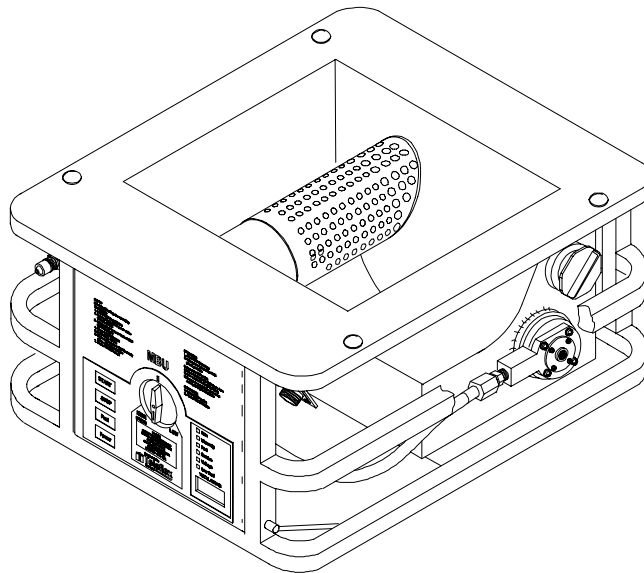


TECHNICAL MANUAL

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

**MODERN BURNER UNIT (MBU)
NSN 7310-01-452-8137
MODERN BURNER UNIT (MBU-V3)
NSN 7310-01-507-9310**



***This manual supersedes TM 10-7310-281-13&P, 31 May 2000, including all changes.**

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

HEADQUARTERS, DEPARTMENT OF THE ARMY

31 JULY 2004

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You can help improve this manual. If you find any mistakes or if you know of a way to improve the procedures, please let us know. Mail your letter, together with DA Form 2028 (Recommended Changes to Publications and Blank Forms), located in the back of this manual, directly to: Commander, U.S. Army Tank - automotive and Armament Command, ATTN: AMSTA-LC-CECT, Kansas Street, Natick, MA 01760. You may also send in your recommended changes via electronic mail directly to amssbriml@natick.army.mil. A reply will be furnished 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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TABLE OF CONTENTS

WP Sequence No.

WARNING SUMMARY

HOW TO USE THIS MANUAL

CHAPTER 1 – GENERAL INFORMATION

General Information.....	0001 00
Location and Description of Major Components	0002 00
Theory of Operation	0003 00

CHAPTER 2 - OPERATOR INSTRUCTIONS

Description and Use of Operator Controls and Indicators.....	0004 00
Operation Under Usual Conditions.....	0005 00
Operation in Unusual Conditions.....	0006 00

CHAPTER 3 – OPERATOR TROUBLESHOOTING PROCEDURES

Malfunction Symptom Index	0007 00
Troubleshooting Procedures	0008 00

CHAPTER 4 – OPERATOR MAINTENANCE INSTRUCTIONS

Preventive Maintenance Checks and Services (PMCS) Introduction	0009 00
Preventive Maintenance Checks and Services (PMCS)	0010 00
Fuel Tank	0011 00
Air Filter	0012 00
Fuel Filter	0013 00
Ignitor	0014 00
Fuel Nozzle	0015 00
Vent Valve Assembly Orifice	0016 00
Fuel Regulator Assembly Air Vent	0017 00

CHAPTER 5 – UNIT MAINTENANCE TROUBLESHOOTING PROCEDURES

Malfunction Symptom Index	0018 00
Troubleshooting Procedures	0019 00

CHAPTER 6 – UNIT MAINTENANCE INSTRUCTIONS

Service Upon Receipt.....	0020 00
12-ft Crossway Cable.....	0021 00
Electrical Connector Assembly.....	0022 00
Controller Assembly	0023 00
Compressor Assembly	0024 00
Fuel Delivery Block Assembly	0025 00
Reflective Heat Shield And Burner Assembly	0026 00
Vent Valve Assembly	0027 00
Fuel Regulator Assembly	0028 00
Fuel Line Assembly	0029 00
Fuel Interface Fitting.....	0030 00
Cable Clips	0031 00
Power Converter	0032 00
Battery Pack	0033 00
Batteries	0034 00
Battery Charger	0035 00
NATO Adapter Cable	0036 00

CHAPTER 7 - DIRECT SUPPORT MAINTENANCE INSTRUCTIONS

MBU Frame	0037 00
Battery Pack	0038 00

CHAPTER 8 - SUPPORTING INFORMATION

References	0039 00
Maintenance Allocation Chart (MAC) Introduction	0040 00
Maintenance Allocation Chart (MAC)	0041 00
Introduction To Repair Parts And Special Tools List (RPSTL)	0042 00
Group 00 MBU and MBU-V3	0043 00
Group 0101 Frame Assembly	0044 00
Group 0102 Connector Harness Assembly	0045 00
Group 0103 Controller Assembly	0046 00
Group 0104 Compressor Assembly	0047 00
Group 0105 Fuel Delivery Block Assembly	0048 00
Group 0106 Vent Valve Assembly	0049 00
Group 0107 Burner Assembly	0050 00
Group 0108 Fuel Regulator Assembly	0051 00
Group 0109 Reflective Heat Shield Assembly	0052 00
Group 0110 Fuel Line Assembly	0053 00
Group 02 Power Converter	0054 00
Group 03 Battery Pack	0055 00
Group 04 Misc. Assemblies	
Group 0401 Fuel Can Adapter and Fuel Hose	0056 00
Group 0402 NATO Adapter Cable	0057 00
Group 0403 24VDC Ext. & Branch Cables	0058 00
Group 0404 110VAC Extension	0059 00
Group 99 Bulk Material	0060 00
Special Tools List	0061 00
National Stock Number Index	0062 00
Part Number Index	0063 00
Components Of End Item (COEI) List & Basic Issue Items (BI) List	0064 00
Additional Authorization List (AAL)	0065 00
Expendable And Durable Items List	0066 00
Mandatory Replacement Parts List	0067 00
Alphabetical Index	Index 1

REAR MATTER

Form DA 2028 "Recommended Changes to Publications and Blank Forms"
Authentication Page
Metric Conversion Chart

HOW TO USE THIS MANUAL

This Manual contains General Information, Operating Instructions, Operator Preventive Maintenance Checks and Services (PCMS), Troubleshooting, and Maintenance/Repair instructions for the Modern Burner Unit (MBU) and the Modern Burner Unit-V3 (MBU-V3).

FRONT MATTER

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

CHAPTER 1 – GENERAL INFORMATION

Chapter 1 contains introductory information on the Modern Burner Unit and the Modern Burner Unit-V3 and its associated equipment as well as a Theory of Operation.

CHAPTER 2 – OPERATOR INSTRUCTIONS

Chapter 2 includes operating instructions under usual and unusual conditions.

CHAPTER 3 – OPERATOR TROUBLESHOOTING PROCEDURES

Chapter 3 contains operator troubleshooting.

CHAPTER 4 – OPERATOR MAINTENANCE INSTRUCTIONS

Chapter 4 contains operator maintenance instructions, PMCS, and service procedures.

CHAPTER 5 – UNIT MAINTENANCE TROUBLESHOOTING PROCEDURES

Chapter 5 contains operator troubleshooting.

CHAPTER 6 – UNIT MAINTENANCE INSTRUCTIONS

Chapter 6 contains service upon receipt, maintenance and service procedures authorized at the unit level.

CHAPTER 7 – DIRECT SUPPORT MAINTENANCE INSTRUCTIONS

Chapter 7 contains maintenance instructions and service procedures authorized at the direct/general support level.

CHAPTER 8 – SUPPORTING INFORMATION

Chapter 8 contains references and other supporting information.

REAR MATTER

Rear matter includes the alphabetical index, Form 2028, conversion charts, and the rear cover.

Manual Organization and Page Numbering System

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

Finding Information

The Table of Contents permits the reader to find information in the manual quickly. The reader should start here first when looking for a specific topic. The Table of Contents lists the topics contained within each chapter and the Work Package Sequence Number where it can be found.

Example: If the reader were looking for instructions on “Replacing the Compressor Assembly”, which is a Unit Maintenance topic, the Table of Contents indicates that Unit Maintenance information can be found in Chapter 6. Scanning down the listings for Chapter 6, “Compressor Assembly” information can be found in WP 0024 00 (Work Package 24).

An Alphabetical Index can be found at the back of the Manual, and lists specific topics with the corresponding work package.

OPERATOR'S, UNIT, AND DIRECT SUPPORT MAINTENANCE
MODERN BURNER UNIT (MBU)
(NSN 7310-01-452-8137)
MODERN BURNER UNIT-V3 (MBU-V3)
(NSN 7310-01-507-9310)
GENERAL INFORMATION

SCOPE

This Technical Manual contains instructions for the operation as well as preventive and corrective maintenance for the Modern Burner Unit (MBU and MBU-V3) (**figure 1, item 1**) and its associated equipment consisting of a Power Converter (**figure 1, item 2**), Battery Pack (**figure 1, item 3**), 110VAC extension cord (**figure 1, item 4**), 24VDC Extension Cables (**figure 1, item 5**), NATO Adapter Cable (**figure 1, item 6**), Fuel Can Adapter (**figure 1, item 7**), Fuel Hose (**figure 1, item 8**), and Branch Cables (**figure 1, item 9**).

An improved Power Converter (**figure 1, item 10**) is available, and may be used with all MBUs.

Type of Manual: Operator's, Unit, and Direct Support Maintenance, including RPSTL.

Equipment Name and Model Number: Modern Burner Unit (MBU100)
Modern Burner Unit-V3 (MBU103)

Purpose of Equipment: The MBU is the primary heat source for the kitchen and sanitation equipment found within all Army field feeding systems.

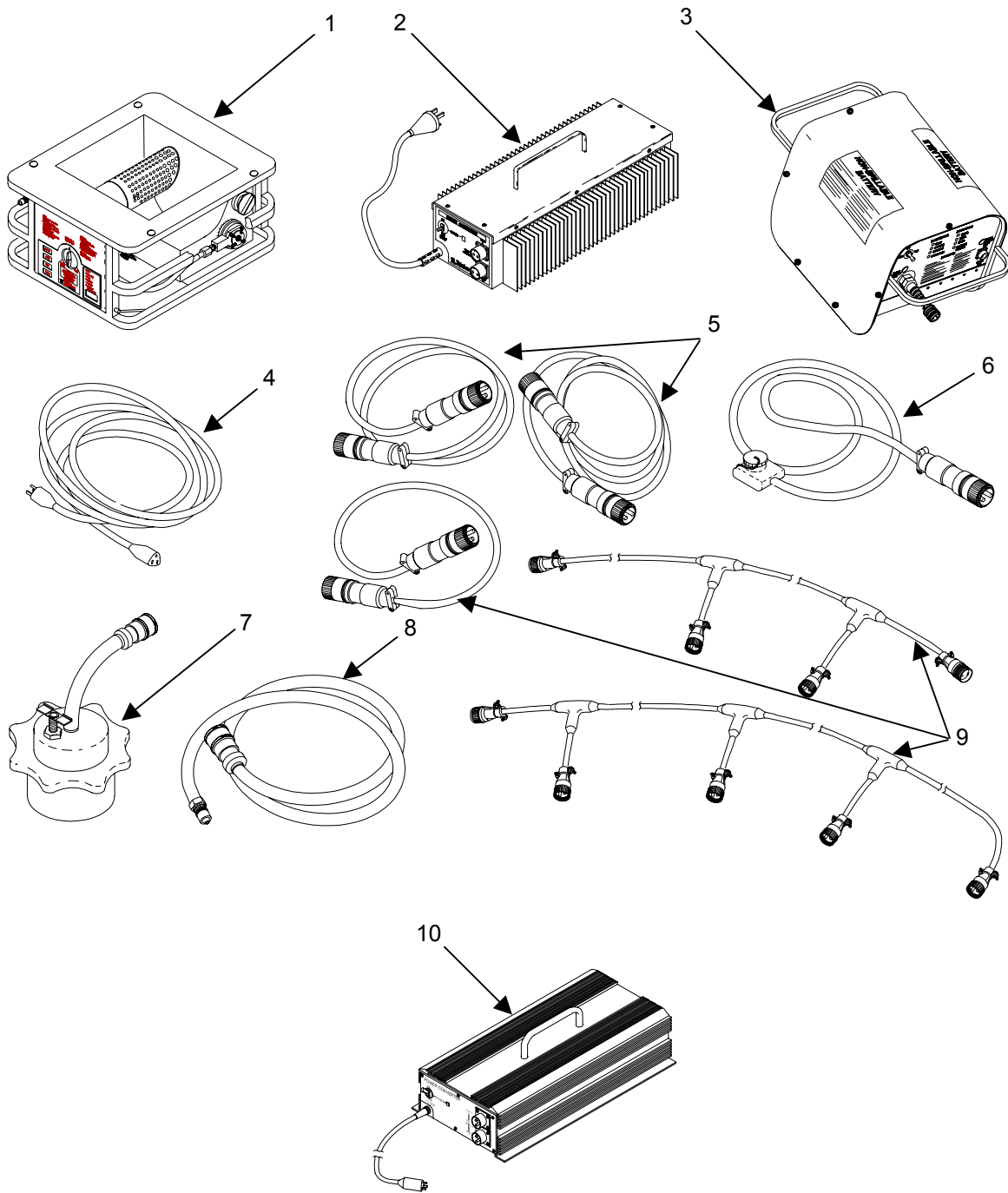


Figure 1. Modern Burner Unit and Associated Equipment