TECHNICAL BULLETIN

OPERATOR'S AND UNIT MAINTENANCE

FOR

SEMITRAILER, TRANSPORTER, HEAVY EQUIPMENT
70 TON, M1000

WHEN LOADED WITH ABRAMS MAIN BATTLE TANK SERIES WITH MINE CLEARING BLADE ATTACHED

Approved for Public Release; Distribution is Unlimited.

HEADQUARTERS, DEPARTMENT OF THE ARMY

AUGUST 2000
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TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHAPTER 1 INTRODUCTION</td>
<td>1-1</td>
</tr>
<tr>
<td>Section I General Information</td>
<td>1-1</td>
</tr>
<tr>
<td>Section II Operational and Maintenance Considerations</td>
<td>1-2</td>
</tr>
<tr>
<td>CHAPTER 2 OPERATING INSTRUCTIONS</td>
<td>2-1</td>
</tr>
<tr>
<td>APPENDIX A REFERENCES</td>
<td>A-1</td>
</tr>
<tr>
<td>APPENDIX B ADDITIONAL AUTHORIZATION LIST (AAL)</td>
<td>B-1</td>
</tr>
</tbody>
</table>

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CHAPTER 1
INTRODUCTION

SECTION NO.  TITLE
I............................................. General Information
II.......................................... Operational and Maintenance Considerations

Section I. GENERAL INFORMATION

PARA. NO.  TITLE
1-1........................................... Scope
1-2........................................... Metric Units
1-3........................................... List of Abbreviations
1-4........................................... Equipment Data

1-1. SCOPE

1-1.1. Type of Manual. Operator’s and unit maintenance technical bulletin.

1-1.2. Model Number and Equipment Name. M1000 Heavy Equipment Transporter Semitrailer (HETS).

1-1.3. Purpose of Equipment. To load or unload and transport a battle-dressed Abrams Main Battle Tank (MBT) series with mine clearing blade attached onto the M1000 Heavy Equipment Transporter Semitrailer (HETS), able or disabled, with or without tracks, during administrative and tactical operations.

1-2. METRIC UNITS

Metric units, in addition to English units, are included in this manual. An English-to-metric conversion table is included on the inside back cover of this manual.

1-3. LIST OF ABBREVIATIONS

AAL Additional Authorization List
APU Auxiliary Power Unit
BII Basic Issue Items List
CCW Counterclockwise
CTA Common Table of Allowances
CTIS Central Tire Inflation System
CW Clockwise
HETS Heavy Equipment Transporter Semitrailer
JTA Joint Table of Allowances
MBT Main Battle Tank
MLC Military Load Classification
MTOE Modification Table of Organization and Equipment
PMCS Preventive Maintenance Checks and Services
PTO Power Takeoff
TDA Table of Distribution and Allowances
1-4. EQUIPMENT DATA

NOTE

Only equipment data elements which are different from those given in TM 9-2330-381-14 are given in this technical bulletin.

M1000 SEMITRAILER (WITH M1A2 MBT WITH MINE CLEARING BLADE ATTACHED)

Weight (fully loaded) ...................................... 198,400 lbs (90,074 kg)

Section II. OPERATIONAL AND MAINTENANCE CONSIDERATIONS

<table>
<thead>
<tr>
<th>PARA. NO.</th>
<th>TITLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-5</td>
<td>Operational Considerations</td>
</tr>
<tr>
<td>1-6</td>
<td>Maintenance Considerations</td>
</tr>
</tbody>
</table>

1-5. OPERATIONAL CONSIDERATIONS

CAUTION

The Abrams MBT series with mine clearing blade attached exceeds the M1000 semitrailer design maximum payload weight. The heaviest of these payloads, the M1A2 MBT with mine clearing blade attached, exceeds the M1000 semitrailer design maximum payload weight by approximately 8,000 pounds (3,632 kg). In addition, when loading or unloading this special payload, the mine clearing blade will scrape the ground. Extreme caution is necessary to prevent damage to equipment.

To operate the M1000 semitrailer with the Abrams MBT series with mine clearing blade attached, semitrailer tire pressure must be increased, special loading and unloading procedures must be followed, maximum driving speeds must be reduced, and stopping distance must be increased to avoid damage to equipment.

a. Before loading the M1000 semitrailer with the Abrams MBT series with mine clearing blade attached, the tire pressure on all semitrailer tires must be increased to 100-110 psi (690-758 kPa).

b. When loading the Abrams MBT series with mine clearing blade attached onto the M1000 semitrailer, the special loading and unloading procedures in Chapter 2 of this supplement must be followed carefully.

c. When the Abrams MBT series with mine clearing blade attached is loaded onto the M1000 semitrailer, the following maximum driving speeds must be observed:

   Highway .................... 40 mph (64 km/h)
   Secondary................... 35 mph (56 km/h)
   Off-road..................... 10 mph (16 km/h)

d. When the Abrams MBT series with mine clearing blade attached is loaded onto the M1000 semitrailer, separation distance in convoys must be increased to account for the greater stopping distance required resulting from the increased weight.
The Military Load Classification (MLC) for the vehicle with payload is raised from 96 to 101. The special vehicle classification data plate must be installed per Chapter 2.

1-6. MAINTENANCE CONSIDERATIONS

WARNING

Brake adjustment must be checked before each mission when operating the M1000 semitrailer with the Abrams MBT series with mine clearing blade attached or braking will be uneven causing serious injury or death to personnel.

a. Before each mission with the M1000 semitrailer loaded with the Abrams MBT series with mine clearing blade attached, check that brakes are in adjustment in accordance with TM 9-2330-381-14, Unit Preventive Maintenance Checks and Services (PMCS). If adjustment is required, perform brake adjustment before loading the special payload.

b. If the same M1000 semitrailers are used to transport the Abrams MBT series with mine clearing blade attached on a recurring basis, the following Unit PMCS inspection intervals (TM 9-2330-381-14) must be decreased (inspected more frequently):

<table>
<thead>
<tr>
<th>Inspection</th>
<th>Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ultra bushing</td>
<td>Semiannual</td>
</tr>
<tr>
<td>Wheel bearing</td>
<td>Semiannual</td>
</tr>
<tr>
<td>Suspension spindle bearing</td>
<td>Semiannual</td>
</tr>
<tr>
<td>Platform weldment</td>
<td>Semiannual</td>
</tr>
</tbody>
</table>
CHAPTER 2
OPERATING INSTRUCTIONS

PARA NO.  TITLE
2-1  GENERAL
2-2  LOADING AND UNLOADING ABLE PAYLOAD WITH MINE CLEARING BLADE ATTACHED
2-3  DUAL WINCH LOADING AND UNLOADING DISABLED PAYLOAD WITH MINE CLEARING BLADE ATTACHED

2-1. GENERAL

This chapter contains the instructions for loading and unloading the Abrams Main Battle Tank (MBT) series with mine clearing blade attached onto the M1000 Heavy Equipment Transporter Semitrailer (HETS). Paragraph 2-2 contains the procedures for loading and unloading when the MBT can be driven onto the platform. Paragraph 2-3 contains the procedures for loading and unloading when the MBT is disabled and must be pulled onto the platform using the M1070 Tractor winches.

NOTE

Throughout this technical bulletin, the terms used to describe areas and parts of the semitrailer, and their location relative to each other, are referenced as follows:

When a person stands at the loading ramp end (rear) of the semitrailer looking toward the gooseneck on the forward (front) end of the semitrailer, the side on the left is designated as the "streetside" and the side on the right is designated as the "curbside". Locations of areas and items on or under the semitrailer platform will be identified as inboard (toward or nearest the center of the platform) or outboard (farthest from the center). For example, the hydraulic operating controls and gages are located on the curbside of the semitrailer under the front corner of the platform. The crowbar is mounted at the rear of the platform.

Since the payload is loaded backward (rear of the payload first), special care is taken to describe locations at the front of the payload (where the driver’s compartment is) and at the rear of the payload (where the engine exhaust is).