

TM 9-1767E

WAR DEPARTMENT TECHNICAL MANUAL

ORDNANCE MAINTENANCE

Semitrailer M15, Component of 40-Ton Tank Transporter Trailer Truck M25

WAR DEPARTMENT TECHNICAL MANUAL
TM 9-1767E

ORDNANCE MAINTENANCE

Semitrailer M15, Component of
40-Ton Tank Transporter Trailer
Truck M25



WAR DEPARTMENT

Washington 25, D. C., 17 February 1944

TM 9-1767E, Ordnance Maintenance: Semitrailer M15, Component of 40-Ton Tank Transporter Trailer Truck M25, is published for the information and guidance of all concerned.

[A.G. 300.7 (10 Aug 43)
O.O.M. 461/(TM 9) RA (18 Feb 44)]

BY ORDER OF THE SECRETARY OF WAR:

G. C. MARSHALL,
Chief of Staff.

OFFICIAL:

J. A. ULIO,
Major General,
The Adjutant General.

DISTRIBUTION: R 9 (4); Bn 9 (2); C 9 (8).

(For explanation of symbols, see FM 21-6.)

CONTENTS

| | Paragraphs | Pages |
|---|-------------------|--------------|
| CHAPTER 1. INTRODUCTION | 1– 2 | 4– 7 |
| CHAPTER 2. BRAKE SYSTEM | 3–21 | 8–23 |
| SECTION I. Slack adjuster | 3– 6 | 8– 9 |
| II. Internal brake | 7–12 | 10–14 |
| III. Relay-emergency valve | 13–21 | 14–23 |
| CHAPTER 3. UNDER CARRIAGE AND SUSPENSION ASSEMBLY (UNDERCONSTRUCTION) | 22–27 | 24–30 |
| SECTION I. Trunnion axle | 22–24 | 24–26 |
| II. Walking beam and trunnion shaft | 25–27 | 27–30 |
| CHAPTER 4. FRAME AND MISCELLANEOUS PARTS | 28–39 | 31–42 |
| SECTION I. Wheel cable guide | 28–29 | 31–32 |
| II. Cable roller | 30–31 | 32–33 |
| III. Supports | 32–33 | 33–36 |
| IV. Trolley hoist | 34–39 | 37–42 |
| CHAPTER 5. WHEELS, HUBS, AND DRUMS | 40–45 | 43–46 |
| SECTION I. Hubs | 40–42 | 43–45 |
| II. Drums | 43–45 | 45–46 |
| REFERENCES | | 47–48 |
| INDEX | | 49–51 |

TM 9-1767E

1-2

**ORDNANCE MAINTENANCE — SEMITRAILER M15, COMPONENT OF
40-TON TANK TRANSPORTER TRAILER TRUCK M25**

CHAPTER 1

INTRODUCTION

| | Paragraph |
|--|------------------|
| Scope | 1 |
| MWO and major unit assembly replacement record | 2 |

1. SCOPE.

a. The instructions contained in this manual are for the information and guidance of personnel charged with the maintenance and repair of the Semitrailer M15 which is a component of the 40-ton Tank Transporter Trailer Truck M25 (figs. 1 and 2). This manual does not contain information which is intended primarily for using arms, since such information is available to ordnance maintenance personnel in TM 9-767.

b. This manual contains a description of and procedure for disassembly, inspection, repair, and assembly of the slack adjuster, internal brake assembly, relay-emergency valve, trunnion axle, walking beam, supports, hoist, hubs, drums, and related items.

c. TM 9-767 contains operating and organizational maintenance instructions for the 40-ton Tank Transporter Trailer Truck M25, of which the Semitrailer M15 is a part.

d. Ordnance maintenance instructions for the Tractor Truck M26, which is the forward component of the 40-ton Tank Transporter Trailer Truck M25, are contained in the following:

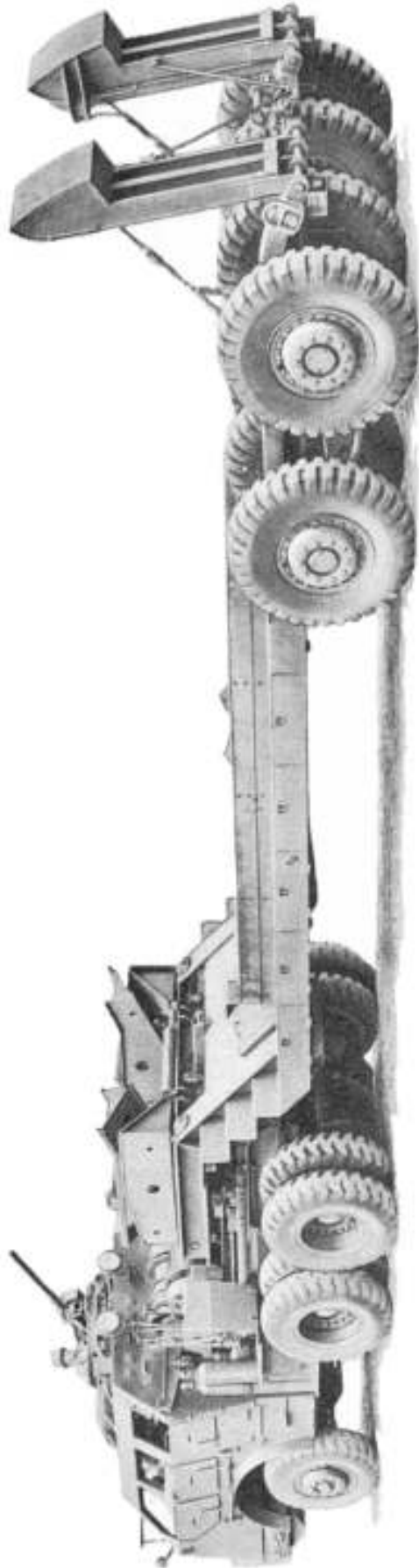
- (1) TM 9-1767A covers the engine and engine accessories.
- (2) TM 9-1767B covers the power train.
- (3) TM 9-1767C covers the body, chassis, and winches.

2. MWO AND MAJOR UNIT ASSEMBLY REPLACEMENT RECORD.

a. **Description.** Every vehicle is supplied with a copy of AGO Form No. 478, which provides a means of keeping a record of each MWO (FSMWO) completed or major unit assembly replaced. This form includes spaces for the vehicle name and U. S. A. registration number, instructions for use, and information pertinent to the work accomplished. It is very important that the form be used as directed, and that it remain with the vehicle until the vehicle is removed from service.

b. **Instructions for Use.** Personnel performing modifications or major unit assembly replacements must record clearly on the form a description of the work completed, and must initial the form in the

INTRODUCTION



RA PD 48207

Figure 1 — 40-ton Tank Transporter Trailer Truck M25

TM 9-1767E

2

ORDNANCE MAINTENANCE — SEMITRAILER M15, COMPONENT OF
40-TON TANK TRANSPORTER TRAILER TRUCK M25



RA PD 57458

Figure 2 — Semitrailer M15

INTRODUCTION

columns provided. When each modification is completed, record the date, hours and/or mileage, and MWO number. When major unit assemblies, such as engines, transmissions, or transfer cases, are replaced, record the date, hours and/or mileage, and nomenclature of the unit assembly. Minor repairs and minor parts and accessory replacements need not be recorded.

c. Early Modifications. Upon receipt by a third or fourth echelon repair facility of a vehicle for modification or repair, maintenance personnel will record the MWO numbers of modifications applied prior to the date of AGO Form No. 478.

TM 9-1767E

3-5

**ORDNANCE MAINTENANCE — SEMITRAILER M15, COMPONENT OF
40-TON TANK TRANSPORTER TRAILER TRUCK M25**

**CHAPTER 2
BRAKE SYSTEM**

**Section I
SLACK ADJUSTER**

| | Paragraph |
|---|------------------|
| Description and data | 3 |
| Test | 4 |
| Disassembly, cleaning, inspection, and assembly | 5 |
| Fits and tolerances | 6 |

3. DESCRIPTION AND DATA.

a. Description. The slack adjusters (fig. 3) act as brake levers, and also provide a quick and easy method of adjusting the brakes. The slack adjusters are mounted on the brake camshafts, and are attached to the equalizers. Air pressure in the brake cylinder moves the slack adjusters and the camshafts, thus expanding the shoes against the brake drums.

b. Data.

| | |
|----------------------------|----------------------------------|
| Make | Fruehauf Trailer Company |
| Model | 51430 |
| Weight | 2 ³ / ₄ lb |
| Length of leverage | 6 in. |
| Quantity per trailer | 8 |

4. TEST.

a. Place arm end of slack adjuster in vise with the adjusting screw up. Try turning adjusting screw with an 8-inch wrench. If adjusting screw fails to turn, this indicates the assembly lacks lubrication, a tooth is stripped on gear, or worm gear is broken. Replace the worn and defective parts. After testing worm assembly, place a 1/2-inch rod end pin through bushing. If pin is extremely loose, replace the bushing.

5. DISASSEMBLY, CLEANING, INSPECTION, AND ASSEMBLY.

a. Disassembly (fig. 3). Screw out worm assembly in a counter-clockwise direction, and remove assembly and lock washer from housing. *NOTE: Do not disassemble the worm assembly.* Pry snap ring out of adjuster housing. Lift out felt retainer, outer felt, worm gear, and inner felt. Remove lubrication fitting. Press bushings out of slack adjuster arm.

b. Cleaning and Inspection.

(1) Remove all grease from slack adjuster housing. Wash housing and all parts in dry-cleaning solvent.