

TRUCK, CARGO: 1-1/4 TON, 6x6, M561 (2320-00-873-5407)**TRUCK, AMBULANCE: 1-1/4 TON, 6x6, M792 (2310-00-832-9907)**

Reference TM 9-2320-242-10 and 20 Series

Hard time intervals and the related man-hour times are based on normal operations. The man-hour times 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 interval may be extended during periods of low activity. If extended, adequate preservation precautions must be taken.

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

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

Dotted leader lines indicate lubrication is required on both sides of the equipment.

WARNING

Do not replace U-joint plugs with grease fittings!!!

Dry cleaning solvent SD-II, used to clean parts is potentially dangerous. Do not use near an open flame or excessive heat.

Clean all parts, fittings, and the area around fill plugs with dry cleaning solvent SD-II or equivalent, before lubricating.

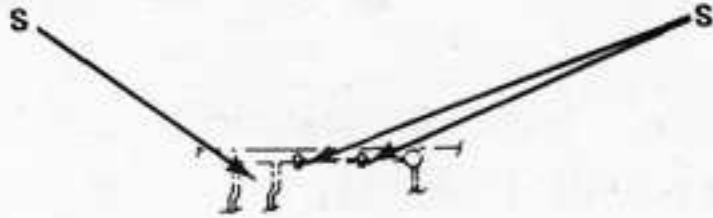
REPORTING OF ERRORS AND RECOMMENDING IMPROVEMENTS. You can help improve this lubrication order. If you find any mistakes or if you know of a way to improve the procedures, please let us know. Mail your letter or DA Form 2028 (Recommended Changes to Publications and Blank Forms) direct to: Commander, U.S. Army Tank Automotive Command, Attn: DRSTA-MB, Warren, Michigan 48090. A reply will be furnished to you.

LUBRICANT • INTERVAL			INTERVAL • LUBRICANT		
Front Steering Gearbox (Check Level) (See Note 8) (O)	GO	S	OE/ HDO	S	Winch Cable (See Note 7) (C)
Winch Clutch Housing (O)	GAA	A	GAA	S	Steering Torque Tube U-Joint (O)
*Tractor Wheel Bearings Remove, Clean, Dry and Repack Until Full. (See Note 3) (O)	GAA	A			Winch Worm Case Level (Check When Used) (C)
Steering Column CV-Joint (O)	GAA	S	GO	S	Winch Worm Case (Check Level) (O) (See Note 8)
Brake Master Cylinder (Check Level) (See Note 4) (O)	BFS	S	GAA	S	Idler Arm Shaft Housing (O)
Steering Torque Tube Bearings (2) (O)	GAA	S	GAA	S	Axle U-Joints and Slip Joint (See Note 21) (O) (2 Front Tractor Axles)
PTO Shaft Slip and U-Joints (O)	GAA	S	GO	S	Front Differential (Check Level) (O) (See Note 8)
Fuel Tanks (See Note 5) (C)		D	OE/ HDO	S	Six Wheel Drive Linkage (O)
Prop Shaft U-Joints (See Note 21) (O)	GAA	S	GAA	S	Axle U-Joints and Slip Joints (See Note 21) (O) (2 Center Axle Shafts)
Steering Torque Tube Bearing (O)	GAA	S			
Prop Shaft U-Joints (See Note 21) (O)	GAA	S			
Steering Torque Tube Bearings (2) (O)	GAA	S			
Torus Bearings (O)	GAA	S	GO	S	Center Differential (Check Level) (O) (See Note 8)
Carrier Hitch Pins (2) (O)	GAA	S			
Steering Torque Tube U-Joint (Front and Rear) (O)	GAA	S			
Double Universal Joint (See Note 21) (O)	GAA	S			

*For Service Operation, Refer
To TM9-2320-242-20 Series

LUBRICANT • INTERVAL

INTERVAL • LUBRICANT

Brake Pedal (O) **GAA****S****OE/
HDO**Brake and Clutch Linkage
Oil Can Points
(See Note 1) (O)Transmission Shift
Tower (2) (O) **GAA****S****OE/
HDO**Shift Linkage
Transmission Transfer
Oil Can Point
(See Note 1) (O)Transmission Fill and
Level
(See Note 9) (O) **GO****S****OE/
HDO**Engine Oil Filter
(See Note 14)Engine Fuel Filter (2)
(C) Drain (See Note 10)
(O) Replace (See Note 10)**W****S****GAA**Governor Throttle
Control Shaft
(See Note 15) (O)Air Reservoir
Tank, Sealed
Brake System
(See Note 22) (O)**M****OE/
HDO**Air Cleaner
(See Note 13) (C)
Heater Fuel Filter
Drain (See Note 24) (C)
Replace (See Note 24) (O)**W****S****OE/
HDO**Engine Crankcase Dipstick
(See Note 12) (C)**D**

LUBRICATION TRACTOR CHASSIS

Radiator and
Engine Coolant
(C) (Check Level)
(O) Drain and Fill
(See Note 11)**W****GAA**Double U-Joint
(See Note 21) (O)**S****S**Transfer Case Dipstick
(Check Level) (C) (See Note 8)**GO****S****GO**Transfer Case
(See Note 8) (O)Crankcase Drain
(See Note 12) (O)**OE/
HDO****S****C/
MR****GO**Transmission Drain
(See Note 9) (O)**C/
MR**

LUBRICATION POWER PLANT

Steering Torque Tube
Slip Joint (O) **GAA****S****GAA**Slip Joint, Power Drive
Shaft (O)**S****S**Steering Torque Tube Bearing **GAA****S****GAA**Universal Joint
(See Note 21) (O)**S****S**Center Bearing
(See Note 23) (O) **GAA****S****GAA**Carrier Wheel Bearings
Remove, Clean, Dry and
Repack Until Full,
(See Note 3) (O)**S****A**Rear Differential
(Check Level) (O)
(See Note 8) **GO****S****GAA**Spindle (6 Wheels)
(See Note 16) (O)**S****S**U-Joints and Slip-Joints
(2 Rear Axles)
(See Note 21) (O) **GAA****S****GAA**Rear Idler Arm
Shaft Housing (O)**S****S**Rear Steering Gearbox
(Check Level) (O)
(See Note 8) **GO****S****GAA**Rear Intermediate Rod and
Pitman Arm (O)**S****S**Pintle Hook (O) **GAA****S***For Service Operations, Refer
To TM9-2320-242-20

LUBRICATION CARRIER CHASSIS

TOTAL MAN-HR		TOTAL MAN-HR	
INTERVAL	MAN-HR	INTERVAL	MAN-HR
D	0.4	Q	0.5
W	0.3	S	1.8
M	0.2	A	2.1
Note: C/MR = Contamination or Maintenance Requirement			

——— KEY ———

FUEL, LUBRICANTS, AND COOLANT	CAPACITY	EXPECTED TEMPERATURES			INTER-VALS
		Above +32°F	+40°F to -10°F	0°F to -65°F	
GO - LUBRICANT, Gear, Universal		GO 80/90	GO 80/90	GO75	FOR ARCTIC OPERATION REFER TO FM 9-207 D - Daily W - Weekly M - Monthly 1 month or 1,000 miles, whichever occurs first. Q - Quarterly 3 months or 3,000 miles, whichever occurs first. S - Semi- annually 6 months or 6,000 miles, whichever occurs first. A - Annually 12 months or 12,000 miles, whichever occurs first.
Front Differential	4 pts				
Center Differential	12 pts				
Rear Differential	5 pts				
Winch Worm Case	4 pts				
Transfer Case	4.5 pts				
Transmission	5.5 pts				
Front Steering Gear Box	1 pt				
Rear Steering Gear Box	0.5 pt				
OE/HDO IC Engine		OE/HDO-30	OE/HDO-10		
Engine Crankcase with Filter Change	12 qts				
OEA-OIL, Engine, Sub-zero				OEA	
GAA - GREASE, Automotive and Artillery		All Temperatures			
Brake Fluid, Silicone Automotive, BFS					
CW - LUBRICANT, Chain, Exposed Gear and Wire Rope					
ENGINE COOLANT*	FOR COOLING SYSTEM COOLANT SEE TB 750-651				
MIL-A-46513 MIL-A-11755					
FUEL - See Note Below	40 gallons	(20 gallons per tank)			

NOTES:

Military specifications for the applicable lubricants are as follows:

LUBRICANT	MIL SPEC.
GAA	MIL-G-10924
GO	MIL-L-2105
OEA	MIL-L-46167
BFS	MIL-B-46176
OE/HDO	MIL-L-2104C
CW	VV-L-751

*Under no conditions should only water with inhibitor MIL-O-1-490 be used.

FUEL REQUIREMENTS

Grade DF2 Fuel (of Spec VV-F-800)
 Grade DF1 Fuel (of Spec VV-F-800)
 Grade DFA Fuel (of Spec VV-F-800)

TEMPERATURE LIMITS

— Do not use below +32°F
 — Do not use below -10°F
 — All temperatures

1. **OIL CAN POINTS.** Every 6,000 miles or 6 months, whichever occurs first, lubricate latches, hinges, shift linkage (transmission/transfer), tie down shackles, brake, and clutch linkage with OE/HDO.

2. **LUBRICATE.** Lubricate after fording or swimming operations.

3. **WHEEL BEARINGS.** Remove, clean, and repack wheel bearings at 12,000 miles or 12 months, whichever occurs first. After fording or swimming operations remove plug on outer rim of brake drums to check for leakage of water into brake cavity. If water leakage contains mud or abrasives, clean and repack wheel bearing.

4. **BRAKE MASTER CYLINDER.** Use silicone brake fluid (BFS) automotive only.

5. **FUEL LEVEL.** Check level daily on both tanks and add fuel as per key note.

6. **LUBRICATED AT TIME OF DISASSEMBLY.** Starter, clutch pilot bearings, speedometer, stub axle bushing.

7. **WINCH CABLE AND SNATCH BLOCK.** After each operation clean and oil with OE. Every 6,000 miles or semiannually, whichever occurs first, if cable is not generally used, unwind cable, clean with OE. Wipe off excess and coat cable and winch drum with CW. Rewind cable. Lubricate snatch block every 6,000 miles or semiannually with GAA.

8. **GEAR CASES.** (Check level every 6,000 miles or semiannually, whichever occurs first). Change gear lubricant only when required by maintenance repair action, contaminated by water, or other foreign material. Drain only when hot after operation. Fill to plug levels (except transfer cases, use dipstick).

9. **TRANSMISSION.** Check level every 6,000 miles or semiannually, whichever occurs first. Change lubricant only when required by maintenance repair action, contaminated by water, or other foreign material. Drain only when hot after operation. Fill to plug level.

10. **ENGINE FUEL FILTERS.** Drain one-half cup of fuel from each fuel filter weekly before starting engine. If primary filter contains large amounts of water, or if secondary filter contains evidence of water, notify organizational maintenance, where the element shall be replaced. Replace filter elements and gaskets every 6,000 miles or 6 months, whichever occurs first, or at the discretion of the maintenance officer, as local conditions warrant.

A copy of this lubrication order will remain with the vehicle at all times. Instructions contained herein are mandatory.

By Order of the Secretary of the Army:

E.C. MEYER
General, United States Army
Chief of Staff

Official:

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

DISTRIBUTION: To be distributed in accordance with DA Form 12-38, Operator Maintenance requirements for Truck, Cargo, 1½ Ton, M561, Truck, Ambulance, 1½ Ton, M792.

11. **ENGINE COOLANT.** Antifreeze inhibited solution MIL-A-46153 may be retained in engine cooling systems for an extended period of time provided coolant meets freeze point requirements and reserve alkalinity requirements. Antifreeze, Arctic-Type MIL-A-11755 is to be replaced on an annual basis, preferably at the beginning of the cold weather season. See TB750-651.

12. **ENGINE CRANKCASE.** Drain every 6,000 miles or at discretion of maintenance officer, as local conditions warrant. Fill with 12 qts of oil, run engine several minutes and recheck oil level. To check oil level, stop engine and wait at least five minutes to allow oil to drain into crankcase. Safe operating range is between "add" and "full" Do not overfill.

13. **AIR CLEANER (DRY TYPE).** Service air cleaner every 3,000 miles or when air restriction indicator stays red. Clean and reuse element unless it is damaged or dust streaks appear in air cleaner base. Insure cleaned element is dry prior to reinstallation.

14. **ENGINE OIL FILTER.** Change every 6,000 miles or 6 months, whichever occurs first, or at discretion of maintenance officer as local conditions warrant. While crankcase is being drained, remove filter drain plug and elements, clean inside of case, install drain plug, new element and gasket.

15. **ENGINE GOVERNOR SHAFT.** Lubricate lightly with GAA. Avoid excessive lubrication.

16. **WHEEL SPINDLE.** Apply until GAA comes out between hub and spindle.

17. **DO NOT LUBRICATE:** Clutch release bearing, ball joints, suspension arm bushings or shock absorber bushings.

18. **MAINTENANCE CHECKS AFTER FORDING OR SWIMMING.** Check for water contamination after swimming or fording (brake drum, differentials and steering gear boxes).

19. **TEMPERATURE RISES.** If ambient temperature rises to +70°F for no more than one week, use of OE 10 is permissible. If ambient temperature rises to +30°F for no more than one week, use of OEA is permissible.

20. **LUBRICATION INTERVALS.** When practicable, lubrication services will be made to coincide with the vehicle "S" preventive maintenance service. For this purpose a 10% tolerance (variation) in specified lubrication point mileage is permissible.

21. **PROPSHAFT U-JOINTS.** Propshaft U-joints with lube fittings require lubrication every 6,000 miles or at "S" service. U-joints without fittings are lubed for life by manufacturer and do not require lubrication service.

22. **AIR RESERVE.** Every month or 1,000 miles, whichever occurs first, drain condensation from the air reservoir tank of sealed brake system using tank drain cock. If oil comes out of the air tank check engine air-box drain tube. Update: drain every 30 days.

23. **CENTER BEARING.** Lubricate center bearing if equipped with lube fittings.

24. **HEATER FUEL FILTER.** Check filter weekly when heater is in use. Place cup under filter assembly and unscrew bowl. If filter contains water, notify organizational maintenance, where the element shall be replaced. Every 6,000 miles or 6 months, whichever occurs first, or at the discretion of the maintenance officer, as local conditions warrant, clean filter element using dry cleaning solvent SD-II. If filter element can not be properly cleaned, replace with a new element.