

**LUBRICATION ORDER**

**LO 10- 39300627 12**

21 JUNE 1984

(Supersedes LO 10-3930-627-12-1, 14 JANUARY 1972, and -2, 3 JUNE 1971)

**TRUCK, FORK, LIFT; GASOLINE, PNEUMATIC**

**TIRED WHEELS; 4,000 LB CAPACITY, 144-INCH LIFT**

**HEIGHT (BAKER MODEL FJF-040, ARMY MODEL**

**MH E221)**

**(NSN 3930-00-151-4428)**

Reference: TM 10-3930-627-12, 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.

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).

**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.

**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	2.1
250	2.6		

**TA 220561**

**LUBRICANT • INTERVAL**

**INTERVAL • LUBRICANT**

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

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

Hydraulic Oil  
Reservoir  
Drain Plug (0)  
(Drain and refill)  
(See Note 8)

Hydraulic Reservoir  
Oil Strainer (0)  
(Clean)  
(See Note 8)

King Pin (0)

Rear Drag  
Link (0)  
(Sparingly)

Bell Crank  
Housing (0)

**OE/  
HDO**

**500**

**50**

**1000**

**1000**

**GAA 250**

**GAA 250**

**GAA 250**

**50**

**OE/  
HDO**

**1000**

**GAA**

**50**

**BFS**

**500**

**250**

**GAA**

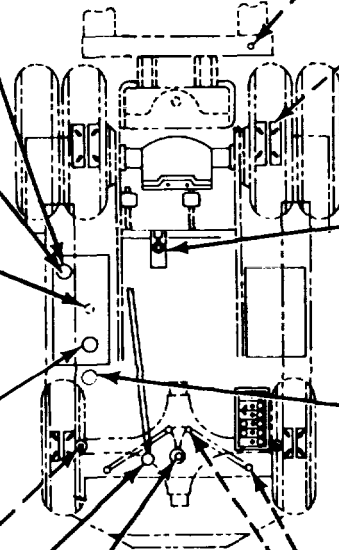
Fork Stop Pins (0)  
(See Key)

Front Wheel  
Bearings (0)  
(See Note 7)

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

Hydraulic Oil  
Filter (0)  
(Replace element)  
(See Note 9)

Tie Rod Ends (0)  
(4 fittings)



**LUBRICANT • INTERVAL**

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Engine Accessory  
Alternator  
(Sealed bearings,  
no lubrication  
required)

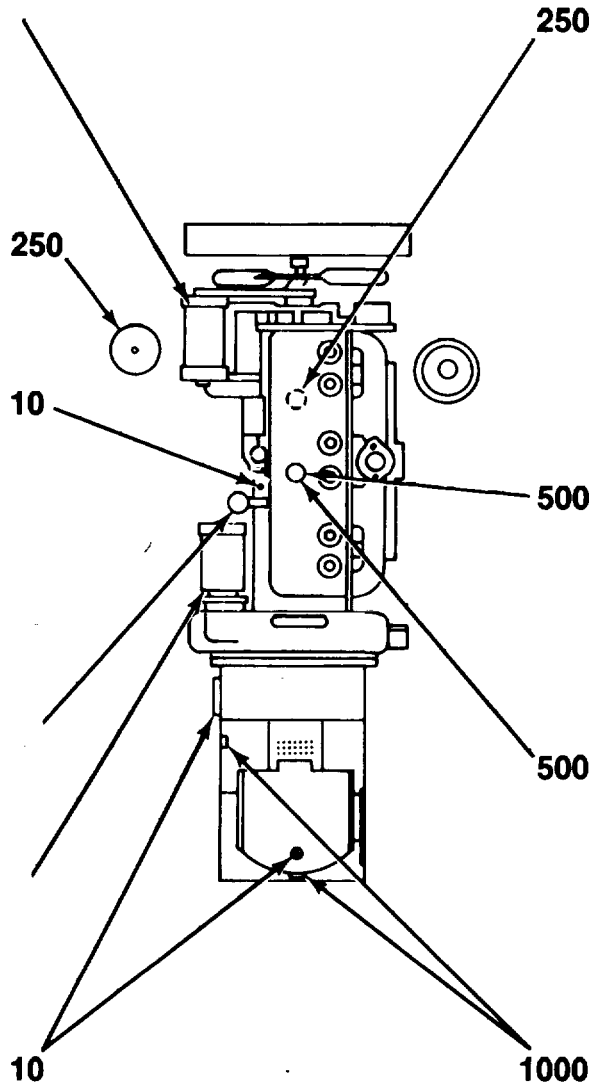
Engine Oil Filter (O)  
(Replace element)  
(See Note 5)

Crankcase Level  
Gage (C)  
(Check level)  
**CAUTION:** When  
OEA Oil is used the  
level will be checked  
more often. (See  
Note 3)

Crankcase  
Fill Cap (C)  
(See Key) **OE/  
HDO**

Starter  
(Sealed bearings,  
no lubrication  
required)

Transmission,  
Converter and  
Drive Axle Fill  
and Level Cap (C)  
(Check level and  
fill) (See Note 6) **OE/  
HDO**



Crankcase  
Drain Plug (O)  
(Drain and refill)  
(See Note 4)

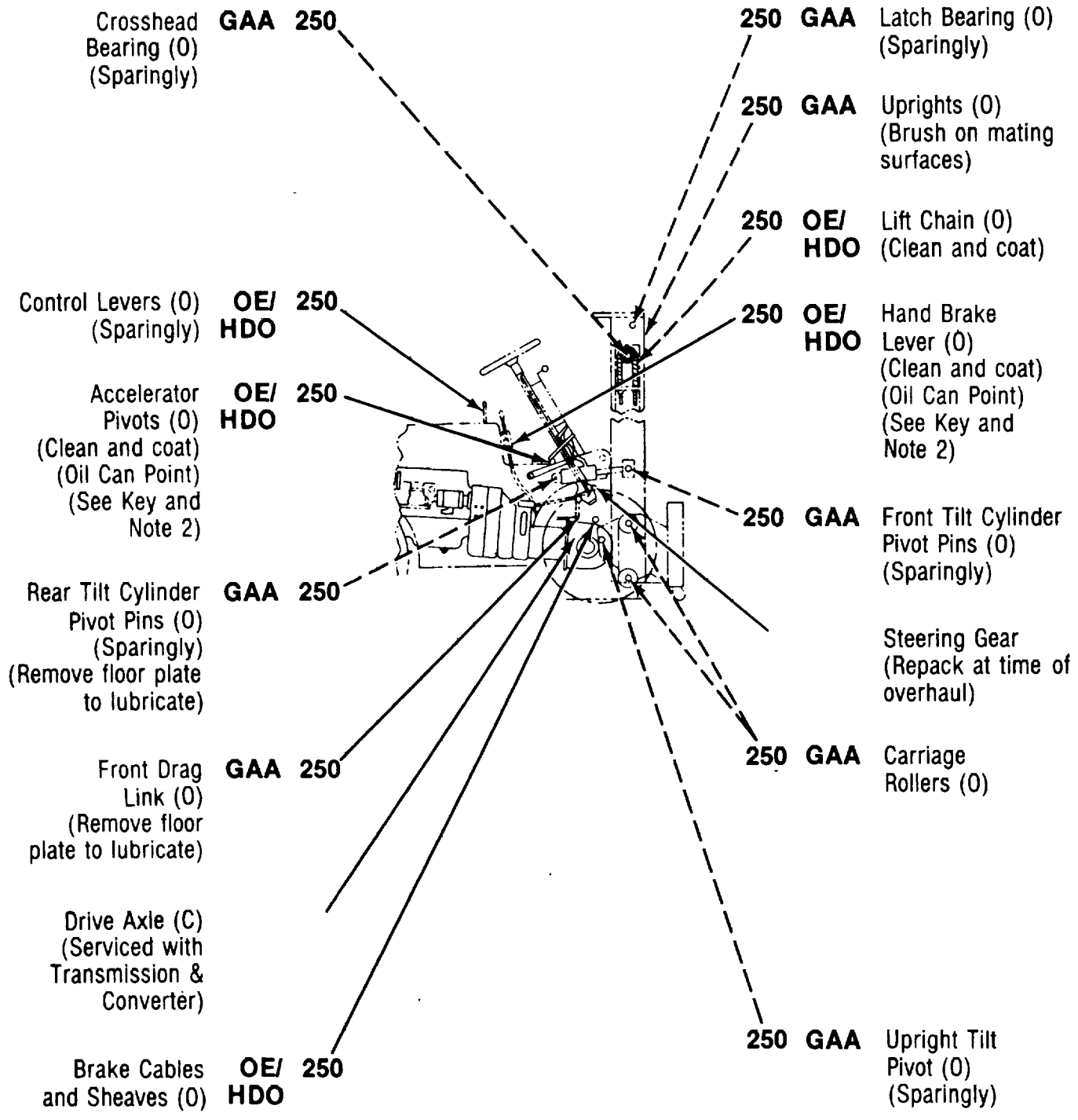
**500 GAA** Distributor Shaft  
and Cam (O)  
(Springly)

**500 OE/  
HDO** Distributor (O)  
(Apply lubricant to  
camwick  
springly)

Transmission,  
Converter and  
Drive Axle  
Drain Plug (O)  
(Drain and refill)  
(See Note 6)

**LUBRICANT • INTERVAL**

**INTERVAL • LUBRICANT**



\* KEY -

LUBRICANTS	CAPACITY	EXPECTED TEMPERATURES			INTERVALS
		Above +15°F (Above -9°C)	+40° to -15°F (+4° to -26°C)	+40° to -65°F (+4° to -54°C)	
<b>OE/ HDO</b> - Lubricating Oil, Internal Combustion Engine, Tactical Service  <b>OEA</b> - Lubricating Oil, Internal Combustion, Arctic  - Crankcase With Oil Filter  - Oil Can Points (See Note 2)	4-1/2 qts. (4.25 L)	OE/HDO 30	OE/HDO 10	OEA (See Note 1)	Intervals given are in hours of normal operation.
- Transmission, Converter and Drive Axle  - Hydraulic Reservoir  - Fork Stop Pins	16 qts. (15.13 L)  50 qts. (47 L)				
<b>BFS</b> - Brake Fluid, Silicone, Automotive  - Brake Master Cylinder	1/2 pt. (0.236 L)	ALL TEMPERATURES			
<b>GAA</b> - Grease, Automotive and Artillery		ALL TEMPERATURES			
*See Note 10 for lubricant specification number.					

For Arctic operation refer to FM 9-207

**NOTES:**

1. FOR OPERATION OF EQUIPMENT IN PROTRACTED COLD TEMPERATURES BELOW -150F (-260C). Remove lubricants prescribed in Key for temperatures above -150F (-260C). Relubricate with lubricants specified in Key for temperatures below -150F (-260C). 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 brake and hand brake linkage, accelerator pivot points, and all exposed adjustable threads with OE/HDO.

3. 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).

4. ENGINE. Oil is to be changed each 250 hours. Drain when lubricant is warm.

5. 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.

6. TRANSMISSION, CONVERTER AND DRIVE AXLE. Check level each 10 hours with engine running at idling speed, oil at operating temperature and transmission in neutral. Maintain oil level at "FULL" mark. Change oil each 1000 hours. Drain when lubricant is warm. Fill transmission to low mark. Run engine at idle speed to fill converter and lines. With engine running at idle speed, oil at operating temperature and transmission in neutral, add oil to bring oil level to "FULL" mark. Operate for 5 minutes and check for leaks.

7. WHEEL BEARINGS. Each 1000 hours, remove front wheels, clean and inspect all parts, replace damaged or

worn parts, repack bearings, and assemble.

8. HYDRAULIC OIL RESERVOIR. Each 1000 hours drain reservoir. Drain when lubricant is warm. Clean and replace strainer. Fill reservoir, operate hydraulic controls, check for leaks, check oil level and bring to "FULL" mark. Check oil level with forks lowered and uprights tilted back.

9. 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.

10. 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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