

**TECHNICAL MANUAL**

**OPERATOR AND ORGANIZATIONAL MAINTENANCE MANUAL**

**TRUCK, LIFT, FORK, GASOLINE, SOLID  
RUBBER TIRED WHEELS, 4000 LBS CAPACITY  
100 AND 180 INCH LIFT ARMY MODEL  
MHE-231 ALLIS-CHALMERS MODELS  
ACC40-24PS100 AND ACC40-24PS180  
NSN 3930-00-590-7814 (100 IN.)  
NSN 3930-00-556-4955 (180 IN.)**

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**HEADQUARTERS, DEPARTMENT OF THE ARMY**

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 TRUCK, LIFT, FORK, GED, SOLID RUBBER TIRED WHEELS,  
 4000 LBS CAPACITY, 100 AND 180 IN LIFT  
 ARMY MODEL MHE-231  
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 (NSN 3930-0-590-7814 (100 IN.)  
 (NSN 393000-556-4955 (180 IN.))**

**REPORTING OF ERRORS**

You can improve this manual by recommending improvements using DA Form 2028 (Recommended Changes to Publications and Blank Forms) or DA Form 2028-2 (Test) located in the back of the manual and mail the form direct to Commander, US Army Tank-Automotive Command, ATTN: DRSTA-MSP, Warren, MI 48090. A reply will be furnished direct to you.

		Paragraphs	Pages
CHAPTER	1. INTRODUCTION		
Section	I. General .....	1-1	1-1
	II. Description and Data .....	1-7	1-1
CHAPTER	2. OPERATING INSTRUCTIONS		
Section	I. Operating Procedures .....	2-1	2-1
	II. Operation under Unusual Conditions .....	2-10	2-8
CHAPTER	3. OPERATOR/CREWMAN MAINTENANCE INSTRUCTIONS		
Section	I. Lubrication .....	3-1	3-1
	II. Operator's preventive Maintenance .....	3-3	3-1
	III. Operator's Troubleshooting .....	3-5	3-2
	IV. Operator's Maintenance of Truck .....	3-7	3-5
CHAPTER	4. ORGANIZATIONAL MAINTENANCE INSTRUCTIONS		
Section	I. Service Upon Receipt of Material .....	4-1	4-1
	II. Movement to a New Work Site .....	4-3	4-4
	III. Repair Parts, Special Tools and Equipment .....	4-5	4-4
	IV. Lubrication Instructions .....	4-8	4-4
	V. Organizational Preventive Maintenance checks and Service .....	4-15	4-5
	VI. Organizational Maintenance Troubleshooting .....	4-17	4-7
	VII. Radio Interference Suppression .....	4-19	4-10
	VIII. Overhead Guard .....	4-22	4-10
	IX. Panels, Cows and Plates .....	4-24	4-11
	X. Seat assembly .....	4-29	4-14
	XI. Instrument Panel .....	4-31	4-15
	XII. Hydraulic Lift Components .....	4-33	4-18
	XIII. Electrical System .....	4-45	4-38
	XIV. Fuel System .....	4-56	4-53
	XV. Cooling System .....	4-66	4-61
	XVI. Exhaust System .....	4-71	4-65
	XVII. Steering System .....	4-73	4-66
	XVIII. Engine .....	4-79	4-70
Section	XIX. Wheels .....	4-84	4-76
	XX. Brakes .....	4-86	4-78
	XXI. Drive Axle .....	4-93	4-87
	XXII. Transmission .....	4-97	4-89
APPENDIX	A. REFERENCES .....		A-1
	B. MAINTENANCE ALLOCATION CHART .....		B-1
	C. BASIC ISSUE ITEMS LIST, TROOP INSTALLED OR AUTHORIZED LIST .....		C-1
INDEX	.....		I-1

## LIST OF ILLUSTRATIONS

<i>Figure number</i>	<i>Title</i>	<i>Page</i>
1-1	Fork lift truck with shipping dimensions, right side view	1-2
1-2	Fork lift truck, left side view.	1-3
1-3	Wiring diagram	1-4
2-1	Controls and instruments (Sheet 1 of 2)	2-2
2-1	Controls and instruments (Sheet 2 of 2)	2-3
2-2	Seat adjustment	2-3
2-3	Engine starting instructions	2-4
2-4	Truck stopping instructions	2-5
2-5	Lifting operation	2-6
2-6	Lowering operation.	2-7
3-1	Air cleaner and indicator	3-5
3-2	Radiator filler cap.	3-6
3-3	Oil filler cap and level gage	3-7
3-4	Transmission filler cap and level gage.	3-8
3-5	Hydraulic filter element indicator.	3-9
3-6	Hydraulic reservoir.	3-10
4-1	Removing, installing or adjusting carriage fork	4-1
4-2	Overhead guard, removal and installation	4-11
4-3	Cowls and floor plates, exploded view.	4-12
4-4	Counterweight and side panels, exploded view.	4-13
4-5	Seat assembly, exploded view.	4-15
4-6	Instrument panel components, exploded view.	4-16
4-7	Instrument panel, exploded view.	4-17
4-8	Hydraulic system diagram	4-19
4-9	Lift chains and anchors, installed view.	4-20
4-10	Lift chains and carriage.	4-21
4-11	Backrest, removal and installation	4-22
4-12	Carriage, removal and installation.	4-23
4-13	Spanning mast channels	4-24
4-14	Setting outside spanning tool	4-24
4-15	Checking bearing alinement.	4-24
4-16	Tilt cylinder, removal and installation.	4-25
4-17	Tilt cylinder yoke, installed view.	4-26
4-18	Checking degrees of mast tilt.	4-27
4-19	Mast assembly (model ACC40-24PS180), exploded view.	4-28
4-20	Mast assembly (model A(XA0-24PS100), exploded view.	4-29
4-21	Mast mounting, exploded view.	4-31
4-22	Control valve levers, installed view.	4-32
4-23	Hydraulic filter element indicator, installed view.	4-33
4-24	Hydraulic filter, installed view.	4-34
4-25	Hydraulic reservoir breather and oil level gage.	4-35
4-26	Hydraulic reservoir drain plug.	4-36
4-27	Hydraulic reservoir, exploded view.	4-37
4-28	Battery, installed view.	4-38
4-29	Headlight, installed view.	4-39
4-30	Combination rear light, exploded view.	4-40
4-31	Brake master cylinder, installed view.	4-41
4-32	Horn and relay, installed view.	4-42
4-33	Oil pressure and hourmeter actuator sending units installed view.	4-43
4-34	Fan belt adjustment.	4-44
4-35	Alternator, installed view.	4-45
4-36	Alternator connections	4-46
4-37	Checking alternator output.	4-46
4-38	Starter, removal and installation	4-47
4-39	Distributor, installed view.	4-47
4-40	Adjusting distributor breaker point gap,	4-48
4-41	Spark plugs and coil, exploded view.	4-49
4-42	Distributor, exploded view.	4-50
4-43	Flywheel timing marks	4-51
4-44	Ignition coil test wiring	4-52
4-45	Fuel system, exploded view.	4-54
4-46	Air cleaner, exploded view.	4-55

<i>Figure Number</i>	<i>Title</i>	<i>Page</i>
4-47	Carburetor adjustment.	4-56
4-48	Governor adjustment.	4-57
4-49	Manifold, exploded view.	4-58
4-50	Accelerator linkage exploded view.	4-59
4-51	Engine coolant drain valve.	4-61
4-52	Water pump and fan, installed view.	4-62
4-53	Radiator and hose, removal and installation	4-63
4-54	Thermostat, removal and installation.	4-64
4-55	Exhaust system, exploded view .	4-65
4-56	Tie rod, exploded view.	4-66
4-57	Spindle stop screw adjustment.	4-67
4-58	Drag link and steering cylinder, removal and installation.	4-68
4-59	Steering wheel and horn button, exploded view.	4-70
4-60	Cylinder head, exploded view.	4-72
4-61	Checking cylinder head for flatness lengthwise.	4-73
4-62	Checking cylinder head for flatness crosswise.4	4-73
4-63	Cylinder head torquing sequence.	4-73
4-64	Valve chamber cover, removal and .installation.	4-74
4-65	Checking valve tappet clearance.	4-75
4-66	Adjusting valve tappet clearance.	4-75
4-67	Drive wheel, removal and installation.	4-76
4-68	Rear wheel removal and installation.	4-77
4-69	Service brake pedal adjustment	4-78
4-70	Brake pedal and linkage, exploded view.	4-79
4-71	Service brake dust shield, installed view.	4-80
4-72	Service brake shoes, installed view.	4-80
4-73	Brake adjuster, disassembly and assembly.	4-81
4-74	Brake system bleeder crew.	4-82
4-75	Service brake master cylinder, removal and installation.	4-83
4-76	Parking brake lever, installed view.	4-84
4-77	Parking brake cable, installed view.	4-85
4-78	Parking brake, exploded view.	4-86
4-79	Drive hat, exploded view.	4-87
4-80	Ring or bull gear lubrication	4-88
4-81	Removing axle shat.	4-89
4-82	Removing spindle.	4-89
4-83	Transmission oil filter and hose, exploded view.	4-90
4-84	Transmission control adjustment	4-84

**CHAPTER 1  
INTRODUCTION**

**Section I. GENERAL**

**1-1. Scope**

This manual is for your use in operating and maintaining Allis Chalmers fork lift trucks ACC40-24PS100 and ACC40-24PS180 (Army model MHE-231). The manual provides information on operation and organizational maintenance of the equipment. Included in the manual are descriptions of the main units and their functions in relation to other components.

**1-2. Maintenance Forms and Records**

Maintenance forms and records that you are required to use are explained in TM 38-750.

**1-3. Destruction to Prevent Enemy Use**

Procedures to be used for destruction of equipment

to prevent enemy use are defined in TM 750-244-3.

**1-4. Equipment Serviceability Criteria**

This equipment is not covered by an Equipment Serviceability Criteria

**1-5 Administrative Storage**

Refer to TM 740-90-1 for instructions pertaining to administrative storage of the fork lift truck.

**1-6. Orientation**

Throughout this manual the terms "right," left," "front" and "rear," with respect to the truck, are determined from the viewpoint of the operator sitting on the seat of the truck.

**Section II. DESCRIPTION AND DATA**

**1-7. Description**

a. The Allis Chalmers fork lift trucks are nontactical trucks (fig.s 741-1 and 1-2) designed for warehouse operation. The trucks can be used to load, transport, unload and stack loads of as much as 4,000 pounds (1812 kg) at a 24-inch (609.6 mm) load center. (The load center is measured from the heel of the fork.)

b. Loads weighing up to 4,000 pounds (1812 kg) as described above can be lifted to a height of 100 inches (2540 mm) (ACC40-24PS100 truck) or 180 inches (4572 mm) (ACC40-24PS180 Truck).

c. The trucks are powered by a four-cylinder, four-stroke cycle, flat head, liquid cooled, gasoline engine. Coupled to the engine is a single speed, powershift transmission. A short propeller shaft connects the transmission to the forward drive axle.

d. Hydraulic oil pressure for the steering gear and cylinder, lift cylinders, and tilt cylinders is supplied by a hydraulic pump driven by the engine crankshaft. Speed of lift is controlled by positioning control lever and increasing or decreasing engine speed.

**1-8. Tabulated Data**

a. *Lift Truck.*  
 Make .....Allis Chalmers  
 Models:  
 100 inch  
 (2540 mm) lift .....ACC40-24PS100  
 100 inch  
 (4572 mm) lift .....ACC40-24PS180

Army Models:  
 100 inch  
 (2540 mm) lift..... MHE-231  
 180 inch  
 (4572 mm) ..... lift MHE-231  
 b. *Dimensions and Weight.*  
 Ground clearance at  
 mast center ..... 5 in. (127 mm)  
 Height  
 With uprights extended:  
 ACC40-24PS100 ..... 168.3 in. (4281.5 mm)  
 ACC40-24PS180 ..... 259.3 in. (6586.2 mm)  
 With uprights  
 retracted 83.0 in. (2108.1 mm)  
 Length:  
 Overall  
 ACC40-24PS100 ..... 12187 in (30937 mm)  
 ACC40-24PS180 ..... 122.5 in. (3111.5 mm)  
 Forks..... 40.0 in. (1016.0 mm)  
 Fork spread (maximum)..... 38.0 in. (965.2 mm)  
 Width (maximum)..... 38.0 (965.2 mm)  
 Weight (gross):  
 Weight390.0 (2894.6 kg)  
 ACC40-24PS100 ..... 6390.0 lbs. (2894.6 kg)  
 ACC40-24PS180 ..... 7315.0 lbs. (3313.7 kg)  
 c. *Performance*  
 Axle width (minimum):  
 Intersecting..... 44.0 in. (1879.6 mm)  
 Right angle stacking:  
 ACC40-24PS100 ..... 135.6 in (34406) mm)  
 ACC40-24PS180 ..... 136.2 in. (3459.5 mm)

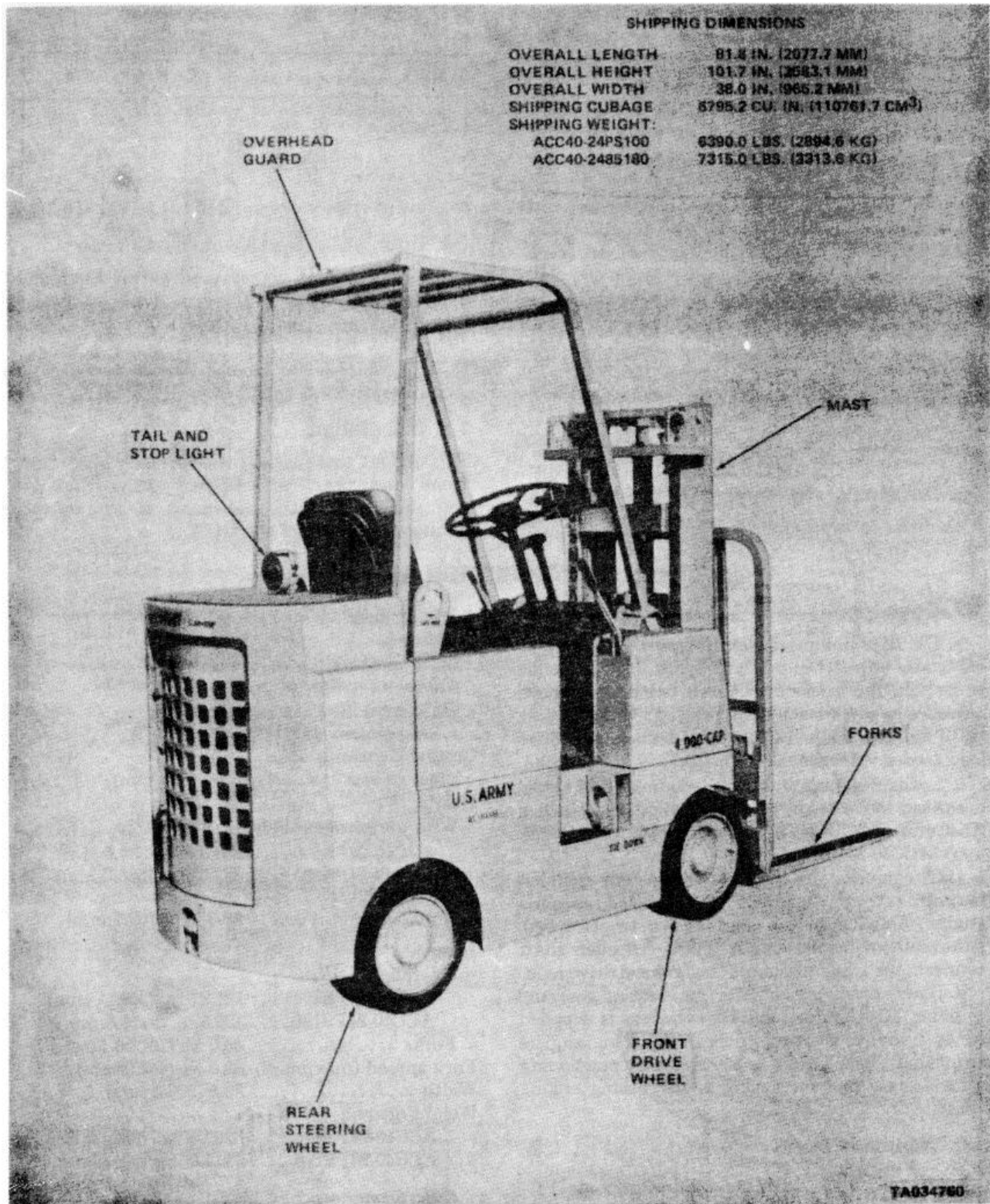


Figure 1-1. Fork lift truck with shipping dimensions, right side view.

Lift height (maximum):

ACC40-24PS100.....	100.0 in. (2540.0 mm)
ACC40-24PS180.....	180.0 in. (4572.0 mm)

Maximum speed (loaded):

Forward .....	8 mph (12.8 km/h)
Reverse .....	8 mph (12.8 km/h)