

TECHNICAL MANUAL

TRANSPORTABILITY GUIDANCE

**HOWITZER, LIGHT, SELF-PROPELLED: 105-MM, M108
(NSN 2350-00-440-8810)**

**HOWITZER, MEDIUM, SELF-PROPELLED: 155-MM, M109
(NSN 2350-00-440-8811)**

**HOWITZER, MEDIUM, SELF-PROPELLED:
155-MM, M109A1
(NSN 2350-00-485-9662)**

HEADQUARTERS, DEPARTMENT OF THE ARMY

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*This manual supersedes TM 55-2350-217-10-1, 21 January 1966.

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CHAPTER 1

INTRODUCTION

1-1. Purpose and Scope

a. This manual provides transportability guidance for logistic handling and movement of the howitzers, self-propelled, full-tracked, M108, M109, and M109A1.

b. The intent of this manual is to provide transportation officers and other personnel responsible for movement or providing transportation services with information considered appropriate for safe transport. Significant technical and physical characteristics as well as safety considerations required for worldwide movement by the various modes of transportation are included. When considered appropriate, metric equivalents are given in parentheses following, dimensions or other measurements. Conversion tables are contained in appendix A.

1-2. Reporting of Recommendations and Comments

The reporting of errors, omissions, and recommendations for improving this manual by the individual user is encouraged. Reports should be submitted on DA Form 2028 (Recommended Changes to DA Publications and Blank Forms) and forwarded to Director, Military Traffic Management Command Transportation Engineering Agency, ATTN: MTT-TRP, P. O. Box 6276, Newport News, Virginia 23606.

NOTE

Attention is invited to the stamped and preaddressed tear-out questionnaire following appendix B. Request that this questionnaire be completed and mailed within 6 months of the manual publication date.

1-3. Safety

Appropriate precautionary measures required during movement of the howitzers are contained in chapter 3.

1-4. Definitions of Warnings, Cautions, and Notes

Throughout this manual, warnings, cautions, and notes emphasize important or critical guidance. They are used for the following conditions:

a. Warning. An operating procedure or practice that, if not correctly followed, could result in personal injury or loss of life.

b. Caution. An operating procedure or practice that, if not strictly observed, could result in damage to or destruction of equipment.

c. Note. An operating procedure or condition that must be emphasized.

CHAPTER 2

TRANSPORTABILITY DATA

Section I. GENERAL

2-1. Scope

This chapter provides a general description of the items, identification photographs, tabulated transportability characteristics, and data that are necessary for movement.

2-2. Descriptions

a. General. The howitzers, M108, M109, and M109A1, are full-tracked, self-propelled, armored, combat vehicles. They are powered by liquid-cooled, compression ignition engines. Power is transmitted to the final drive through a cross-drive transmission differential, steering, and braking unit. The vehicles are supported by a torsion bar suspension system.

b. M108 (fig 2-1). The M108 armament includes a 105-mm cannon, M103, mounted in a howitzer mount, M 139, and a caliber .50 machine gun, M2, mounted on the commander's cupola.

c. M109 (fig 2-2). The M109 armament includes a 155-mm cannon, M126, mounted in a howitzer mount, M127, and a caliber .50 machine gun, M2, mounted on the commander's cupola.

d. M109A1 (fig. 2-3). The M109A1 armament includes a 155-mm cannon, M126A1, mounted in a howitzer mount, M127, and a caliber .50 machine gun, M2, mounted on a commander's cupola.

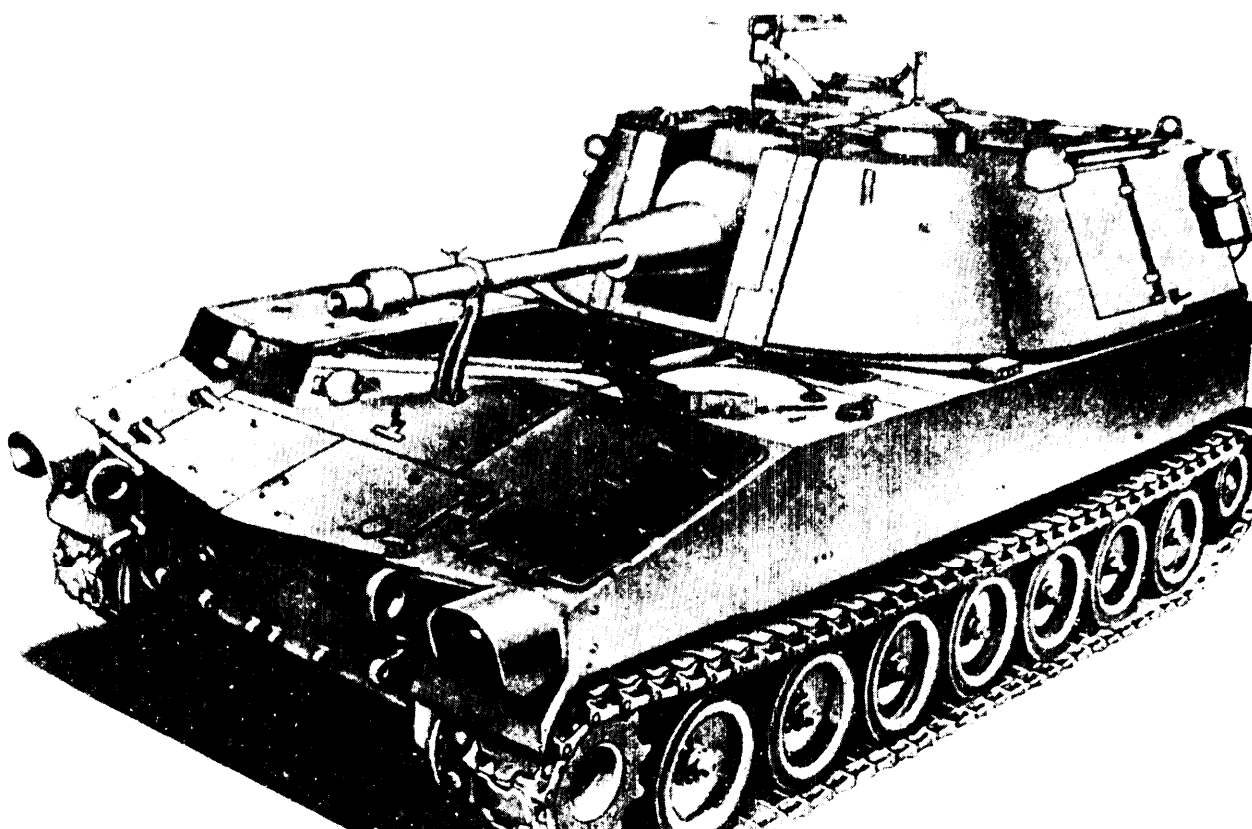


Figure 2-1. Howitzer, light, self-propelled, 105-mm, M108.



Figure 2-2. Howitzer, medium, self-propelled, 155-mm, M109.

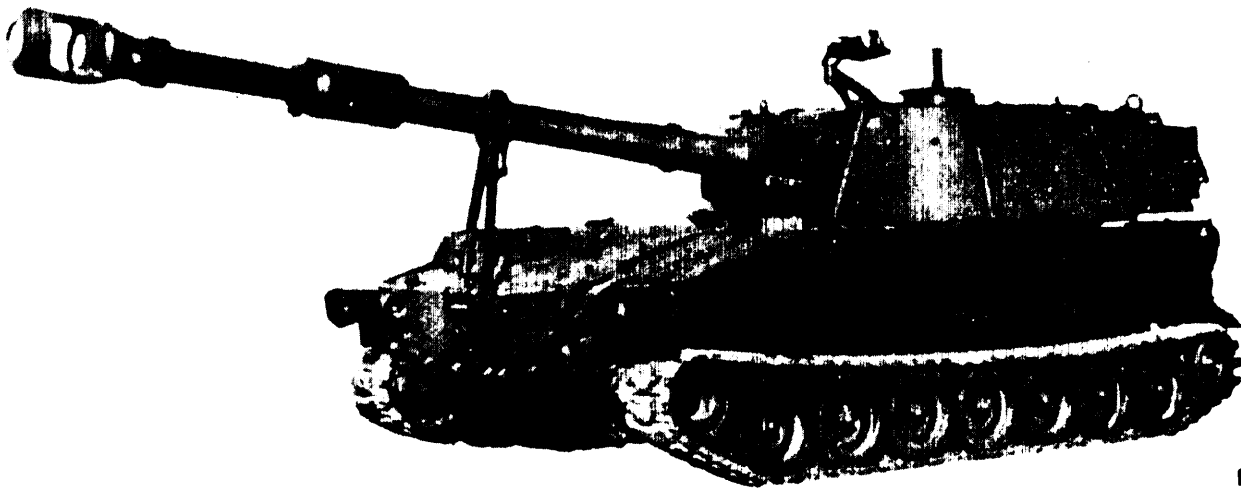


Figure 2-3. Howitzer, medium, self-propelled, 155-mm, M109A1.

Section II. CHARACTERISTICS AND RELATED DATA

2-3. General

Data contained in figures 2-4 through 2-8 and table 2-1 are applicable to model number or National Stock Number (NSN) shown. Changes in model number or NSN may affect transportability as related to guidance contained in this manual.

2-4. Side and Rear Elevation Drawings

Detailed side and rear elevation drawings (fig 2-4 through 2-8) provide data necessary for determining transportability of the howitzers by the various modes of transportation.