

LUBRICATION ORDER

30 APRIL 1983

This copy is a reprint which includes current
pages from Change 1.

LO 9-2320-209-12-1

(Supersedes LO 9-2320-209-12/1

30 September 1976 and

portion of LO 9-2320-209-12

15 October 1971 applicable to
multifuel powered vehicles)

TRUCK, CHASSIS: 2-1/2 TON, 6X6, M44A1 AND M44A2 (MULTIFUEL);
TRUCK, CARGO: M35A1, M35A2, M35A2C, M36A, M36A1, M36A2, M36A2C;
TRUCK, TANK, FUEL: M49A1C, M49A2C;
TRUCK, TANK, WATER: M50A1, M50A2, M50A3;
TRUCK, VAN, SHOP: M109A2, M109A3;
TRUCK, REPAIR SHOP: M185A2, M185A3;
TRUCK, TRACTOR: M275A1, M275A2;
TRUCK, DUMP: M342A2;
TRUCK, PIPELINE CONSTRUCTION: M756A2;
TRUCK, EARTH BORING AND POLESETTING: M764

REFERENCE: TM 9-2320-209-10-HR, TM 9-2320-209-10-1, TM 9-2320-209-10-2, TM 9-2320-209-10-3, TM 9-2320-209-10-4, TM 9-2320-209-20-1, TM 9-2320-209-20-2-1, TM 9-2320-20-2-2, TM 9-2320-209-20-3-1, TM 9-2320-209-20-3-2, TM 9-2320-209-20-3-3, TM 9-2320-209-20-3-4, TM 9-2320-209-20P.

Intervals (on-condition or hard time) 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. 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.

Refer to TB 43-0002-87 for BFS conversion procedures.

Clean fittings before lubricating. Clean parts with drycleaning solvent (SD) type II or equivalent. Dry before lubricating. Dotted arrow points indicate lubrication required on both sides of equipment.

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

Relubricate after fording.

REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS

You can help improve this lubrication order. If you find any mistakes or if you know of a way to improve the procedures, please let us know. Your letter or DA form 2028 (Recommended Changes to Publications) should be mailed directly to: Commander, U.S. Army Tank-Automotive Command, ATTN: DRSTA-MB, Warren, Michigan 48090. A reply will be furnished directly to you.

TA 252437

OIL CAN POINTS

Every 1,000 miles (1,600 km) or monthly, lubricate: door, tailgate, windshield and side panel hinges, locks and latches, transfer case and power takeoff shift linkage, clutch and brake pedal linkage, handbrake shoe outer pin, handbrake control, winch propeller shaft shear pin, rear winch and power-divider control lever linkages, earth boring machine operating handle linkage, outrigger control lever linkage, discharge valve control lever pivot pin, and tailgate control lever linkage with seasonal grade OE. Coat roller sheave spindle bars with thin layer of GAA. For vehicles in storage, oil and operate the handbrake lever at 30-day intervals to allow for penetration of lubricant between the handbrake lever shaft and housing.

DO NOT LUBRICATE

Springs, leaves, clutch release bearing, generator, alternator, starter, and shock absorbers.

LUBRICATE AT TIME OF ASSEMBLY BY DIRECT SUPPORT (DS) AND GENERAL SUPPORT (GS) PERSONNEL

Clutch pilot bearing, clutch release bearing carrier, speedometer flexible shaft, revolving platform bearings, and lineguide roller shaft bearings.

GENERAL NOTES

General notes are located on pages 30 through 33.

NOTE

All lubrication capacities are approximate (approx).

Military symbols for lubricants are found in general notes number 21.

Hours in the interval column refer to hours of operation. When two intervals are shown, lubricate at the interval which occurs first.

—KEY—

LUBRICANTS	CAPACITIES	EXPECTED TEMPERATURES			INTERVALS
		Above 15°F (Above -10°C)	+40° to -15°F (+5° to -25°C)	+40° to -65°F (+5° to -55°C)	
OE/HDO-LUBRICATING OIL, ICE TACTICAL (MIL-L-2104) (SEE NOTE 14)					OC-On condition (AOAP) C/MR-Change gear lubricant only when required by mainte- nance repair action, or if contaminated by water or other foreign materials. D- Daily W- Weekly M- Monthly Q- Quarterly S- Semiannually 1- 1,000 miles (1,600 km) 3- 3,000 miles (4,800 km)/ 3 months/ 300 hours 6- 6,000 miles (9,600 km) 12- 12,000 miles (19,000 km) D/8 HR-Daily or after 8 hours of operation, whichever comes first. M/100 HR-Month- ly or after 100 hours of operation, whichever comes first. W/25 HR-Weekly or after 25 hours of operation, whichever comes first. S/S-3,000 miles (4,800 km) or semiannually (6 months), whichever comes first.
OEA-LUBRICATING OIL, ARCTIC (MIL-L-46167)					
OIL CAN POINTS		OE/HDO 30	OE/HDO 10*	OEA	
MAIN DRIVE IDLER GEAR HOUSING	5 qts. (4.7 l)				
CRANKCASE	22 qts. (21 l) w/filter				
CRANE HYDRAULIC TANK					
EARTH BORING CLUTCH AND BRAKE					
DUMP BODY HYDRAULIC RESERVOIR	18 pts. (17.0 l)	OE/HDO 10*			
GO-LUBRICATING OIL, GEAR MULTIPURPOSE (MIL-L-2105)					
WINCH END BORING FRAME HOUSING	1 pt. (0.47 l)				
WINCH WORM HOUSING	1-1/4 pts. (0.6 l)				
TRANSMISSION (W/PTO)	8-1/2 pts. (4.0 l)				
STEERING GEAR	3-1/8 pts. (1.5 l)	GO 80/90	GO 80/90	GO 75	
WORM GEAR HOUS- ING (REAR WINCH)	7 pts. (3.3 l)				
WORM GEAR HOUS- ING (FRONT WINCH)	2-3/4 pts. (1.30 l)				
POWER DIVIDER	3-1/2 qts. (3.3 l)				
SPEED REDUCER	2 pts. (0.9 l)				
BORING CASE	10 qts. (9.5 l)				
END FRAME HOUSING	1-7/8 pts. (0.89 l)				
DIFFERENTIAL (3)	6 qts. ea. (5.7 l)				
TRANSFER CASE	7 qts. (6.6 l)				

* If OEA lubricant is required to meet the temperature ranges prescribed in the KEY, then the OEA lubricant is to be used in place of OE/HDO 10 lubricant for all temperature ranges.

—KEY— (Cont'd)

LUBRICANTS	CAPACITIES	EXPECTED TEMPERATURES				INTERVALS
		Above 15°F (Above -10°C)	+40° to -15°F (+5° to -25°C)	+40° to -65°F (+5° to -55°C)		
GAA-GREASE, AUTOMOTIVE AND ARTILLERY (MIL-G-10924) FRONT WHEEL UNIVERSAL JOINT	2 lbs. ea. (0.91 kg)	ALL TEMPERATURES				FOR ARCTIC OPERATION, REFER TO FM 9-207
BFS**-BRAKE FLUID, SILI- CONE, AUTOMOTIVE, ALL WEATHER, OPER- ATIONAL AND PRESERVATIVE (MIL-B-46176) BRAKE MASTER CYLINDER		ALL TEMPERATURES				
CW-LUBRICATING OIL, CHAIN WIRE ROPE, EXPOSED GEAR (VV-L-751) WINCH WIRE ROPE		ABOVE +80°F(27°C)	80° to 30°F (27° to -1°C)	30° to -30°F (-1° to -34°C)	-30° to -65°F (-34° to -55°C)	
		CW-IIC	CW-IIB	CW-IIA	GO 75	

FOR ARCTIC OPERATION, REFER TO FM 9-207

** See TB 43-0002-87 for conversion procedures from HB to BFS.

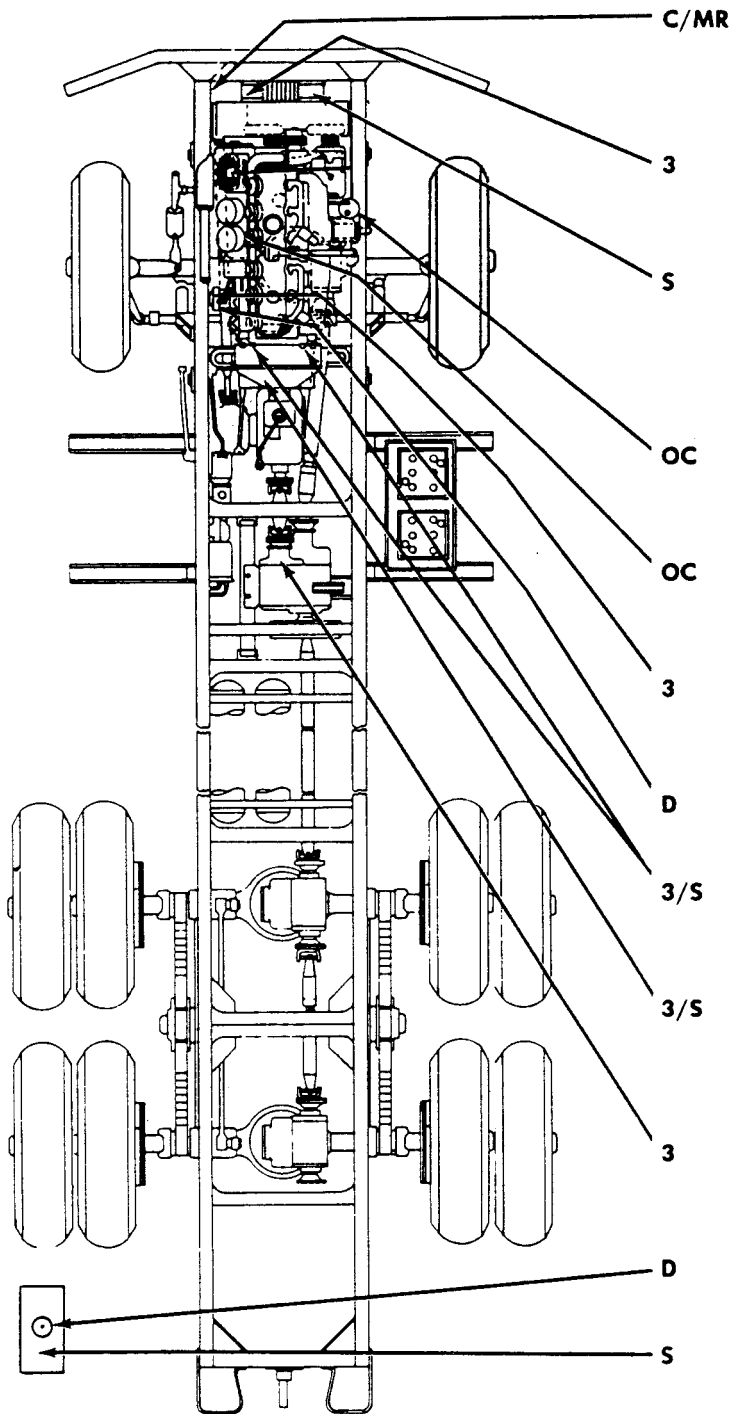
TOTAL MAN-HOURS

	OC	C/MR	D	W	M	Q	S	1,000	3,000	6,000	12,000	D/ 8 HR	M/ 100 HR	W/ 25 HR	3/5
TRUCK, CARGO: M35A1, M35A2, M35A2C, M36A2	3.0	3.7	0.6			1.2	3.7	3.5	1.2	6.5	3.2				1.5
TRUCK, TANK, FUEL: M49A1C, M49A2C	3.0	3.7	0.7			1.2	3.7	3.5	1.2	6.5	3.2				1.5
TRUCK, TANK, WATER: M50A1, M50A2, M50A3	3.0	3.7	0.7			1.2	3.7	3.5	1.2	6.5	3.2				1.5
TRUCK, VAN SHOP: M109A2, M109A3;	3.0	3.7	0.6			1.2	3.7	3.5	1.2	6.5	3.2				1.5
TRUCK, REPAIR SHOP: M185A2, M185A3															
TRUCK, TRACTOR: M275A1, M275A2	3.0	3.7	0.6			1.2	3.7	4.0	1.2	6.5	3.2				1.5
TRUCK, DUMP: M342A2	3.0	3.7	0.8			1.2	4.0	3.5	1.2	7.5	3.2				2.0
TRUCK, PIPELINE CON- STRUCTION: M756A2	3.0	5.0	1.2		1.0	1.2	5.2	3.6	1.2	6.5	3.2				1.5
TRUCK, EARTH BORING AND POLESETTING: M764	3.0	5.5	1.6	1.0	0.5	1.2	5.2	3.6	2.4	8.5	3.2	1.0	1.0	1.5	1.5
WINCH, FRONT MOUNTED							2.5	0.5	0.5	0.1	1.5				

NOTE

The man-hours shown above have been established on an individual vehicle basis and, accordingly, are not applicable at maintenance facilities where production line methods are employed. TA 252440

INTERVAL • LUBRICANT



CHASSIS — M44A1, M44A2

C/MR		Winch Worm Housing Drain (Drain and refill) (Cap. — 1-1/4 pts. [0.59 l]) (See note 7) [F] (O)
3	GO	Winch Worm Housing (Check level) (See note 6) [D] (O)
S	OE/ HDO	Winch Cable (See note 10) (C)
OC	OE/ HDO	Crankcase Fill (Cap. — 22 qts. [21 l] incl. filter) (See note 5) [H] (O)
OC	OE/ HDO	Oil Filters (2) and Oil Filter Drain Plug (See note 4) [K] [L] (O)
3		Engine Fuel Filter (Replace element) (See note 3) (O)
D		Engine Fuel Filters (2) (Drain) (See note 3) (C)
3/S	GAA	Starter Cross-Shaft (2 fittings) (M44A1 series trucks only) [DD] (O)
3/S	GAA	Hand Lever Cross-Shaft (2 fittings) (Dump and tanker trucks only) (Located back of driver's seat) [ZZ] (O)
3	GO	Transfer Case (Check level) (See note 6) (O)
D	OE/ HDO	Outrigger Oil Reservoir Level (Check level) (M764) [BE] (C)
S		Outrigger Oil Reservoir Drain (Drain and refill) (See note 16a) (M764) [BF] (O)

NOTE

Letters in brackets after lubrication entries refer to localized views. See pages 21 through 29.

TA 252441