

TECHNICAL MANUAL

**OPERATOR'S AND ORGANIZATIONAL
MAINTENANCE MANUAL**

**TRUCK, FORK LIFT; 4000 LB CAPACITY;
144 IN. LIFT; GASOLINE ENGINE DRIVEN
(BAKER MODEL FJF-040; ARMY MODEL MHE-211)
FSN 3930-935-7963**

**This copy is a reprint which includes current pages from
Changes 1 and 2.**

TECHNICAL MANUAL

NO. 10-3930-623-12

HEADQUARTERS
DEPARTMENT OF THE ARMY
WASHINGTON, D.C., 17 March 1971

Operator's and Organizational Maintenance Manual

TRUCK, FORK LIFT, 4000 LB CAPACITY,
144 IN. LIFT, GASOLINE ENGINE DRIVEN
(BAKER MODEL FJF-040; ARMY MODEL MHE-211)
FSN 3930-935-7963

Section	Page	Section	Page
I	INTRODUCTION AND GENERAL	5-15	Cooling System Maintenance..... 5-3
	DESCRIPTION..... 1-1	5-27	Electrical System Maintenance..... 5-4
1-1	Introduction..... 1-1	5-39	Chassis Maintenance..... 5-15
1-3	General Description..... 1-1	5-42	Lubrication..... 5-15
1-7	Detailed Description..... 1-3	5-44	Troubleshooting..... 5-15
1-37	Electrical System Components..... 1-9	5-46	Test Equipment..... 5-27
II	TABLE OF SPECIFICATIONS..... 2-1	VI	REMOVAL AND INSTALLATION
III	PREPARATION FOR USE..... 3-1		OF ASSEMBLIES..... 6-1
3-1	Visual Examination..... 3-1	6-1	General..... 6-1
3-3	Services upon Receipt..... 3-1	6-4	Overhead Guard..... 6-1
IV	OPERATION..... 4-1	6-7	Counterweight..... 6-1
4-1	Principles of Operation..... 4-1	6-10	Seat Assembly..... 6-1
4-3	Engine..... 4-1	6-13	Sheet Metal..... 6-1
4-12	Fuel System..... 4-2	6-21	DELETED
4-16	Ignition System..... 4-2.1	6-25	Tilt Cylinder Assemblies..... 6-3
4-24	Cooling System..... 4-3	6-28	Lift Chains..... 6-5
4-30	Charging System..... 4-5	6-31	DELETED
4-42	Drive Axle and Transmission..... 4-5	6-34	DELETED
4-53	Operating Instructions..... 4-8.1	6-37	DELETED
4-56	Operating Procedures and	6-40	DELETED
	Techniques..... 4-11	6-43	Control Valve..... 6-5
4-60	General Loading and	6-46	Electrical System..... 6-6
	Driving Procedures..... 4-11	6-59	Radiator..... 6-8
4-64	Safety Precautions..... 4-12	6-62	Power Train..... 6-8.1
V	INSPECTION, MAINTENANCE AND	6-64	Fuel Filter, Fuel Pump
	LUBRICATION..... 5-1		and Carburetor..... 6-8.1
5-1	Scope of Section..... 5-1	6-67	Water Pump..... 6-9
5-3	Preventive Maintenance Services..... 5-1	6-70	Steering Gear..... 6-9
5-9	Engine Maintenance..... 5-2	6-74	Hydraulic Brake Master Cylinder
5-12	Fuel System Maintenance..... 5-2.4	6-77	Brake Pedal..... 6-13
		6-80	Exhaust Hose..... 6-13
		6-83	Intake And Exhaust Manifold..... 6-13
		6-87	Return Line Filter Installation..... 6-13
		APPENDIX A	Maintenance Allocation Chart*..... A-1
		APPENDIX B	Basic Issue List..... B-1

LIST OF ILLUSTRATIONS

Number		Page
i	FJF-040 Fork Lift Truck.....	iv
1-1	Deleted	
1-2	Typical Engine, Front and Rear Views	1-2
1-3	Charging System Basic Schematic.....	1-3
1-4	Hydraulic System Diagram	1-4
1-5	Steering System Arrangement.....	1-5
1-6	Power Steering Gear Operation.....	1-7
1-7	Transmission, Showing Pressure Passages	1-8
1-8	Transmission Hydraulic Diagram	1-9
1-9	Drive Axle, Exploded View	1-10
1-10	Uprights, Carriage and Fork	1-11
1-11	Electrical Schematic	1-12
1-12	Instrument Panel	1-13
3-1	Check Points before Use.....	3-2
4-1	Four Stroke Engine Cycle	4-1
4-1.1	Fuel Tank Removal and Installation	4-2.2
4-2	Ignition System Schematic.....	4-3
4-3	Wiring Diagram	4-4
4-4	Differential Diagram.....	4-6
4-5	Transmission Power Flow	4-7
4-6	Wheel Brake Layout	4-8.3
4-6.1	Front Drive Axle Complete, Exploded View	4-8.4
4-6.2	Hand Brake Control Installation, Exploded View	4-9
4-7	Instruments and. Controls	4-10
5-1	Tensioning Alternator Belt	5-2
5-2	Cylinder Head Tightening Sequence.....	5-2
5-2.1	Accelerator Linkage, Removal and Installation.....	5-2.5
5-3	Measuring Tappet Clearance	5-3
5-4	Flywheel Timing Marks	5-5
5-5	Breaker Plate	5-6
5-6	Breaker Point Adjustment	5-7
5-7	Measuring Spark Plug Gap	5-7
5-8	Measuring Brush Spring Tension	5-8
5-9	Deleted	
5-10	Deleted	
5-11	Deleted	
5-12	Alternator Test Setup.....	5-11
5-13	Deleted	
5-14	Test Equipment	5-26
6-1	Fork Lift Truck Components	6-2
6-2	Hydraulic System Layout	6-4
6-2.1	Hydraulic Hoist and Tilt Control Valve, Exploded View.....	6-4.1
6-3	Engine Mounted Electrical Units.....	6-7
6-4	Neutral Safety Switch Adjustment	6-8
6-5	Steering Gear Removal.....	6-10
6-6	Hydraulic Brake Master Cylinder and Pedal Assembly, Exploded View.....	6-12
6-7	Exhaust Hose, Muffler and Exhaust Pipe, Exploded View.....	6-14
6-8	Engine Assembly	6-15
6-9	Hydraulic System Line Filter, Exploded View.....	6-16

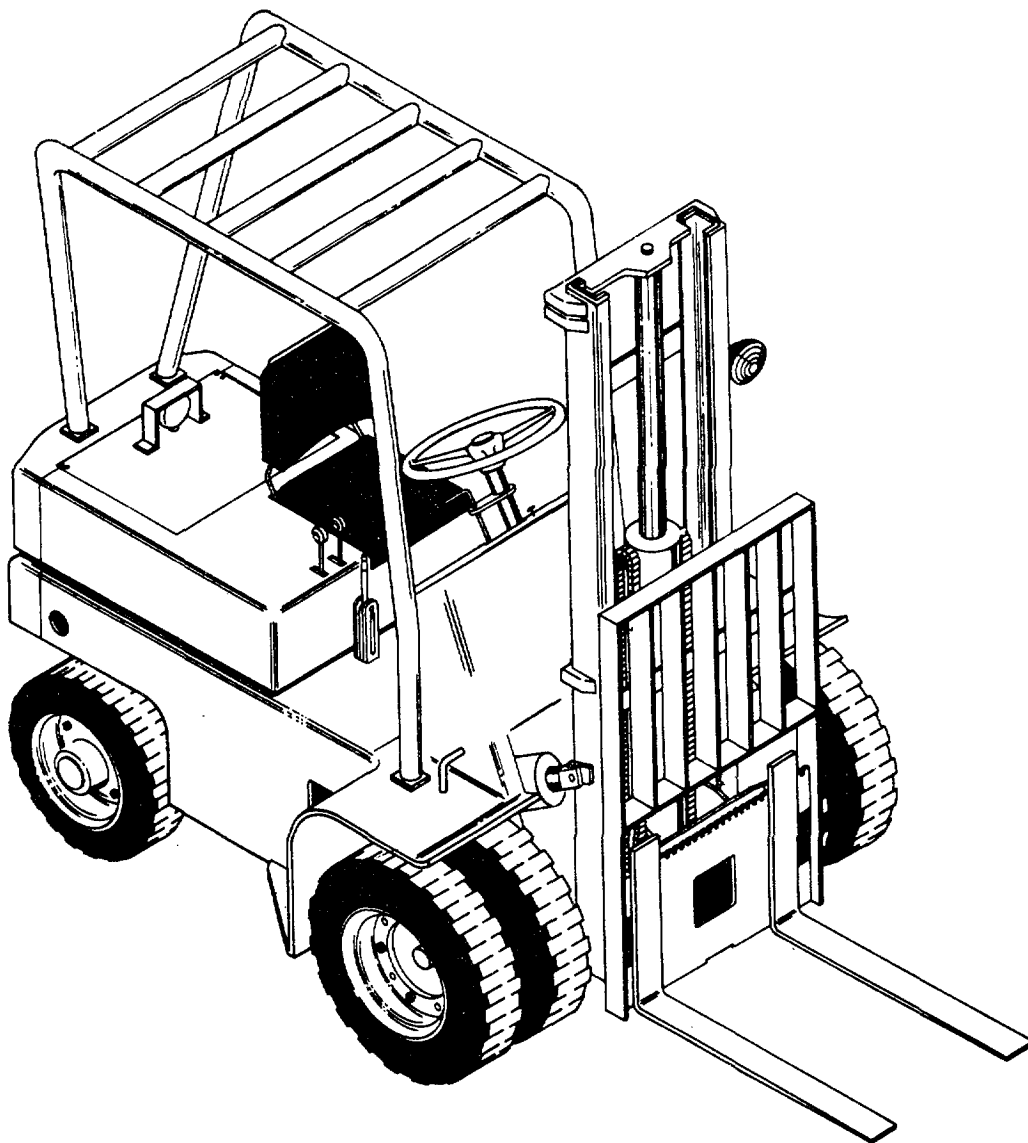


Figure i. FJF-040 Fork Lift Truck

2012-1

SECTION I

INTRODUCTION AND GENERAL DESCRIPTION

1-1. INTRODUCTION.

1. Scope. These instructions are published for the information and guidance of personnel to whom the forklift truck is issued. Information is provided on the operation, preventive maintenance services, and organizational maintenance of the equipment, accessories, and components.

2. Demolition and Administrative Storage

a. For information on the administrative storage of this equipment, refer to TM 740-90-1.

b. For information on the demolition of this equipment, refer to TM 750-244-3..

3. Maintenance Forms and Records. Maintenance forms, records, and reports which are to be used by maintenance personnel at all maintenance levels are listed in and prescribed by TM 38-750.

1-2. Recommendation for Maintenance Publications Improvements

You can help to improve this manual by calling attention to errors and by recommending improvements. Your letter or DA Form 2028 (Recommended Changes to Publications and Blank Forms) should be mailed direct to: Commander, US Army Troop Support Command, ATTN: AMSTS-MPP, 4300 Goodfellow Blvd., St. Louis, MO 63120. A reply will be furnished direct to you.

1-3. GENERAL DESCRIPTION.

1-4. The Model FJF-040 fork lift truck is a front loading unit rated to handle loads to 4000 pounds at 24 inch load centers. Pneumatic tires permit satisfactory operation of the truck off paved surfaces.

1-5. Handling of loads is accomplished by engaging the two 40 inch fork prongs with the load. The forks are mounted on a hydraulically operated mast assembly which can raise the load to a height of twelve feet for stacking of commodities handled. The mast is tiltable ten degrees rearward to cradle the load when traveling, to three degrees forward to facilitate disengaging the load when depositing it. Travel speed of the trucks is limited to about 12 miles per hour loaded, or 14 miles per hour empty, by an engine speed governor. Steering is power assisted. Arrangement of the controls conforms to general industrial truck standards, permitting ready use by operators with previous fork lift experience.

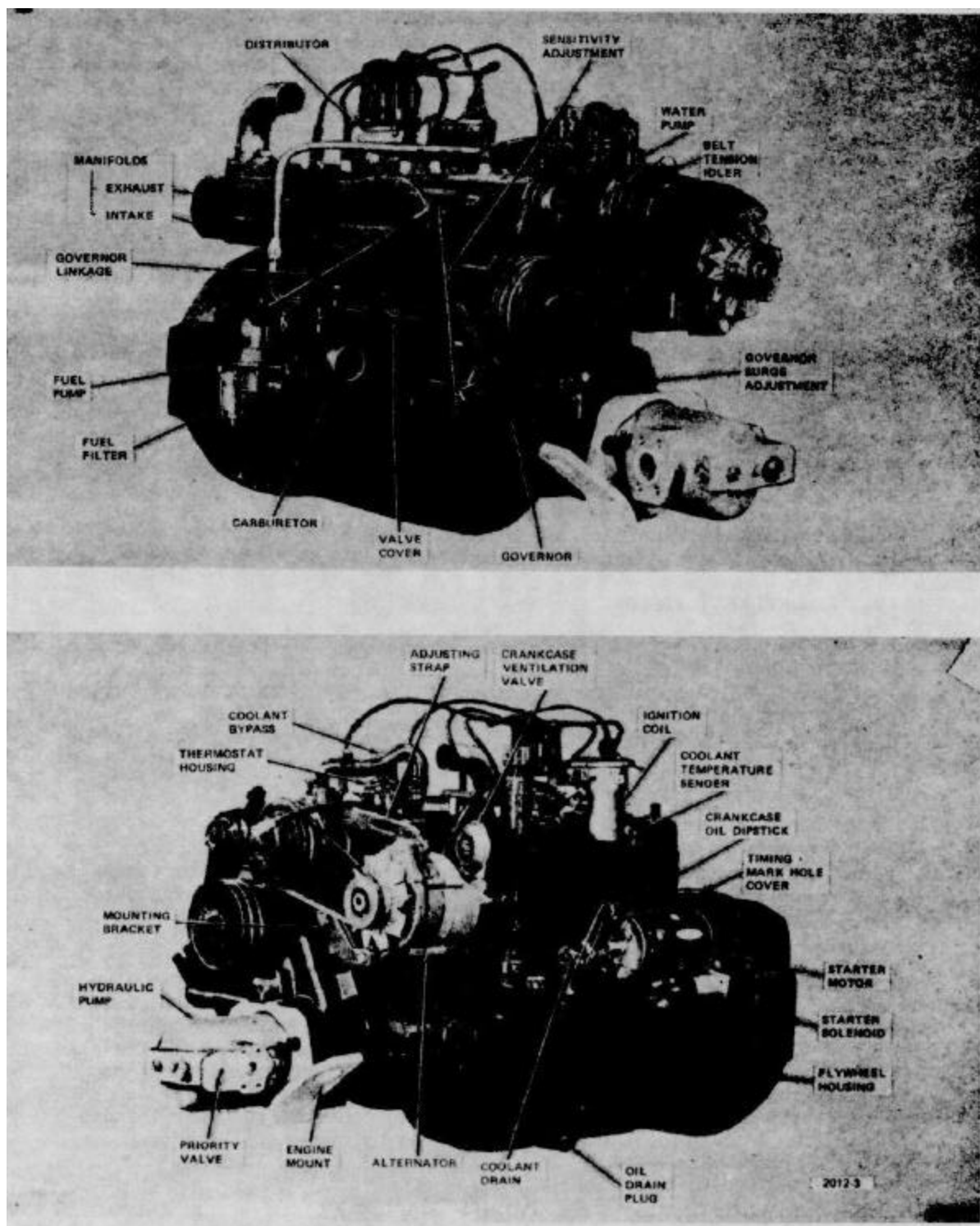


Figure 1-2. Typical Engine, Front and Rear Views