13 JUNE 1984

(Supersedes LO 5-3895-219-20-1, and -2, and -3, 19 MAY 1967)

MIXER, CONCRETE, TRAILER MTD; GASOLINE DRIVEN, 16 CU FT (CONSTRUCTION MACHINERY MODEL 16SM), WATER-COOLED (NSN 3895-00-807-7985) AND AIR-COOLED (NSN 3895-00-985-5335)

Reference: TM 5-3895-219-10, and -20, and FEDERAL SUPPLY CATALOG C9100-IL.

Hard time intervals and the related man-hour times are based on normal operation. The man-hour time specified is the time you need to do all the services prescribed for a particular interval. 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.

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.

Clean parts or fittings with dry cleaning solvent (SD), Type II or equivalent. Dry before lubricating. Dotted arrow shafts indicate lubrication on both sides of equipment. A dotted circle indicates a drain below. Relubricate all items found contaminated after fording or 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).

Reporting errors and recommending improvements.

You can help improve this manual. If you find any mistakes, or if you know of a way to improve the procedures, please let us know. Mail your letter or DA Form 2028 (Recommended Changes to Publications and Blank Forms) direct to: Commander, US Army Tank-Automotive Command, ATTN: DRSTA-MB, Warren, MI 48090. A reply will be furnished to you.

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

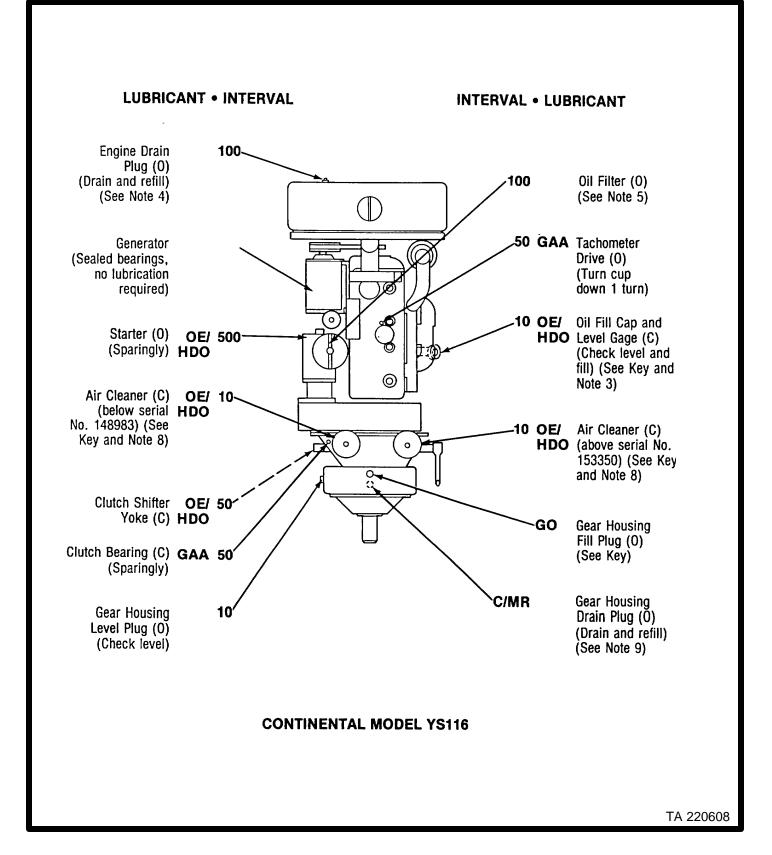
*TOTAL	MAN-HOURS	*TOTAL	MAN-HOURS
INTERVAL	MAN-HOURS	INTERVAL	MAN-HOURS
10	1.4	250	0.3
50	1.7	500	0.2
100	1.0	1000	1.5

LUBRICANT • INTERVAL INTERVAL • LUBRICANT OE/ Discharge Roller HDO Chain (0) Skip Pulley Shaft (C) GAA 10 50 OE/ (Remove plug in top of chain guard Hoist Cables (C) to lubricate) CW 50 Hoist Drum GAA 10 10 GAA Skip Bumper (C) Sleeve Bearing (C) Shifter Cone GAA 10 Collar (C) 10 GAA Handwheel Shaft (C) Brake Shaft (C) GAA 10 50 GAA Drum Roller Shaft (C) Clutch Shaft (C) GAA 10 50 GAA King Pins (C) Tie Rod End (C) GAA 50 Tie Rod Center Steering Arm (C) GAA 50 50 GAA Pivot Pin (C) (Sparingly)

INTERVAL • LUBRICANT

Discharge Chute GAA 10 50 GAA Main Drive Šhaft (C) Shaft (C) Dual Prime Pump GAA 50 Bearing (C) Dual Prime Pump GAA 10 Seal Grease Cup (C) (Refill when wing nut reaches cap) (See Note 11) 50 CW Drum Gear Drive Chain Guard GO 10 Segment (C) Fill and Level Plug (C) (Check level and fill) (See Key) 50 CW Spur Gear (C) Drive Chain Guard C/MR Drain Plug (0) (Drain and refill) (See Note 9) 1000 GAA Wheel Bearings (0) GAA 50 Drum Roller (See Note 10) Shaft (C)

LUBRICANT • INTERVAL



INTERVAL • LUBRICANT **LUBRICANT • INTERVAL** Air Cleaner (C) OE/ 10 (See Key and HDO **50 OE**/ Oil Filter (0) HDO (See Note 6) Note 8) 50 OE/ Crankcase **HDO** Breather and Fill (C) Gear Housing OE/ 10 (Clean and re-oil breather Fill Plug (0) HDO (See Key) (See Key) Crankcase Oil 10 10 Level Bayonet Gear Housing Level Plug (0) Gage (C) (Check level) (Check level) 50 Crankcase Drain Plug (0) Gear Housing 250 Drain Plug (0) (Drain and refill) (See Note 6) (Drain and refill) **WISCONSIN MODEL MVF4D**

OE/ Lubricating OE/HDO 30 OE/HDO 10 OE/HDO 1			T		EY -			T
Capacitical Combustion Comb				EXPE	CTED TEMPERAT	URES]	
OE/ Lubricating OE/ Alice Conduction Combustion Engine, Tactical Service Oil, Internal Combustion Comb	L	LUBRICANTS	CAPACITY					INTERVALS
- Crankcase	OE/ HDO OEA	Oil, Internal Combustion Engine, Tactical Service Lubricating Oil, Internal Combustion, Arctic		OE/HDO 30	OE/HDO 10			Condition
Continue								
Serial No. 148983)		- Crankcase						Intervals
- Air Cleaner 1 qt. (0.946 L) - Gear Housing (0.946 L) - Oil Can Points (See Note 2) GO - Lubricating Oil, Gear, Multipurpose - Gear Housing, Engine Model YS116 - Air Cleaner 1 qt. (0.946 L) GO 80W/90 GO 80W/90 GO 80W/90 GO 75W		(Below Serial No.					to FM	in hours
- Air Cleaner 1 qt. (0.946 L) - Gear Housing (0.946 L) - Oil Can Points (See Note 2) GO - Lubricating Oil, Gear, Multipurpose - Gear Housing, Engine Model YS116 - Air Cleaner 1 qt. (0.946 L) GO 80W/90 GO 80W/90 GO 80W/90 GO 75W		(Above Serial No.	-				peration refe	
GO - Lubricating Oil, Gear, Multipurpose - Gear Housing, Engine Model YS116 (0.946 L) 1 qt. (0.946 L) 1 qt. (0.946 L) 60 80W/90 GO 80W/90 GO 80W/90 GO 80W/90 GO 80W/90		MVF4D	•				For Arctic o	
ing (0.946 L) - Oil Can Points (See Note 2) GO - Lubricating Oil, Gear, Multipurpose - Gear Housing, Engine Model YS116 (0.946 L) GO 80W/90 GO 80W/90 GO 80W/90 GO 80W/90 GO 80W/90		- Air Cleaner						
Oil, Gear, Multipurpose Gear Hous- ing, Engine (1.4 L) Model YS116		ing - Oil Can Points						
- Gear Hous- 1-1/2 qts. ing, Engine (1.4 L) Model YS116	GO	Oil, Gear,		GO 80W/90	GO 80W/90	GO 75W		
	-	Gear Hous- ing, Engine						
Guard (0.7 L)	-	Drive Chain						TA 22061

-KEY-							
	EXPECTED TEMPERATURES						
LUBRICANTS	CAPACITY	Above +15°F (Above -9°)	+ 40°F to -15° F (+ 4° to -26°)	+40°F to -65°F (+4° to -54°)	1 9-207	INTERVALS	
CW - Lubricating Oil, Chain, Wire Rope, Exposed		(GRADE 11B) ALL TEMPERATURES			operation refer to FM	C/MR- Condition Monitor	
GAA - Grease, Automotive and Artillery		ALL TEMPERATURES				given are in hours of normal	
					Fo	operation.	

^{*}See Note 12 for lubricant specification number.

NOTES:

- 1. 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.
- 2. OIL CAN POINTS. Each 50 hours clean and lightly coat the governor control linkages, and control linkage and all exposed adjusting threads with OE/HDO. Weekly clean and lightly coat the governor and carburetor linkage and joints for the Wisconsin model MVF4D engine with OE/HDO.
- 3. 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).
- 4. ENGINE OIL (CONTINENTAL MODEL YS116). Oil is to be changed each 100 hours. Drain when lubricant is warm.

- 5. ENGINE OIL FILTER (CONTINENTAL MODEL YS116). Each 100 hours, remove filter element, clean housing and install new filter element. After installing new filter element, fill crankcase, operate engine for 5 minutes, check housing for leaks, check crankcase oil level and bring to "FULL" mark.
- 6. ENGINE OIL (WISCONSIN MODEL MVF4D). Oil is to be changed each 50 hours. Drain when lubricant is warm.
- 7. ENGINE OIL FILTER (WISCONSIN MODEL MVF4D). Each 50 hours, remove filter element, clean housing and install new filter element. After installing new filter element, fill crankcase, operate engine for 5 minutes, check housing for leaks, check crankcase oil level and bring to "FULL," mark.
- 8. AIR CLEANER. Each 10 hours, refill reservoir to level mark. Each 50 hours, disassemble entire unit, clean, re-oil and assemble.
- 9. DRIVE CHAIN GUARD/GEAR HOUSING. Check level each 250 hours. Change gear lubricant only when required by maintenance repair action, contamination by water, or other foreign material. After refill, operate for five minutes,

NOTES - CONTINUED:

check for leaks and bring oil level to level plug opening.

- 10. WHEEL BEARINGS. Each 1000 hours, remove wheels, inspect all parts, replace damaged or worn parts, repack bearings, and assemble.
- 11. GREASE .CAP. To fill cap turn wingnut clockwise to cap, fill cup, replace cap and turn wing nut counterclockwise to top of shaft.
- 12. LUBRICANTS. The following is a list of lubricants with military symbols and applicable specification numbers.

OE/HDO MIL-L-2104
GO MIL-L-2105
GAA MIL-L-46167
OEA MIL-G-10924,
CW VV-L-751
(SD), Type II P-D-680

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, JR. General, United States Army Chief of Staff

OFFICIAL:

ROBERT M. JOYCE Major General, United States Army The Adjutant General

DISTRIBUTION:

To be distributed in accordance with DA Form 12-25B, Operator and Organizational maintenance requirements for Trailer Mounted Concrete Mixers.

PIN: 055764-000