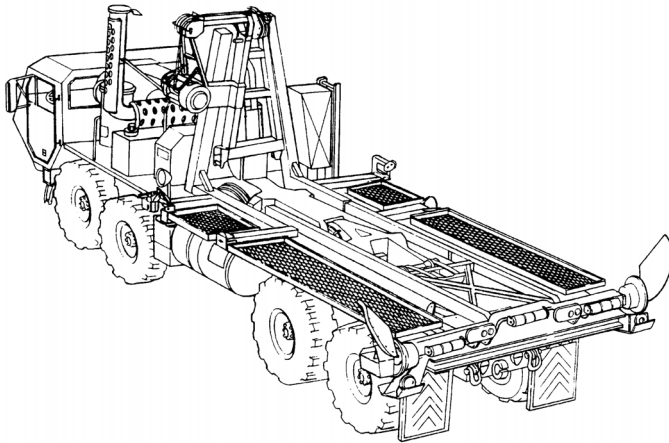


TECHNICAL MANUAL

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



**TRUCK, CARGO, 10-TON, 8X8,
COMMON BRIDGE TRANSPORTER,
M1977 WITHOUT WINCH
NSN 2320-01-442-1940, EIC: DVZ
M1977A2 WITHOUT WINCH
NSN 2320-01-492-8218
M1977A2R1 WITHOUT WINCH
NSN 2320-01-492-8228
M1977 WITH WINCH
NSN 2320-01-443-8023, EIC: DV4
M1977A2 WITH WINCH
NSN 2320-01-492-8219
M1977A2R1 WITH WINCH
NSN 2320-01-492-8229
AND
PALLET, BRIDGE ADAPTER, M15
NSN 3990-01-442-1939
EIC: DV5**

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Approved for public release; distribution unlimited.

**OPERATOR’S, UNIT, DIRECT SUPPORT, AND
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AND
PALLET, BRIDGE ADAPTER, M15
NSN 3990-01-442-1939, EIC: DV5**

REPORTING OF ERRORS AND RECOMMENDING IMPROVEMENTS

You can improve this publication. If you find any mistakes or if you know of a way to improve the procedures, please let us know. Submit your DA Form 2028-2 (Recommended Changes to Equipment Technical Publications), through the Internet, on the Army Electronic Product Support (AEPS) website. The Internet address is <http://aeprs.ria.army.mil>. If you need a password, scroll down and click on “ACCES REQUEST FORM.” The DA Form 2028 is located in the ONLINE FORMS PROCESSING section of the AEPS. Fill out the form and click on SUBMIT. Using this form on the AEPS will enable us to respond quicker to your comments and better manage the DA Form 2028 program. You may also mail, fax, or email your letter, DA Form 2028, or DA Form 2028-2 direct to :P Commander, U.S. Army Tank-automotive and Armaments Command, ATTN: AMSTA-LC-CIP-WT, Rock Island, IL 61299-7630. The email address is TACOM-TECH-PUBS@ria.army.mil. The fax number is DSN 793-0726 or Commercial (309) 782-0726.

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HOW TO USE THIS MANUAL

SCOPE.

This technical manual provides you with the information you will need to operate and maintain the M1977 Common Bridge Transporter (CBT) and the M15 Bridge Adapter Pallet (BAP). You will also need the M977 Heavy Expanded Mobility Tactical Truck (HEMTT) technical manuals (TM 9-2320-279-Series) for vehicle operation and maintenance. Bridging operations are covered in FM 90-13. The ribbon bridge is covered in TM 5-5420-209-12. For any HEMTT item or procedure not included in this manual, refer to the appropriate HEMTT technical manual referenced in Appendix A.

The information contained in this manual is presented in 6 chapters and 11 appendixes, one of which is a repair parts and special tools list (RPSTL). The chapters are divided into sections covering operation or maintenance procedures and/or other information for specific systems or components.

Note that Appendix A gives the title of every manual, form, pamphlet, or other document referenced in this manual.

INDEXING.

Three indexing procedures are used to help you locate information quickly:

- Cover index. Lists chapter and appendix titles and other important parts of the manual, with corresponding page numbers. Each chapter/appendix or part listed is boxed in.
- Table of contents. The table of contents follows the warning summary. The table of contents lists all chapters and sections numerically, with corresponding page numbers.
- Chapter indexes. Each chapter starts with a numerical listing of all sections and paragraphs in that chapter.
- Index. The alphabetically arranged subject index starts on page Index-1.

WARNINGS, CAUTIONS, AND NOTES.

You must read and understand this manual BEFORE operating the CBT and the BAP.

Throughout this manual you will see WARNING, CAUTION, and NOTE headings. There are good reasons for every one of these notices.

WARNING

A WARNING is used to alert the user to hazardous operating and maintenance procedures, practices, or conditions that could result in injury or death. WARNINGS must be strictly observed.

WARNINGS, CAUTIONS, AND NOTES (continued).

CAUTION

A **CAUTION** is used to alert the user to hazardous operating and maintenance procedures, practices, or conditions that could result in damage to, or destruction of, equipment or mission effectiveness. **CAUTIONs** must be strictly observed.

NOTE

A **NOTE** highlights an essential operating or maintenance procedure, condition, or statement.

WARNINGs and **CAUTIONs** appear immediately preceding the step to which they pertain. It is important to read and thoroughly understand the **WARNINGs** and/or **CAUTIONs** before beginning maintenance.

NOTEs may precede or follow the steps to which they pertain, depending on what makes the most sense.

CHAPTER 1

INTRODUCTION

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Section I. GENERAL INFORMATION

1-1. SCOPE.

This chapter provides general information, equipment descriptions, and principles of operation for the Common Bridge Transporter (CBT) and the M15 Bridge Adapter Pallet (BAP).

- a. Type of Manual.** This technical manual (TM) provides CBT Operator’s instructions; Unit, Direct Support, and General Support maintenance instructions; and a Repair Parts and Special Tools List (RPSTL). Troubleshooting procedures and preventive maintenance checks and services procedures are also included.
- b. Equipment Name.**

 - (1) The M1977 CBT consists of a modified M977 Heavy Expanded Mobility Tactical Truck (HEMTT) (with or without a winch) and a Load Handling System (LHS), which together are called the “CBT” (Model A or B) (often referred to as “Transporter”). See page 1-7 for identification of Model A and B.
 - (2) The CBT System consists of an M1977 CBT and either an M15 BAP or an M14 Improved Boat Cradle (IBC).
- c. Purpose of Equipment.** The CBT provides the capability for transporting, launching, and retrieving elements of the rapidly deployable Military Load Class 70 Improved Float Bridge (Ribbon Bridge) and the Bridge Erection Boat, Twin Jet, Aluminum Hull (Models USCSBMK1, national stock number [NSN] 1940-01-105-5728, and USCSBMK2, NSN 1940-01-218-2165). The CBT also provides the capability for performing cargo-hauling missions using the Palletized Load System (PLS) flatrack loaded to 10 tons (9 metric tons). The CBT is capable of towing the PLS trailer to increase hauling capabilities.

1-2. MAINTENANCE FORMS, RECORDS, AND REPORTS.

Department of the Army forms and procedures used for equipment maintenance will be those prescribed by DA Pam 738-750 as contained in the Maintenance Management Update.

1-3. DESTRUCTION OF ARMY MATERIEL TO PREVENT ENEMY USE.

Procedures for the destruction of Army materiel to prevent enemy use are contained in TM 750-244-3.

1-4. PREPARATION FOR STORAGE OR SHIPMENT.

Information on preparing the CBT for storage or shipment is in Section VIII of Chapter 4.

1-5. QUALITY ASSURANCE.

- a. No specific quality assurance manual pertains to the M1977 CBT and the M15 BAP.
- b. Defective material received through the supply system should be reported on SF Form 368. Instructions for preparing the reports are provided in AR 702-7. Mail your completed form directly to:

Commander
U.S. Army Tank-automotive and Armaments Command
ATTN: AMSTA-TR-E-MPA
Warren, MI 48397-5000

1-6. REPORTING EQUIPMENT IMPROVEMENT RECOMMENDATIONS.

If your CBT needs improvement, let us know. Send us an equipment improvement recommendation (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. Describe the problem on an SF Form 368 (Product Quality Deficiency Report) and mail it to us at Commander, U.S. Army Tank-automotive and Armaments Command, ATTN: Commander, U.S. Army Tank-automotive and Armaments Command, ATTN: AMSTA-TR-E-MPA, Warren, MI 48397-5000. We will send you a reply.

1-7. WARRANTY INFORMATION.

For complete information covering the warranty for the CBT, refer to TB 5-5420-234-15, *Warranty Program for the Common Bridge Transporter (CBT)*. There is no warranty for the BAP.

1-8. CORROSION PREVENTION AND CONTROL.

- a.* Corrosion prevention and control (CPC) of Army materiel is a continuing concern, particularly since the CBT usually operates in a wet environment. It is important that any corrosion problems be reported so they can be corrected and improvements can be made to prevent problems in the future.
- b.* While corrosion is typically associated with the rusting of metals, it can also include deterioration of other materials, such as rubber and plastic. Unusual cracking, softening, swelling, or breaking of these materials may be a corrosion problem.
- c.* If a corrosion problem is identified, it can be reported using SF Form 368. The use of key words, such as "corrosion," "rust," "deterioration," and "cracking," will ensure that the information is identified as a CPC problem. The form should be submitted to the address specified in DA Pam 738-750.

1-9. LIST OF ABBREVIATIONS AND ACRONYMS.

AMDF	Army Master Data File
AOAP	Army Oil Analysis Program
BAP	Bridge Adapter Pallet
BII	basic issue items
BOI	basis of issue
CAGEC	Commercial and Government Entity Code
CARC	chemical agent resistant coating
CBT	Common Bridge Transporter
cm	centimeter
COEI	components of end item
CPC	corrosion prevention and control
CTA	Common Table of Allowances
dia.	diameter
DS	Direct Support
EIC	end-item code
EIR	Equipment Improvement Recommendation
ft	foot
GAA	grease, automotive and artillery
gal.	gallon
gpm	gallons per minute
GS	General Support
HEMTT	Heavy Expanded Mobility Tactical Truck
IBC	Improved Boat Cradle
in.	inch
JTA	Joint Table of Allowances
kg	kilogram
km	kilometer
lb	pound
LED	Light Emitting Diode
LH	left-hand
LHS	Load Handling System
MAC	maintenance allocation chart
mi	mile
MLC	military load class
MTOE	Modified Tables of Organization and Equipment

1-9. LIST OF ABBREVIATIONS AND ACRONYMS (continued).

NIIN	national item identification number
NSN	national stock number
OEA	oil, engine, arctic
OE/HDO	oil, engine/hydraulic oil
oz	ounce
PLS	Palletized Load System
PMCS	preventive maintenance checks and services
PTO	power takeoff
Qty. Recm.	quantity recommended
Qty. Rqr.	quantity required
RCU	remote control unit
RH	right-hand
RPSTL	repair parts and special tools list
SMR	source, maintenance, and recoverability
SRA	specialized repair activity
TDA	Tables of Distribution and Allowances
TM	technical manual
TMDE	test, measuring, and diagnostic equipment
TOE	Tables of Organization and Equipment
u/m	unit of measure
UOC	usable-on code
V dc	Volts, direct current