# PUMPING ASSEMBLY, DIESEL ENGINE DRIVEN, WHEEL MTD, 600 GPM, 150 PSI HEAD NSN 4320-01-314-8844

References: TM 10-4320-315-10 and TM 10-4320-315-24 Federal Supply Catalog C91 00-IL

#### REPORTING OF ERRORS

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Level of maintenance. The lowest level of maintenance authorized to lubricate a point is indicated by one of the following symbols as appropriate: operator/Crew (C); and Unit Maintenance (O).

Intervals and the related man hour times are based on normal operation. The manhour time specified is the time you need to do all the services prescribed for a particular interval. Change the Interval if your lubricants are contaminated or if you are operating the equipment under adverse operating conditions, including longer than usual operating hours. You may extend the interval during periods of low activity, but you must take adequate preservation precautions.

Hard time oil change intervals are applied. The Army Oil Analysis Program (AOAP) LABORATORY support is not available at this time.

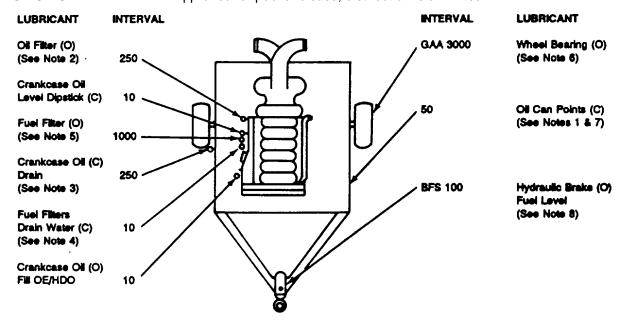
**CAUTION** - Ensure pumping assembly is level before checking oil levels.

**WARNING** - Dry cleaning solvent, PD680, used to clean parts is potentially dangerous to personnel and property. Avoid repeated or skin contact. Do not us near open flame or excessive heat. Flash point of solvent is 100 - 138° F (38 -60°C).

Lubricate immediately after fording, or m soon after as unit movement permits.

Clean fittings before lubricating. Clean parts with solvent, dry cleaning PD-680 or an approved solvent. Dry fitting before lubricating.

**DISTRIBUTION STATEMENT A** - Approved for public release; distribution is unlimited.



Card 1 of 3

TOTAL	TASK-HR	TOTAL	TASK-HR			
INTERVAL	TASK-HR	INTERVAL	TASK-HR			
10	0.10	250	1.0			
50	0.25	1000	1.0			
100	0.20	3000(See Note 6)	1.5			

#### INTERVALS GIVEN IN FIGURE ARE IN HOURS OF OPERATION

- KEY -

						(	XF	EC	TE	E D	T	E M	PE	R A	T	JAI	ES				
LUBRICANTS	COMPONE		•F	<-50	-40	-30	-20	-10	0	10	20	30	40	50	60	70	80	90	100	110	12
	CAPACITY	CAPACITY (APP)		<-46	-40	-34	-29	-23	-18	-12	-7	-1	4	10	16	21	27	32	38	44	4
OE/HDO (MIL-L-2104) LUBRICATING OIL, ICE, COMBAT/ TACTICAL SERVICE	ENGINE	12.5 qts (12 L)			,	•	•			O	E/H	00-1	10 (0	D-23		HDC	)-30	(0-2	238)		
ORA (MIL-L-46167) LUBRICATING OIL, ICE, ARCTIC	OIL CAN POINTS					(	ŒA	(0-11	33)				1	OE	E/HC	XO-1	5/40	(0-	1236	)	
GAA	WHEEL	AS									Ġ	W (	3-4(	j <b>3</b> )		7	,			- T -	Т
(MIL-G-10924) GREASE AUTOMOTIVE AND ARTILLERY	BEARINGS	REQD						A	L	. Т	EN	A P	EΑ	ΑT	UF	RES	3				
BFS (MIL-B-46176) BRAKE FLUID, SILICONE AUTOMOTIVE ALL WEATHER OPERATIONAL	HYDRAULIC	AS									BI	FS (1	H-54	17)							
	BRAKE	REQD	·F	<u> </u>				-10	0	10	20	30	40		60	70	80			110	
AND PRESERVATIVE			°C	<-46	-40	-34	-29	-23	-18	-12	-7	-1	4	10	16	21	27	32	38	44	49

# NOTES:

- 1. For operation of equipment in protracted cold temperature below -10 F (-23 C). Remove lubricant prescribed in the key for temperature above -10 F (-23 C). Clean parts with dry-cleaning solvent Relubricate with lubricants specified in the key for temperature below -10 F (-23 C).
- 2. OIL FILTER. Rep oil filter every engine oil change. Unscrew element, clean seat install new element After crankcase, serviced, operate engine for 5 minutes, check for filter leaks, check oil level and bring to FULL mark
- 3. ENGINE CRANKCASE. Drain when hot after opera9on. To drain, remove plug in bolt, of crankcase sump. Clean and install plug. Remove filer cap, fl sup with 12.5 s (12 L) of oil QEDO to bring level to FDLL mark on dipstick On new or overhauled engines, drain oil after 50 hours of operation. Reservice crankcase.
- 4. FUEL FILTER. Open, one or two turns, the knurled screws on the bottom of each filter. Close when draining liquid is all fuels.

- 5. FUEL FILTER. Screw off fuel filter cartridge. Clean sealing surface, oil gasket, screw new filter in place. After filter contacts seat, tighten filter 12 turn.
- 6. WHEEL BEARINGS. Pack wheel bearings annually or 3000hours whichever comes first. With assembly on jackstands, remove grease cap, cotter pin, axle nut and washer. Remove outer bearing, hub, grease seal and inner bearing. Degrease all parts. Pack bearings, install inner bearings and seal. install hub, outer bearing, washer, nut cotter pin and cap.
- 7. OIL CAN POINTS. Every 50 hours dean and lightly oil control panel hinges, access door hinges and pad jacks.
- 8. HYDRAULIC BRAKE FLUID LEVEL Check fluid level before trailer travel.

By Order of the Secretary of the Army:

GORDON R. SULLIVAN

Official:

General, United States Army Chief of Staff

Mitta A. Samlton MILTON H. HAMILTON

Administrative Assistant to the Secretary of the Army

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# 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 decigram = .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 milliters = .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**

To change To		Multiply by	To change	То	Multiply by		
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	guarts	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)**

Г	ranienneit	5/9 (aner	Ceisius	
	temperature	subtracting 32)	temperature	

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