LO 10-3930-242-12
LUBRICATION ORDER
24 June 1991
(Supersedes LO 10-3930-242-12, 11 January 1984)

TRUCK, LIFT FORK, DED, PT WHEELS, ROUGH TERRAIN, 6000 LB CAPACITY, 24 IN LOAD CENTER, (ANTHONY MODEL MLT-6) (ARMY MODEL MHE 200) (NSN 3930-00-903-0900) (CHRYSLER MODEL MLT-6CH) (ARMY MODEL MHE 202) (NSN 3930-00-937-0220) (ATHEY MODEL ARTFT-6, ARMY MODEL MHE 222) (NSN 3930-00-419-5744)

Reference: TN 10-3930-242-12 and FEDERAL SUPPLY CATALOGUE CS100-IL.

REPORTING OF ERRORS
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NOTES
This LO is for crew (C) or unit (O) maintenance. Lube intervals (on-condition or hard time) are based on normal operation. Lube more during constant use, and less during inactive periods. Use correct grade of lubricant for seasonal temperature expected.

On the pictures, a dash line(–) means lube points on both sides.
Clean parts with dry cleaning solvent (SD), type II, or equivalent. Dry before lubricating.

ALWAYS
a. Clean grease fittings before lubrication.
b. Use the lubrication order as your guide.

NEVER
a. Use wrong grades/viscosity grease.
b. Use too much lubricant.

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Oil filters shall be serviced/cleaned/changed as applicable, when:
1. They are known to be contaminated, or clogged;
2. Service is recommended by AGAP laboratory analysis, or
3. At prescribed hardtime intervals.

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.

**TOTAL MAN-HOURS**

<table>
<thead>
<tr>
<th>INTERVAL</th>
<th>MAINT-HOURS</th>
<th>INTERVAL</th>
<th>MAINT-HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>0.1</td>
<td>100</td>
<td>1.0</td>
</tr>
<tr>
<td>05</td>
<td>0.3</td>
<td>105</td>
<td>1.1</td>
</tr>
</tbody>
</table>

LO 10-3930-242-12 CARD 1 OF 9
<table>
<thead>
<tr>
<th>LUBRICANTS</th>
<th>CAPACITY</th>
<th>EXPECTED TEMPERATURES</th>
<th>INTERVALS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OE/HDO</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lubricating Oil, Internal Combustion Engine, Tactical Service</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Engine Crankcase</td>
<td>16 qts. (15.13 L)</td>
<td>OE/HDO 30</td>
<td>C/MR - Condition Monitor</td>
</tr>
<tr>
<td>- Transfer Case</td>
<td>24 qts. (22.70 L)</td>
<td>OE/HDO 10</td>
<td>OC - On Condition (AOAP)</td>
</tr>
<tr>
<td>- Oil Can Points (See Note 3)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Differential Lock Control Valve (See Note 14)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Hydraulic Tank</td>
<td>200 qts. (189.2 L)</td>
<td>OE/HDO 15/40</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(See Note 2)</td>
<td>For Arctic operation refer to FM 9-207</td>
</tr>
<tr>
<td><strong>GO</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lubricating Oil, Gear, Multipurpose</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Front and Rear Wheel Hub</td>
<td>4 qts. ea (3.82 L) ea</td>
<td>GO 85W/140</td>
<td>Intervals given are in hours of normal operation.</td>
</tr>
<tr>
<td>- Front and Rear Differential</td>
<td>10 qts. ea (9.46 L) ea</td>
<td>GO 80W/90</td>
<td></td>
</tr>
<tr>
<td>- Steering Gear Housing</td>
<td>1 qt. (0.946 L)</td>
<td>GO 75W</td>
<td></td>
</tr>
<tr>
<td><strong>GGP</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grease General Purpose</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Slides</td>
<td></td>
<td>ALL TEMPERATURES</td>
<td></td>
</tr>
</tbody>
</table>

*See Note 17 for lubricant specification number.*
# ARMY OIL ANALYSIS PROGRAM (AOAP)

For Active Army units, obtain samples from engine and automatic transmission every 50 hours of operation or 60 days (whichever comes first). Reserve and National Guard activities will use 50 hours or 120 days as the prescribed sample intervals. Reserve and National Guard equipment in frequent use during active training period will adhere to the schedule for Active Army units. As a minimum, one sample from each unit’s two week active training period will be submitted for each item of equipment. Send these samples to the nearest AOAP laboratory. Refer to TB 43-0210 for sampling instructions. When or if AOAP laboratory support is unavailable, hard time intervals will apply.

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## NOTE

Do not hold oil samples. Submit oil samples as soon as they have been taken. Seasonal oil changes will be made due to expected temperatures. (See Key.)

## 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.

## OIL CAN POINTS

Each 50 hours lubricate accelerator, bellcrank, brake, throttle, hydraulic valve linkages, control linkage, pins, clevises, and all exposed adjusting threads with OE/HDO.

## 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).
5. ENGINE CRANKCASE. Oil is to be changed each time an engine oil change is directed by AOAP laboratory. When AOAP laboratory support is not available, change oil each 250 hours. Drain when lubricant is warm.

6. ENGINE OIL FILTER. Filter is to be replaced each time an engine oil change is directed by AOAP laboratory. After installing new filter element, fill crankcase, operate engine 5 minutes, check housing for leaks, check crankcase oil level and bring to full mark. When AOAP laboratory support is not available, install new filter element each 250 hours.

7. TORQUE CONVERTER, TRANSMISSION, AND TRANSFER CASE. Check level each 10 hours with engine running at idle speed, oil at operating temperature and transmission in neutral. Maintain oil level to “FULL” mark. Oil is to be changed each time a transmission oil change is directed by AOAP laboratory. After draining oil, remove oil screen (located on front side of the oil galley), clean and install. Fill transfer case to full mark. With engine running at idle or fast idle, oil at operating temperature and transmission in neutral, fill sump to “FULL” mark on gage. Operate for 5 minutes and check for leaks. When AOAP support is not available, change torque converter, transmission and transfer case oil each 500 hours.

8. TRANSFER CASE OIL FILTER. Filter element is to be replaced each time a torque converter, transmission and transfer case oil change is directed by AOAP laboratory. Remove filter element, clean filter housing, install new filter element and seal. After replacement fill transfer case to full mark. With engine running, oil at operating temperature and transmission in neutral, fill sump to “FULL” mark on gage. Operate for 5 minutes and check for leaks. When AOAP laboratory support is not available, install new filter element each 500 hours.

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

10. HYDRAULIC OIL TANK DRAIN. Each 500 hours drain tank. Refill tank to “FULL” mark. Operate hydraulic system for 5 minutes, check for leaks and bring oil to “FULL” mark.

11. FRONT AND REAR WHEEL HUB FILL AND DRAIN PLUGS. To drain, turn wheel until fill and drain plug is at bottom center. Fill housing by turning wheel until fill and drain plug is in an upward position. Check level with arrow pointing straight down. Fill until lubricant extrudes from level plug (lower plug opening).

12. DIFFERENTIALS/WHEEL HUBS/STEERING GEAR HOUSING. 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.

13. CONSTANT VELOCITY JOINT. After operation in seawater, remove a bolt (only 1 of 4) from bottom bearing cap, drain off water, inject GAA through top fitting to remove contaminated lube. Replace bearing cap bolt. Relubricate.

14. DIFFERENTIAL LOCK CONTROL VALVE. Check level each 100 hours. Oil should be within 3/4 inch of the top of the valve. Drain only when repaired. Bleed lines at the lockout mechanism on the differential. Use BFS brake fluid (MIL-B-46176) on S/N E1468 and up. Use oil OE/HDO 10 (MILL-L-2104) for S/N below S/N E1468.
NOTES - CONTINUED:

15. DISCONNECT LINKAGE. Fittings are located at upper and lower end of linkage.

16. In sandy or desert environment, keep the carriage frame track and bushing clean and dry. Other environments apply a light coat of GAA.

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

<table>
<thead>
<tr>
<th>OE/HDO</th>
<th>MIL-L-2104</th>
</tr>
</thead>
<tbody>
<tr>
<td>GO</td>
<td>MIL-L-2105</td>
</tr>
<tr>
<td>GAA</td>
<td>MIL-G-10924</td>
</tr>
<tr>
<td>GGP</td>
<td>MIL-G-23549</td>
</tr>
<tr>
<td>OEA</td>
<td>MIL-L-46167</td>
</tr>
<tr>
<td>BFS</td>
<td>MIL-B-46176</td>
</tr>
<tr>
<td>CW</td>
<td>FED-VV-L751</td>
</tr>
<tr>
<td>(SD), Type II</td>
<td>P-D-680</td>
</tr>
</tbody>
</table>

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:

GORDON R. SULLIVAN  
General, United States Army  
Chief of Staff

Official:

PATRICIA P. HICKERSON  
Brigadier General, United States Army  
The Adjutant General

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