Ovens and Burners for Other Mess Equipment         TM 5-641           Metal Body Repairs and Related Operations         TC 9-510           Operator, Organizational and Direct Support Maintenance Manual Including Repair Parts and Special Tools List for Range Outlift, Field Gasoline, Model M59         TM 10-7360-204-13&P           Operator, Organizational and Direct Support Maintenance Manual Including Repair Parts and Special Tools List for Kitchen, Field, Modular         TM 10-7360-208-13&P           Operator Sunit and Direct Support Maintenance Manual Including Repair Parts and Special Tools List for Medical Maintenance Manual Including Repair Parts and Special Tools List for Face Maintenance Manual Including Repair Parts Tools List for Modular General Purpose Tent System (MGPTS)         TM 10-730-281-13&P <td< td=""><td>Discrepancy in Shipment Report</td><td> SF 361</td></td<>	Discrepancy in Shipment Report	SF 361
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Inspections and Preventive Maintenance Services: Ranges, Bake Ovens and Burners for Other Mess Equipment  TM 5-641 Metal Body Repairs and Related Operations Operator, Organizational and Direct Support Maintenance Manual Including Repair Parts and Special Tools List for Range Outfit, Field Gasoline, Model M59.  Operator, Organizational and Direct Support Maintenance Manual Including Repair Parts and Special Tools List for Range Outfit, Field Gasoline, Model M59.  Operator, Organizational and Direct Support Maintenance Manual Including Repair Parts and Special Tools List for Kitchen, Field, Modular  Operator's Unit and Direct Support Maintenance Manual Including Repair Parts and Special Tools List for Modern Burner Unit  Operator, Organizational and Direct Support Maintenance Manual Including Repair Parts and Special Tools List for Tent, Extendable, Modular (16 x 20 Utility) (NSN 8340-01-185-2613)  TM 10-7310-281-13&P  Operator, Organizational and Direct Support Maintenance Manual Including Repair Parts and Special Tools List for Tent, Extendable, Modular (16 x 20 Utility) (NSN 8340-01-185-2613)  TM 10-8340-224-13  Operator, Organizational and Direct Support Maintenance Manual Including Repair Parts and Special Tools List for Modular General Purpose Tent System (MGPTS).  TM 10-8340-224-13  Anges, Bake Ovens and Burners for Mess Equipment-, Repairs and Utilities  TM 10-8340-224-13  TM 10-8340-224-13  TM 10-8340-224-13  Anges, Bake Ovens and Burners for Mess Equipment-, Repairs and Utilities  TM 10-8340-224-13	Field Water Supply	FM 10-52
Services: Ranges, Bake Ovens and Burners for Other Mess Equipment	A-4. TECHNICAL MANUALS	
Metal Body Repairs and Related Operations TC 9-510 Operator, Organizational and Direct Support Maintenance Manual Including Repair Parts and Special Tools List for Range Outfit, Field Gasoline, Model M59.  Operator, Organizational and Direct Support Maintenance Manual Including Repair Parts and Special Tools List for Kitchen, Field, Modular  Operator's Unit and Direct Support Maintenance Manual Including Repair Parts and Special Tools List for Modern Burner Unit.  Operator, Organizational and Direct Support Maintenance Manual Including Repair Parts and Special Tools List for Tools List for Tent, Extendable, Modular (16 x 20 Utility) (NSN 8340-01-185-2613)  Operator, Organizational and Direct Support Maintenance Manual Including Repair Parts and Special Tools List for Modular General Purpose Tent System (MGPTS).  TM 10-8340-224-13  Operator, Organizational and Direct Support Maintenance Manual Including Repair Parts Tools List for Modular General Purpose Tent System (MGPTS).  The 10-8340-240-12&P Procedure for Destruction of Equipment to Prevent Enemy Use.  TM 10-750-224-13  TM 10-750-224-13  TM 10-750-224-13  TM 10-8340-240-12&P Total Tent Tools List for Modular General Purpose Tent System (MGPTS).  TM 10-8340-240-12&P Tools List for Modular General Purpose Tent System (MGPTS).  TM 10-8340-240-12&P Tools List for Modular General Purpose Tent System (MGPTS).  TM 10-8340-240-12&P Tools List for Modular General Purpose Tent System (MGPTS).  TM 10-8340-240-12&P Tools List for Modular General Purpose Tent System (MGPTS).  TM 10-8340-240-12&P Tools List for Modular General Purpose Tent System (MGPTS).  TM 10-8340-224-13  TM 10-750-224-13  TM 10-750-224-13  TM 10-8340-240-12&P TM 10-8		
Operator, Organizational and Direct Support Maintenance Manual Including Repair Parts and Special Tools List for Range Outfit, Field Gasoline, Model M59.  Operator, Organizational and Direct Support Maintenance Manual Including Repair Parts and Special Tools List for Kitchen, Field, Modular.  Operator's Unit and Direct Support Maintenance Manual Including Repair Parts and Special Tools List for Modern Burner Unit.  Operator, Organizational and Direct Support Maintenance Manual Including Repair Parts and Special Tools List for Tent, Extendable, Modular (16 x 20 Utility)  (NSN 8340-01-185-2613)  Operator, Organizational and Direct Support Maintenance Manual Including Repair Parts and Special Tools List for Tent, Extendable, Modular (16 x 20 Utility)  (NSN 8340-01-185-2613)  Operator, Organizational and Direct Support Maintenance Manual Including Repair Parts Tools List for Modular General Purpose Tent System (MGPTS).  Procedure for Destruction of Equipment to Prevent Enemy Use  TM 10-8340-240-12&P  TM 10-8340-240-12&P  TM 10-750-224-13  Ranges, Bake Ovens and Burners for Mess Equipment, Repairs and Utilities  TM 5-640  Welding Theory and Application  TM 9-237  Preservation, Packaging, Packing of Military Supplies end Equipment  TM 38-230-2  A-5. ARMY REGULATIONS  Identification and Distribution of DA Publications and Issue of Agency and Command  Administrative Publications  AR 310-2  Reporting of Item and Packaging Discrepancies in Shipments  AR 55-38  A-6. MISCELLANEOUS  Consolidated Index of Army Publications and Blank Forms  DA PAM 25-30  Hand Portable Fire Extinguishers Approved for Army Users  TB 5-4200-200-10  Identification List for Fuels, Lubricants, Oils and Waxes  C9100-1L	Services: Ranges, Bake Ovens and Burners for Other Mess Equipment	TM 5-641
and Special Tools List for Range Outfit, Field Gasoline, Model M59.  Operator, Organizational and Direct Support Maintenance Manual Including Repair Parts and Special Tools List for Kitchen, Field, Modular.  Operator's Unit and Direct Support Maintenance Manual Including Repair Parts and Special Tools List for Modern Burner Unit.  Operator, Organizational and Direct Support Maintenance Manual Including Repair Parts and Special Tools List for Tent, Extendable, Modular (16 x 20 Utility)  (NSN 8340-01-185-2613)	Metal Body Repairs and Related Operations	TC 9-510
Operator, Organizational and Direct Support Maintenance Manual Including Repair Parts and Special Tools List for Kitchen, Field, Modular	Operator, Organizational and Direct Support Maintenance Manual Including Repair Parts	
and Special Tools List for Kitchen, Field, Modular	and Special Tools List for Range Outfit, Field Gasoline, Model M59	TM 10-7360-204-13&P
Operator's Unit and Direct Support Maintenance Manual Including Repair Parts and Special Tools List for Modern Burner Unit		T14 40 T000 000 400 D
Tools List for Modern Burner Unit		TM 10-7360-208-13&P
Operator, Organizational and Direct Support Maintenance Manual Including Repair Parts and Special Tools List for Tent, Extendable, Modular (16 x 20 Utility) (NSN 8340-01-185-2613)		TM 40 7040 004 400D
and Special Tools List for Tent, Extendable, Modular (16 x 20 Utility) (NSN 8340-01-185-2613)  Operator, Organizational and Direct Support Maintenance Manual Including Repair Parts Tools List for Modular General Purpose Tent System (MGPTS) Procedure for Destruction of Equipment to Prevent Enemy Use Ranges, Bake Ovens and Burners for Mess Equipment-, Repairs and Utilities TM 10-750-224-13 Ranges, Bake Ovens and Application Repairs and Utilities TM 9-237 Preservation, Packaging, Packing of Military Supplies end Equipment TM 38-230-2  A-5. ARMY REGULATIONS Identification and Distribution of DA Publications and Issue of Agency and Command Administrative Publications AR 310-2 Reporting of Item and Packaging Discrepancies Reporting of Transportation Discrepancies in Shipments  AR 55-38  A-6. MISCELLANEOUS Consolidated Index of Army Publications and Blank Forms DA PAM 25-30 Hand Portable Fire Extinguishers Approved for Army Users TB 5-4200-200-10 Identification List for Fuels, Lubricants, Oils and Waxes C9100-1L		TM 10-7310-281-13&P
(NSN 8340-01-185-2613)		
Operator, Organizational and Direct Support Maintenance Manual Including Repair Parts Tools List for Modular General Purpose Tent System (MGPTS)	and Special Tools List for Tent, Extendable, Modular (To X 20 Othicy) (NISN 9240 04 195 2612)	TM 10 9340 334 13
List for Modular General Purpose Tent System (MGPTS)		110 10-0340-224-13
Procedure for Destruction of Equipment to Prevent Enemy Use		TM 10-8340-240-12&P
Ranges, Bake Ovens and Burners for Mess Equipment-, Repairs and Utilities TM 5-640 Welding Theory and Application TM 9-237 Preservation, Packaging, Packing of Military Supplies end Equipment TM 38-230-2  A-5. ARMY REGULATIONS Identification and Distribution of DA Publications and Issue of Agency and Command Administrative Publications AR 310-2 Reporting of Item and Packaging Discrepancies AR 735-11-2 Reporting of Transportation Discrepancies in Shipments AR 55-38  A-6. MISCELLANEOUS Consolidated Index of Army Publications and Blank Forms DA PAM 25-30 Hand Portable Fire Extinguishers Approved for Army Users TB 5-4200-200-10 Identification List for Fuels, Lubricants, Oils and Waxes C9100-1L		
Welding Theory and Application		
Preservation, Packaging, Packing of Military Supplies end Equipment TM 38-230-2  A-5. ARMY REGULATIONS Identification and Distribution of DA Publications and Issue of Agency and Command     Administrative Publications AR 310-2 Reporting of Item and Packaging Discrepancies AR 735-11-2 Reporting of Transportation Discrepancies in Shipments AR 55-38  A-6. MISCELLANEOUS Consolidated Index of Army Publications and Blank Forms DA PAM 25-30 Hand Portable Fire Extinguishers Approved for Army Users TB 5-4200-200-10 Identification List for Fuels, Lubricants, Oils and Waxes C9100-1L	Welding Theory and Application	
A-5. ARMY REGULATIONS Identification and Distribution of DA Publications and Issue of Agency and Command    Administrative Publications		
Identification and Distribution of DA Publications and Issue of Agency and Command Administrative Publications	The state of the s	00 200 2
Administrative Publications		
Reporting of Item and Packaging Discrepancies		
Reporting of Transportation Discrepancies in Shipments AR 55-38  A-6. MISCELLANEOUS  Consolidated Index of Army Publications and Blank Forms DA PAM 25-30  Hand Portable Fire Extinguishers Approved for Army Users TB 5-4200-200-10  Identification List for Fuels, Lubricants, Oils and Waxes C9100-1L		
A-6. MISCELLANEOUS  Consolidated Index of Army Publications and Blank Forms		
Consolidated Index of Army Publications and Blank Forms	Reporting of Transportation Discrepancies in Shipments	AR 55-38
Hand Portable Fire Extinguishers Approved for Army Users	A-6. MISCELLANEOUS	
Hand Portable Fire Extinguishers Approved for Army Users	Consolidated Index of Army Publications and Blank Forms	DA PAM 25-30
Identification List for Fuels, Lubricants, Oils and Waxes		
D/11/100/100		
Combat Field Feeding System Operations FC 21-150		
Occupational and Environmental Health Food Service Sanitation		

#### **APPENDIX B**

#### MAINTENANCE ALLOCATION CHART (MAC)

#### Section I. INTRODUCTION

#### **B-1. The Army Maintenance System MAC**

This introduction provides a general explanation of all maintenance and repair functions authorized at the two maintenance levels under the Two-Level Maintenance System concept.

This MAC (immediately following the introduction) designates overall authority and responsibility for the performance of maintenance functions on the identified end item or component. The application of the maintenance functions to the end item or component shall be consistent with the capacities and capabilities of the designated maintenance levels, which are shown on the MAC in column (4) as:

Field - includes two columns, Unit maintenance and Direct Support maintenance. The Unit maintenance column is divided again into two more subcolumns, C for Operator or Crew and O for Unit maintenance.

Sustainment – includes two subcolumns, General Support (H) and Depot (D).

The tools and test equipment requirements (immediately following the MAC) list the tools and test equipment (both special tools and common tool sets) required for each maintenance function as referenced from the MAC.

The remarks (immediately following the tools and test equipment requirements) contain supplemental instructions and explanatory notes for a particular maintenance function.

#### **B-2.** Maintenance Functions

Maintenance functions will be limited to and are defined as follows:

- 1. Inspect. To determine the serviceability of an item by comparing its physical, mechanical, and/or electrical characteristics with established standards through examination (e.g., by sight, sound, or feel.) This includes scheduled inspection and gagings and evaluation of cannon tubes.
- 2. Test. To verify serviceability by measuring the mechanical, pneumatic, hydraulic, or electrical characteristics of an item and comparing those characteristics with prescribed standards on a scheduled basis, i.e., load testing of lift devices and hydrostatic testing of pressure hoses.
- 3. Service. Operations required periodically to keep an item in proper operating condition; e.g., to clean (includes decontaminate, when required), to preserve, to drain, to paint, or to replenish fuel, lubricants, chemical fluids, or gases. This includes scheduled exercising and purging of recoil mechanisms. The following are examples of service functions:
  - a. Unpack. To remove from packing box for service or when required for the performance of maintenance operations.
  - b. Repack. To return item to packing box after service and other maintenance operations.
  - c. Clean. To rid the item of contamination.

- d. Touch up. To spot paint scratched or blistered surfaces.
- e. Mark. To restore obliterated identification.
- 4. Adjust. To maintain or regulate, within prescribed limits, by bringing into proper position, or by setting the operating characteristics to specified parameters.
- 5. Align. To adjust specified variable elements of an item to bring about optimum or desired performance
- 6. Calibrate. To determine and cause corrections to be made or to be adjusted on instruments of test, measuring, and diagnostic equipment used in precision measurement. Consists of comparisons of two instruments, one of which is a certified standard of known accuracy, to detect and adjust any discrepancy in the accuracy of the instrument being compared.
- 7. Remove/Install. To remove and install the same item when required to perform service or other maintenance functions. Install may be the act of emplacing, seating, or fixing into position a spare, repair part, or module (component or assembly) in a manner to allow the proper functioning of an equipment or system.
- 8. Paint. To prepare and spray color coats of paint so that the ammunition can be identified and protected. The color indicating primary use is applied, preferably, to the entire exterior surface as the background color of the item. Other markings are to be repainted as original so as to retain proper ammunition identification.
- Replace. To remove an unserviceable item and install a serviceable counterpart in its place. "Replace" is authorized by the MAC and assigned maintenance level is shown as the third position code of the Source, Maintenance and Recoverability (SMR) code.
- 10. Repair. The application of maintenance services, including fault location/troubleshooting, removal/installation, disassembly/assembly procedures and maintenance actions to identify troubles and restore serviceability to an item by correcting specific damage, fault, malfunction, or failure in a part, subassembly, module (component or assembly), end item, or system.

# NOTE

The following definitions are applicable to the "repair" maintenance function:

Services. Inspect, test, service, adjust, align, calibrate, and/or replace.

Fault location/troubleshooting. The process of investigating and detecting the cause of equipment malfunctioning; the act of isolating a fault within a system or Unit Under Test (UUT).

Disassembly/assembly. The step-by-step breakdown (taking apart) of a spare/functional group coded item to the level of its least component, that is assigned an SMR code for the level of maintenance under consideration (i.e. identified as maintenance significant).

Actions. Welding, grinding, riveting, straightening, facing, machining, and/or resurfacing.

- 11. Overhaul. That maintenance effort (service/action) prescribed to restore an item to a completely serviceable/operational condition as required by maintenance standards in appropriate technical publications. Overhaul is normally the highest degree of maintenance performed by the Army. Overhaul does not normally return an item to like new condition.
- 12. Rebuild. Consists of those services/actions necessary for the restoration of unserviceable equipment to a like new condition in accordance with original manufacturing standards. Rebuild is the highest degree of material maintenance applied to Army equipment. The rebuild operation includes the act of returning to zero those age measurements (e.g., hours/miles.) considered in classifying Army equipment/components.

#### B-3. Explanation of Columns in the MAC, Section II

Column (1) Group Number. Column (1) lists Functional Group Code (FGC) numbers, the purpose of which is to identify maintenance significant components, assemblies, subassemblies, and modules with the Next Higher Assembly (NHA).

Column (2) Component/Assembly. Column (2) contains the names of components, assemblies, subassemblies, and modules for which maintenance is authorized.

Column (3) Maintenance Function. Column (3) lists the functions to be performed on the item listed in column (2). (For a detailed explanation of these functions refer to "Maintenance Functions" outlined above).

Column (4) Maintenance Level. Column (4) specifies each level of maintenance authorized to perform each function listed in column (3), by indicating work time required (expressed as manhours in whole hours or decimals) in the appropriate subcolumn. This work time figure represents the active time required to perform that maintenance function at the indicated level of maintenance. If the number or complexity of the tasks within the listed maintenance function varies at different maintenance levels, appropriate work time figures are to be shown for each level. The work time figure represents the average time required to restore an item (assembly, subassembly, component, module, end item, or system) to a serviceable condition under typical field operating conditions. This time includes preparation time (including any necessary disassembly/assembly time), troubleshooting/fault location time, and quality assurance time in addition to the time required to perform the specific tasks identified for the maintenance functions authorized in the MAC. The system designations for the various maintenance levels are as follows:

#### Field:

- C Operator or Crew maintenance
- O Unit maintenance
- F Direct Support maintenance

# Sustainment:

- L Specialized Repair Activity
- H General Support maintenance
- D Depot maintenance

# **NOTE**

The "L" maintenance level is not included in column (4) of the MAC. Functions to this level of maintenance are identified by work time figure in the "H" column of column (4), and an associated reference code is used in the REMARKS column (6). This code is keyed to the remarks and the SRA complete repair application is explained there.

Column (5) Tools and Equipment Reference Code. Column (5) specifies, by code, those common tool sets (not individual tools), common Test, Measurement and Diagnostic Equipment (TMDE), and special tools, special TMDE and special support equipment required to perform the designated function. Codes are keyed to the entries in the tools and test equipment table.

Column (6) Remarks Code. When applicable, this column contains a letter code, in alphabetic order, which is keyed to the remarks table entries.

# B-4. Explanation of Columns in the Tools and Test Equipment Requirements, Section III

Column (1) - Tool or Test Equipment Reference Code. The tool or test equipment reference code correlates with a code used in column (5) of the MAC.

Column (2) - Maintenance Level. The lowest level of maintenance authorized to use the tool or test equipment.

Column (3) - Nomenclature. Name or identification of tool or test equipment.

Column (4) - National Stock Number (NSN). The NSN of the tool or test equipment.

Column (5) - Tool Number. The manufacturer's part number.

# B-5. Explanation of Columns in Remarks, Section IV

Column (1) - Remarks Code. The code recorded in column (6) of the MAC.

Column (2) - Remarks. This column lists information pertinent to the maintenance function being performed as indicated in the MAC.

# Section II. MAINTENANCE ALLOCATION CHART FOR FOOD SANITATION CENTER

(1)	(2)	(3)		(4)			(5)	(6)	
GROUP NUMBER	COMPONENT/ ASSEMBLY	MAINTENANCE FUNCTION		MAINTENANCE LEVEL			TOOLS AND EQUIPMENT REFERENCE	REMARKS CODE	
				FIEL		SUSTAIN	MENT	CODE	
				NIT	DIRECT SUPPORT	GENERAL SUPPORT	DEPOT		
			С	0	F	Н	D		
00	FOOD SANITATION CENTER								
01	TENT							8	Α
02	LATERN, GASOLINE OR LIGHT EXTENSION	Inspect Repair	0.1 0.5						В
03	STORAGE RACK ASSMEBLY	Inspect Service Repair	0.1 0.2	0.5	1.0			1	C D
04	SINK ASSEMBLY								
0401	COVER, SINK	Inspect Service Repair	0.1 0.2		1.0			1	C D
0402	BODY ASSEMBLY, SINK	Inspect Service Repair	0.1 0.2	0.5	1.0			1,12	C D
0403	RACK, BURNER	Inspect Service Repair	0.1 0.2		1.0				C D
0404	RACK, BASE	Inspect Service Repair	0.1 0.2		1.0				C D
05	DRAIN HOSE ASSEMBLIES								
0501	DRAIN HOSE, SINGLE SINK	Inspect Service Replace Repair	0.1 0.2	0.5 0.8				1,5,12,14	E C
0502	DRAIN HOSE, THREE SINK	Inspect Service Replace Repair	0.1 0.2	0.6 1.0				1,5,12,14	E C
06	BURNER UNIT, M2A/MBU							2,3,7,9 10,11,13	F,G
07	TABLE ASSEMBLY, SINK DRAIN	Inspect Service Repair	0.1 0.2	0.5	1.0			1	C D
08	TABLE ASSEMBLY, FOLDING LEGS	Inspect Service Repair	0.1 0.2	0.5	1.0			1	C D

# Section III. TOOLS AND TEST EQUIPMENT FOR FOOD SANTITATION CENTER

(1) TOOL OR TEST EQUIPMENT REFERENCE CODE	(2) MAINTENANCE LEVEL	(3) NOMENCLATURE	(4) NATIONAL STOCK NUMBER	(5) TOOL NUMBER
1	0	Tool Kit, General Mechanic's: Automotive	5180-00-177-7033	
2	С	Brush, Wire	7920-00-291-5815	
3	С	Cleaner, Burner Slot	5120-00-379-2490	
4	С	Hammer, Hand	5120-00-892-5485	
5	0	Knife, Pocket	5110-40-240-5943	
6	С	Pliers, Slip Joint	5120-00-223-7397	
7	С	Pump, Inflating	4320-00-852-9036	
8	0	Repair Kit Fabric or Repair Kit, Tentage (MGPTS)	8340-00-262-5767 8340-01-491-0486	
9	С	Screwdriver, Cross Tip	5120-00-234-8913	
10	С	Screwdriver, Flat Tip	5120-00-222-8852	
11	С	Wrench, Adjustable	5120-00-240-5328	
12	0	Wrench, Adjustable	5120-00-449-8084	
13	С	Wrench, Combination	5120-00-303-7737	
14	0	Wrench, Pipe	5120-00-277-1462	

# Section IV. REMARKS FOR FOOD SANTITATION CENTER

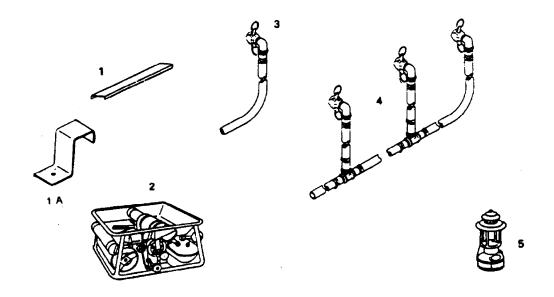
(1) REMARKS CODE	(2) REMARKS
Α	Refer to TM 10-8340-224-13 or TM 10-8340-240-12&P for Tent Maintenance Instructions
В	Refer to FM 10-23 for Lantern Maintenance Instructions
С	Service includes cleaning
D	Weld at Direct Support Level
E	Inspect includes ensuring drain hoses are not dogged
F	Refer to TM 10-7360-204-13&P for M2 Burner Unit Maintenance Instructions

#### APPENDIX C

#### COMPONENTS OF END ITEM AND BASIC ISSUE ITEMS LIST

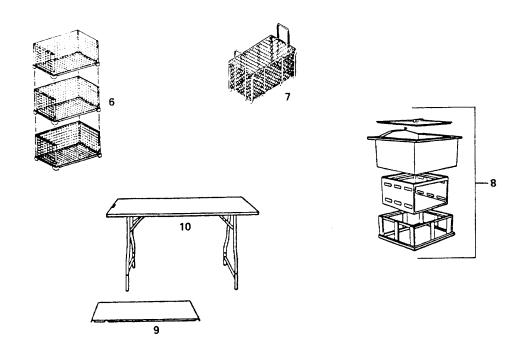
#### Section I. INTRODUCTION

- C-1. SCOPE. This appendix lists Components of End Item (COEI) and Basic Issue Items (BII) for the FSC to help you inventory items required for safe and efficient operation.
- C-2. GENERAL. The Components of End Item List (COEI) is divided into the following sections:
- a. <u>Section II, Components of End Item.</u> This listing is for informational purposes only, and is not authority to requisition replacements. These items are part of the end item, but are removed and separately packaged for transportation or shipment. As part of the end item, these items must be with the end item whenever it is issued or transferred between property accounts. Illustrations are furnished to assist you in identifying the items.
- b. <u>Section III. Basic Issue Items</u>. These are the minimum essential items required to place the FSC in operation, to operate it, and to perform emergency repairs. Although shipped separately packed, Bll must accompany the FSC during operation and whenever it is transferred between accountable officers. The accompanying illustrations will assist you with hard-to-identify items. This manual is your authority to requisition replacement BII based on Modified Table of Organization and Equipment (MTOE) authorization of your FSC.
- C-3. EXPLANATION OF COLUMNS. The following provides an explanation of columns found in the tabular listings:
- a. Column (1) Illustration Number (Illus Number). Indicates the illustration number of FSC components and accessories.
- b, <u>Column (2) National Stock Number (NSN).</u> Indicates the NSN assigned to the item and will be used for requisitioning purposes,
- c. <u>Column (3) Description. CAGEC and Part Number.</u> Indicates the Federal item name and, if required, a minimum description to identify and locate the item. The last line for each item indicates the CAGEC (in parenthesis) followed by the part number. If item needed differs for different models of this equipment, the model is shown under the "Usable On code" heading in this column.
- d. <u>Column (4) -Unit of Measure (U/M)</u>. Indicates the measure used in performing the actual operational/maintenance function. This measure is expressed by a two-character alphabetical abbreviation (e.g., ea, in, pr).
- e. <u>Column (5) Quantity Required (Qtv Rqd)</u>. Indicates the quantity of the item authorized to be used with/on the equipment.



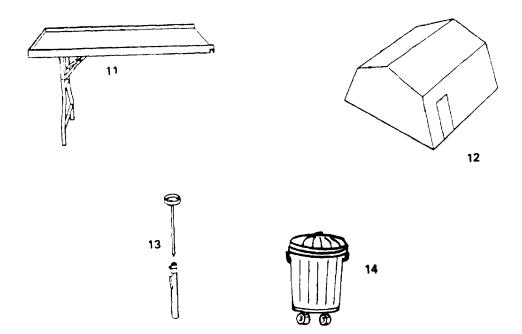
# SECTION II. COMPONENTS OF END ITEM

(1) Illus Number	(2) National Stock Number	(3) Description, CAGEC, and Part Number	(4) U/M	(5) Qty Rqr
1	7320-01-333-9188	Adapter, Sink (81337) 5-13-4256	EA	2
1A	5340-01-333-8483	Bracket Angle (81337) 5-13-4261	EA	3
2	7310-01-113-9172	Burner Unit, M2A (81337) MIL-B-40098	EA	3
	7310-01-455-5703	FSC MBU Kit	EA	1
	7310-01-452-8137	Modern Burner Unit (3AD06)		
3	4720-01-333-8488	Drain Hose Assembly, Single Sink (81337) 5-13-4061	EA	1
4	4720-01-333-8489	Drain Hose Assembly, Three Sink (81337) 5-13-3749	EA	1
5	6260-00-837-0996	Lantern, Gasoline (58536) A-A-52078 or	EA	2
	6230-01-485-6376	Light, Extension (06967) 31-5004-IP	EA	2



SECTION II. COMPONENTS OF END ITEM - Continued

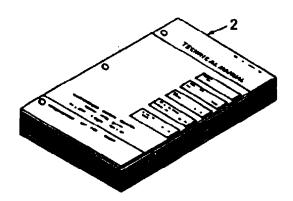
(1) Illus Number	(2) National Stock Number	(3) Description, CAGEC, and Part Number	(4) U/M	(5) Qty Rqr
6	7125-01-334-3159	Rack Assembly, Storage/Drying (81337) 5-13-4050	EA	6
7	7320-01-334-3160	Rack, Sink, Immersion (81337) 5-13-4255	EA	2
8	4510-01-333-9186	Sink Assembly, (81337) 5-13-4120	EA	3
9	5340-01-333-8486	Shelf, Table (81337) 5-13-4257	EA	1
10	7105-01-333-8493	Table, Folding Leg (81337) 5-13-4212	EA	1



SECTION II. COMPONENTS OF END ITEM - Continued

(1) Illus Number	(2) National Stock Number	(3) Description, CAGEC, and Part Number	(4) U/M	(5) Qty Rqr
11	7305-01-333-8492	Table, Drain (81337) 5-13-4240	EA	1
12	8340-01-185-2613	Tent, Extendable Modular (16 X 20 Utility) (81337) MIL-T-44271	EA	1
	8340-01-456-3633	or Modular General Purpose Tent System (Type 1 Small, Green) (73005) 2480107	EA	1
13	6685-00-444-6500	Thermometer, 5-1/2 inch (28480) 0440-0004	EA	3
14	7240-00-151-6629	Waste Receptacle 32 gallon, with lid (58536) A-A-295	EA	2





Section III. BASIC ISSUE ITEMS

(1) Illus Number	(2) National Stock Number	(3) Description, CAGEC and Part Number	Usable On Code	(4) U/M	(5) Qty Rqd.
1	4210-01-149-1356	Extinguisher, Fire (19207) 12255633-1		EA	1
2		Technical Manual TM 10-7310-281-13&P		EA	1
		Technical Manual TM 10-7360-211-13&P		EA	1
		Technical Manual TM 10-7360-204-13&P		EA	1
		Technical Manual TM 10-8340-224-13&P		EA	1
		or Technical Manual TM 10-8340-240-12&P		EA	1

#### **APPENDIX D**

#### ADDITIONAL AUTHORIZATION LIST

#### **SECTION I. INTRODUCTION**

- **D-1. SCOPE.** This appendix lists additional items authorized for the support of the FSC.
- **D-2. GENERAL.** This list identifies items that do not have to accompany the FSC and that do not have to be turned in with it. These items are all authorized to you by CTA, MTOE, TDA, or JTA.
- **D-3. EXPLANATION OF LISTING.** National Stock Numbers, descriptions, and quantities are provided to help you identify and request the additional items you require to support this equipment. The items are listed in alphabetical sequence by item name under the type document (i.e., CTA, MTOE, TDA, or JTA) which authorizes the item(s) to you. If the item you require differs between serial numbers of the same model, effective serial numbers are shown in the last line of the description. If item required differs for different models of this equipment, the model is shown under the "Usable on" heading in the description column.

#### Section II. ADDITIONAL AUTHORIZATION LIST

(1) NATIONAL STOCK	(2) DESCRIPTION			(4) QTY AUTH
NUMBER	CAGEC & PART NUMBER  CTA AUTHORIZED ITEMS	USABLE ON CODE		
	<u> </u>			
8415-00-634-5023	APRON, UTILITY (81348) ZZA605		EA	6
8340-01-186-3025	FLOOR, TENT (81349) MIL-T-44243		EA	2
8340-01-477-1397	or FLOOR, END SECTION (FOR THE (73005) 2480127	MGPTS)	EA	2
	GLOVE, NITRILE (30716) AI 810		PR	8
4520-01-329-3451	HEATER, SPACE (81349) MIL-H-13514		EA	1
8340-01-211-9638	LINER, TENT (81349) MIL-T-44222		EA	2
8340-01-491-1392	or LINER, END SECTION (FOR THE MO (73005) 2480125	GPTS)	EA	2

#### APPENDIX E

# EXPENDABLE/DURABLE SUPPLIES AND MATERIALS LIST

#### Section I. INTRODUCTION

**E-1. SCOPE.** This appendix lists expendable supplies and materials you will need to operate and maintain the FSC. This listing is for informational purposes 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 5, Repair Parts, and Heraldic Items), or CTA 8-100, Army Medical Department Expendable/Durable Items.

#### E-2. EXPLANATION OF COLUMNS.

- a. Column (1) Item Number. This number is assigned to the entry in the listing and is referenced in the narrative instructions to identify the material (e.g., "Use cleaning compound, item 5, App.E").
- <u>b. Column (2) Level.</u> This column identifies the lowest level of maintenance that requires the listed item.

#### C - Operator/Crew

- c. Column (3) National Stock Number. This is the NSN assigned to the item; use it to request or requisition the item.
- <u>d. Column (4) Description.</u> Identifies the Federal item name. If required, the last line for each item indicates a description to identify the item. The last line for each item indicates the Commercial and Government Entity Code (CAGEC) in parenthesis, followed by the part number.
- <u>e. Column (5) Unit of Measure (U/M).</u> Indicates the measure used in performing the actual maintenance function. This measure is expressed by a two-character alphabetical abbreviation (e.g., ea, in, pr). If the unit of measure differs from the unit of issue, requisition the lowest unit of issue that will satisfy your requirements.

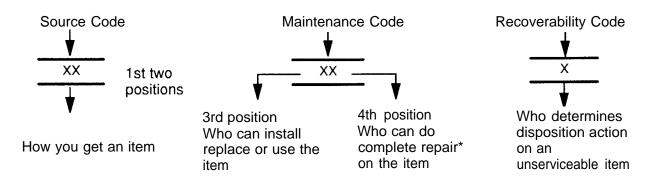
# SECTION II. EXPENDABLE SUPPLIES AND MATERIALS LIST

(1)	(2)	(3)	(4)	(5)
ITEM NO.	LEVEL	NATIONAL STOCK NUMBER	DESCRIPTION	U/M
1	С	8135-00-226-3124	BARRIER MATERIAL (81349)MIL-B-121	RO
2	C	6850-00-664-5685	DRY CLEANING SOLVENT (58536)A-A-711 TY1	GL
3	С	9150-00-273-2389	LUBRICATING OIL, GENERAL PURPOSE (81348)VV-L-800	OZ
4	С	7920-00-659-9175	PADS,SCOURING (80244)L-P-0050 TY15Z1	EA
5	0	8030-00-201-0996	SEALING COMPOUND (81348)TT-S-1732	OZ

# UNIT, DIRECT SUPPORT AND GENERAL SUPPORT MAINTENANCE REPAIR PARTS AND SPECIAL TOOLS LIST

#### SECTION I. INTRODUCTION

- 1. **SCOPE.** This RPSTL lists and authorizes spares and repair parts; special tools; special test, measurement, and diagnostic equipment (TMDE); and other special support equipment required for performance of unit, direct support, and general support maintenance of the Food Sanitation Center. It authorizes the requisitioning, issue, and disposition of spares, repair parts and special tools as indicated by the source, maintenance and recoverability (SMR) codes.
- **2. GENERAL.** In addition to this section, Introduction, this Repair Parts and Special Tools List is divided into the following sections:
- **a. Section II. Repair Parts List.** A list of spares and repair parts authorized by this RPSTL for use in the performance of maintenance. The list also includes parts which must be removed for replacement of the authorized parts. Parts lists are composed of functional groups in ascending alphanumeric sequence, with the parts in each group listed in ascending figure and item number sequence. Bulk materials are listed in item name sequence. Repair parts kits are listed separately in their own functional group within Section II. Repair parts for repairable special tools are also listed in this section. Items listed are shown on the associated illustration(s)/figure(s).
- **b. Section III. Special Tools List.** A list of special tools, special TMDE, and other special support equipment authorized by this RPSTL (as indicated by Basis of issue (BOI) information in DESCRIPTION AND USABLE ON CODE column) for the performance of maintenance.
- **c. Section IV. Cross-references Indexes.** A list, in National Item Identification Number (NIIN) sequence, of all National stock numbered items appearing in the listing, followed by a list in alphanumeric sequence of all part numbers appearing in the listings. National stock numbers and part numbers are cross referenced to each illustration figure and item number appearance. The figure and item number index lists figure and item number in alphanumeric sequence and cross references NSN, CAGEC and part number.
- 3. EXPLANATION OF COLUMNS (SECTIONS II AND III).
- a. ITEM NO. (Column (1)). Indicates the number used to identify items called out in the illustration.
- **b. SMR Code (Column (2)).** The Source, Maintenance, and Recoverability (SMR) code is a 5-position code containing supply/requisitioning information, maintenance category authorization criteria, and disposition instruction, as shown in the following breakout:



\*Complete Repair: Maintenance capacity, capability, and authority to perform all corrective maintenance tasks of the "Repair" function in a use/user environment in order to restore serviceability to a failed item.

(1) Source Code. The source code tells you how to get an item needed for maintenance, repair, or overhaul of an end item/equipment. Explanations of source codes follows:

Code		Explanation
PA PB PC** PD PE PF PG	}	Stocked items; use the applicable NSN to request/requisition items with these source codes. They are authorized to the category indicated by the code entered in the 3rd position of the SMR code.  **NOTE: Items coded PC are subject to deterioration.
KD KF KB	}	Items with these codes are not to be requested/requisitioned individually. They are part of a kit which is authorized to the maintenance category indicated in the 3rd position of the SMR code. The complete kit must be requisitioned and applied.

MO - (Made at org AVUM Level)

MF - (Made at DS/AVUM Level)

MH - (Made at GS Level)

ML - (Made at Specialized Repair Activity (SRA))

MD - (Made at Depot)

Items with these codes are not to be requested/requisitioned individually. They must be made from bulk material which is identified by the part number in the DESCRIPTION and USABLE ON CODE (UOC) column and listed in the Bulk Material group of the repair parts list in this RPSTL. If the item is authorized to you by the 3rd position code of the SMR code, but the source code indicates it is made at a higher level, order the item from the higher level of maintenance.

AO - (Assembled by org/AVUM Level)

AF - (Assembled by DS/AVIM Level

AH - (Assembled by GS Category)

AL - (Assembled by SRA)

AD - (Assembled by Depot)

Items with these codes are not to be requested/requisitioned individually. The parts that make up the assembled item must be requisitioned or fabricated and assembled at the level of maintenance indicated by the source code. If the 3rd position code of the SMR code authorizes you to replace the item, but the source code indicates the items are assembled at a higher level, order the

item from the higher level of maintenance.

- X A Do not requisition "XA" -coded item. Order its next higher assembly. (Also, refer to the NOTE below.)
- X B If an "XB" item is not available from salvage, order it using the CAGEC and part number given.
- X C Installation drawing, diagram, instruction sheet, field service drawing, that is identified by Reciprocating Compressor manufacturer's part number.
- X D Item is not stocked. Order an "XD" -coded item through normal supply channels using the CAGEC and part number given if no NSN is available.

#### NOTE

Cannibalization or controlled exchange, when authorized, maybe used as a source of supply for items with the above source codes, except for those source coded "XA" or those aircraft support items restricted by requirements of AR 750-1.

- (2) Maintenance Code. Maintenance codes tells you the level(s) of maintenance authorized to USE and REPAIR support items. The maintenance codes are entered in the third and fourth positions of the SMR code as follows:
- (a) The maintenance code entered in the third position tells you the lowest maintenance level authorized to remove, replace, and use an item. The maintenance code entered in the third position will indicate authorization to one of the following levels of maintenance.

#### Code

# Application/Explanation

- C- Crew or operator maintenance done within organizational or aviation unit maintenance.
- O-Organizational or aviation unit category can remove, replace, and use the item.
- F Direct support or aviation intermediate level can remove, replace, and use the item.
- H General support level can remove, replace, and use the item.
- L- Specialized repair activity can remove, replace, and use the item.
- D Depot level can remove, replace, and use the item.
- **(b)** The maintenance code entered in the fourth position tells whether or not the item is to be repaired and identifies the lowest maintenance level with the capability to do complete repair (i.e., perform all authorized repair functions.) NOTE: Some limited repair may be done on the item at a lower level of maintenance, if authorized by the Maintenance Allocation Chart (MAC) and SMR codes. This position will contain one of the following maintenance codes.

#### Code

#### Application/Explanation

- O Organizational or (aviation unit) is the lowest level that can do complete repair of the item.
- F Direct support or aviation intermediate is the lowest level that can do complete repair of the item.
- H General Support is the lowest level that can do complete repair of the item.
- L Specialized repair activity is the lowest level that can do complete repair of the item.
- D Depot is the lowest level that can do complete repair of the item.
- Z Nonreparable. No repair is authorized.
- B No repair is authorized. (No parts or special tools are authorized for the maintenance of a "B" coded item). However, the item may be reconditioned by adjusting, lubricating, etc., at the user level.
- (3) Recoverability Code. Recoverability codes are assigned to items to indicate the disposition action on unserviceable items. The recoverability code is entered in the fifth position of the SMR Code as follows:

# Recoverability

#### Codes

# Application/Explanation

- Nonreparable item. When unserviceable, condemn and dispose of the item at the level of maintenance shown in 3d position of SMR Code.
- O Reparable item. When not economically reparable, condemn and dispose of the item at organizational or aviation unit level
- F Reparable item. When uneconomically reparable, condemn and dispose of the item at the direct support or aviation intermediate level
- H Reparable item. When uneconomically reparable, condemn and dispose of the item at the general support level.
- Reparable item. When beyond lower level repair capability, return to depot. Condemnation and disposal of item not authorized below depot level.
- L Reparable item. Condemnation and disposal not authorized below specialized repair activity (SRA).
- A Item requires special handling or condemnation procedures because of specific reasons (e.g., precious metal content, high dollar value, critical material, or hazardous material). Refer to appropriate manuals/directives for specificinstructions.
- **c. CAGEC (Column (3)).** The Commercial and Government Entity Code (CAGEC) is a 5-digit numeric code which is used to identify the manufacturer, distributor, or Government agency, etc., that supplies the item.
- **d. PART NUMBER (Column (4)).** Indicates the primary number used by the manufacturer, (individual, company, firm, corporation, or Government activity), which controls the design and characteristics of the item by means of its engineering drawings, specifications standards, and inspection requirements to identify an item or range of items.

#### NOTE

When you use an NSN to requisition an item, the item you receive may have a different part number from the part ordered.

- e. DESCRIPTION AND USABLE ON CODE (UOC) (Column (5). This column includes the following information:
  - (1) The Federal item name and, when required, a minimum description to identify the item.
- (2) The physical security classification of the item is indicated by the parenthetical entry, e.g., PhySec C1 Confidential, Phy Sec C1 (S) Secret, Phy Sec C1 (T) Top Secret.
  - (3) Items that are included in kits and sets are listed below the name of the kit or set.
- (4) Spare/repair parts that make up an assembled item are listed immediately following the assembled item line entry.
- **(5)** Part numbers for bulk materials are referenced in this column in the line item entry for the item to be manufactured/fabricated.
- **(6)** When the item is not used with all serial numbers of the same model, the effective serial numbers are shown on the last line(s) of the description (before UOC).

- (7) The usable on code, when applicable (see paragraph 5, Special Information).
- (8) In the Special Tools List section, the basis of issue (BOI) appears as the last line(s) in the entry for each special tool, special TMDE, and other special support equipment. When density of equipments supported exceeds density spread indicated in the basis of issue, the total authorization is increased proportionately.
- (9) The statement "END OF FIGURE" appears just below the last item description in Column 5 for a given figure in both Section II and Section III.
- (10) The indenture, shown as dots appearing before the repair part, indicates that the item is a repair part of the next higher assembly.
- **f. QTY (Column (6)).** The QTY (quantity per figure column) indicates the quantity of the item used in the breakout shown on the illustration figure, which is prepared for a functional group, subfunctional group, or an assembly. A "V" appearing in this column in lieu of a quantity indicates that the quantity is variable and may vary from application to application.
- 4. EXPLANATION OF COLUMNS (SECTION IV).
  - a. NATIONAL STOCK NUMBER (NSN) INDEX.
- (1) STOCK NUMBER column. This column lists the NSN by National item identification number (NIIN) sequence. The NIIN consists of the last nine digits of the NSN, i.e.

When using this column to locate an item, ignore the first 4 digits of the NSN. However, the complete NSN should be used when ordering items by stock number.

- (2) FIG. column. This column lists the number of the figure where the item is identified/located. The figures are in numerical order in Section II and Section III.
- (3) ITEM column. The item number identifies the item associated with the figure listed in the adjacent FIG. column. This item is also identified by the NSN listed on the same line.
- **b. PART NUMBER INDEX.** Part numbers in this index are listed by part number in ascending alphanumeric sequence (i e., vertical arrangement of letter and number combination which places the first letter or digit of each group in order A through Z, followed by the numbers 0 through 9 and each following letter or digit in like order).
- (1) CAGEG column. The Commercial and Government Entity Code (CAGEC) is a 5-digit numeric code used to identify the manufacturer, distributor, or Government agency, etc., that supplies the item.
- (2) PART NUMBER column. Indicates the primary number used by the manufacturer (individual, firm, corporation, or Government activity), which controls the design and characteristics of the item by means of its engineering drawings, specifications standards, and inspection requirements to identify an item or range of items.
- (3) STOCK NUMBER column. This column lists the NSN for the associated part number and manufacturer identified in the PART NUMBER and CAGEC columns to the left.

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- (4) FIG. column. This column lists the number of the figure where the item is identified/located in Sections II and III.
- **(5) ITEM column.** The item number is that number assigned to the item as it appears in the figure referenced in adjacent figure number column.

# c. FIGURE AND ITEM NUMBER INDEX.

- (1) FIG. column. This column lists the number of the figure where the item is identified/located in Section II and III.
- **(2) ITEM column.** The item number is that number assigned to the item as it appears in the figure referenced in the adjacent figure number column.
  - (3) STOCK NUMBER column. This column lists the NSN for the item.
- (4) CAGEC column. The Commercial and Government Entity Code (CAGEC) is a 5-digit numeric code used to identify the manufacturer, distributor, or Government agency, etc., that supplies the item.
- (5) PART NUMBER column. Indicates the primary number used by the manufacturer (individual, firm, corporation, or Government activity), which controls the design and characteristics of the item by means of its engineering drawings, specifications standards, and inspection requirements to identify an item or range of items.

#### 5. SPECIAL INFORMATION.

- **a. USABLE ON CODE.** The usable on code appears in the lower corner of the Description column heading. Usable on codes are shown as "UOC: . . . . . . " in the Description Column (justified left) on the last line applicable item description/nomenclature. Uncoded items are applicable to all models.
- **b. ASSOCIATED PUBLICATIONS.** The publications listed below pertain to the Food Sanitation Center and its components.

Publication

Short Title

NOT APPLICABLE

# 6. HOW TO LOCATE REPAIR PARTS.

- a. When National Stock Number or Part Number is NOT Known.
- (1) First. Using the table of contents, determine the assembly group or subassembly group to which the item belongs. This is necessary since figures are prepared for assembly groups and subassembly groups, and listings are divided into the same groups.
- **(2) Second.** Find the figure covering the assembly group or subassembly group to which the item belongs.

- (3) Third. Identify the item on the figure and note the item number.
- **(4) Fourth.** Refer to the Repair Parts List for the figure to find the part number for the item number noted on the figure.
  - (5) Fifth. Refer to the Part Number Index to find the NSN, if assigned.

# b. When National Stock Number or Part Number is Known.

- (1) First. Using the Index of National Stock Numbers and Part Numbers, find the pertinent National Stock Number or Part Number. The NSN index is in National Item Identification Number (NIIN) sequence (see c-4a.(1)). The part numbers in the Part Number index are listed in ascending alphanumeric sequence (see paragraph c-4.b). Both indexes cross-reference you to the illustration figure and item number of the item you are looking for.
- **(2) Second.** After finding the figure and item number, verify that the item is the one you are looking for, then locate the item number in the repair parts list for the figure.
- 7. ABBREVIATIONS. Abbreviations used in this manual are listed in MIL-STD-12.

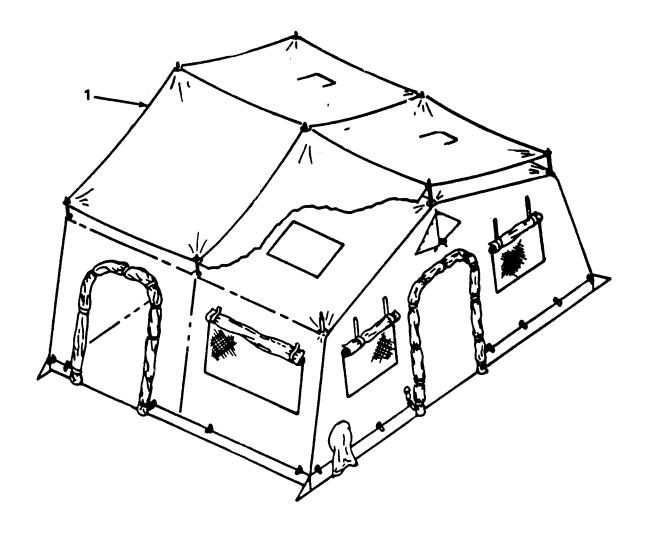
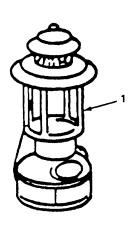
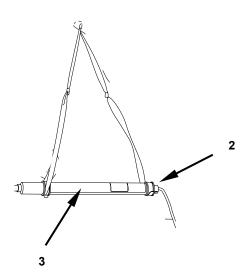
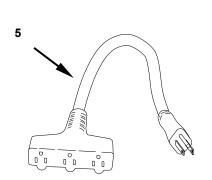


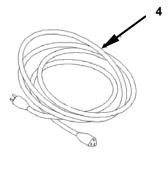
Figure F-1. Tent.

_		 (4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES (UOC) GROUP 01 TENT FIGURE F-1 TENT	(6) QTY
	40FF 0000	MTL-T-44271 2480107	TENT or MGPTS, Small, Green END OF FIGURE	1









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(1) ITEM	(2) SMR	(3) CAGEC	(4) PART	(5) DESCRIPTION AND USABLE ON CODES (UOC)	(6) QTY
NO	CODE	CAGEC	NUMBER	,	QII
				GROUP 02 LANTERN, GASOLINE Figure F-2 LANTERN, GASOLINE	
1	PAOZZ	58536	A-A-52078	LANTERN, GASOLINE	2
2	PA000	06967	31-5004-IP	LIGHT, EXTENSION	2
3	PAOZZ	06967	31-1-50	. KIT, RELAMPING	1
4	PAOZZ	3AD06	MS0425	EXTENSION CORD, SHORT	1
5	PAOZZ	7X667	00594.63.04	CABLE ASSEMBLY, POWER	1

END OF FIGURE

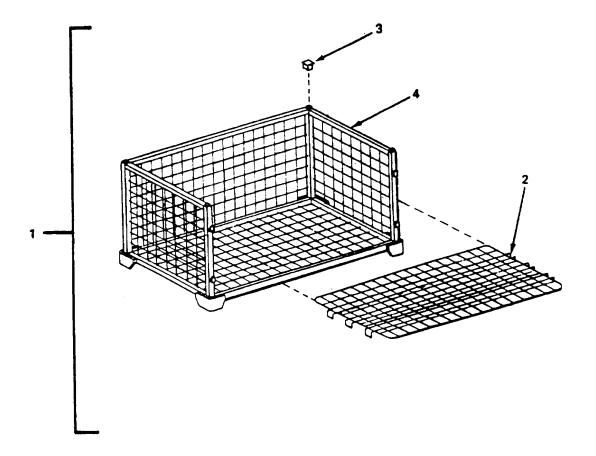


Figure F-3. Storage Rack Assembly.

SECTION (1)	ON II (2) SMR	(3)	TM10-7360-211-13&P (4) PART	(5)	(6)
NO	CODE	CAGEC	NUMBER	DESCRIPTION AND USABLE ON CODES (UOC)	QTY
				GROUP 03 STORAGE RACK ASSEMBLY	
				FIGURE F-3 STORAGE RACK ASSEMBLY	
1 2 3 4	PBOFF PBOFF PAOZZ PBOFF	81337 81337 81337 81337	5-13-4050 5-13-4053 5-13-4052 5-13-4051	STORAGE RACK ASSEMB .SHELF/COVER .PLUG,PROTECTIVE,DUS .RACK,STORAGE	6 1 8 1
				END OF FIGURE	

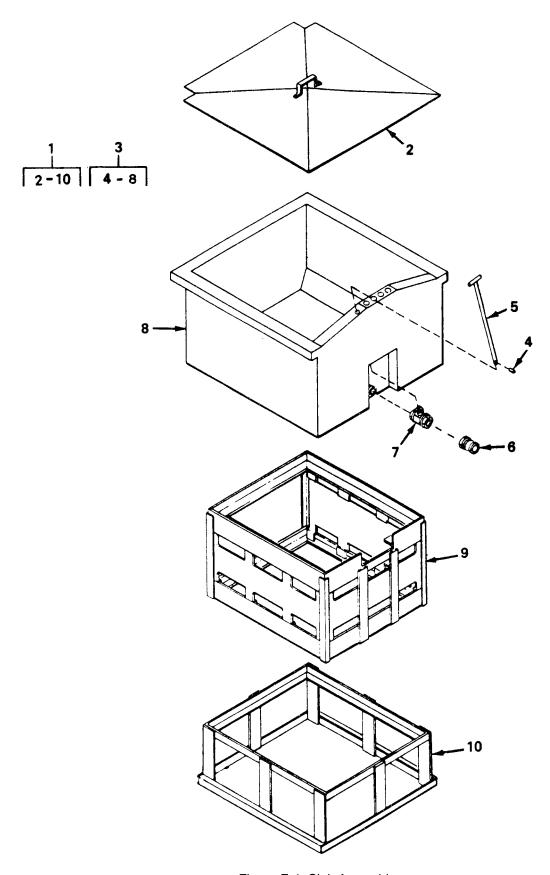


Figure F-4. Sink Assembly.

SECTIO	ON II		TM10-7360-211-13&P		
(1) ITEM	(2) SMR	(3)	(4) PART	(5)	(6)
NO	CODE	CAGEC	NUMBER	DESCRIPTION AND USABLE ON CODES (UOC)	QTY
				GROUP 04 SINK ASSEMBLY	
				FIGURE F-4 SINK ASSEMBLY	
1	PBOFF	81337	5-13-4120	SINK ASSEMBLY	3
2	PBOFF	81337	5-13-4206	.COVER,SINK	1
3	PBOFF	81337	5-13-4121	.BODY ASSY,SINK	1
4	PAOZF	96906	MS24665-300	PIN,COTTER	1
5	XDOZZ	81337	5-13-4123	HANDLE, VALVE	1
6	XDOZZ	96906	MS27022-8	COUPLING	1
7	PBOZZ	81337	5-13-4124	VALVE, DRAIN	1
8	XAOZZ	81337	5-13-4122	BODY,SINK	1
9	PBOFF	81337	5-13-3875	.RACK,BURNER	1
10	PBOFF	81337	5-13-3868	.RACK,BASE	1

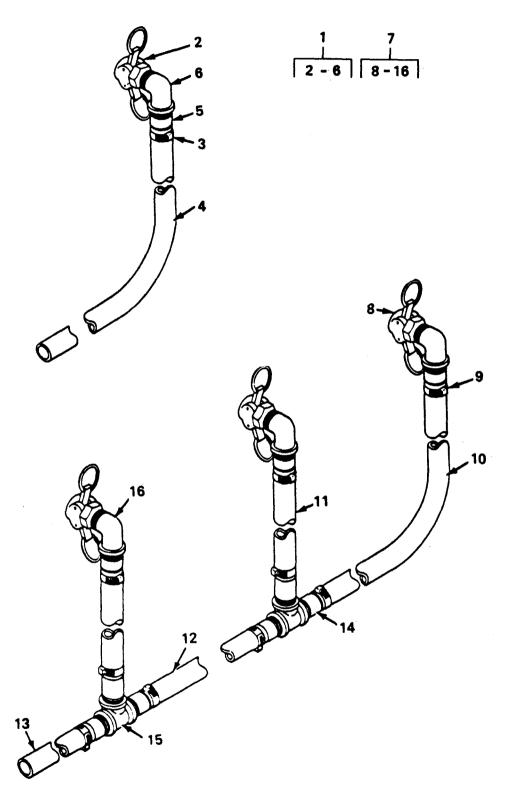


Figure F-5. Drain Hose Assemblies, Immersion Sink Rack, Sink Adapter and Thermometer (Sheet 1 of 2).

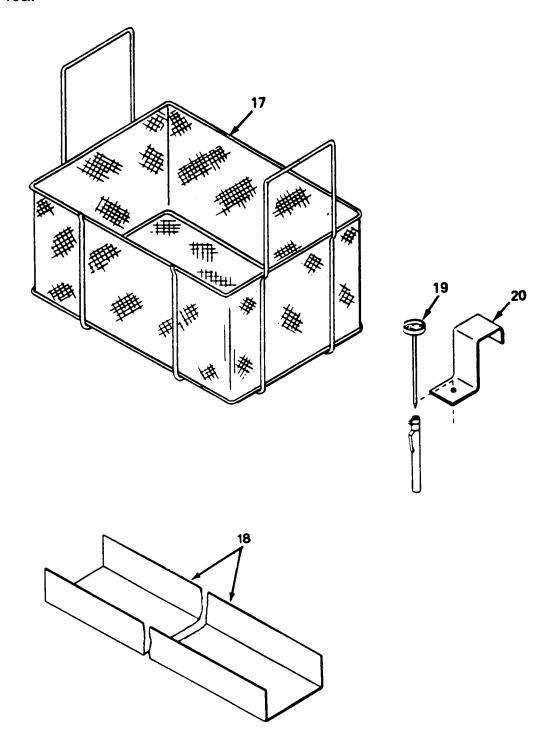


Figure F-5. Drain Hose Assemblies, Immersion Sink Rack, Sink Adapter and Thermometer (Sheet 2 of 2).

SE	CTION	II	TM10-73	360-211-13&P	
(1)	(2)	(3)	(4)	(5)	(6)
ITEM NO	SMR CODE	CAGEC	PART NUMBER	DESCRIPTION AND USABLE ON CODES(UOC)	QTY
				GROUP 05 DRAIN HOSE ASSEMBLIES	
				FIGURE F-5 DRAIN HOSE ASSEMBLIES, IMMERSION SINK RACK, SINK ADAPTER AND THERMOMETER	
<b>2</b> 3	PBOZZ PBOZO	96906	5-13-4061 MS27024-8 MS35842-12 5-13-4061-5	DRAIN HOSE, SINGLE	1 1 1
6	PBOZZ PBOZZ PBOO0	96906	EST15 MS51952-7 5-13-3749	ADAPTER, STRAIGHT, PI	1 1 1
9	<b>PBOZO</b>	96906	MS27024-8 MS35842-12	.COUPLING HALF,QUICK	3 9
10	MOOZZ	81337	5-13-3749-4	. HOSE NONMETALLIC. MAKE FROM P/N 631, CAGEC 73801, 5 FT REQ	1
11	MOOZZ	81337	5-13-3749-5	. HOSE NONMETALLIC, MAKE FROM P/N 831, CAGEC 73801, 3 FT REQ	2
12	MOOZZ	81337	5-13-3749-6	HOSE NONMETALLIC, MAKE FROM P/N 631, CAGEC 73801, 2 FT REQ	1
13	MOOZZ	81337	5-13-3749-9	. HOSE NONMETALLIC, MAKE FROM P/N 831, CAGEC 73801, 15 FT REQ	1
15 16	PBOZZ PBOZZ	96906 96906 32682	MS14305-7YA MS51952-7 5-13-4255 5-13-4256	.ADAPTER,STRAIGHT,PI .COUPLING,PIPEELBOW,PIPE RACK,SINK,IMMERSIONADAPTER,SINK	2
	PAOZZ	81337	2292-0017600 5-13-4261	BRACKET, THERMOMETER	

END OF FIGURE

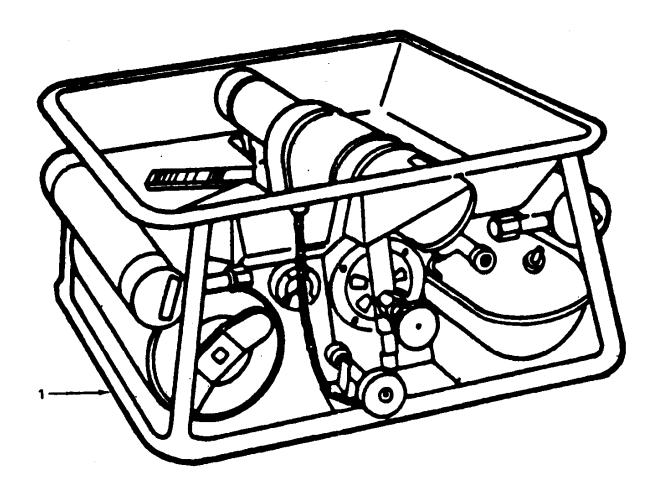


Figure F-6. Burner Unit.

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Sect	tion II		TM 10-736	60-211-13&P	
(1) ITEN	(2) M SMR	(3)	(4) PART	(5)	(6)
NO	•	CAGECNUMB		ESCRIPTION AND USABLE ON CODES (UOC)	QTY
				GROUP 06 BURNER UNIT, M2A/MBU	
				FIGURE F-6 BURNER UNIT M2A/MBU	
1A	PAOOO	81349	MIL-B-4009	D98 BURNER UNIT, GASOLINEFOR REPAIR PARTS REFER TO TM 10-7360-204-13&	3 P
1B	PAOFF	3AD06	880110K	MODERN BURNER UNIT (MBU)FOR REPAIR PARTS REFER TO TM 10-7310-281-13&	3 P

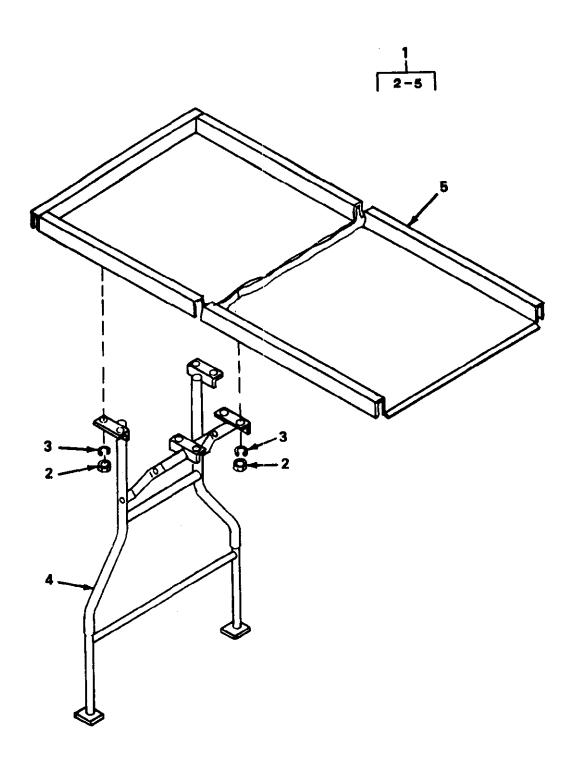


Figure F-7. Table Assembly, Sink Drain.

SECTION (1)	(2)	(3)	TM10-7360-211-13&P (4)	(5)	(6)
ITEM NO	SMR CODE	CAGEC	PART NUMBER	DESCRIPTION AND USABLE ON CODES (UOC)	QTY
				GROUP 07 TABLE ASSEMBLY, SINK DRAIN	
				FIGURE F-7 TABLE ASSEMBLY, SINK DRAIN	
1	PBOFF	81337	5-13-4240	TABLE ASSEMBLY, SINK DRAIN	1
2	PAOZO	96906	MS51971-1	.NUT, PLAIN, HEXAGON	8
3	PAOZZ	96906	MS35335-61	.WASHER,LOCK	8
4	PBOFF	81337	5-13-4245-2	.LEG ADAPTER	1
5	XAOZZ	81337	5-13-4241	.TABLE TOP,DRAIN	1
				END OF FIGURE	

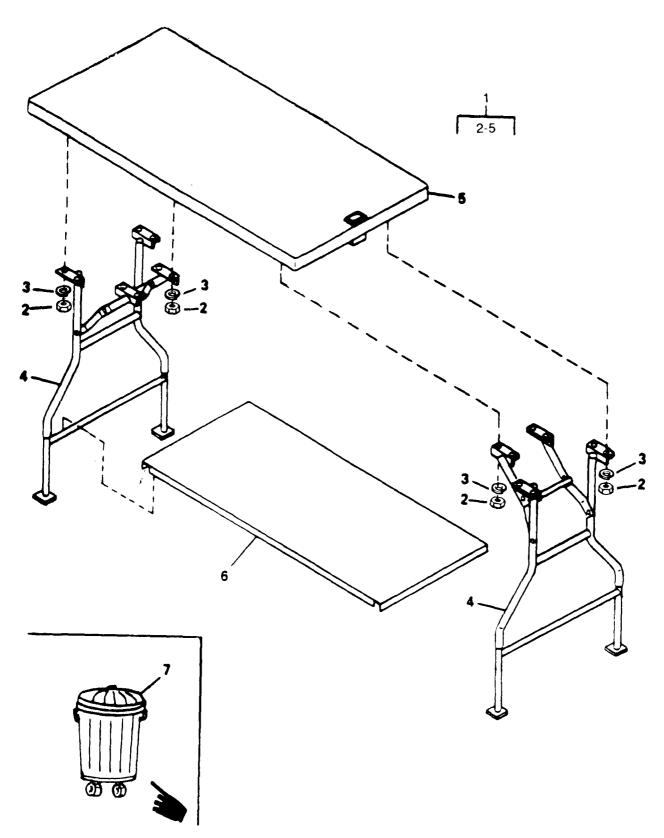
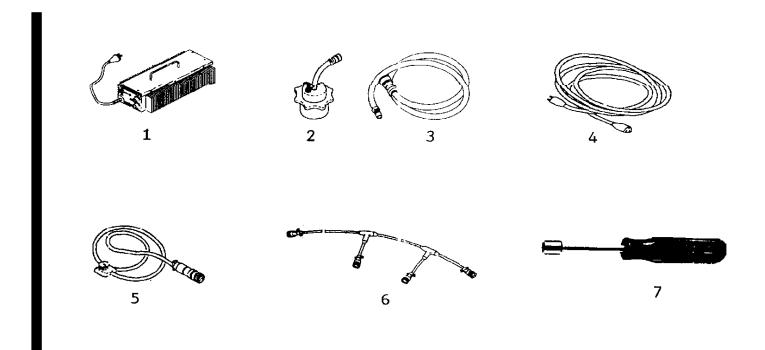


Figure F-8. Table Assembly, Folding Legs.

#### SECTION II

# TM 10-7360-211-13&P

(1) ITEM	(2) SMR	(3)	(4) PART	(5)	(6)
NO	CODE	CAGEC	NUMBER	DESCRIPTION AND USABLE ON CODES (UOC)	QTY
				GROUP 08 TABLE ASSEMBLY, FOLDING LEGS	
				FIGURE F-8 TABLE ASSEMBLY, FOLDING LEGS	
1	PBOFF	81337	5-13-4242	TABLE ASSEMBLY, FOLDING LEGS	1
2	PAOZO	96906	MS51971-1	. NUT, PLAIN, HEXAGON	16
3	PAOZZ	96906	MS35335-61	. WASHER, LOCK	16
4	PBOFF	81337	5-13-4245-1	. LEG ADAPTER	2
5	XAOZZ	81337	5-13-4243	. TABLE TOP	1
6	PBOZZ	81337	5-13-4257	SHELF, TABLE	1
7	PAOZZ	58536	A-A-295	WASTER RECEPTACLE	2
				END OF FIGURE	



### **SECTION II**

(1)	(2)	(3)	(4)	(5)	(6)
ITEM NO	SMR CODE	CAGEC	PART NUMBER	DESCRIPTION AND USABLE ON CODES (UOC)	QTY
				GROUP 09 FSC MODERN BURNER UNIT (MBU) KI	Т
				FIGURE F-9	
1	PAOZZ	73801	MS0150	CONVERTOR	1
2	PAOZZ	36976	MS0300	FUEL CAN ADAPTER	1
3	PAOZZ	3AD06	MS0350	FUEL LINE (20	1
4	PAOZZ	23633	MS0400	110 VOLT EXTENSION CORD (50 FT)	1
5	PAOZZ	3AD06	MS0101	CABLE A, 24 VOLT DC LONG (25 FT)	1
6	PAOZZ	3AD06	MS0104	CABLE D, 2 BRANCH	2
7	PAOZZ	3AD06	980266	CABLE CLIP	10
8	PAOZZ			7/16" NUT DRIVER	1

END OF FIGURE

# **SECTION II**

(1)	(2)	(3)	(4)	(5)	
ITEM NO	SMR CODE	CAGEC	PART NUMBER	DESCRIPTION AND USABLE ON CODES (UOC)	
				GROUP 10 BULK	
				FIGURE BULK	
1	PAOZZ 7	73801	631	HOSE, NONMETALLIC	V
				END OF FIGURE	

# Section III. SPECIAL TOOLS LIST

(Not Applicable)

#### SECTION IV. CROSS-REFERENCE INDEXES

### NATIONAL STOCK NUMBER INDEX

STOCK NUMBER	FIG.	ITEM	STOCK NUMBER	FIG.	ITEM
7240-00-151-8629	F-8	7	7310-01-458-5060	F-2	4
4730-00-187-7652	F-5	15	6230-01-485-6376	F-2	2
5315-00-234-1863	F-4	4	6230-01-506-9387	F-2	3
6685-00-444-6500	F-5	19	6250-01-507-8466	F-2	5
5310-00-527-3634	F-7	3			
	F-8	3			
5260-00-837-0996	F-2	1			
5310-00-903-5966	F-7	2			
4700 00 000 0400	F-8	2			
4730-00-908-3193	F-5	3			
4720 04 022 2650	F-5	9			
4730-01-823-2659	F-5	2			
7310-01-113-9172	F-5 F-6	8 1			
4730-01-113-9172	F-5	6			
4730-01-124-3709	F-5	16			
8340-01-185-2613	F-1	1			
7360-01-250-3649	F-4	9			
7360-01-250-3652	F-4	10			
5340-01-333-8483	F-5	20			
4820-01-333-8484	F-A	7			
5340.01-333-8485	F-4	2			
5340-01-333-8486	F-8	6			
4720-01-333-8488	F-5	1			
4720-01-333-8489	F-5	7			
7105-01-333-8492	F-7	1			
7105.01-333-8493	F-8	1			
7125-01-333-8494	F-3	4			
7105-01-333-8495	F-3	2			
4510-01-333-9186 4510-01-333-9187	F-4 F-4	1 3			
7320-01-333-9188	F-5	18			
7105-01-333-9189	F-7	4			
7125-01-334-3159	F-3	1			
7320-01-334-3160	F-5	17			
5340-01-334-5088	F-3	3			
4720-01-371-1336	BULK	1			
7310-01-452-8137	F-1	1			
7310-01-452-6513	F-9	1			
7310-01-454-1281	F-9	4			
7310-01-455-0665	F-9	5			
7310-01-455-1017	F-9	6			
7310-01-455-3735	F-9	3			
7310-01-455-3736	F-9	2			
8340-01-456-3633 7310-01-457-5836	F-1 F-9	1 7			
1310-01-401-0030	r -∌	ı			

### SECTION IV. CROSS-REFERENCE INDEXES

#### PART NUMBER INDEX

CAGEC	PART NUMBER	STOCK NUMBER	FIG.	ITEM
58536 58536 72661	A-A-295 A-A-52078 BST1 5	7240-00-151-6629 6260-00-837-0996	F-8 F-2 F-5 F-5	7 1 5 14
81349 81349 3AD06 3AD06 3AD06 3AD06 3AD06 3AD06 3AD06 3AD06 3AD06 99096 96906	MIL-B-40098 MIL-T-44271 88011 K MS0101 MS0104 MS0150 MS0300 MS0350 MS0400 980266 MS0425 MS143057YA MS24665-300	7310-01-113-9172 8340-01-185-2613 7310-01-452-8137 7310-01-455-0665 7310-01-455-1017 7310-01-453-6513 7310-01-455-3736 7310-01-454-1281 7310-01-458-5060 4730-00-187-7652 5315-00-234-1863	F-6 F-1 F-6 F-9 F-9 F-9 F-9 F-9 F-2 F-5 F-4	1 1 1 5 6 1 2 3 4 7 4 15 4
96906 96906	MS27022-8 MS27024-8	4730-01-023-2659	F-4 F-5 F-5	6 2 8
96906 96906	MS35335-61 MS35842-12	5310-00-527-3634 4730-00-908-3193	F-7 F-8 F-5	3 3 3
96906	MS51952-7	4730-01-124-3709	F-5 F-5 F-5	9 6 16
96906	MS51971-1	5130-00-903-5966	F-7 F-8	2 2
7X667 06967 06967 65092 81337 81337 81337 81337 81337 81337 81337 81337 81337 81337 81337 81337 81337 81337 81337	00594.63.04 31-1-50 31-5004-IP 2292-0017600 5-13-3749-4 5-13-3749-6 5-13-3749-9 5-13-3868 5-13-3875 5-13-4050 5-13-4051 5-13-4052 5-13-4053 5-13-4061 5-13-4061-5 5-13-4120 5-13-4121 5-13-4122 5-13-4123	6250-01-507-8466 6230-01-506-9387 6230-01-485-6376 6685-00-444-6500 4720-01-333-8489 7360-01-250-3652 7360-01-250-3649 7125-01-334-3159 7125-01-333-8494 5340-01-333-8495 4720-01-333-8488 4510-01-333-9186 4510-01-333-9187	F-2 F-2 F-5 F-5 F-5 F-5 F-5 F-4 F-4 F-3 F-3 F-3 F-3 F-5 F-5 F-5 F-4 F-4 F-4	5 3 2 19 7 10 11 12 13 10 9 1 4 3 2 1 4 1 3 8 5

### SECTION IV. CROSS-REFERENCE INDEXES

#### PART NUMBER INDEX-Continued

CAGEC	PART NUMBER	STOCK NUMBER	FIG.	ITEM
81337	5-13-4124	4820-01-333-8484	F-4	7
81337	5-13-4206	5340-01-333-8485	F-4	2
81337	5-13-4240	7105-01-333-8492	F-7	1
81337	5-13-4241		F-7	5
81337	5-13-4242	7105-01-333-8493	F-8	1
81337	5-13-4243		F-8	5
81337	5-13-4245-1		F-8	4
81337	5-13-4245-2	7105-01-333-9189	F-7	4
32682	5-13-4255	7320-01-334-3160	F-5	17
81337	5-13-4256	7320-01-333-9188	F-5	18
81337	5-13-4257	5340-01-333-8486	F-8	6
81337	5-13-4261	5340-01-333-8483	F-5	20
73801	631	4720-01-371-1336	BULK	1

### SECTION IV. CROSS-REFERENCE INDEXES-Continued

#### FIGURE AND ITEM NUMBER INDEX

FIG.	ITEM	STOCK NUMBER	CAGEC	PART NUMBER
BULK	1	4720-01-371-1336	73801	631
F-1	1	8340-01-185-2613	81349	MIL-T-44271
F-2	1	6260-00-837-0996	58536	A-A-52078
F-2	2	6230-01-485-6376	06967	31-5004-IP
F-2	3		06967	31-1-50
F-2	4	7310-01-458-5060	3AD06	MS0425
F-2	5	6250-01-507-8466	7X667	00594.63.04
F-2	4	6230-01-506-9387	06967	31-1-50
F-3	1	7125-01-334-3159	81337	5-13-4050
F-3	2	7105-01-333-8495	81337	5-13-4053
F-3	3	5340-01-334-5088	81337	5-13-4052
F-3	4	7125-01-333-8494	81337	5-13-4051
F-4	1	4510-01-333-9186	81337	5-13-4120
F-4	2	5340-01-333-8485	81337	5-13-4206
F-4	3	4510-01-333-9187	81337	5-13-4121
F-4	4	5315-00-234-1863	96906	MS24665-300
F-4	5		81337	5-13-4123
F-4	6		96906	MS27022-8
F-4	7	4820-01-333-8484	81337	5-13-4124
F-4	8		81337	5-13-4122
F-4	9	7360-01-250-3649	81337	55-13-3875
F-4	10	7360-01-250-3652	81337	5-13-3868
F-5	1	4720-01-333-8488	81337	5-13-4061
F-5	2	4730-01-023-2659	96906	MS27024-8
F-5	3	4730-00-908-3193	96906	MS35842-12
F-5	4		81337	5-13-4061-5
F-5	5		72661	BST1 5
F-5	6	4730-01-124-3709	96906	MS51952-7
F-5	7	4720-01-333-8489	81337	5-13-3749
F-5	8	4730-01-023-2659	96906	MS27024-8
F-5	9	4730-00-908-3193	96906	MS35842-12
F-5	10		81337	5-13-3749-4
F-5	11		81337	5-13-3749-5
F-5	12		81337	5-13-3749-6
F-5	13		81337	5-13-3749-9
F-5	14		72661	BST1 5
F-5	15	4730-00-187-7652	96906	MS14305-7YA
F-5	16	4730-01-124-3709	96906	MS51952-7
F-5	17	7320-01-334-3160	32682	5-13-4255
F-5	18	7320-01-333-9188	81337	5-13-4256
F-5	19	6685-00-444-6500	65092	2292-0017600

#### SECTION IV. CROSS-REFERENCE INDEXES-Continued

#### FIGURE AND ITEM NUMBER INDEX

FIG.	ITEM	STOCK NUMBER	CAGEC	PART NUMBER
F-5	20	5340-01-333-8483	81337	5-13-4261
F-6	1	7310-01-113-9172	81349	MIL-B-40098
F-6	1	7310-01-452-8137	3AD06	MS001
F-7	1	7105-01-333-8492	81337	5-13-4240
F-7	2	5310-00-903-5966	96906	MS51971 -1
F-7	3	5310-00-527-3634	96906	MS35335-61
F-7	4	7105-01-333-9189	81337	5-13-4245-2
F-7	5		81337	5-13-4241
F-8	1	7105-01-333-8493	81337	5-13-4242
F-8	2	5310-00-903-5966	96906	MS51971 -1
F-8	3	5310-00-527-3634	96906	MS35335-61
F-8	4		81337	5-13-4245-1
F-8	5		81337	5-13-4243
F-8	6	5340-01-333-8486	81337	5-13-4257

#### **GLOSSARY**

#### Section I. ABBREVIATIONS

Following is an alphabetical listing of some of the abbreviations used in this manual. The exact word or phrase for each abbreviation used is identified.

AAL Additional Authorization List

BII Basic Issue Item

CAGEC Contractor and Government Entity Code

CM Centimeter

COEI Component of End Item

CTA Common Table of Allowances

EIR Equipment Improvement Recommendations

FSC Food Sanitation Center

JTA Joint Table of Allowances

KG Kilogram

KM Kilometer

MAC Maintenance Allocation Chart

MM Millimeter

MOS Military Occupational Specialty

MTOE Modified Table of Organization and Equipment

MWO Modification Work Order

MFK Modular Field Kitchen

NIIN National Item Identification Number

NSN National Stock Number

PMCS Preventive Maintenance Checks and Services

PSI Pounds Per Square Inch

RPSTL Repair Parts and Special Tools List

SMR Source, Maintenance and Recoverability

SRA Specialized Repair Activity

TDA Table of Distribution & Allowances

TMDE Test Measurement and Diagnostic Equipment

#### TM 10-7360-211-13&P

Section I. ABBREVIATIONS - Continued

U/M Unit of Measure

UOC Usable on Code

Section II. TERMS

None

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- 7. Date Sent: 19-OCT-93
- 8. Pub no: 55-2840-229-23
- 9. Pub Title: TM
- 10. Publication Date: 04-JUL-85
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- 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:

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R	RECOMMEN		ANGES		ICATIONS	S AND	Use Part II (reverse) for Repair Parts and Special Tool Lists (RPSTL) and Supply Catalogs/Supply Manuals (SC/SM).  DATE 21 October 2003			
F	or use of this	form, see Al	R 25-30; th	e proponent	agency is OI	DISC4.				
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	TICK, MA 0		P	ART I – ALL	PUBLICAT		RPSTL AND S	C/SM) AND BL	ANK FORMS	
	CATION/FORM					DATE		TITLE		
TM 10	-1670-296-	23&P				30 Octobe	r 2002	Unit Manua Drop Syste		nent for Low Velocity Air
ITEM NO.	PAGE NO.	PARA- GRAPH	LINE NO. *	FIGURE NO.	TABLE NO.			RECOMMENDE	D CHANGES AND REASO recommended changes,	
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	, OIM	VIX III EI	_		EXTENSION		_,, , , , , , , , , , , , , , , , , , ,		J. W. I. VILL	
Jane	Doe, PFC				508-233	3-4141 Jane Doe Jane Doe			te Doe	

FROM: (Activity and location) (Include ZIP Code) DATE TO: (Forward direct to addressee listed in publication) COMMANDER PFC Jane Doe U.S. ARMY TANK-AUTOMOTIVE AND ARMAMENT COMMAND 21 October 2003 CO A 3<sup>rd</sup> Engineer BR ATTN: AMSTA-LC-CECT Ft. Leonardwood, MO 63108 15 KANSAS STREET NATICK, MA 01760-5052 PART II - REPAIR PARTS AND SPECIAL TOOL LISTS AND SUPPLY CATALOGS/SUPPLY MANUALS **PUBLICATION NUMBER** DATE TITLE 30 October 2002 Unit Manual for Ancillary Equipment for Low TM 10-1670-296-23&P Velocity Air Drop Systems TOTAL NO. OF REFERENCE **FIGURE PAGE** COLM LINE NATIONAL ITEM **MAJOR ITEMS** STOCK NUMBER SUPPORTED NO. NO. NO. RECOMMENDED ACTION NO. NO. NO. 0066 00-1 Callout 16 in figure 4 is pointed 4 to a D-Ring. In the Repair Parts List key for figure 4, item 16 is called a Snap Hook. Please correct one or the other. 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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SIGNATURE

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For use of this form, see AR 25-30; the proponent					agency is O	DISC4.	,			
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	-7360-211	RM NUMBER 1-13&P					DATE 30 May 1991  TITLE Operator's, Unit and Direct Support Maintenance Including Repair Parts and Special Tools List for Food Center (FSC)			Ils List for Food Sanitation
ITEM NO.	PAGE NO.	PARA- GRAPH	LINE NO. *	FIGURE NO.	TABLE NO.				D CHANGES AND REASO f recommended changes, if	
				*Re	ference to li	ne numbers with	in the paragrap	h or subparagra	aoh.	
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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	
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	-7360-211	RM NUMBER 1-13&P		·		DATE 30 May 199	91	Including Re Center (FSC	pair Parts and Special Too	Ils List for Food Sanitation
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F	or use of thi	s form, see A	AR 25-30; the	e proponent a	agency is O	DISC4.	,			
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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 = 3 2.8 feet 1 hectometer = 10 dekameters = 328.08 feet

#### Weights

1 kilometer = 10 hectometers = 3,280.8 feet

1 centigram = 10 milligrams = .15 grain 1 decigrarn = 10 centigrams = 1.54 grains 1 gram = 10 decigrams = .035 ounce 1 dekagrarn = 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 = .15 5 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**

To change	To	Multiply by	To change	To	Multiply by
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	Iiters	.473	milliliters	fluid ounces	.034
quarts	Iiters	.946	liters	pints	2.113
gallons	Iiters	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	5/9 (after	Celsius	_C
	temperature	subtracting 32)	temperature	

PIN: 068741-000