

**PROPELLING UNIT, OUTBOARD, DIESEL, 165 HP  
NSN 201 0-01-251-2227**

Approved for public release. Distribution is unlimited.

**Reference:** TM 5-2010-205-14 and Federal Supply Catalog C9100-IL.

**Reporting of Errors**

You can improve this publication by calling attention to errors and by recommending improvements and by stating your reasons for the recommendations. Your letter or DA Form 2028 (Recommended Changes to Publications and Blank Forms) should be mailed directly to Commander, US Army Troop Support Command, ATTN: AMSTR-MMTS, 4300 Goodfellow Blvd., St. Louis, MO. 63120-1798. A reply will be furnished directly to you.

Intervals (on condition or hard time) and the related task-hour times are based on normal operations. The task-hour time specified is the time you need to do all the services prescribed for a particular interval. On-condition (OC) oil sample intervals shall be applied unless changed by the Army Oil Analysis Program (AOAP) laboratory. 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. Hard time intervals will be applied in the event AOAP laboratory support is not available.

Clean fittings before lubricating. Clean parts with dry cleaning solvents (SD), type II or equivalent. Relubricate all areas exposed to water after vessel operation.

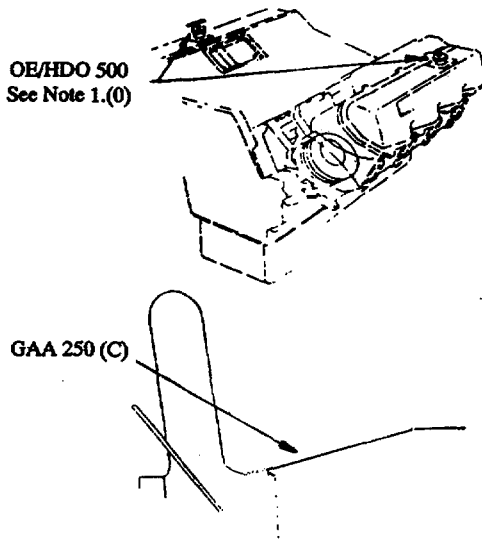
Dry before lubricating.

Level of maintenance. The lowest level of maintenance authorized to lubricate a point is indicated by one of the following: (C) Operator/crew; (O) Unit.

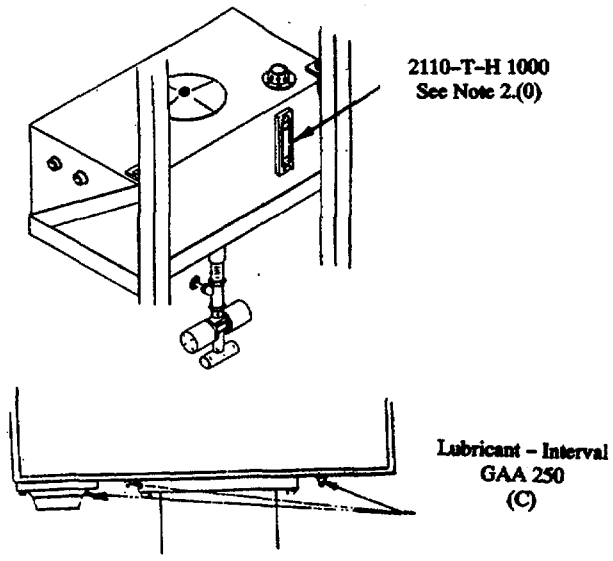
For arctic operation refer to FM 9-207.

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

**LUBRICANT ● INTERVAL**



**INTERVAL ● LUBRICANT**



TOTAL TASK-HOURS

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INTERVAL	TASK-HOURS
250	0.5
500	1.2

INTERVAL	TASK-HOURS
1000	0.5
2000	0.5

Lubricants	Capacity	Expected Temperature	Intervals																																																																								
OE/HDO (MIL-L-2104) Lubricating Oil, ICE, Tactical Service  OEA (MIL-L-46167) Lubricating Oil, ICE, Arctic  Engine	16 Qt	<table border="1"> <thead> <tr> <th colspan="17">EXPECTED TEMPERATURES</th> </tr> <tr> <th>°F</th> <th>&lt;-50</th> <th>-40</th> <th>-30</th> <th>-20</th> <th>-10</th> <th>0</th> <th>10</th> <th>20</th> <th>30</th> <th>40</th> <th>50</th> <th>60</th> <th>70</th> <th>80</th> <th>90</th> <th>100</th> <th>110</th> <th>120</th> </tr> <tr> <th>°C</th> <th>&lt;-46</th> <th>-40</th> <th>-34</th> <th>-29</th> <th>-23</th> <th>-18</th> <th>-12</th> <th>-7</th> <th>-1</th> <th>4</th> <th>10</th> <th>16</th> <th>21</th> <th>27</th> <th>32</th> <th>38</th> <th>44</th> <th>49</th> </tr> </thead> <tbody> <tr> <td colspan="17" style="text-align: center;"> </td> </tr> </tbody> </table>	EXPECTED TEMPERATURES																	°F	<-50	-40	-30	-20	-10	0	10	20	30	40	50	60	70	80	90	100	110	120	°C	<-46	-40	-34	-29	-23	-18	-12	-7	-1	4	10	16	21	27	32	38	44	49																		Intervals given are in hours of normal operation
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MIL-H-17672 Hydraulic Fluid, Petroleum, Inhibited  Hydraulic Oil Reser- voir	75 Gal.	2110-T-H(H-573) ALL TEMPERATURES																																																																									
GAA (MIL-L-10924) Grease, Automotive and Artillery	As Req'd	GAA(G-403) ALL TEMPERATURES																																																																									

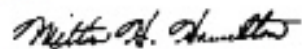
**Notes:**

- FOR OPERATION OF EQUIPMENT IN PROTRACTED COLD TEMPERATURE BELOW -10 deg F (-23 deg C). Remove lubricants prescribed in the key for temperatures above -10 deg F (-23 deg C). Clean parts with SOLVENT, dry-cleaning (SD-II). Relubricate with lubricants specified in the key for temperatures below -10 deg F (-23 deg C).
- HYDRAULIC RESERVOIR. Remove oil reservoir filler cap and check strainer. Clean if necessary and install strainer. Remove drain plug and drain. Clean and install drain plug. Refill reservoir with HRO. Proper level of oil is at high mark.
- When AOAP Laboratory support is not available, drain and refill crankcase at 500 hours or 6 months.
- Install filters, fill crankcase. Operate at idle and inspect for leaks. Shut off engine, and allow 5 minutes for oil to drain to crankcase. Check oil level with dipstick.
- Check crankcase level with engine shutdown.
- A sample of oil shall be sent to an AOAP Laboratory for analysis at an interval of 50 hours or 30 days. Refer to TB 43-0210 for sampling requirements.
- Oil filters will be changed at the same time as the oil is changed.
- Fuel filters will be changed at 250 hours or quarterly.
- Expansion tank coolant will be changed at every 2000 hours or two years.
- Hydraulic system filters will be changed every 1000 hours or annually.

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:**

Official:



MILTON H. HAMILTON  
*Administrative Assistant to the  
Secretary of the Army*  
02226

GORDON R. SULUVAN  
*General, United States Army  
Chief of Staff*

**DISTRIBUTION:**

To be distributed in accordance with DA Form 12-25-E, block 3107, Operator and Unit Maintenance requirements for LO 5-2010-205-12.



