

**LUBRICATION ORDER**

21 March 1984

(Supersedes LO 5-3820-242-12, 15 MARCH 1974)

**AUGER, EARTH, SKID MOUNTED (TEXOMA INC.  
MODEL 254-8 X 2) (NSN 3820-00-201-8293)**

Reference: TM 5-3820-242-12, and FEDERAL SUPPLY CATALOG C9100-IL.

Hard time intervals and the related manhour 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.

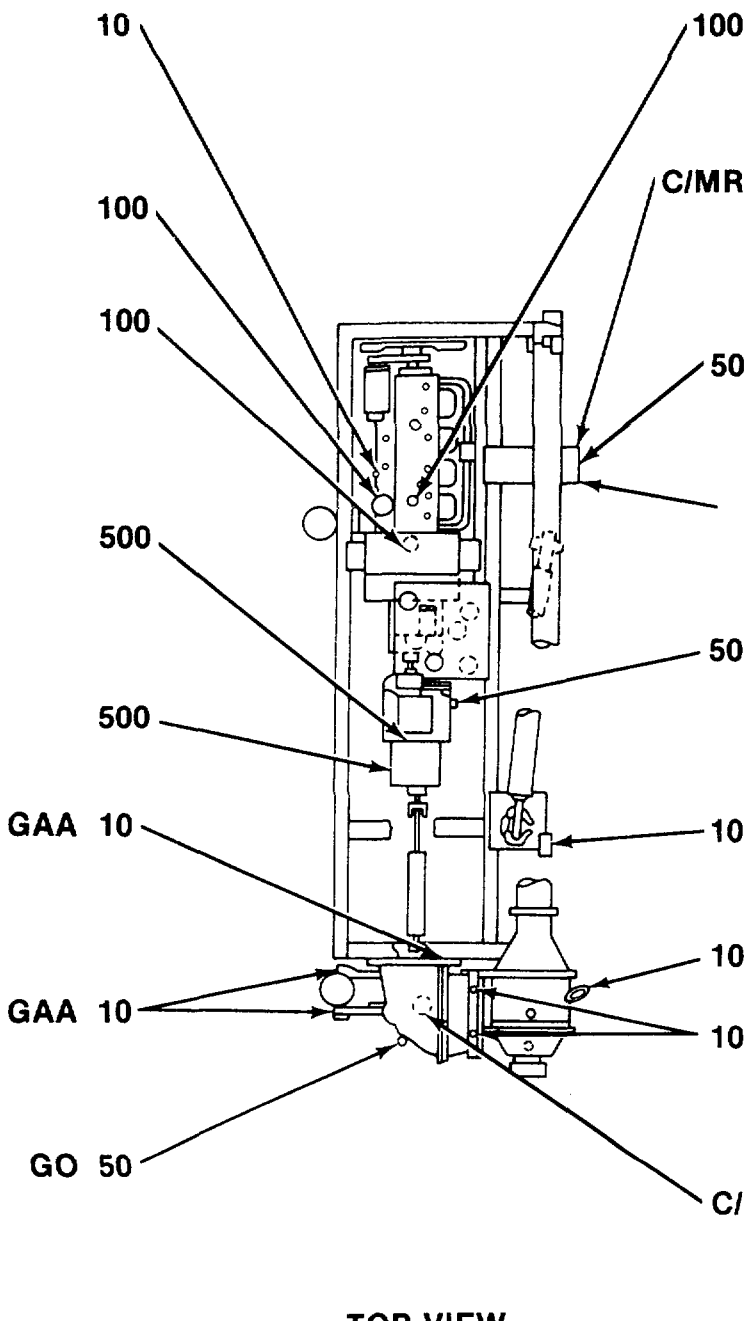
\*The time specified is the time required to perform all services at the particular interval.

*TOTAL MAN-HOURS		*TOTAL MAN-HOURS	
INTERVAL	MAN-HOURS	INTERVAL	MAN-HOURS
10	2.3	250	0.5
50	2.0	500	0.6
100	0.9	1000	0.5

**LUBRICANT • INTERVAL**

**INTERVAL • LUBRICANT**

- Crankcase Oil Level Gage (C)  
(Check level)  
(See Note 2)
- Oil Filter (O)  
(See note 4)
- Crankcase Oil Drain Plug (O)  
(Drain and refill)  
(See Note 3)
- Transmission Drain (O)  
(Drain and refill)  
(See Note 6)
- Transmission Oil Filter (O)  
(See Note 7)
- Right Angle Drive Pinion Carrier (O)  
(Sparingly)  
(4 fittings)
- Leveling Cylinder Support (O)  
(Sparingly)
- Right Angle Drive Fill and Level Gage (O)  
(Check level)  
(See Key)



- 100 OE/HDO** Crankcase Fill and Breathers (O)  
(Clean breathers)
- C/MR** Winch Drain Plug (O)  
(Drain and refill)  
(See Note 11)
- 50** Winch Level Plug (O)  
(Check level)
- GO** Winch Fill Plug (O)  
(See Key)
- 50 OE/HDO** Transmission Fill and Level (O)  
(Check level)  
(See Key)
- 10 GAA** Lower Mast Sheave (O)
- 10 GAA** Snatch Block (O)
- 10 GAA** Final Drive Pinion Carrier (O)  
(Sparingly)  
(4 fittings)
- C/MR** Right Angle Drive Drain Plug (O)  
(Drain and refill)  
(See Note 10)

**TOP VIEW**

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**LUBRICANT • INTERVAL**

**INTERVAL • LUBRICANT**

Hydraulic Tank  
Fill and Level (0)  
(Check level)  
(See Key)

**OE/ 50**  
**HDO**

Air Cleaner (0)  
(See Note 5)

**OE/ 10**  
**HDO**

Hydraulic Oil  
Strainer (0)  
(See Note 9)

**50**

Universal  
Joint (0)  
(Sparingly)

**GAA 250**

Leveling  
Cylinder (0)  
(2 fittings)

**GAA 10**

**10 GAA** Upper Mast  
Sheave (0)

**10 GAA** Winch Shaft  
Bearings (0)

**10 GAA** Elevating Cylinder,  
Upper (0)  
(Sparingly)

**1000** Hydraulic Tank  
Drain Plug (0)  
(Drain and refill)

**250** Hydraulic  
Filter (0)  
(See Note 8)

**10 GAA** Elevating Cylinder,  
Lower (0)  
(Sparingly)  
(2 fittings)

**50 GO** Final Drive Fill  
and Level  
Gage (0)  
(Check level)  
(Raise elevator to  
vertical position to  
check level)

**C/MR**

Final Drive Drain  
Plug (0)  
(Drain and refill)  
(See Note 10)

**TOP VIEW**

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±KEY-

LUBRICANTS	CAPACITY	EXPECTED TEMPERATURES			INTERVALS
		Above +15°F (Above -9°)	+ 40°F to -15° F (+ 4° to -26°)	+40°F to -65°F (+4° to -54°)	
<b>OE/HDO</b> - Lubricating Oil, Internal Combustion Engine, Tactical Service  <b>OEA</b> - Lubricating Oil, Internal Combustion Arctic - Crankcase	6 qts. (5.67 L)	<b>OE/HDO</b> 30	<b>OE/HDO</b> 10	<b>OEA</b> (See Note 1)	C/MR-Condition Monitor  Intervals given are in hours of normal operation.
- Air Cleaner	2/3 qt. (0.80 L)				
- Hydraulic Tank - Transmission	260 qts. (246 L) 13 qts. (12.30 L)				
<b>GO</b> - Lubricating Oil, Gear, Multipurpose  - Right Angle Drive Final Drive  - Winch	3 qts. (2.84 L) 3-1/2 qts (3.31 L) 1 qt. (0.946 L)	<b>GO</b> 80W/90	<b>GO</b> 80W/90	<b>GO</b> 75W	For Arctic operation refer to FM 9-207
<b>GAA</b> - Grease, Automotive and Artillery		ALL TEMPERATURES			

\*See Note 12 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. ENGINE OIL LEVEL HOT OR COLD CHECK. Oil level should be between high and low marks on dipstick (allow to set 5 minutes before checking).

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NOTES - CONTINUED:

3. ENGINE. Oil is to be changed each 100 hours. Drain when lubricant is warm.

4. ENGINE OIL FILTER. Each 100 hours, remove filter, clean mounting and install new filter. After installing new filter, fill crankcase, operate engine for 5 minutes, check for leaks, check that crankcase oil level is between high and low marks.

5. AIR CLEANER. Each 10 hours, refill reservoir to level mark. Each 50 hours disassemble entire unit, clean, re-oil and assemble.

6. TRANSMISSION. Check level each 50 hours with engine running at idle speed, oil at operating temperature and transmission in neutral. Maintain oil level between high and low marks. Change oil each 500 hours. To drain the transmission oil, remove the drain plug in the shuttle assembly and the gear box or part of the transmission oil remain in the gear box. 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 level between high and low marks. Operate for 5 minutes and check for leaks.

7. TRANSMISSION OIL FILTER. Each 500 hours, remove filter element, clean filter housing, install new filter element and seal. Fill transmission to low mark. With engine running, oil at operating temperature and transmission in neutral, add oil to bring oil level between high and low marks. Operate for 5 minutes and check filter housing for leaks.

8. HYDRAULIC OIL FILTER. Each 250 hours, remove filter elements, clean filter housing and install new filter elements and gasket. After replacement, operate hydraulic system for 5 minutes, check for leaks, check oil level and bring to "FULL" mark.

9. HYDRAULIC OIL STRAINER. Each 50 hours, remove strainer, clean and install strainer. Operate

hydraulic system for 5 minutes, check for leaks, check oil level and bring to "FULL" mark.

10. RIGHT ANGLE DRIVE/FINAL DRIVE. Check level each 50 hours. Change gear lubricant only when required by maintenance repair action, contamination by water, or other foreign material. After refill, operate for five minutes, check for leaks and bring oil level to "FULL" mark.

11. WINCH. Check level each 50 hours. Change gear lubricant only when required by maintenance repair action, contamination by water, or other foreign material. After refill, operate for five minutes, check for leaks and bring oil level to level plug opening.

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

OE/HDO	MIL-L-2104
GO	MIL-L-2105
GAA	MIL-G-10924
OEA	MIL-L-46167
(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

DISTRIBUTION:

To be distributed in accordance with DA Form 12-25B, Operator and Organizational maintenance requirements for Earth Auger.

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