

**LUBRICATION ORDER**

**LO 10-3930-623-12**

**15 DECEMBER 83**

(Supersedes LO 10-3930-623-12-1, and -2, 2 OCTOBER 1970)

**TRUCK, FORK LIFT; 4,000 LB CAPACITY, 144-INCH  
LIFT, GASOLINE ENGINE DRIVEN (BAKER MODEL  
FJF-040, ARMY MODEL MHE-211)  
(NSN 3930-00-935-7963)**

Reference: TM 10-3930-623-12 and FEDERAL SUPPLY CATALOG C9100-IL.

Hard time intervals and the related man-hour times are based on normal operation. The man-hour time specified is the time you need to do all the services prescribed for a particular interval. Change the hard time interval if your lubricants are contaminated or if you are operating the equipment under adverse operating conditions, including longer-than-usual operating hours. The hard time interval may be extended during periods of low activity. If extended, adequate preservation precautions must be taken.

**WARNING**

**Dry cleaning fluid is flammable. Do not use near a flame or excessive heat. Use only with adequate ventilation. Avoid prolonged breathing of vapors and minimize skin contact.**

Clean parts or fittings with dry cleaning solvent (SD), Type II or equivalent. Dry before lubricating. Dotted arrow shafts indicate lubrication on both sides of equipment. A dotted circle indicates a drain below. Relubricate all items found contaminated after fording or washing.

The lowest level of maintenance authorized to lubricate a point is indicated by one of the following symbols as appropriate: Operator/Crew (C) ; and Organizational Maintenance (O).

**Reporting errors and recommending improvements.** You can help improve this manual. If you find any mistakes or if you know of a way to improve the procedures, please let us know. Mail your letter or DA Form 2028 (Recommended Changes to Publications and Blank Forms) direct to: Commander, US Army Tank-Automotive Command, ATTN: DRSTA-MB, Warren, MI 48090. A reply will be furnished to you.

\*The time specified is the time required to perform all services at the particular interval.

<b>*TOTAL MAN-HOURS</b>		<b>*TOTAL MAN-HOURS</b>	
<b>INTERVAL</b>	<b>MAN-HOURS</b>	<b>INTERVAL</b>	<b>MAN-HOURS</b>
10	0.2	500	0.6
50	0.3	1000	1.6
250	2.6		

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**LUBRICANT • INTERVAL**

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Hydraulic Reservoir  
Breather (0)  
(Remove breather  
cap, clean and  
re-oil) (See Note 4)

500

50 OE/  
HDO

Fork Stop Pins (0)

Hydraulic Reservoir  
Oil Fill and  
Level Cap (C)  
(Check level) (See  
Key) (See Note 3)

OE/  
HDO 50

1000 GAA Wheel Bearings (0)  
(Service)  
(See Note 6)

Hydraulic Oil  
Reservoir Drain  
Plug (0)  
(Drain and refill)  
(See Note 4)

1000

Hydraulic Reservoir  
Oil Strainer (0)  
(See Note 4)

1000

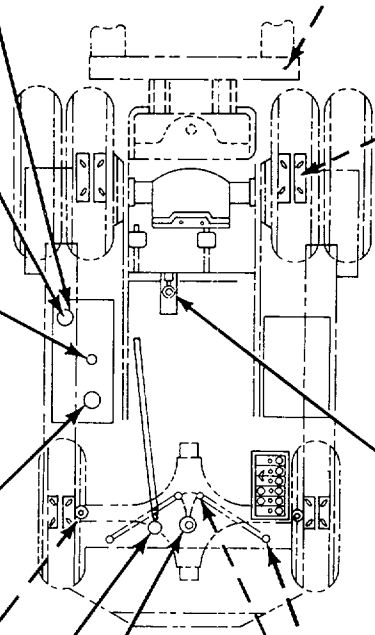
50 BFS Master Brake  
Cylinder Fill  
and Level (0)  
(Check level)  
(See Key)

King Pin (0) GAA 250

Rear Drag Link (0) GAA 250  
(Sprangly)

Bell Crank  
Housing (0) GAA 250

250 GAA Tie Rod Ends (0)  
(4 fittings)



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Engine Accessory  
Alternator (Sealed  
bearings, no  
lubrication  
required)

Engine Oil  
Filter (O)  
(Replace element)  
(See Note 9)

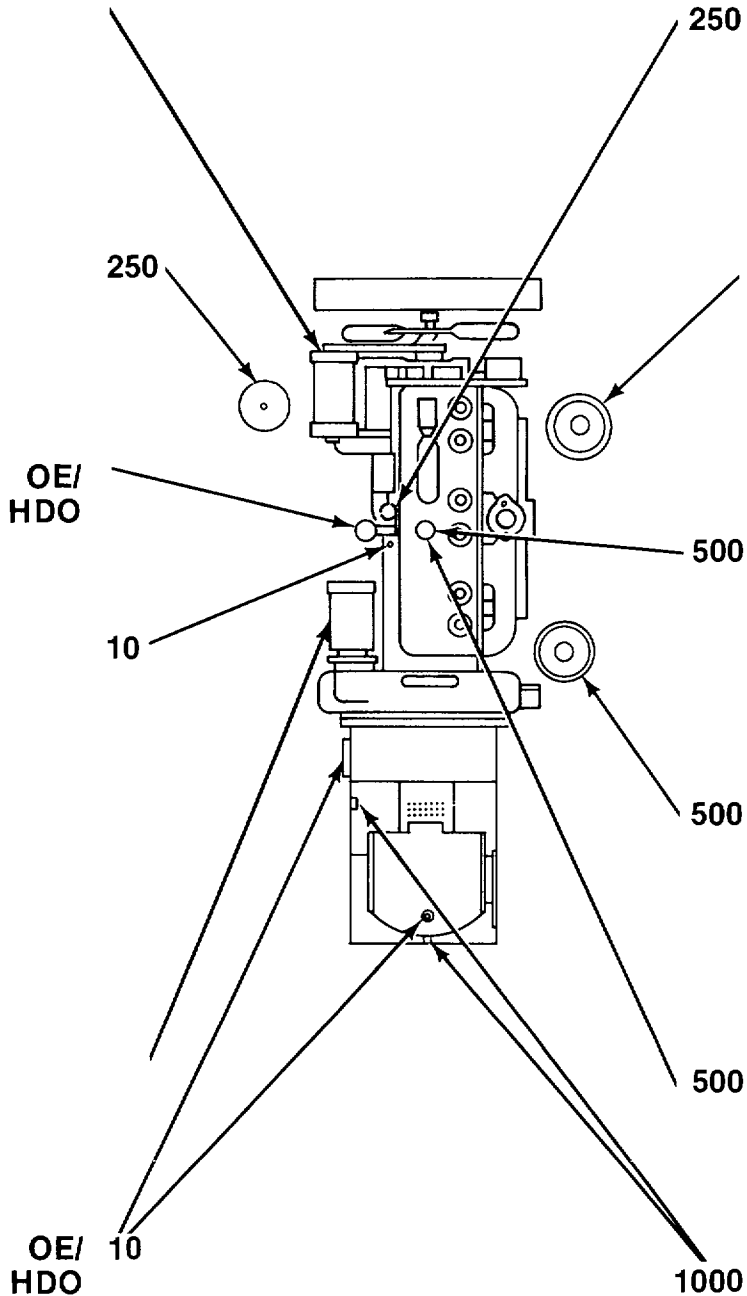
Engine Crankcase  
Fill Cap (C)  
(See Key)

Engine Crankcase  
Level Gage (C)  
(Check level)

CAUTION: When  
OEA Oil  
is used the  
level will  
be checked  
more often.  
(See Note 7)

Starter (Sealed  
bearings, no  
lubrication  
required)

Transmission,  
Converter and  
Drive Axle Fill and  
Level Cap (C)  
(Check level)  
(See Key and  
Note 10)



Engine Crankcase  
Drain Plug (O)  
(Drain and refill)  
(See Note 8)

Air Cleaner  
(Dry type. No  
lubrication  
required)

Distributor Shaft  
and Cam (O)  
(Springly)

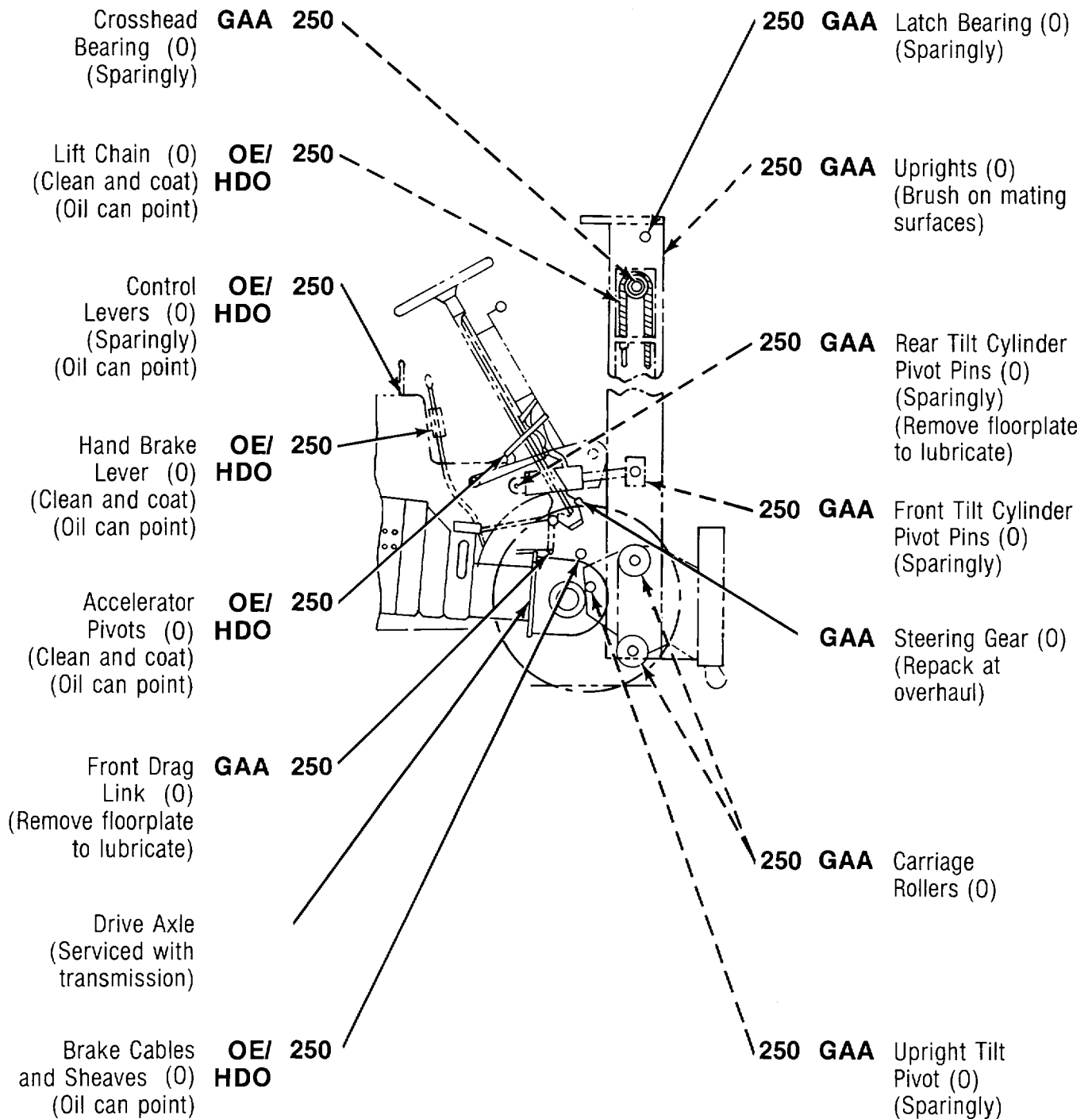
Hydraulic Oil  
Filter (O)  
(Replace element)  
(See Note 5)

Distributor (O)  
(Apply lubricant to  
camwick sparingly)

Transmission,  
Converter and  
Drive Axle Drain  
Plug (O)  
(Drain and refill)  
(See Note 10)

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**-\*KEY-**

LUBRICANTS	CAPACITY	EXPECTED TEMPERATURES			INTERVALS	
		Above + 15°F (Above - 9°C)	+ 40° to -15° (+ 4° to - 26°C)	+ 40° to - 65° (+ 4° to - 54°C)		
<b>OE/ - HDO</b> - Lubricating Oil, Internal Combustion Engine, Tactical Service  <b>OEA</b> - Lubricating Oil, Internal Combustion, Arctic  - Oil Can Points (See Note 2)  - Engine Crankcase w/Oil Filter		<b>OE/HDO 30</b>	<b>OE/HDO 10</b>	<b>OEA</b> (See Note 1)	Intervals given are in hours of normal operation.	
- Hydraulic Reservoir  - Transmission, Torque Converter and Drive Axle						<b>For Arctic operation refer to FM 9-207</b>
<b>BFS</b> - Brake Fluid, Silicone, Automotive  - Brake Master Cylinder						
<b>GAA</b> - Grease, Automotive and Artillery		ALL TEMPERATURES				

\* See Note 10 for lubricant specification number.

**NOTES:**

1. FOR OPERATION OF EQUIPMENT IN PROTRACTED COLD TEMPERATURES BELOW -15°F (-26°C). Remove lubricants prescribed in Key for temperatures above -15°F (-26°C). Relubricate with lubricants specified in Key for temperatures below -15°F (-26°C). If OEA lubricant is required to meet the temperature ranges prescribed in the Key, OEA lubricant is to be used in place of OE/HDO-10 lubricant for all

temperature ranges where OE/HDO-10 is specified in the Key.

2. OIL CAN POINTS. Each 250 hours lubricate lift chain, control levers, hand-brake levers, accelerator pivots, brake cables and sheaves, linkages, and all exposed adjusting threads with OE/HDO.

NOTES - CONTINUED:

3. HYDRAULIC RESERVOIR LEVEL. Each 50 hours check level. Maintain level to "FULL" mark with OE/HDO. Check oil level with forks lowered and uprights tilted back.

4. HYDRAULIC RESERVOIR. Each 500 hours remove breather cap, clean with approved dry cleaning solvent, and re-oil. Each 1000 hours change oil and clean strainer. After refill operate hydraulic system for 5 minutes, check for leaks, check oil level and bring to "FULL" mark.

5. HYDRAULIC OIL FILTER. Each 500 hours, remove element, clean filter shell and install new element. After replacement, operate hydraulic system for 5 minutes, check for leaks, check level and bring to "FULL" mark.

6. WHEEL BEARINGS. Each 1000 hours, remove dual wheels, clean and inspect all parts, replace worn or damaged parts, repack bearings, and assemble.

7. ENGINE OIL LEVEL HOT OR COLD CHECK. Cold engine, oil level should be at high mark on dipstick. Hot engine, oil level must be between high and low marks on dipstick (allow to set 5 minutes before checking).

8. ENGINE CRANKCASE. Each 250 hours change oil. Drain when oil is warm.

9. ENGINE OIL FILTER. Each 250 hours, remove filter element, clean housing and install new filter element. After installing new filter element, fill crankcase, operate engine for 5 minutes, check housing for leaks, check crankcase oil level and bring to "FULL" mark.

10. TRANSMISSION, CONVERTER AND DRIVE AXLE. Check oil level each 10 hours with engine running at idle speed, oil at operating temperature and transmission in neutral. Maintain oil level to "FULL" mark. Each 1000 hours change oil. Fill transmission to low mark. Run engine at idle speed to fill converter and lines. Add oil to low mark. Operate for 5 minutes, check for leaks, check level and bring to "FULL" mark.

11. LUBRICANTS. The following is a list of lubricants with military symbols and applicable specification numbers.

OE/HDO	MIL-L-2104
GAA	MIL-G-10924
OEA	MIL-L-46167
BFS	MIL-B-46176
(SD), Type II	P-D-680

Copy of this Lubrication Order will remain with the equipment at all times, instructions contained herein are mandatory.

By order of the Secretary of the Army:

JOHN A. WICKHAM, JR.  
General, United States Army  
Chief of Staff

OFFICIAL:

ROBERT M. JOYCE  
Major General, United States Army  
The Adjutant General

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To be distributed in accordance with DA Form 12-25A, Operator and Organizational maintenance requirements for Fork Lift Trucks.

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