WAR DEPARTMENT TECHNICAL MANUAL

ORDNANCE MAINTENANCE

Crane For Heavy Wrecking Truck MIAI

(Ward La France and Kenworth)

WAR DEPARTMENT

26 APRIL 1944

FOR ORDNANCE PERSONNEL ONLY

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TM 9-1796, Ordnance Maintenance: Crane for Heavy Wrecking Truck M1A1 (Ward La France and Kenworth), is published for the information and guidance of all concerned.

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

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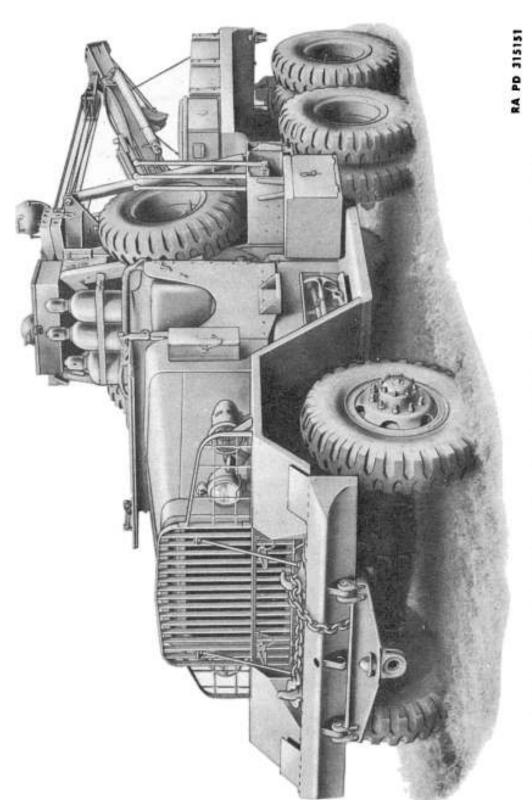


Figure 1 — Heavy Wrecking Truck MIAI — Three-quarter Front View

ORDNANCE MAINTENANCE — CRANE FOR HEAVY WRECKING TRUCK M1A1 (WARD LA FRANCE AND KENWORTH)

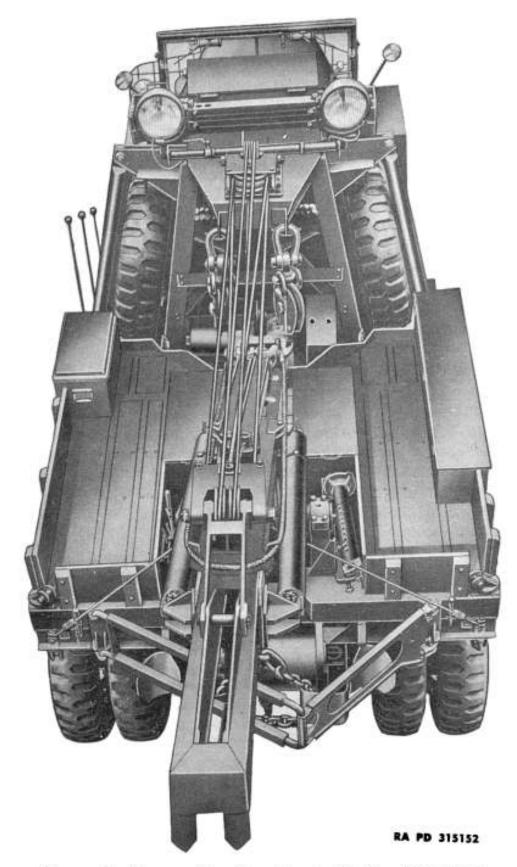


Figure 2 - Heavy Wrecking Truck M1A1 - Top View

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ORDNANCE MAINTENANCE — CRANE FOR HEAVY WRECKING TRUCK MIAI (WARD LA FRANCE AND KENWORTH)

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 crane for the Heavy Wrecking Truck M1A1. 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 Technical Manuals or Field Manuals.
- b. This manual contains a description of, and procedure for, the disassembly, inspection, repair, and assembly of the crane for the Heavy Wrecking Truck M1A1.
- c. TM 9-796, Heavy Wrecking Truck M1A1 (Ward La France and Kenworth) contains instructions for organization maintenance.
- d. TM 9-1795A, Ordnance Maintenance: Power Train for Heavy Wrecker M1 series 2 (axles, transmissions, wheels, and tires), contains instructions for the disassembly, inspection, repair and assembly of the axle, transmission, wheels, and tires.
- e. TM 9-1795B, Ordnance Maintenance: Engine for Heavy Wrecking Truck M1, contains instructions for the disassembly, inspection, repair, and assembly of the engine.
- f. TM 9-1795D, Ordnance Maintenance: Body and Chassis for Heavy Wrecking Truck M1, contains instructions for the disassembly, inspection, repair, and assembly of the body and chassis.

2. MWO AND MAJOR UNIT ASSEMBLY REPLACEMENT RECORD.

- a. Description. Every vehicle is supplied with a copy of W.D., A.G.O. Form No. 478 which provides a means of keeping a record of each MWO 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

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, 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 W.D., A.G.O. Form No. 478.

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ORDNANCE MAINTENANCE — CRANE FOR HEAVY WRECKING TRUCK MIAI (WARD LA FRANCE AND KENWORTH)

CHAPTER 2

CRANE

Section 1

CRANE DESCRIPTION AND DATA

3. DESCRIPTION AND OPERATION.

a. The crane is full-powered direct from the engine through a power take-off mounted on the transfer case. The raising and lowering of the boom and load, and the swinging of the boom and load, are all power driven and can be used independent of and in conjunction with one another. The boom can be raised from 6 feet 3 inches to 16 feet, measurements being taken at the hoist line sheave positions. The crane assembly consists briefly of longitudinal base channels and A-frame on which are installed the boom topping pivot and boom pivot, and in which is installed the necessary gear cases and driving mechanism to hoist the load and raise and swing the boom.

4. DATA (CRANE).

Model
Make
TypeFull-powered
Number of gear cases
Maximum lift capacity
Maximum transport capacity
Swinging arc
Boom cable length
Boom cable size
Hoist cable length
Hoist cable size
Maximum allowable engine speed
Engine clutch control
Engine throttle control
Gear case shift control
Gear case lubricant capacity
Boom pivot lubricant capacity4 q
Sheave lubrication
Bushing lubrication
Antifriction bearing lubrication Pressure fitting
Topping pivot lubrication Pressure fitting