TECHNICAL MANUAL

DIRECT SUPPORT AND GENERAL SUPPORT

MAINTENANCE MANUAL

TRUCK, LIFT, FORK, GED, SOLID RUBBER WHEELS

4000 LBS CAPACITY 180 IN. LIFT (ARMY MODEL

MHE209) (ALLIS CHALMERS MODEL F40-24PS)

FSN 3930-459-5948

This copy is a reprint which includes current pages from Changes I through 4.

HEADQUARTERS, DEPARTMENT OF THE ARMY

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LIST OF ILLUSTRATIONS

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CHAPTER 1

INTRODUCTION

Section I. General

1-1. Scope

This manual contains instructions for the use of Direct Support and General Support Maintenance personnel maintaining the Truck, Lift, Fork, Gasoline, Solid Rubber Tired Wheels, 4, 000 pound capacity as allocated by the Maintenance Allocation Chart. It provides information on the maintenance of the equipment, which is beyond the scope of the tools, equipment, personnel, or sup- plies normally available to Operator and Organizational Maintenance.

1-2. Forms and Records

a. DA forms and records used for equipment maintenance will be only those prescribed in TM 38-750.

b. Report of errors, ommissions, and recommendations for improving this publication by the individual user is encouraged. Reports should be submitted on DA Form 2028 (Recommended Changes to Publications) and forwarded direct to Commanding General, U.S. Army Mobility Equipment Command, ATTN: AMSME-MPP, 4300 Goodfellow Boulevard, St. Louis, Mo. 63120.

Section II. DESCRIPTION AND DATA

1-3. Description

A general description of the Model MHE-209 Fork Lift Truck and information pertaining to the identification plates are contained in TM 10-3930- 621-12. A more detailed description of specific components and assemblies is contained in the applicable section(s) of this manual. Detailed descriptions of the components of the Model MHE- 209 Fork Lift Truck are provided in the applicable maintenance paragraphs of this manual.

1-4. Tabulated Data

a. General. This paragraph contains all maintenance data pertinent to Direct Support and General Support maintenance personnel. Refer to TM 10-3930-621-12 for the wiring diagram.

b. Engine Classification and Rating.

Make	Waukesha
Model	FCB4-G5943
Valve arrangement	Valve in block
Number of cylinders and arrangement	4, L-head
Piston stroke	4 in.
Piston displacement	133 cu. in.
Compression ratio	6.5:1
Firing order	1-3-4-2
Under load speed	2000 rpm
No-load speed	2200 rpm
Idle speed	600 rpm
Main crankshaft bearings	3
Connecting rod hearings	4
Piston type	Aluminum
Piston pin type	Full floating
Connecting rod type	Forged I section

c. Steering Unit Classification and Rating.

Make	Char-Lynn
Type	Hydraulic

d. Hydraulic Unit Classification and Rating.

Make	Cesna Aircraft Co.
rpm	1400
psi	1000
gpm	2.5

e. Hydraulic Contol Valve Classification and Rating.

Make	Hydraulic Unit Specialities
Control	2 plunger

f. Distributor Classification and Rating.

Make	Delco-Remy
Model	111712
Voltage	12
Rotation	Clockwise viewed at rotor end.
Type	Grounded
Timing range	22 ° automatic

g. Starter Motor Classification and Rating.

Make	Delco-Remy
Model	1107324
Type	Bendix drive
Voltage	12
No load test:	
Volts	11.6
Max., amperes	70.0
Min., RPM	6,000

h. Voltage Regulator Classification and Rating.

Make	Delco-Remy
Model	1116381
Type	150 (transistor)
Voltage	L2
Ground polarity	Negative

Voltage setting ranges (suggested):

65c°	13.5 to 15.5 volts
850°	13.3 to 15.3 volts
105°	13.1 to 15.1 volts
1250°	12.9 to 14.9 volts
1450°	12.8 to 14.8 volts

i. Alternator Classification and Rating.

Make	Delco-Remy
Model	1100877
Rotation (drive-end)	Either
Ground	Negative
Amps	22
Volts	12

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