

TM 9-1729B

WAR DEPARTMENT TECHNICAL MANUAL

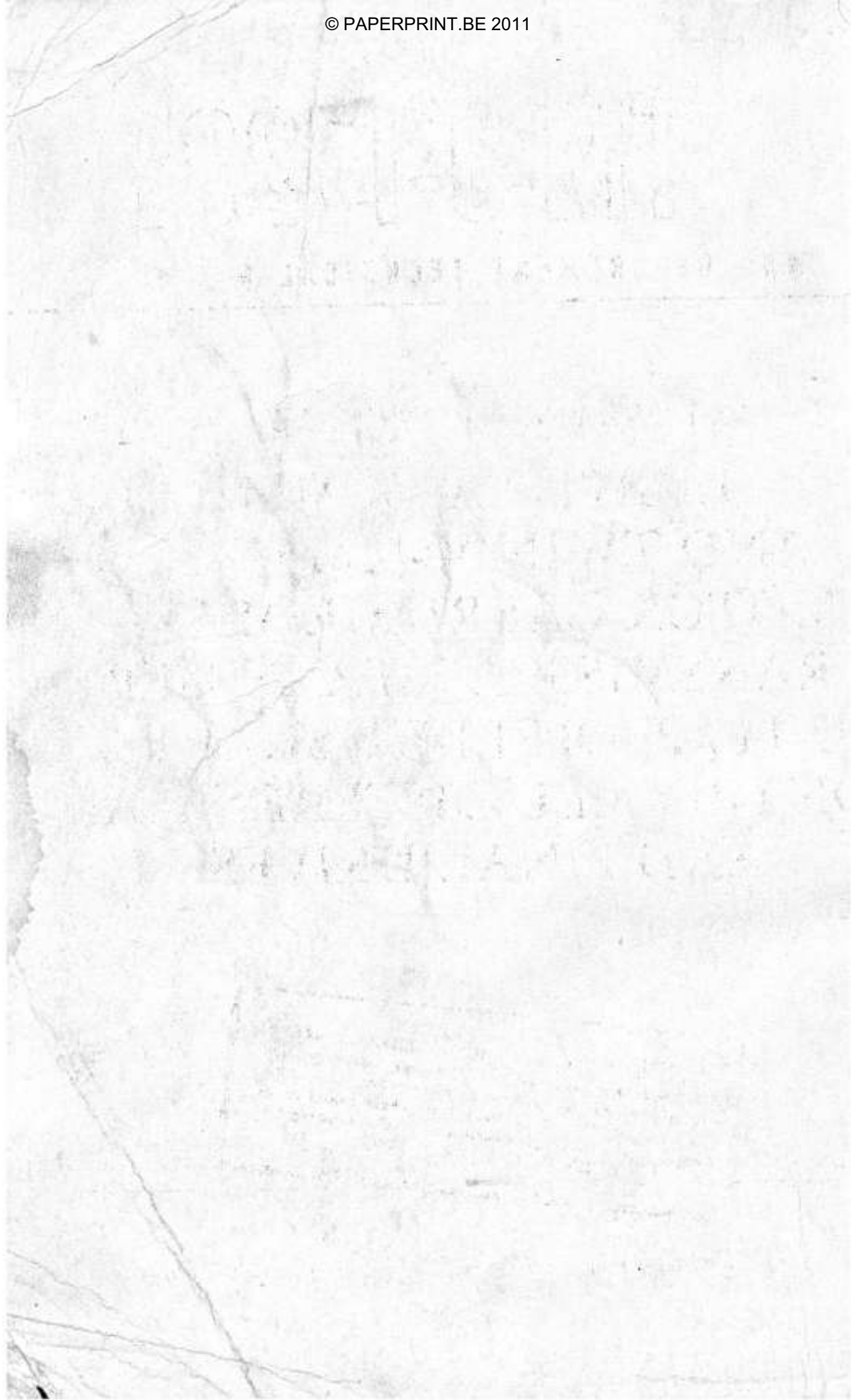
ORDNANCE MAINTENANCE

LIGHT TANK M24 AND TWIN 40-MM GUN MOTOR CARRIAGE M19— TRANSMISSION, TRANSFER UNIT, PROPELLER SHAFTS, CONTROLLED DIFFERENTIAL AND FINAL DRIVES

RESTRICTED. DISSEMINATION OF RESTRICTED MATTER.
No person is entitled solely by virtue of his grade or position
to knowledge or possession of classified matter. Such matter
is entrusted only to those individuals whose official duties
require such knowledge or possession. (See also paragraph
23b, AR 380-5, 15 March 1944.)

WAR DEPARTMENT

• 10 FEBRUARY 1945



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Washington 25, D. C., 10 February 1945

TM 9-1729B, Ordnance Maintenance: Light Tank M24 and Twin 40-mm Gun Motor Carriage M19—Transmission, Transfer Unit, Propeller Shafts, Controlled Differential and Final Drives, is published for the information and guidance of all concerned.

[A.G. 300.7 (11 Jan 44)
O.O.M. 461/Rar. Ars. (10 Feb 45)R]

BY ORDER OF THE SECRETARY OF WAR:

G. C. MARSHALL,
Chief of Staff.

OFFICIAL:

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

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

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RESTRICTED

CHAPTER 1

INTRODUCTION

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 Light Tank M24, and Twin 40-mm Gun Motor Carriage M19. These instructions are supplementary to Field and Technical Manuals prepared for the using arms. This manual does not contain information which is intended primarily for the using arms, since such information is available to Ordnance Maintenance Personnel in 100-series TM's or FM's.

b. This manual contains a description of, and procedure for, disassembly, cleaning, inspection, repair and assembly of the transmission, transfer unit, propeller shafts, controlled differential, and final drives of Light Tank M24 and Twin 40-mm Gun Motor Carriage M19.

c. TM 9-1729A contains description and procedure for disassembly, cleaning, inspection, repair and assembly of the engines, and of the components of the cooling systems and fuel systems of Light Tank M24, and Twin 40-mm Gun Motor Carriage M19.

d. TM 9-1729C contains the same essential information on the hull, turret, electrical system and track suspension of the Light Tank M24, and the Twin 40-mm Gun Motor Carriage M19.

e. TM 9-1826A contains service information on the Carter carburetor used in these vehicles.

f. TM 9-1825A covers service information on the Delco-Remy electrical equipment used in these vehicles.

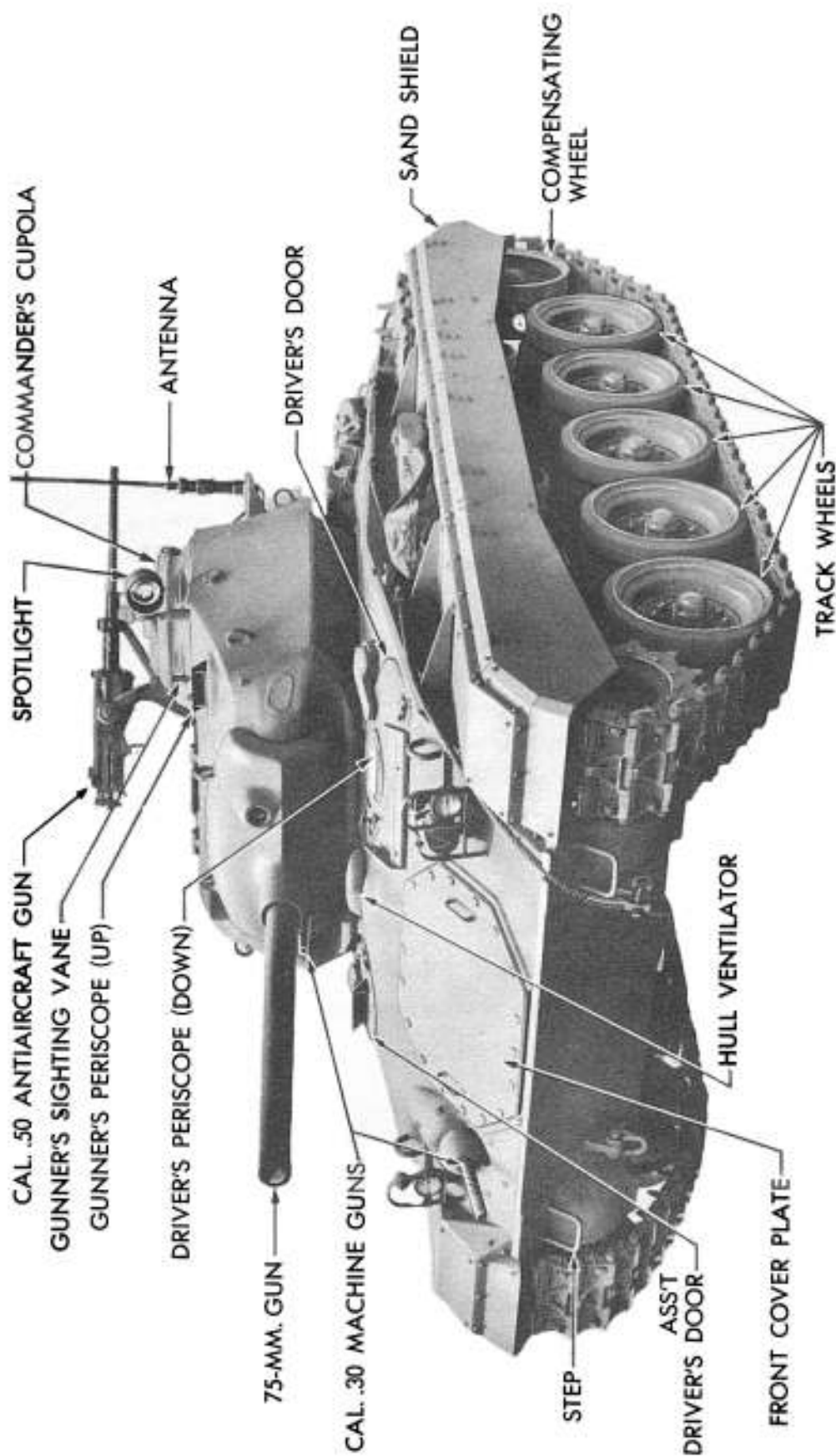
g. TM 9-1829A contains information on the instrument panel and instruments.

h. TM 9-1731G contains service information on the hydraulic turret traverse mechanism used in these vehicles.

2. RECORDS.

a. Forms and records applicable for use in performing prescribed operations are listed below with a brief explanation of each:

(1) **WAR DEPARTMENT LUBRICATION ORDER.** War Department Lubrication Order No. 153 prescribes lubrication maintenance for this vehicle. A lubrication order is issued with each vehicle and is to be carried with it at all times. Instructions on the order are binding on all echelons of maintenance and there shall be no deviations.



RA PD 331308

Figure 1 — Light Tank M24

Introduction

(2) W.D., Q.M.C. FORM No. 400 (REQUISITION). This form may be used in obtaining all general supplies, parts, or materials except those for which specific forms are required. It will not be required for a direct exchange of unit assemblies and spare parts.

(3) W.D., A.G.O. FORM No. 462, PREVENTIVE MAINTENANCE SERVICE AND TECHNICAL INSPECTION WORK SHEET FOR FULL-TRACK AND TANK-LIKE WHEELED VEHICLES. This form will be used for all 50-hour (500-mile) or 100-hour (1,000-mile) services and for technical inspections of these vehicles.

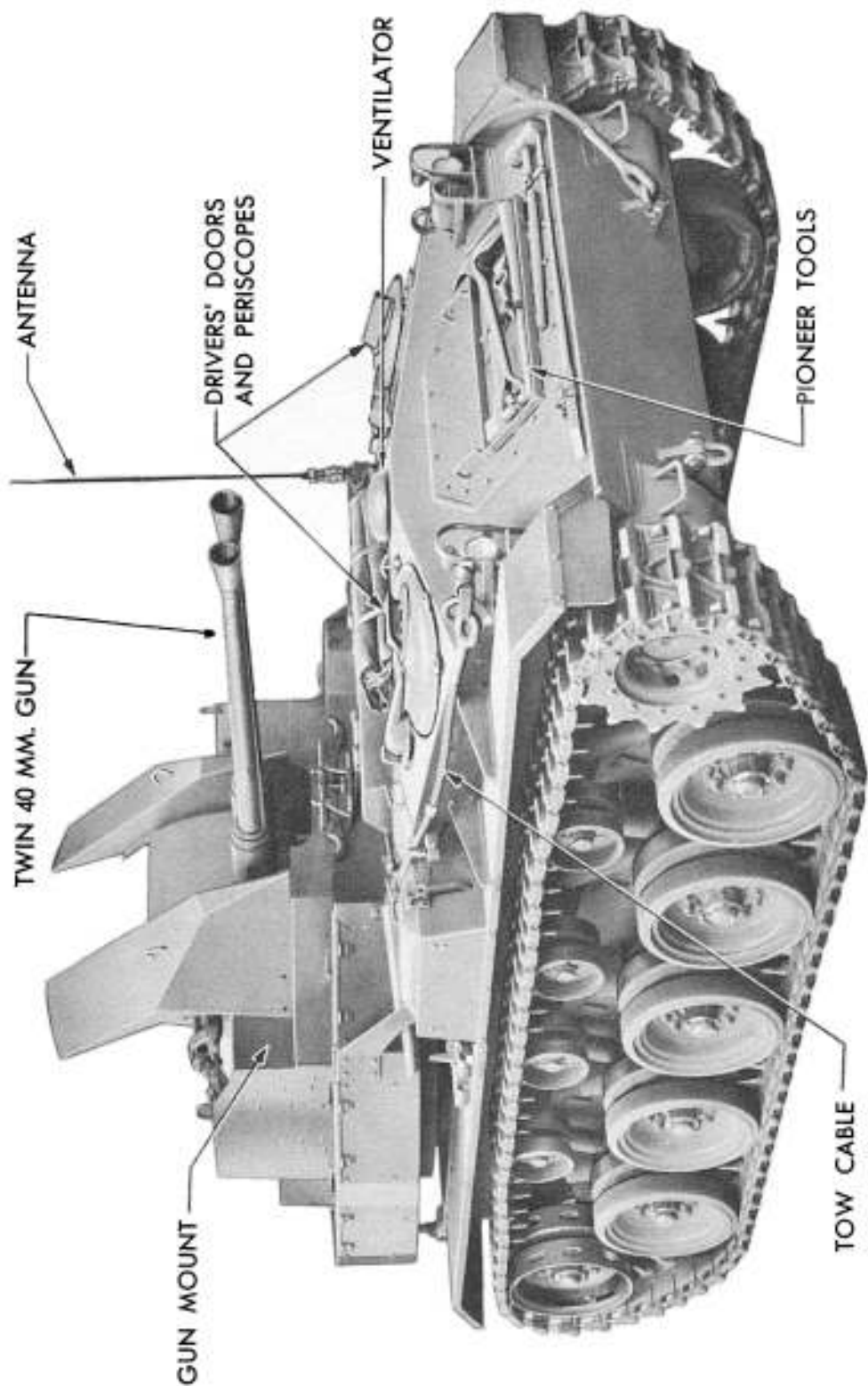
(4) W.D., A.G.O. FORM No. 468, UNSATISFACTORY EQUIPMENT REPORT. This form will be used for reporting manufacturing, design, or operational defects in materiel with a view to improving and correcting such defects, and for use in recommending modifications on materiel. This form will not be used for reporting failures, isolated materiel defects, or malfunctions of materiel resulting from fair wear and tear or accidental damage; nor for the replacement, repair, or the issue of parts and equipment. It does not replace currently authorized operational or performance records.

(5) W.D., A.G.O. FORM No. 478, MWO AND MAJOR UNIT ASSEMBLY REPLACEMENT RECORD. This form, carried with the vehicle, will be used by all personnel completing a modification or major unit assembly (engine, transmission, transfer case, tracks, etc.) replacement to record clearly the description of work completed, date, vehicle hours and/or mileage, and MWO number or nomenclature of unit assembly. Personnel performing the operation will initial in the column provided. Minor repairs, parts, and accessory replacements will not be recorded.

(6) W.D., Q.M.C. FORM No. 489 (TALLY SHEET, INCOMING). This form may be used to record all incoming materials or supplies pending negotiation of a final voucher. It may also be used in exchanging vehicles, parts, or tools, or in lieu of shipping ticket.

(7) W.D., Q.M.C. FORM No. 490 (TALLY SHEET, OUTGOING). This form may be used to record all outgoing materials or supplies pending negotiation of the final voucher. It may also be used in exchanging vehicles, parts, or tools, or in lieu of shipping ticket.

(8) W.D., O.O. FORM No. 7356 (LOCATOR AND INVENTORY CONTROL CARD). This form may be used as a bin tag, locator card, or



RA PD 331557

Figure 2 — Twin 40-mm Gun Motor Carriage M19