# MWO 10-7360-206-30-1

#### ROUTINE

MWO Effective date is 1 May 1998 and completion date is 1 January 2013

### MODIFICATION WORK ORDER

#### MODIFICATION OF MOBILE KITCHEN TRAILER (MKT)

MKT-75	7360-01-439-8218	Kitchen Field Trailer Mounted (EIC:N/A)
MKT-75	7360-00-138-7782	Kitchen Field Trailer Mounted (EIC:YBC)
MKT-75A	7360-01-092-0470	Kitchen Field Trailer Mounted (EIC:YBL)
MKT-82	7360-01-155-6020	Kitchen Field Trailer Mounted (EIC:YBM)
MKT-85	7360-01-214-1176	Kitchen Field Trailer Mounted (EIC:YBT)
MKT-90	7360-01-313-2238	Kitchen Field Trailer Mounted (EIC:YCF)
MKT-95	7360-01-417-4635	Kitchen Field Trailer Mounted (EIC:YCG)

Headquarters Department of the Army, Washington, D.C.

# 1 December 2000

#### REPORTING OF ERRORS AND RECOMMENDING IMPROVEMENTS

You can help improve this MWO. 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) directly to: Commander, US Army Soldier and Biological Chemical Command (SBCCOM), ATTN: AMSSB-RIM-E (N), Kansas St, Natick, MA 01760-5018. A reply will be provided to you.

<u>DISTRIBUTION STATEMENT A.</u> Approved for public release; distribution is unlimited.



#### 1. PURPOSE:

The purpose of this Modification Work Order (MWO) is to modify the Mobile Kitchen Trailer (MKT) for the installation of the Modern Burner Unit (MBU). This modification will consist of installing five (5) 1/2 inch cable clamps on the platform assembly under the MKT trailer, installing a feeder cable harness and installing a power converter mounting bracket assembly. The power converter and the connecting power cables will be provided with the MBU, which will replace the M2/M2A burners.

- **2. PRIORITY:** This modification is classified as ROUTINE.
- a. <u>Equipment in Use.</u> All equipment in use must be modified prior to installation of MBUs.
- b. <u>Equipment in Wholesale Depot Supply or Maintenance Activities</u>. The MWO will be accomplished on serviceable material prior to issue and/or subsequent to the scheduled completion date. Issue of material not modified is not prohibited. The MWO will be applied to unserviceable material during scheduled Depot Maintenance (DM).
- **3. END ITEM(S) OR SYSTEM(S) TO BE MODIFIED:** The modification will apply to all MKTs Army wide prior to or concurrent with MBU installation. (See Table 1).

Table 1.

Nomenclature	Line Item No.	Cage Code
Mobile Kitchen Trailer	L28351	81337

**4.** MODULE(S) (Components, assemblies, subassemblies) TO BE MODIFIED: Assemblies and parts will be modified by this Modification Work Order (See Table 2).

Table 2.

Nomenclature	Part No.	Cage code
Platform Ramp Assembly	5-13-2509	81337
Platform Assembly	5-13-2510	81337
Storage Cabinet Assembly	5-13-2527	81337
Storage Cabinet Frame	5-13-2528	81337
Platform Frame Assembly	5-13-2511-G1	81337
Platform Deck Assembly	5-13-2511-G2	81337
Panel Details Cabinet	5-13-2506	81337

5. PARTS TO BE MODIFIED: N/A.

#### 6. APPLICATION:

<u>Time Compliance Schedule</u>.

- a. The MWO effective date is 1 May 1998, and the completion date is 1 May 2013.
- b. Level of maintenance: Direct Support maintenance is the lowest level of maintenance authorized to perform this MWO.
- c. Time Required: Eight (8) man-hours are required to apply this MWO.
- d. MWO to be applied to or concurrently with this MWO. None.

#### 7. TECHNICAL PUBLICATIONS AFFECTED/CHANGED:

TM10-7360-206-13	Operator's, Organizational and Direct	
	Support Maintenance Manual for the	
	Kitchen, Field, Trailer Mounted	
TM10-7360-206-23P	Unit and Direct Support Maintenance	
	Repair Parts and Special Tools List for the	
	Kitchen, Field, Trailer Mounted	

#### 8. MWO KIT(S)/PART(S) AND THEIR DISPOSITION.

- a. Kit(s)/Part(s) Needed to Apply the MWO (See Table 4).
- b. Bulk and Expendable Materials: N/A
- c. Parts Disposition: N/A

### **Table 4. Contents of the MWO kit (MCN 7360-01-B15-1005)**

MKT modification kit – MCN 7360-01-B15-1005



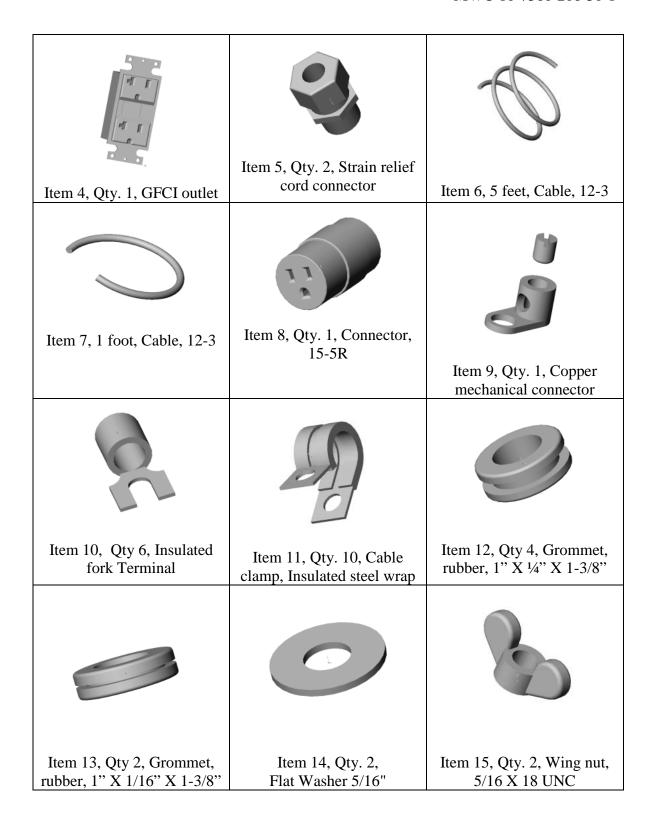
Item 1, Qty. 1, Watertight plug, 15-5P



Item 2, Qty. 1, Waterproof outlet box



Item 3, Qty. 1, Waterproof cover, vertical







# 9. SPECIAL TOOLS; TOOL KITS; JIGS; TEST MEASUREMENT AND DIAGNOSTIC EQUIPMENT (TDME); AND FIXTURE REQUIRED:

SC 4910-95-A74, (NSN) 4910-00-754-0654 SHOP EQUIPMENT. 1-3/8 inch drill bit, or hole saw for drilling aluminum plate, and cutting fluid for aluminum.

#### 10. MODIFICATION PROCEDURES:

**WARNING.** Wear safety shatterproof glasses or goggles when drilling under the Trailer platform deck and the storage cabinet.

#### a. Modification of the storage cabinet.

1) Drill 1-3/8 inch holes in the three aluminum panels of the storage cabinet. Refer to Figure 1 for the storage cabinet location, Figure 2 for the panel locations, and Figure 3 for the hole location in each panel and insert a grommet (Item 13) into the holes in panels 1 and 2.

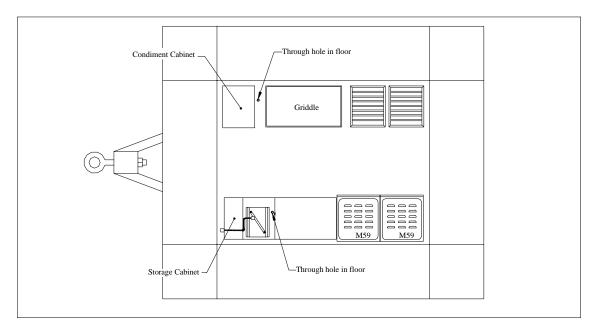


Figure 1. Location of cabinets and holes in MKT platform.

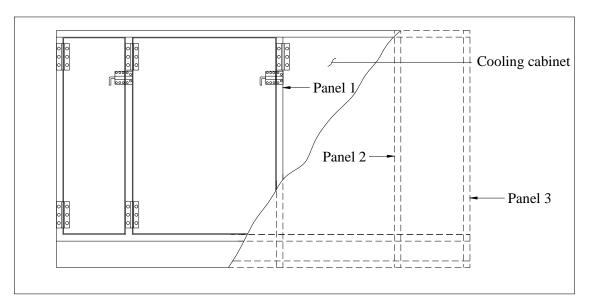


Figure 2. Location of storage cabinet panels.

2) From inside the cooling cabinet (Figure 2), drill five, 3/16 inch holes in panel 2. See Figure 4 for hole locations. These holes will be used for mounting cable clamps in step g.

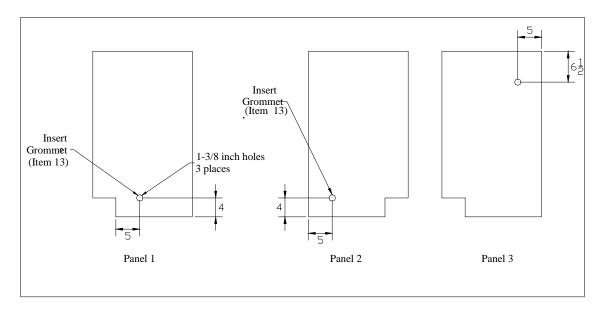


Figure 3. Location of cable pass through holes in storage cabinet panels.

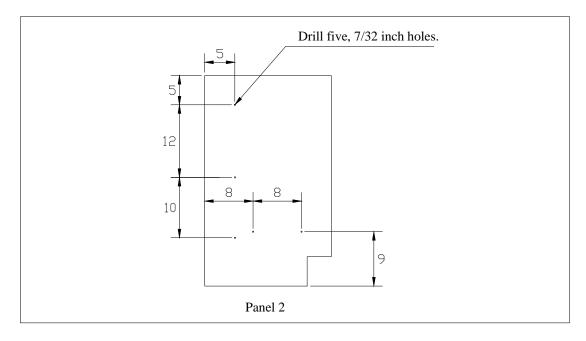


Figure 4. Location of cable clamp mounting holes in storage cabinet panel.

- **b. Modification of the MKT platform.** The platform deck and frame must be modified to allow the cross-way cable (that will be supplied with the MBU MKT kit) to pass down through the floor, underneath and across the platform, and back up through the floor on the other side of the MKT isle.
- 1) Remove the condiment cabinet from the passenger side of the MKT by lifting it straight up to clear the brackets that hold it in place. See Figure 1 for condiment cabinet location.

2) Drill a 1 - 3/8 inch hole in the aluminum platform deck in the position shown in Figure 5 and insert grommet (Item 12) in hole.

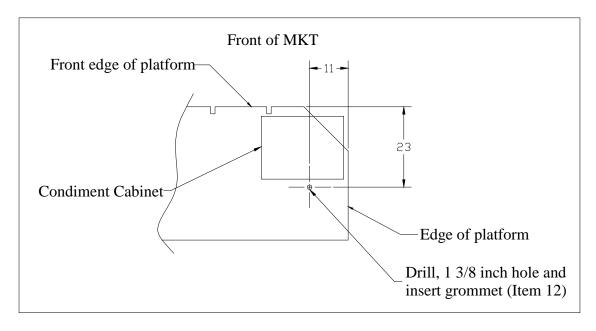


Figure 5. Location of cable pass through hole in platform near condiment cabinet.

3) Gain access to the platform deck inside the storage cabinet by opening the cooling cabinet door. Drill a 1-3/8 inch hole in the aluminum platform deck in the position shown in Figure 6. Use reference dimensions from the storage cabinet frame to position the hole. NOTE: If the storage cabinet is removed, use the alternate dimensions from the edge of the platform in Figure 6 to position the hole. Insert one grommet (Item 12) into the hole.

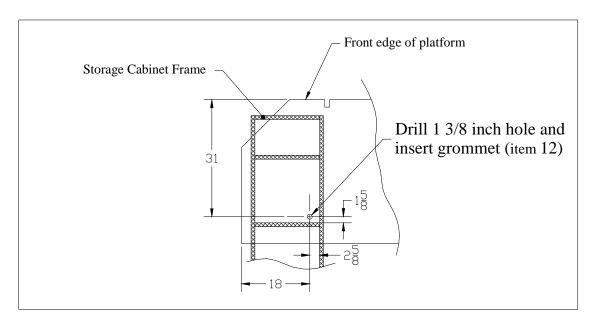


Figure 6. Location of cable pass-through hole inside storage cabinet.

# c. Drilling the cross-way holes.

1) Locate and drill two, 1-3/8 in. holes through the channel sections of the MKT platform frame and insert one grommet (Item 12) into the hole. See Figure 7 and Figure 8 for hole locations. The frame can only be accessed from underneath the front of the MKT trailer. These frame members are 3/8 inch thick aluminum channel sections. They sit directly on top of the trailer frame. DO NOT DRILL THROUGH THE TRAILER FRAME.

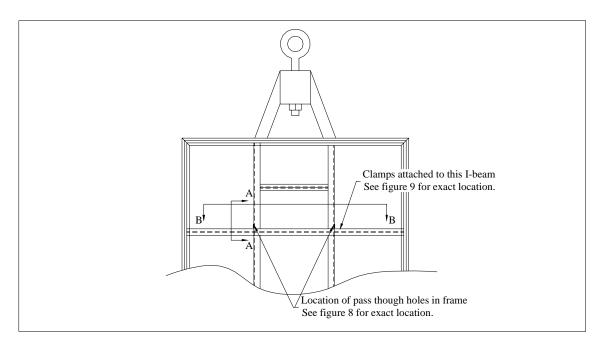


Figure 7. Location of holes and cable clamps in MKT frame.

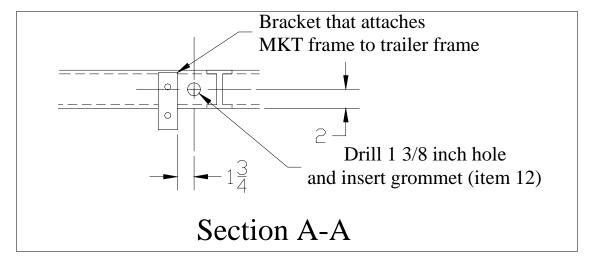


Figure 8. Location of pass-through hole in MKT frame.

- **d. Installation of cross-way cable clamps.** NOTE: The clamps installed in this step must be removed to install the cross-way cable when the MBU-MKT kit is installed. If you already have the MBU-MKT kit, it is easiest to install the cross-way cable along with these clamps to avoid removing them later.
- 1) Attach the five steel insulated clamps (item 11) to the aluminum I-beam of the MKT platform frame using the self drilling #8 hex screws (Item 23). Pre-drill 1/8 inch holes

before install the screws. Position them according to Figure 7 and Figure 9 (section B-B).

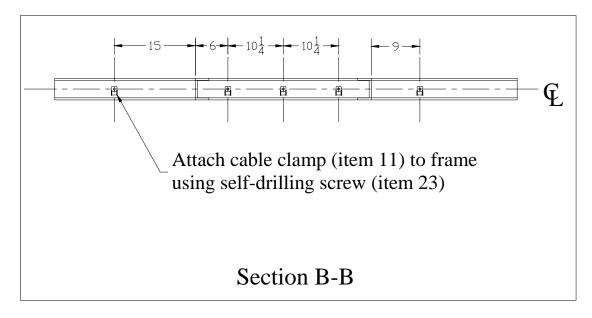


Figure 9. Location of cable clamp on the MKT platform frame.

### e. Installation of power converter bracket.

1) Insert one 5 inch carriage bolt (Item 22) into each of the square holes of the power converter bracket (Item 27) and capture each carriage bolt using one 5/16 inch nut (Item 16). See Figure 10.

**CAUTION**: Position the nut according to Figure 10. This will allow the carriage to fit loosely in the bracket, reducing the chance of damage to the bolts or personal injury when the storage cabinet is removed for cleaning. DO NOT TIGHTEN 5/16 INCH BOLT.

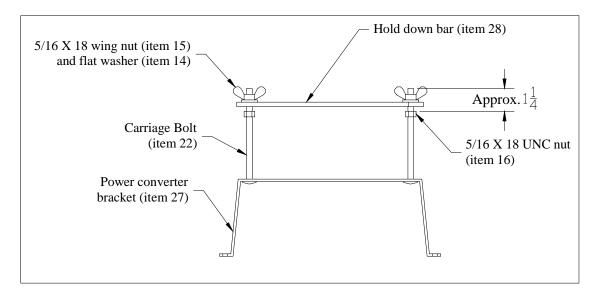


Figure 10. Assembly of power converter bracket.

- 2) Install the power converter hold down bar (Item 28) onto the carriage bolts and capture it using one flat washer (Item 14) and a wing nut (Item 15).
- 3) Place the power converter bracket assembly inside the storage cabinet.
- 4) Install the power converter bracket according to Figure 11.

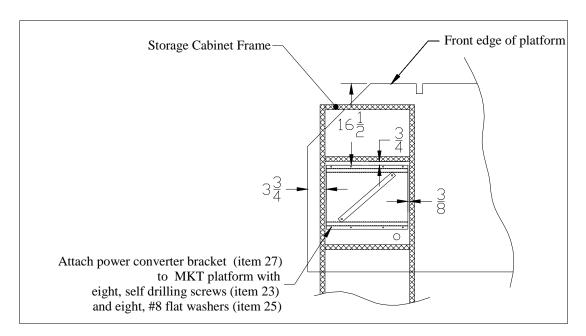


Figure 11. Position of power converter bracket inside storage cabinet.

### f. Feeder cable harness assembly.

1) Attach the plug (item 1) to one end of 1-foot cable (item 7), stripping cable jacket and wire as necessary. Ensure green to ground, black to brass, and white to silver terminals. (Figure 12).

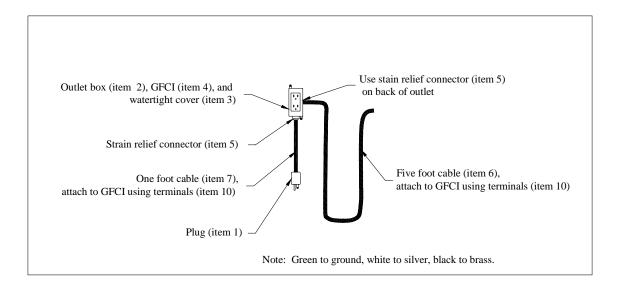


Figure 12. Assembly of feeder cable harness.

- 2) Strip back approximately 3 inches of cable jacket and ¼ inch of each wire jacket from the other end of the 1-foot cable and attach terminals (item 10) to each of the three wire ends.
- 3) Pass the end with the terminals through the strain relief connector (item 5) and install the 1-foot cable assembly into the bottom access hole of the outlet box (item 2).
- 4) Strip back approximately 3 inches of cable jacket and ½ inch of each wire jacket from one end of the 5-foot cable (item 6) and attach terminals (item 10) to the each of the three wire ends.
- 5) Attach mounting tabs supplied with the outlet box to the outlet box.
- 6) Insert the end of the 5-foot cable with the terminals through the strain relief connector (item 5) and install the 5-foot cable assembly into the rear access hole of the outlet box (item 2). Make sure the threads of the strain relief do not extend into the inside of the box.
- 7) Attach the 5-foot cable to the load side and 1-foot cable to the line side to the GFCI duplex outlet (item 4). Insure green to ground, black to brass, and white to silver terminals of the outlet. Do not attach the receptacle at this time.

- 8) Secure the outlet to the outlet box and install the watertight cover with the hinge on top (item 3).
- 9) Tighten both strain relief connectors.

#### g. Installation of feeder cable harness to the storage cabinet.

1) Insert the long cable of the feeder cable harness assembly through the 1-3/8 inch hole in panel 3 of the storage cabinet (Figure 13).

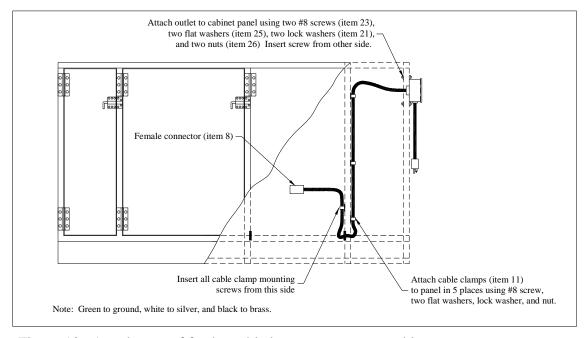


Figure 13. Attachment of feeder cable harness to storage cabinet.

- 2) Locate outlet box mounting holes using the outlet box (item 2) as a template and drill two 3/16 inch holes in panel 3.
- 3) Attach the outlet box to panel 3 of the storage cabinet using two #8 X 32 bolts (Item 24), flat washers (Item 25), lock washers (Item 21), and nuts (Item 26).
- 4) Feed the 5-foot cable down the left side of the drawer cabinet behind the drawer slides and through the hole in panel 2.
- 5) Secure the 5-foot cable by using the cable clamps. Secure the cable clamps to panel 2 into the holes pre-drilled in step a. 2), using the #8 screws, flat washers, lock washers, and nuts. Ensure that the cable will not interfere with the operation of the storage cabinet drawer (Figure 13).
- 6) Attach the female connector (item 8) to the end of the 5-foot cable. Ensure green to ground, black to brass, and white to silver terminals (Figure 13).

#### h. Installation of the grounding lug.

1) Mount grounding lug on the MKT frame according to Figure 14 and Figure 15, by removing the paint at the hole location to achieve good contact.

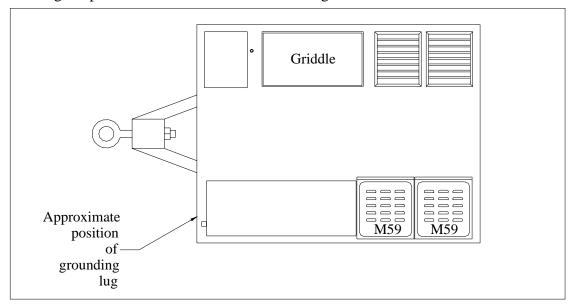


Figure 14. Position of grounding lug on MKT frame.

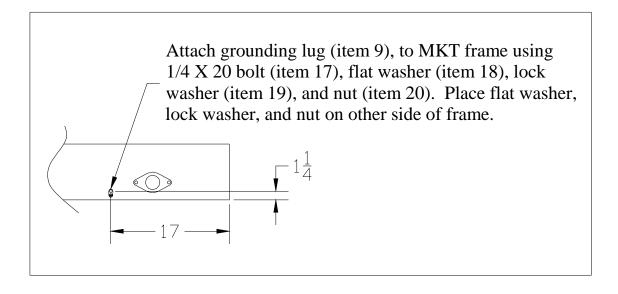


Figure 15. Installation of grounding lug on the MKT frame.

- 11. CALIBRATION REQUIREMENTS. Not applicable.
- **12**. **WEIGHT AND BALANCE DATA**. Weight and balance are not significantly affected.
- 13. QUALITY ASSURANCE REQUIREMENTS. Inspection of completed MWO application for full compliance with the technical requirements of the instructions will be accomplished by qualified personnel.
- **14. RECORDING AND REPORTING OF THE MODIFICATION.** Records, reports and modification accomplishment shall be in accordance with DA PM 738-750. The Army Maintenance Management System (TAMMS), and Standard Army Maintenance Systems (SAMS). DA form 2407/5504 shall be completed and submitted within three (3) days of accomplishment of modification. After completion, copies of DA form 2407/5504 will be distributed as follows:
- a. One (1) copy retain by using unit.
- b. Two (2) copies to:

COMMANDER
US ARMY SOLDIER AND BIOLOGICAL CHEMICAL
COMMAND (SBCCOM)
ATTN: AMSSB-RSO (RI), MWO OFFICE
ROCK ISLAND, IL 61299-7390

- **15**. **MATERIEL CHANGE (MC) NUMBER:** This MWO is authorized by MC number 1-99-08-001.
- **16. MODIFICATION IDENTIFICATION:** The duplex receptacle mounted to the Storage Cabinet with one-foot extension cable. The power converter bracket is installed inside the Storage Cabinet.

# By Order of the Secretary of the Army:

#### **ERIC K. SHINSEKI**

General, United States Army Chief of Staff

Official:

JOEL B. HUDSON

Administrative Assistant to the Secretary of the Army
0017209

Joel B. Huln

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To: amssb-rim-e@natick.army.mil

Subject: DA Form 2028

1. *From:* Joe Smith

2. Unit: home

Address: 4300 Park
 City: Hometown

5. *St:* MO6. *Zip:* 77777

7. Date Sent: 19-OCT-93
 8. Pub no: 55-2840-229-23

9. Pub Title: TM

10. Publication Date: 04-JUL-85

11. Change Number: 7
12. Submitter Rank: MSG
13. **Submitter FName:** Joe
14. Submitter MName: T

15. Submitter LName: Smith

16. Submitter Phone: 123-123-1234

17. **Problem: 1**18. Page: 2
19. Paragraph: 3
20. Line: 4
21. NSN: 5

22. Reference: 6 23. Figure: 7 24. Table: 8 25. Item: 9 26. Total: 123

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**PUBLICATION NUMBER** TM 1-1520-250-10 **PUBLICATION DATE** 15 June 1992

**PUBLICATION TITLE** 

Operator's manual MH60K Helicopter

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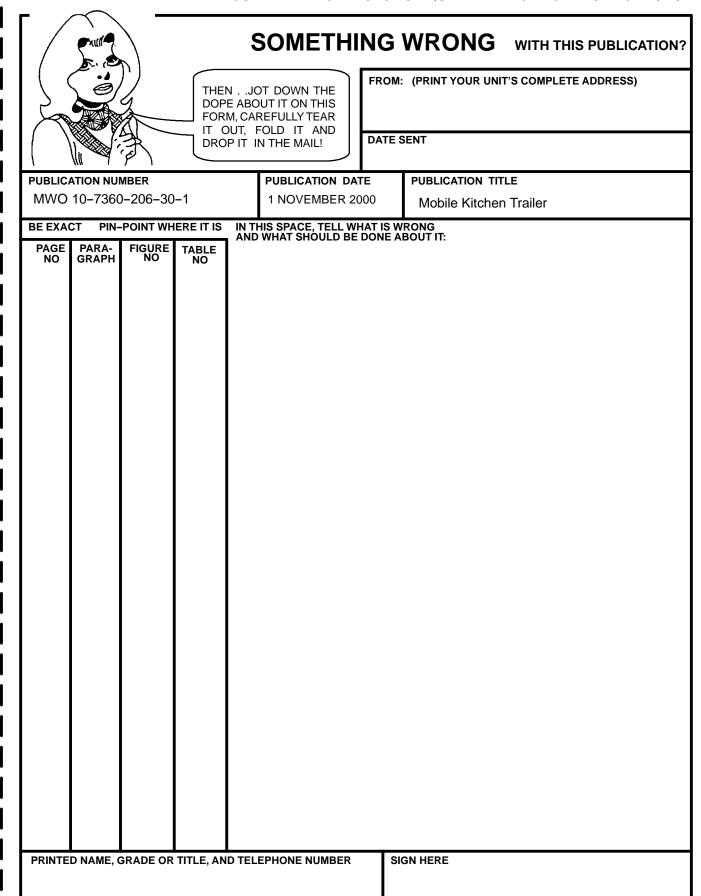
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# The Metric System and Equivalents

#### Linear Measure

1 centimeter = 10 millimeters = .39 inch 1 decimeter = 10 centimeters = 3.94 inches 1 meter = 10 decimeters = 39.37 inches 1 dekameter = 10 meters = 32.8 feet 1 hectometer = 10 dekameters = 328.08 feet 1 kilometer = 10 hectometers = 3,280.8 feet

#### Weights

1 centigram = 10 milligrams = .15 grain 1 decigram = 10 centigrams = 1.54 grains 1 gram = 10 decigrams = .035 ounce 1 dekagram = 10 grams = .35 ounce 1 hectogram = 10 dekagrams = 3.52 ounces 1 kilogram = 10 hectograms = 2.2 pounds 1 quintal = 100 kilograms = 220.46 pounds 1 metric ton = 10 quintals = 1.1 short tons

#### Liquid Measure

1 centiliter = 10 milliliters = .34 fl. ounce 1 deciliter = 10 centiliters = 3.38 fl. ounces 1 liter = 10 deciliters = 33.81 fl. ounces 1 dekaliter = 10 liters = 2.64 gallons 1 hectoliter = 10 dekaliters = 26.42 gallons 1 kiloliter = 10 hectoliters = 264.18 gallons

#### Square Measure

1 sq. centimeter = 100 sq. millimeters = .155 sq. inch 1 sq. decimeter = 100 sq. centimeters = 15.5 sq. inches 1 sq. meter (centare) = 100 sq. decimeters = 10.76 sq. feet 1 sq. dekameter (are) = 100 sq. meters = 1,076.4 sq. feet 1 sq. hectometer (hectare) = 100 sq. dekameters = 2.47 acres 1 sq. kilometer = 100 sq. hectometers = .386 sq. mile

#### Cubic Measure

1 cu. centimeter = 1000 cu. millimeters = .06 cu. inch 1 cu. decimeter = 1000 cu. centimeters = 61.02 cu. inches 1 cu. meter = 1000 cu. decimeters = 35.31 feet

# **Approximate Conversion Factors**

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	liters	.473	milliliters	fluid ounces	.034
quarts	liters	.946	liters	pints	2.113
gallons	liters	3.785	liters	quarts	1.057
ounces	grams	28.349	liters	gallons	.264
pounds	kilograms	.454	grams	ounces	.035
short tons	metric tons	.907	kilograms	pounds	2.205
pound-feet	newton-meters	1.356	metric tons	short tons	1.102
pound-inches	newton-meters	.11296			

# **Temperature (Exact)**

$^{\circ}F$	Fahrenheit	5/9 (after	Celsius	$^{\circ}C$
	temperature	subtracting 32)	temperature	

PIN: 078217-000