LUBRICATION

ORDER
LI-0064G-12

15 MAY 1975 (Supersedes LO-5-4210-217-12 dated 6 APRIL 1973)

TRUCK, FIRE FIGHTING: POWERED PUMPER; FOAM AND WATER 750 G.P.M. CAP.; CENTRIFUGAL PUMP, POWER TAKE OFF DRIVEN; 400 GAL. WATER TANK, 40 GAL. FOAM CHEMICAL TANK, (ENGINEERED DEVICES INC. MODEL 0814) FSN 4210-150-1426, (AMERICAN AIR FILTER MODEL FT 750) FSN 4210-106-7432 AND WINTERIZED (AMERICAN AIR FILTER MODEL FT 750W) FSN 4210-106-7433

Reference: TM5-4210-217-12, LO9-2320-209-12, and FEDERAL SUPPLY CATALOG C9100-IL

Intervals are based on normal hours of operation. Adjust to compensate for abnormal operations and severe conditions.

During inactive periods sufficient lubrication must be performed for adequate preservation.

Clean fittings before lubricating.

A dotted circle indicates a drain below.

Clean parts with SOLVENT, dry-cleaning, Type II (SD-2).

Dry before lubricating.

Lubricate points indicated by dotted arrow shafts on both sides of equipment.

* The times specified are the hours required to perform 311 services at the particular interval.

<table>
<thead>
<tr>
<th>INTERVAL</th>
<th>MAN-HR</th>
<th>INTERVAL</th>
<th>MAN-HR</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td>1.0</td>
<td>250</td>
<td>1.1</td>
</tr>
<tr>
<td>100</td>
<td>1.5</td>
<td>500</td>
<td>1.1</td>
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LUBRICANT ● INTERVAL

Radiator Shutter (See note 16) OE/HDO
Bearings Outboard (See note 5) GAA
Pinion Shaft Bearing (2 fittings) GAA
PTO Propeller Shaft Universal and Slip Joints (3 fittings) GAA
(See note 4 & 6)
Fire Pump Gear Case (Check sight glass) (See note 15) GAA
Motor, Priming Pump (See note 4 & 11) OE/HDO

LUBRICANT ● LUBRICANT

Tank, Priming Pump, Check and Fill (Fill to 1/2 inch from top of tank) (See note 7)
Transfer Valve (See note 8)
Transmission Interlock Cable (2 fittings) (See note 4)
Electric Shift Unit (Check and fill) (See note 4 & 9)
Fire Pump Gear Case (Fill and drain) (Drain below)
KEY

<table>
<thead>
<tr>
<th>LUBRICANTS</th>
<th>CAPACITY</th>
<th>EXPECTED TEMPERATURES</th>
<th>INTERVALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tank, Priming Pump</td>
<td>4 qts (3.8L)</td>
<td>0°F to -65°F</td>
<td>OEA</td>
</tr>
<tr>
<td>Oil Can Points</td>
<td>1 oz (30cc)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motor, Priming Pump</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gear Case, Fire Pump</td>
<td>5 pts (1.4L)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GAA-GREASE, Automotive and Artillery</td>
<td></td>
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NOTES:

1. FOR OPERATION OF EQUIPMENT IN PROTRACTED COLD TEMPERATURES BELOW 10°F. (-23°C). Remove lubricants prescribed in the key for temperatures above 10°F. (-23°C). Relubricate with lubricants specified in the key for temperatures below -10°F. (-23°C).

2. OIL CAN POINTS. Every 250 hours or quarterly, whichever occurs first, clean and lightly coat door hinges and locks, push-pull operating control rods, throttle control, latches, springs, and pinion gear, and all exposed threads with OE/HDO.

3. LUBRICANTS. The following is a list of lubricants with Military Symbols and applicable Specification numbers.
   
   GO MIL-L-2105 GOS
   GO MIL-L-10324
   OE/HDO MIL-L-2104C OEA
   GAA MIL-L-46176
   MIL-L-10924

4. PUMP COMPARTMENT PANEL. Remove bottom cover panel of pump compartment for access to PTO propeller shaft universal and slip joints, transmission interlock cable, electric shift unit, priming pump motor, and draining fire pump gear case.

5. BEARING OUTBOARD (IMPELLER SHAFT). Every 250 hours of operation or quarterly, whichever occurs first, lubricate until lubricant appears at relief fitting. The relief fitting is located directly below the lubrication fitting.

6. PTO PROPELLER SHAFT UNIVERSAL JOINTS. To prevent damage to journal seals, do not require lubrication. Lubricate hose reel drive chain with cloth saturated with OE/HDO.

7. HOSE REEL. The motor, drum shaft bearings, and swivel connection, do not require lubrication. Lubricate hose reel drive chain with cloth saturated with OE/HDO.

8. PRIMING PUMP MOTOR. Every 500 hours or semiannually, whichever occurs first, lubricate the priming pump motor. The oil can point is located on top of motor shaft housing. Use only a few drops of oil, do not over lubricate.

11. FIRE PUMP. Every 500 hours or semiannually, whichever occurs first, lubricate the 5 gear sector racks with GAA. The racks are installed on the 3 discharge and 2 suction valves.

12. BATTERY COMPARTMENT. Every 500 hours or semiannually, whichever occurs first, lubricate the sliding trays, channels of top cover, and battery terminals with GAA.

13. FIRE PUMP PACKING GLANDS. The stuffing boxes (2 each) are designed to leak slightly during operation to cool and lubricate the packing. Acceptable leakage rates are 10 drops minimum to 60 drops maximum of water per minute at 150 psig discharge pressure. To adjust packing glands, refer to TM 5-4210-217-12.

14. PUMP GEAR CASE. Check oil level after each use. Add if required. Note: Area of check located under left operator's panel on chassis member.

16. RADIATOR SHUTTER. Position control assembly screw to full exposure and apply OE/HDO to surface.

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

By Order of the Secretaries of the Army and the Navy:

Fred C. Weyand
General, United States Army
Chief of Staff

Verne L. Bowers
Major General, United States Army
The Adjutant General

E. J. Miller
Major General, U.S. Marine Corps Deputy Chief of Staff for Installations & Logistics

DISTRIBUTION:

Active Army: To be distributed in accordance with DA Form 12-25A, (qty of req block no. 121) Operator maintenance requirements for Fire Fighting.

Marine Corps: MARCORPS LIST: AO plus 7000161 (2)
<table>
<thead>
<tr>
<th>PAGE NO.</th>
<th>PARAGRAPH</th>
<th>FIGURE NO.</th>
<th>TABLE NO.</th>
<th>IN THIS SPACE, TELL WHAT IS WRONG AND WHAT SHOULD BE DONE ABOUT IT.</th>
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<tbody>
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<th>SIGN HERE</th>
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P.S.—IF YOUR OUTFIT WANTS TO KNOW ABOUT YOUR RECOMMENDATION MAKE A CARBON COPY OF THIS AND GIVE IT TO YOUR HEADQUARTERS.
### Linear Measure

1 centimeter = 10 millimeters = .39 inch  
1 decimeter = 10 centimeters = 3.94 inches  
1 meter = 10 decimeters = 39.37 inches  
1 dekameter = 10 meters = 32.8 feet  
1 hectometer = 10 dekameters = 328.08 feet  
1 kilometer = 10 hectometers = 3,280.8 feet

### Liquid Measure

1 centiliter = 10 milliters = .34 fl. ounce  
1 deciliter = 10 centiliters = 33.81 fl. ounces  
1 liter = 10 deciliters = 2.64 gallons  
1 dekaliter = 10 liters = 2.64 gallons  
1 hektoliter = 10 dekaliters = 264.18 gallons

### Weights

1 centigram = 10 milligrams = .15 grain  
1 decigram = 10 centigrams = 1.54 grains  
1 gram = 10 decigrams = .035 ounce  
1 decagram = 10 grams = .35 ounce  
1 quintal = 100 kilograms = 220.46 pounds  
1 metric ton = 10 quintals = 1.1 short tons

### Square Measure

1 sq. centimeter = 100 sq. millimeters = .155 sq. inch  
1 sq. decimeter = 100 sq. centimeters = 15.5 sq. inches  
1 sq. meter (centare) = 100 sq. decimeters = 10.76 sq. feet  
1 sq. dekameter (are) = 100 sq. meters = 1,076.4 sq. feet  
1 sq. hectometer (hectare) = 100 sq. dekameters = 2.47 acres  
1 sq. kilometer = 100 sq. hectometers = .386 sq. mile

### Cubic Measure

1 cu. centimeter = 1000 cu. millimeters = .06 cu. inch  
1 cu. decimeter = 1000 cu. centimeters = 61.02 cu. inches  
1 cu. meter = 1000 cu. decimeters = 35.31 cu. feet

### Approximate Conversion Factors

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<th>To</th>
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<td>pound-feet</td>
<td>Newton-meters</td>
<td>1.356</td>
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### Temperature (Exact)

<table>
<thead>
<tr>
<th>°F Fahrenheit temperature</th>
<th>5/9 (after subtracting 32)</th>
<th>°C Celsius temperature</th>
</tr>
</thead>
</table>

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The Metric System and Equivalents

- **Linear Measure**
- **Liquid Measure**
- **Weights**
- **Square Measure**
- **Cubic Measure**
- **Approximate Conversion Factors**
- **Temperature (Exact)**
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