

# LUBRICATION ORDER

ARMY LO 5-4310-452-12  
MARINE CORPS LI08917A-12

30 Jul 1987

**COMPRESSOR, ROTARY, AIR, DED, 250 CFM, 100 PSI  
TRAILER MOUNTED**

**NSN 4310-01-158-3262**

**Ingersoll-Rand Model P-250-WDM-H268**

**COMPONENT OF PNEUMATIC TOOL AND  
COMPRESSOR OUTFIT**

**NSN 3820-00-950-8584**

Reference TM 5-4310-452-14&P/TM 08917A-14&P

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.

Clean fittings before lubricating. Clean parts with dry cleaning solvent (SD), type II

#### TOTAL MAN-HR

INTERVAL	MAN-HR
D	0.1
S	0.8

or equivalent. Dry before lubricating. Dotted arrow points indicate lubrication on both sides of the equipment.

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 Organizational Maintenance (O).

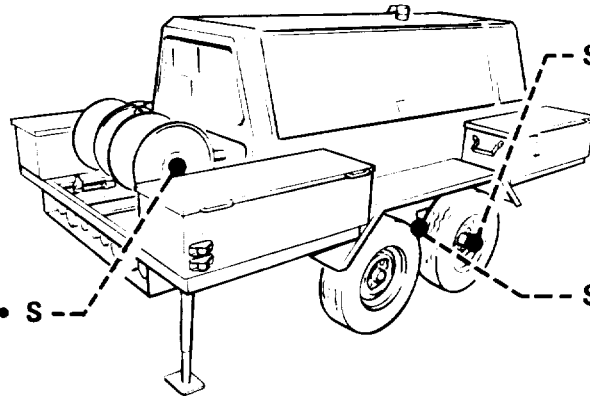
Reporting errors and recommending improvements. You can help improve this manual. If you find any mistakes or if you know of a way to improve the procedures, please let us know. Mail your letter or DA Form 2028 (Recommended Changes to Publications and Blank forms) direct to: Commander, US Army Tank-Automotive Command, ATTN: AMSTA-MB, Warren, MI 48397-5000. A reply will be furnished to you.

Marine Corps Personnel submit NAV-MO 10772 to Commanding General, Marine Corps Logistics Base, Code 850, Albany, GA 31704-5000.

Approved for Public Release; distribution unlimited

LUBRICANT • INTERVAL

INTERVAL • LUBRICANT



Air Compressor, Side View

Hose Reels (O)  
Lubricate Fittings  
(2 places)  
(See view C Warning  
and Note 10)

GAA • S

S • GAA Wheel Bearings (O)  
Repack  
(4 places)  
(See view B  
and Note 7)

S • GAA Spring Hanger (O)  
Lubricate Fittings  
(2 places)  
(See view A)

LUBRICANT • INTERVAL

INTERVAL • LUBRICANT

Fuel Filter (O) •  
(See view D  
and Note 1)

1000H

Engine Oil  
Filter (O)  
(See view D  
and Note 2)

OC or  
250H

Engine Oil  
Dipstick (C)  
(See view D  
and Note 3)

D

Engine Oil  
Fill (O) (See E •  
view and  
Note 3)

OC  
or  
250H

Water Separator (O)  
(See view E  
and Note 6)

1000H

Brake Fluid  
Reservoir (O)  
(See view I  
and Note 8)

S

Compressor  
Oil Tank (O)  
(See view H  
and Note 5)

S

Oil Cooler Drain  
(See view G and  
Note 9)

S

Compressor  
Oil Filter (O)  
(See view G  
and Note 4)

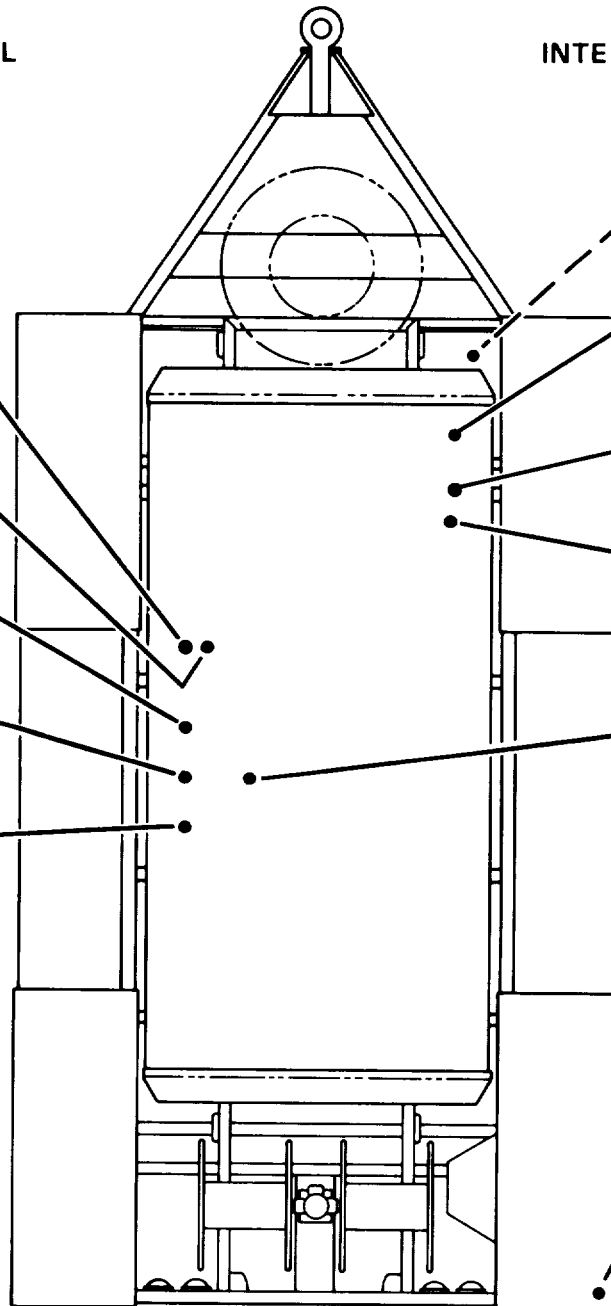
S

Engine  
Crankcase  
Drain Cover (O)  
(See view F  
and Note 3)

OC  
or  
250H

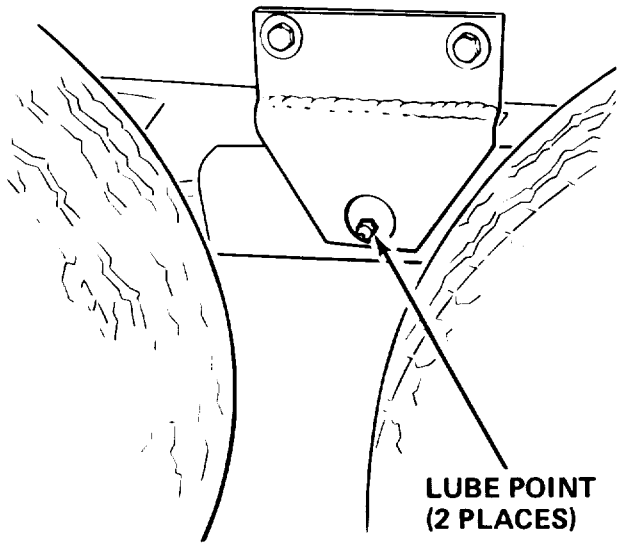
S • GAA

Leveling Stands (O)  
Lubricate Fitting  
(3 places)  
(See view J)

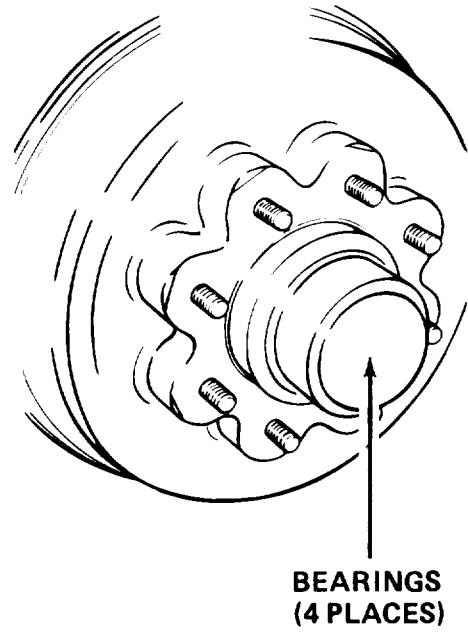


Air Compressor  
Overhead View

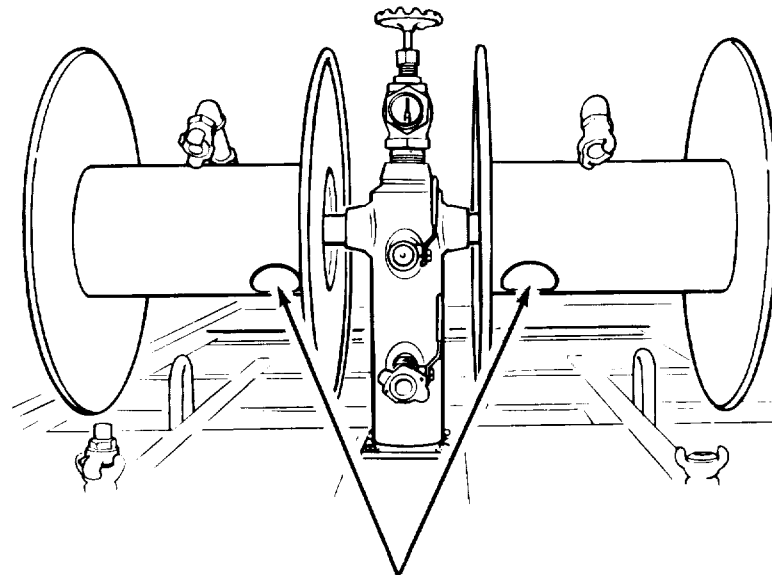
VIEW (A) SPRING HANGER



VIEW (B) WHEEL BEARINGS



VIEW (C) HOSE REELS

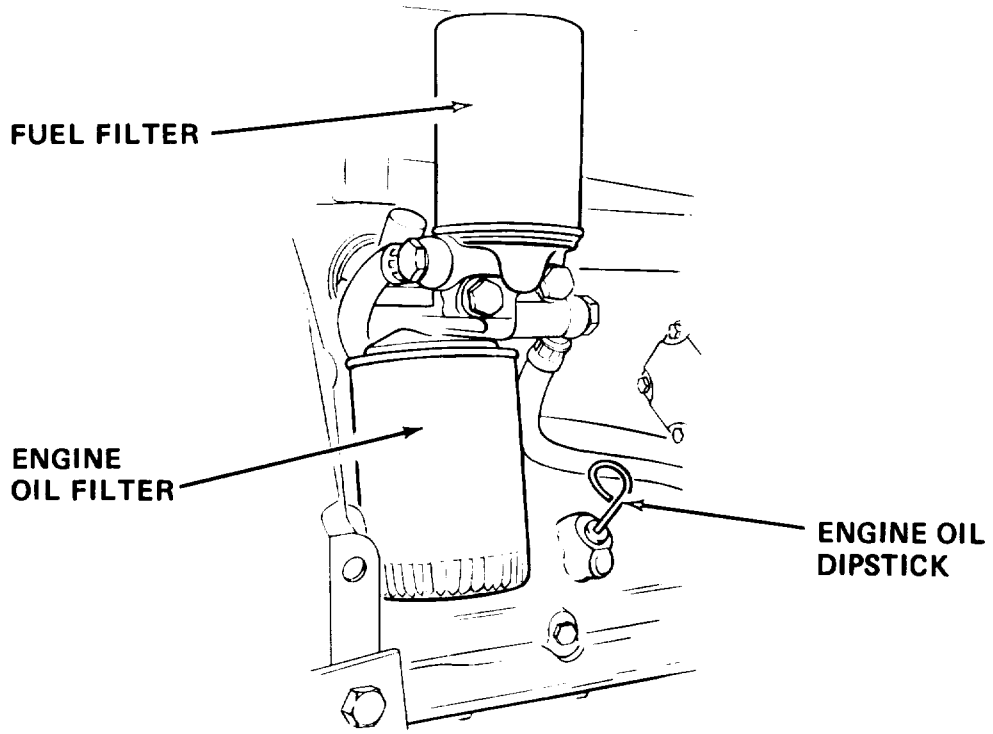


LUBE POINTS  
(2 PLACES)

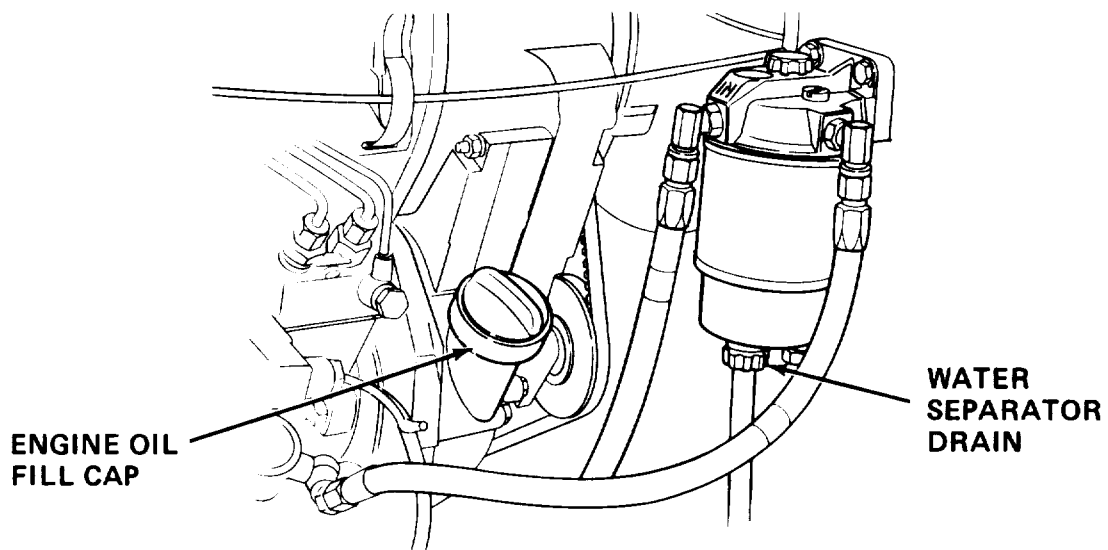
**WARNING**

Relieve air pressure, with engine off, before lubricating grease fittings.

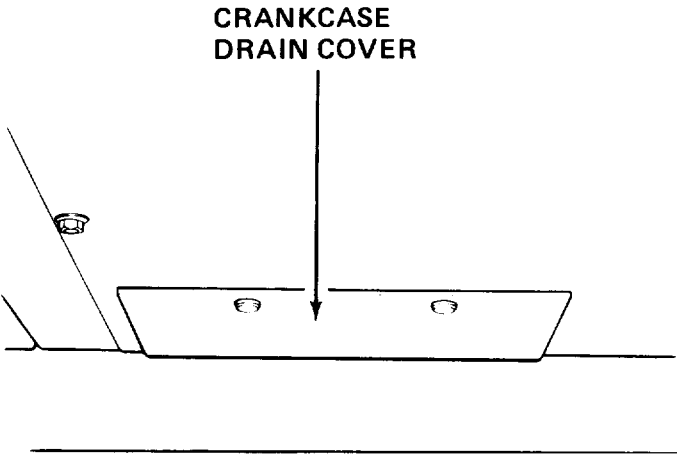
VIEW (D) FUEL FILTER, ENGINE OIL FILTER AND DIPSTICK



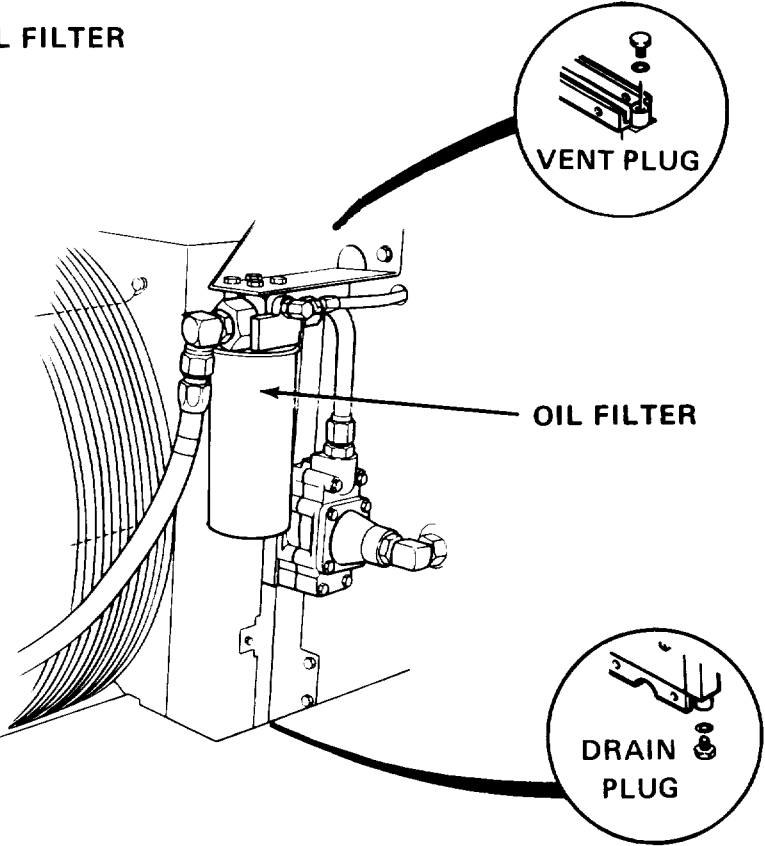
VIEW (E) ENGINE OIL FILL AND WATER SEPARATOR



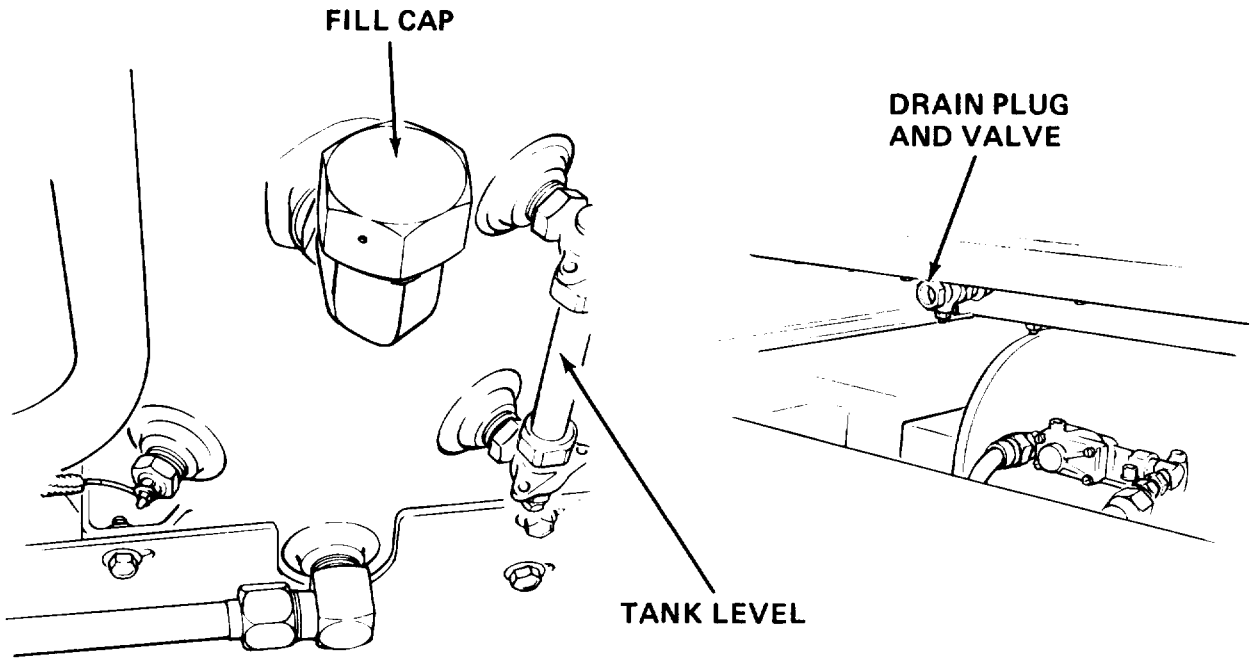
VIEW (F) ENGINE CRANKCASE DRAIN COVER



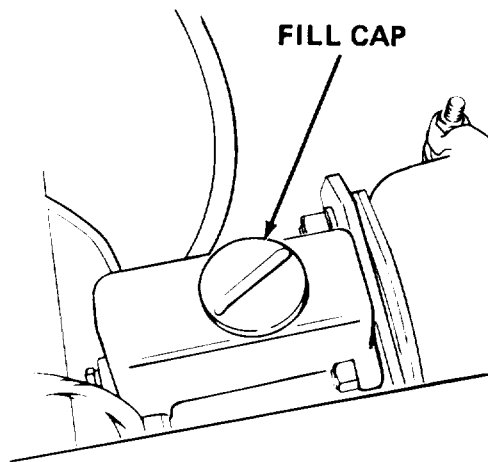
VIEW (G) COMPRESSOR OIL FILTER



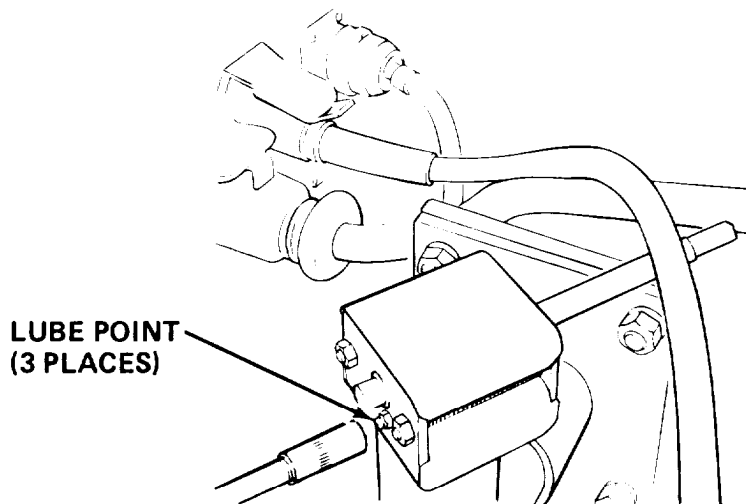
VIEW (H) COMPRESSOR OIL TANK LEVEL, FILL AND DRAIN



VIEW (I) BRAKE FLUID RESERVOIR



VIEW **(J)** LEVELING STANDS



KEY

LUBRICANTS	CAPACITIES (APP.)	EXPECTED TEMPERATURES		
		Above 15°F (Above -9°C)	-15°F to +40°F (-26°C to 4°C)	-65°F to +20°F (54°C to 0°C)
OE/HDO Lubricating Oil, Engine (MIL-L-2104)				
OE/Lubricating Oil, Arctic (MIL-L-46167)				
Engine Crankcase	9.5 litres 10 quarts	OE/HDO-30 (1 and 2)	OE/HD-10 (3)	OE/L
Compressor	22.7 litres 6 U.S. Gal.	OE/HDO-10 (3)		OE/L
GAA Grease Auto-motive (MIL-G-10924) & Artillery	As req'd	ALL TEMPERATURES		

For Arctic operation, refer to FM9-207.

1. Grade 15W/40 (OE/HDO 15/40) may be used when expected temperatures are above +5° F (-15° C).

2. D = Daily, S = Semi-annually.

3. If OE/L lubricant is required to meet the low "expected temperature" range, OE/L lubricant is to be used in place of OE/HDO-10 lubricant for all expected temperature ranges where OE/HDO-10 is specified in the key.

## NOTES

1. **FUEL FILTER.** Remove filter, clean mounting base. Apply film of oil to new filter gasket. Install new filter until gasket contacts base, then turn an additional 3/4 turn. Air-vent fuel system.
2. **ENGINE OIL FILTER.** Remove filter, clean mounting base. Apply film of engine oil to new filter gasket. Install new filter until gasket contacts base, then turn an additional 3/4 turn.
3. **ENGINE OIL LEVEL AND CRANKCASE.** Check oil level daily. Change engine crankcase oil every 250 operating hours when fuel sulphur content is 0.5% or less. Change 011 every 125 hours when fuel sulphur content is greater than 0.5%. Remove three screws and drain cover. Remove drain plug and allow oil to drain. Replace oil filter (Note 2). Install drain plug and drain cover. Fill crankcase. Run engine at low idle for 5 minutes. Stop engine and recheck oil level.
4. **COMPRESSOR OIL FILTER.** Remove filter. Clean mounting base. Apply film of engine oil to new filter gasket. Install new filter until gasket contacts base, then turn an additional 3/4 turn.
5. **COMPRESSOR OIL TANK.** Air receiver system must be completely relieved of all air pressure before servicing. Check oil level daily. Add oil only if the level falls to the bottom of the sight gauge when the unit is not running. Make sure that the compressor oil level is never above the top of sight gauge. To drain tank; remove plug, open valve and allow tank to drain. Close valve and install plug. Remove fill cap and fill tank with oil. Replace cap and run compressor for 5 minutes. Stop engine and check oil level.
6. **WATER SEPARATOR.** To drain water, loosen drain screw through one or two turns. To replace filter element, remove drain hose and unscrew filter and bowl assembly. Clean mounting base. Remove bowl from old filter and clean bowl. Install bowl and new O-ring to bottom of new filter element. Apply film of oil to new filter gasket. Install new filter until gasket contacts base, then turn an additional 3/4 turn. Attach drain hose and air-vent system.
7. **WHEEL BEARINGS.** Clean, inspect and repack wheel bearings every six months. Raise and support tire securely off the ground. Remove tire and wheel assembly. Remove dust cap, cotter pin, nut, washer, and outer bearing. Remove brake drum. Use seal puller to remove grease seal. Remove inner bearing. Repack bearings using wheel bearing grease conforming to Specification MIL-G-10924. Install inner bearing and new grease seal. Place brake drum over spindle and install outer bearing, washer and nut. Tighten nut to specifications and install cotter pin. Replace dust cap and tire. Repeat procedure for remaining wheels.
8. **BRAKE FLUID RESERVOIR.** Fill to within 1/4 in of top opening with Silicon brake fluid conforming to MIL-B-46176.
9. **OIL COOLER.** To drain oil from cooler, open vent plug and remove drain plug.
10. **HOSE REELS.** Before lubrication, depressurize the entire air system with engine off. High pressure may be present on hose reel grease fittings.

Copy of this Lubrication Order will remain with the equipment at all times; instructions contained herein are mandatory.

By Order of the Secretaries of the Army and the Marine Corps:

**CARL E. VUONO**  
General, United States Army  
Chief of Staff

Official:

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

**J.J. WENT**  
Lieutenant General, USMC  
Deputy Chief of Staff for Installations and Logistics

ARMY: To be distributed in accordance with DA Form 12-25A Operator, Unit and Direct and General Support Maintenance requirements for Compressor, Rotary Air, DED 250 CFM, 100 PSI, Trailer Mounted, Ingersoll-Rand MDL P250-W DM-H268.

USMC:AJG

PIN: 062197-000