

LUBRICATION ORDER

LO 10-3930-237-12

7 March 1984

(Supersedes LO 10-3930-237-20-1, 4 SEPTEMBER 1964)

TRUCK, LIFT, FORK, GASOLINE, SOLID RUBBER
 TIRED WHEELS, 2000 POUND CAPACITY, ARMY
 MODEL MHE-192 CLARK MODELS C20B-1632032-100
 (NSN 3930-00-781-3857) AND C20-B-1632033-127
 (NSN 3930-00-781-3858)

Reference: TM 10-3930-237-10, -20 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 service 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

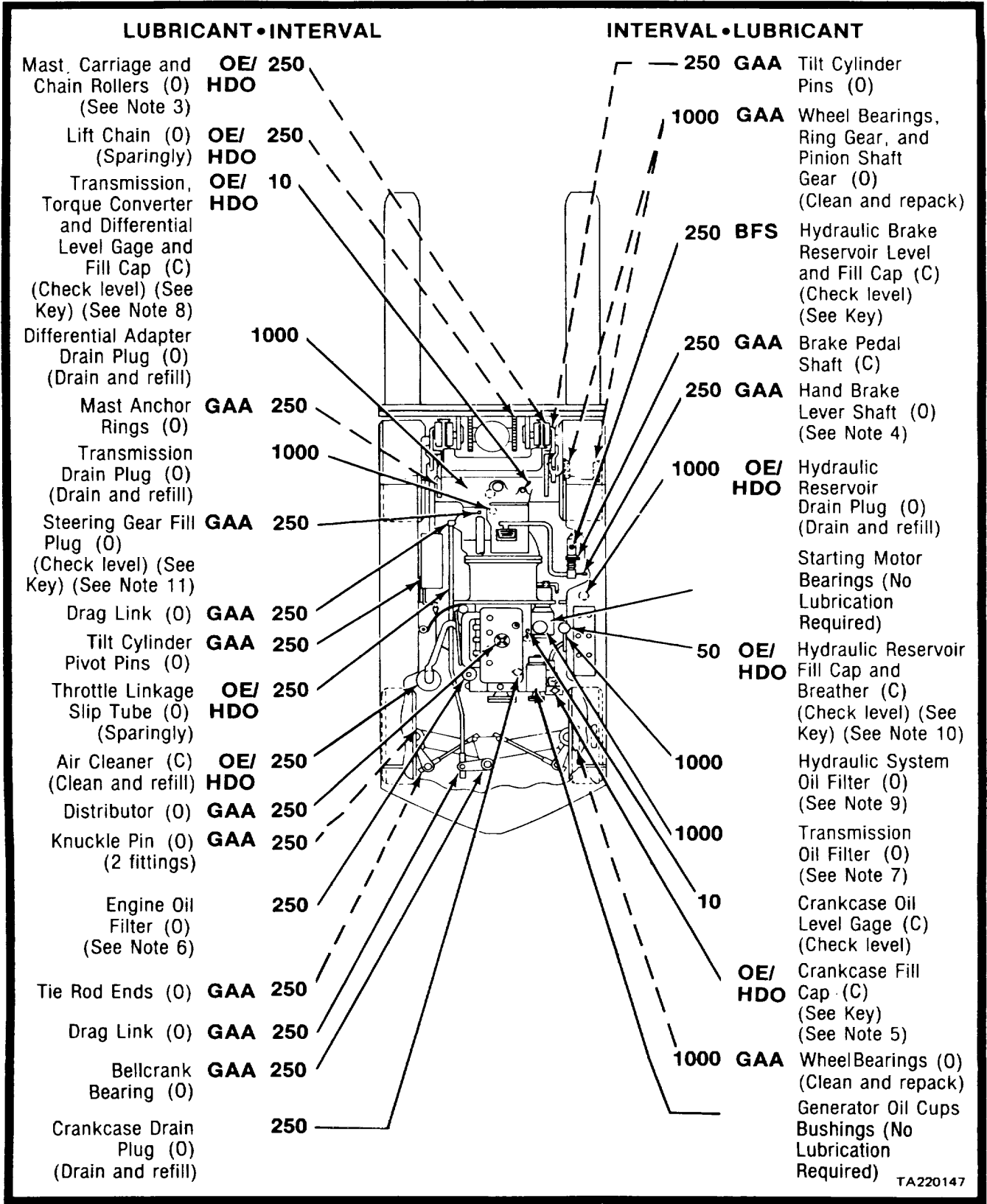
Dry cleaning fluid is flammable. Do not use near a flame or excessive heat. Use only with adequate ventilation. Avoid prolonged breathing of vapors and minimize skin contact.

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.

*TOTAL MAN-HOURS		*TOTAL MAN-HOURS	
INTERVAL	MAN-HOURS	INTERVAL	MAN-HOURS
10	0.2	250	2.1
50	0.2	1000	1.9

TA220146



* 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)	
OE/ HDO - Lubricating Oil, Internal Combustion Engine, Tactical Service OEA - Lubricating Oil, Internal Combustion, Arctic - Throttle Linkage Slip Tube - Crankcase - Generator - Oil Can Points (See Note 2) - Lift Chain - Mast, Carriage, and Chain Rollers		OE/HDO 30	OE/HDO 10	OEA (See Note 1)	Intervals given are in hours of normal operation. For Arctic operation refer to FM 9-207
- Transmission, Torque Converter and Differential - Hydraulic Steering System - Hydraulic Lift System - Air Cleaner	15 qts. (14.26 L) 1 pt. (0.47 L)				
GAA - Grease, Automotive and Artillery - Rear Wheel Bearings - Front Wheel Bearings, Ring and Pinion Gear - Steering Gear	1 lb. (0.45 kg)	ALL TEMPERATURES			

*See Note 12 for lubricant specification number.

TA220148

* 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)	
BFS - Brake Fluid, Silicone, Automotive,		ALL TEMPERATURES			

*See Note 12 for lubricant specification number.

1. FOR OPERATION OF EQUIPMENT IN PROTRACTED COLD TEMPERATURES BELOW -150F (-260C). Remove lubricants prescribed in Key for temperatures above -15°F (-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 throttle shift and hydraulic levers and linkages, parking brake handle, hood latches and seat adjuster with OE/HDO.

3. MAST, CARRIAGE, AND CHAIN ROLLERS. Inject lubricant through rubber seal with hypodermic syringe and needle.

4. HAND BRAKE LEVER SHAFT. Remove floor plate, lubricate using gun with flexible connection, install floor plate.

5. 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).

6. ENGINE OIL FILTER. Filter element is to be replaced each 250 hours. Remove filter element, clean housing, install new filter element. After replacement, fill crankcase, operate engine 5 minutes, check housing for leaks, check crankcase oil level and bring to "FULL" mark.

7. TRANSMISSION OIL FILTER. Filter element is to be replaced every 1000 hours. Remove filter element, clean housing, install new filter element. After replacement, with engine running at idle speed, oil at operating temperature and transmission in neutral, check housing for leaks, check transmission oil level and bring to "FULL" mark.

8. TRANSMISSION AND TORQUE CONVERTER. Check oil level each 90 hours with engine running at idle speed, oil at operating temperature and transmission in neutral. Maintain oil level to "FULL" mark. Operate for 5 minutes, check for leaks and bring transmission oil level to "FULL" mark.

9. HYDRAULIC SYSTEM OIL FILTER. Filter element is to be replaced every 1000 hours. Drain hydraulic reservoir, disconnect hydraulic hose, remove filter, flush reservoir, replace filter element, install filter, connect hose, fill reservoir. Operate hydraulic system for 5 minutes, check for leaks, check oil level and bring to "FULL" mark.

10. HYDRAULIC RESERVOIR FILL CAP AND BREATHER. Each 10 hours, clean breather by tapping on a wood block or bench. Replace if excessively dirty.

11. STEERING GEAR. Check level each 250 hours. Change gear lubricant only when required by maintenance repair action, contamination by water, or other foreign material. After refill operate for 5 minutes, check for leaks and bring oil to level of level plug opening.

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NOTES - CONTINUED:

12. 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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