

**LUBRICATION ORDER
AND OIL ANALYSIS**

**LO 5-6115-614-12
LI-07536B-12**

15 OCTOBER 1986

**GENERATOR SET, DIESEL ENGINE
DRIVEN, TACTICAL SKID MTD. 200 KW.
3 PHASE, 4 WIRE, 120/208 AND
240/416 VOLTS**

**DOD MODEL
MEP009B**

**CLASS
UTILITY**

**HERTZ
50160**

**NSN
6115-01-021-4096**

Reference: C1900-IL

Intervals (on-condition or fixed time) and the related man-hour time are based on normal operation. The man-hour time specified is the time needed to do all the services prescribed for a particular interval. On-condition (OC) oil sample interval shall be applied unless changed by the Army Oil Analysis Program (AOAP) Laboratory. Change the fixed time Interval if lubricants are contaminated or if equipment is functioning under adverse operating conditions, including longer-than-usual operating hour. The fixed time interval may be extended during periods of low activity. It extended adequate preservation precautions must be taken. Fixed time intervals will be applied in the event AOAP laboratory support is not available.

On-condition (OC) AOAP Laboratory determined oil change intervals shall be applied instead of fixed time intervals such as hourly, calendar, or mileage, unless otherwise notified. The services will be required when

directed by a Army Oil Analysis Program (AOAP) Laboratory which has analyzed the oil for serviceability.

Clean fittings with an approved solvent before lubricating. Dotted lines indicate lubrication points on both sides of the equipment, and lubrication points not visible from a top view.

Relubricate after 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).

Drain crankcase when hot. Fill and check level.

Change the engine oil whenever the engine has been in an overheated condition.

LUBRICANT • INTERVAL

INTERVAL • LUBRICANT

Hinges, latches (C)
(lubricated, see note 2)

Crankcase Drain Valve (O) (Drain and refill)

Crankcase Drain Plug (O) (Drain and refill)

OE/HDO 100

OE/HDO 100

300

OE/HDO 100

300

OE/HDO 100

100 OE/HDO

OE/HDO 300

OE/HDO 300

8

100 OE/HDO

Engine Air Cleaner (Dry type) (C) (No lubrication required)

Engine Oil Filters (O) (Spin-on type, remove and replace.)

Crankcase Oil FillCap (O) (See key)

Crankcase Oil Fill Gauge (C) (Check level) (See note 3)

TOTAL MAN-HR		TOTAL MAN HR	
INTERVAL	MAN-HR	INTERVAL	MAN-HR
8	0.1	300	1.5
100	0.3		

KEY

LUBRICANTS	CAPACITIES	EXPECTED TEMPERATURE			For arctic operation refer to FM 9-207	INTERVALS
		Above + 32° F (Above 0 °C)	+ 40 °F to -10° (+4° to -23°C)	0 °F to -65 °F (-19 °C to -54°C)		
OE/HDO (MIL-L-2104C) OIL Engine Heavy Duty Crankcase and Filters OEA (MIL-L-46167) OIL Can Points OIL, Engine, Sub zero	33 Quarts (31.2 Liters)	OE/HDO 30	OE/HDO 10	OEA		Intervals given are in hours of normal operation.

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). Clean parts with dry cleaning SOLVENT. Relubricate with lubricants specified in the key for temperatures 0°F to -65°F.

2. OIL CAN POINTS. Every 100 hours lubricate the door hinges, latches, control linkages and all exposed adjusting threads with OE-HDO.

3. ENGINE OIL FILTER. Every 300 hours remove oil filter, install new filter, fill crankcase, operate engine for 5 minutes, check for leaks, check crankcase oil level and bring to FULL mark. The crankcase oil level can be checked with the engine running or in a static condition.

4. When AOAP Laboratory support is not available, drain and refill crankcase oil at 300 hours.

5. Army Oil Analysis Program, (AOAP) may be used to determine oil change interval on units that have not reached recommended operating hour change requirements.

6. Lubricating oil standing in engines that are used infrequently or are in storage between seasons may tend to oxidize and require changing even though it is not dirty. Laboratory testing is the best way to determine whether oil or fuel is oxidizing under these conditions.

7. Units in standby service should be started once each week in locations where ambient temperature remains below 70 deg F [21.1 deg C] and contains a high percentage of humidity. Start engine, bring unit up to normal operating temperature and run for approximately thirty minutes. Check electrical equipment for corrosion on all relays and switch terminals. Check controls for leaks and proper operation.

8. On units in locations where ambient temperature is normally above 70 deg F [21.1 deg C] perform, starting procedure as above once every two weeks.

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
General, United States Army
Chief of Staff

Official:

R. L. DILWORTH
Brigadier General, United States Army
The Adjutant General

DISTRIBUTION:

To be distributed in accordance with DA Form 12-25A, Operator and Organizational Maintenance Requirements for Generator Set, Diesel Driven, 120/208V, 240/416V, 100 KW, 50/60HZ, 3PH, 4 Wire (MEP-008B)

RECOMMENDED CHANGES TO EQUIPMENT TECHNICAL PUBLICATIONS



THEN...JOT DOWN THE DOPE ABOUT IT ON THIS FORM. CAREFULLY TEAR IT OUT, FOLD IT AND DROP IT IN THE MAIL.

SOMETHING WRONG WITH PUBLICATION

FROM: (PRINT YOUR UNIT'S COMPLETE ADDRESS)

DATE SENT

PUBLICATION NUMBER

PUBLICATION DATE

PUBLICATION TITLE

BE EXACT PIN-POINT WHERE IT IS

PAGE NO.	PARA-GRAPH	FIGURE NO.	TABLE NO.

IN THIS SPACE, TELL WHAT IS WRONG AND WHAT SHOULD BE DONE ABOUT IT.

PRINTED NAME, GRADE OR TITLE AND TELEPHONE NUMBER

SIGN HERE

The Metric System and Equivalents

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

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 hectogram = 10 decagrams = 3.52 ounces
 1 kilogram = 10 hectograms = 2.2 pounds
 1 quintal = 100 kilograms = 220.46 pounds
 1 metric ton = 10 quintals = 1.1 short tons

Liquid Measure

1 centiliter = 10 milliliters = .34 fl. ounce
 1 deciliter = 10 centiliters = 3.38 fl. ounces
 1 liter = 10 deciliters = 33.81 fl. ounces
 1 dekaliter = 10 liters = 2.64 gallons
 1 hectoliter = 10 dekaliters = 26.42 gallons
 1 kiloliter = 10 hectoliters = 264.18 gallons

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

<i>To change</i>	<i>To</i>	<i>Multiply by</i>	<i>To change</i>	<i>To</i>	<i>Multiply by</i>
inches	centimeters	2.540	ounce-inches	Newton-meters	.007062
feet	meters	.305	centimeters	inches	.394
yards	meters	.914	meters	feet	3.280
miles	kilometers	1.609	meters	yards	1.094
square inches	square centimeters	6.451	kilometers	miles	.621
square feet	square meters	.093	square centimeters	square inches	.155
square yards	square meters	.836	square meters	square feet	10.764
square miles	square kilometers	2.590	square meters	square yards	1.196
acres	square hectometers	.405	square kilometers	square miles	.386
cubic feet	cubic meters	.028	square hectometers	acres	2.471
cubic yards	cubic meters	.765	cubic meters	cubic feet	35.315
fluid ounces	milliliters	29.573	cubic meters	cubic yards	1.308
pints	liters	.473	milliliters	fluid ounces	.034
quarts	liters	.946	liters	pints	2.113
gallons	liters	3.785	liters	quarts	1.057
ounces	grams	28.349	liters	gallons	.264
pounds	kilograms	.454	grams	ounces	.035
short tons	metric tons	.907	kilograms	pounds	2.205
pound-feet	Newton-meters	1.356	metric tons	short tons	1.102
pound-inches	Newton-meters	.11296			

Temperature (Exact)

°F	Fahrenheit temperature	5/9 (after subtracting 32)	Celsius temperature	°C
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PIN: 061758/000