

DEPARTMENT OF THE ARMY TECHNICAL MANUAL

DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE MANUAL

TRUCK, FIRE FIGHTING: POWERED PUMPER, FOAM AND
WATER, 500-GALLONS PER MINUTE CAPACITY
CENTRIFUGAL PUMP, POWER TAKEOFF DRIVEN,
400-GALLON WATER TANK,
40-GALLON FOAM CHEMICAL TANK, CLASS 530B
NONWINTERIZED,
(WARD LAFRANCE MODEL M45A2WLF)
FSN 4210-928-3515

This reprint includes all changes in effect at the time of publication; change 1.
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HEADQUARTERS, DEPARTMENT OF THE ARMY

10 MAY 1968

TECHNICAL MANUAL

No. 5-4210-213-35

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HEADQUARTERS
DEPARTMENT OF THE ARMY
WASHINGTON, D.C., May 10, 1968DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT
MAINTENANCE MANUAL**TRUCK, FIRE FIGHTING: POWERED PUMPER, FOAM AND WATER,
500-GALLONS PER MINUTE CAPACITY
CENTRIFUGAL PUMP, POWER TAKEOFF DRIVEN, 400-GALLON WATER TANK,
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CHAPTER 1 INTRODUCTION

Section I. GENERAL

1-1. Scope

a. These instructions are published for the use of direct and general support and depot maintenance personnel maintaining the Model M45A2WLF Ward LaFrance Fire Fighting Truck. They provide information on the maintenance of the equipment, which is beyond the scope of the tools, equipment, personnel, or supplies normally available to the using organizations.

b. Report of errors, omissions, and recommendation for improving this publication by the individual user is encouraged. Reports should be submitted on DA Form 2028 (Recommended Changes to DA Publications) and forwarded direct to Commanding General,

U. S. Army Mobility Equipment Command, ATTN: AMSME-MPP, 4300 Goodfellow Boulevard, St. Louis, Mo. 63120.

c. Report all equipment improvement recommendations as prescribed by TM 38-750.

1-2. Record and Report Forms

For other record and report forms applicable to direct and general support, and depot maintenance, refer to TM 38-750.

Note: Applicable forms, excluding Standard Form 46 (United States Government Motor Vehicles Operator's Identification Card) which is carried by the operator, will be kept in a canvas bag mounted on the equipment.

Section II. DESCRIPTION AND TABULATED DATA

1-3. Description

A general description of the Ward LaFrance Model M45A2WLF Fire truck, the location and description of the identification and instruction plates, and information on the differences in models are contained in the Operator and Organizational Maintenance Manual. Direct and general support and depot repair and maintenance instructions are described in appropriate sections of this manual. For truck engine and chassis maintenance instructions refer to TM 9-2320-209-35.

1-4. Tabulated Data

a. *General* This paragraph contains all the overhaul data pertinent to direct and general support and depot maintenance personnel. A wiring diagram (fig. 1-1) is also included.

b. *Primer Pump.*

Suction side pump..... 3/4 in. diameter
Discharge pipe 1 15/16 in. diameter

c. *Fire Pump.*

Relief valve regulator limit 250 psi (pounds per square inch)

Related capacity maximum
500 gpm (gallons per minute)

Type Centrifugal
Pump ratio 1 to 2:28
Shaft diameter 1 1/2 in.
Taper per foot..... 1 7/8 in.

d. *Nut and Bolt Torque Data.*

Size	Torque lb. inch
5/16.....	130
3/8.....	215
7/16.....	375
1/2.....	300

e. *Repair and Replacement Standards* Table 1-1 lists manufacturer's sizes, tolerances, desired clearances, and maximum allowable wear and clearances.

Figure 1-1. Wiring diagram.

(Located in back of manual)

Table 1-1. Repair and Replacement Standards

Component	Tolerance	Wear Limit
Impeller-Clearance Ring-Housing (Outside Diameter)	.010 to .014	.020
Impeller-Clearance Ring-Housing (Inside Diameter)	.010 to .014	.020
Shaft and Bearing	.004 to .007	.010
Drive Shaft (GSA-36)		
End Play	.005 to .020	Loose
Pump Shaft (GS-37)		
End Play	.010 to .030	Loose