

LUBRICATION ORDER

11 JULY 1984

(Supersedes LO 5-4310-338-12-1, and -2, 2 APRIL 1973)

**COMPRESSOR, ROTARY; AIR, DIESEL ENGINE  
 DRIVEN, TRAILER MTD, 4-WHEEL,  
 PNEUMATIC TIRED; 600 CFM, 100 PSI  
 (DAVEY MODEL IM600RPV)  
 (NSN 4310-00-136-4369)**

Reference: TM 5-4310-338-15 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.

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).

**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.**

**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	0.1	500	0.6
50	0.4	1000	2.0
100	0.7	4000	3.6
250	0.5		

TA 219610

**LUBRICANT • INTERVAL**

**INTERVAL • LUBRICANT**

Water Pump  
(Sealed bearings,  
no lubrication  
required)

Crankcase Oil  
Level Gage (C)  
(Check level)  
Caution: When  
OEA oil is used, the  
level will be checked  
more often.  
(See Note 3)

Engine Oil  
Filters (O)  
(Replace elements)  
(See Note 5)

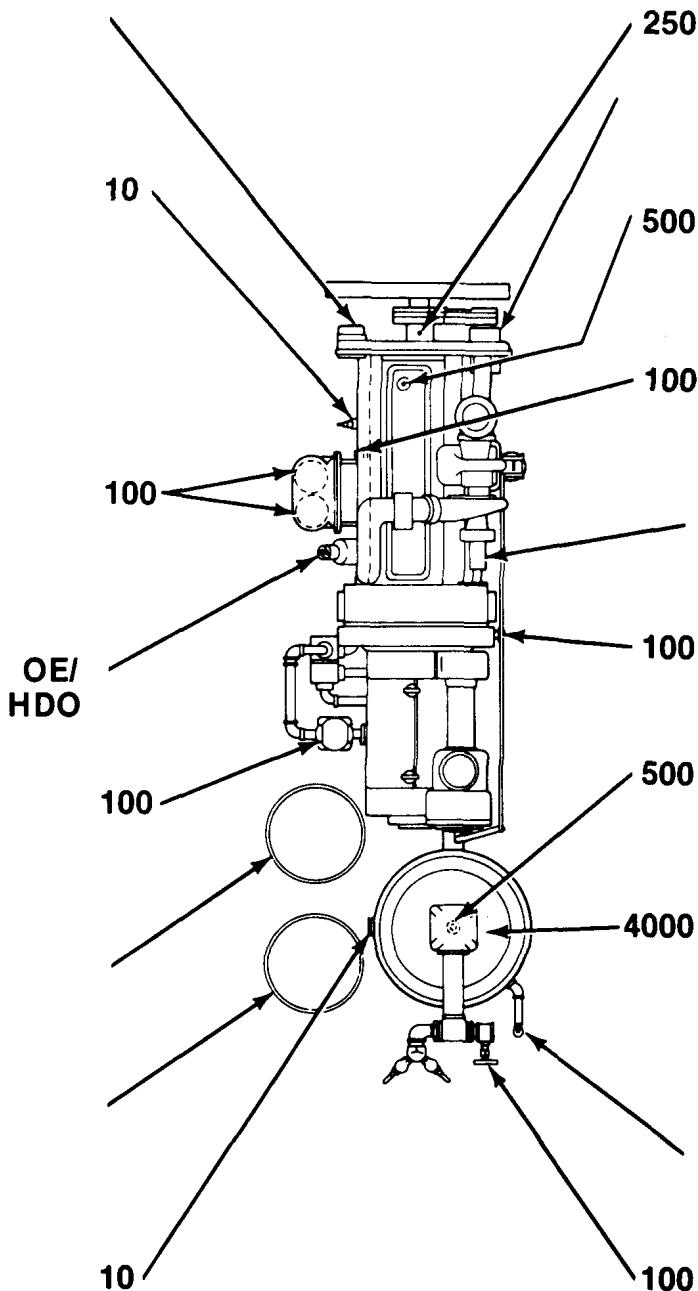
Crankcase Oil  
Fill Cap (O)  
(See Key)

Compressor Oil  
Filter (O)  
(Clean element)  
(See Note 6)

Engine Air Cleaner  
(Dry type, no lubri-  
cation required)

Compressor Air  
Cleaner (Dry type,  
no lubrication  
required)

Oil Separator Sight  
Level Gage (C)  
(Check level)



**250 GAA** Fan Drive Pulley (O)

Generator (Sealed  
bearings, no lubri-  
cation required)

Crankcase  
Breather (O)  
(Remove, clean and  
reinstall)

Crankcase Drain  
Plug (O)  
(Drain and refill)  
(See Note 4)

Starting Motor  
(Sealed bearings, no  
lubrication required)

**100 GAA** Speed Control  
Linkage (O)  
(Springly)

Oil Separator Drain  
Plug (O)  
(Drain and refill)  
(See Note 6)

Oil Separator (O)  
(See Note 7)

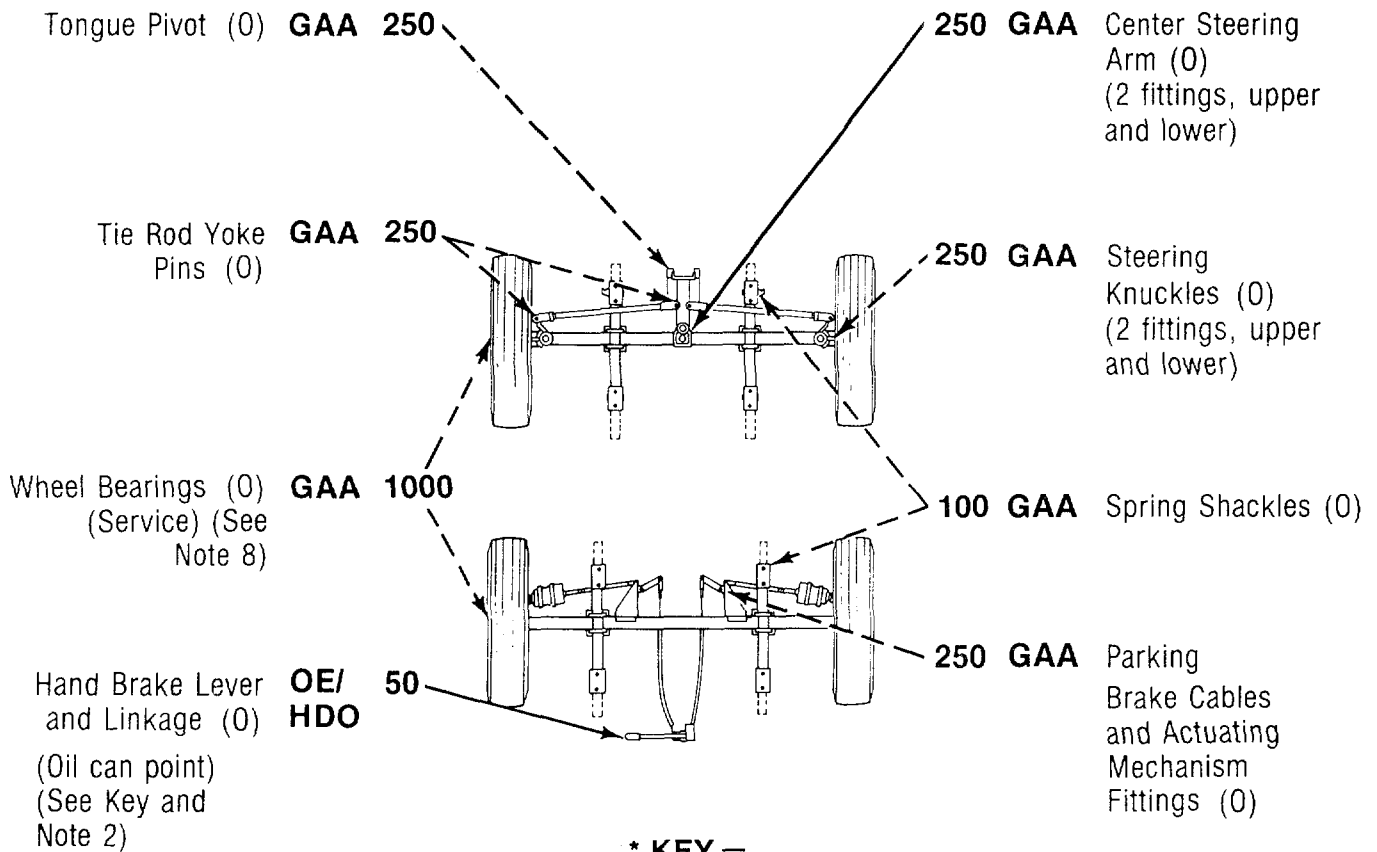
Warning: Remove  
and destroy  
separator element  
each 4000 hours.

**OE/  
HDO** Oil Separator  
Fill Plug (O)  
(See Key)

**100 GAA** Air Service  
Valves (O)  
(Springly)

**LUBRICANT • INTERVAL**

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**\* KEY —**

LUBRICANTS	CAPACITY	EXPECTED TEMPERATURES			INTERVALS
		Above +15°F (Above -9°C)	+ 40° to -15°F (+4° to -26°C)	+ 40° to -65°F (+4° to -54° C)	
<b>OE/</b> - Lubricating Oil, Internal Combustion Engine, Tactical Service <b>HDO</b> <b>OEA</b> - Lubricating Oil, Internal Combustion, Arctic - Oil Can Points (See Note 2) - Crankcase w/Filters - Compressor Separator	22 qts. (20.8 L) 26 gals. (98.4 L)	OE/HDO 30	OE/HDO 10	OEA (See Note 1)	Intervals given are in hours of normal operation.  For Arctic operation refer to FM 9-207
<b>GAA</b> - Grease, Automotive and Artillery		ALL TEMPERATURES			

\*See Note 3 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, lubricate control linkage, pins, springs, safety chains, doors and hinges, latches, and all exposed adjusting threads with OE/HDO.

3. ENGINE OIL LEVEL HOT OR COLD CHECK. Oil level should be between high and low marks on dipstick (allow to set 5 minutes before checking).

4. ENGINE. Oil is to be changed each 100 hours. Drain when lubricant is warm.

5. ENGINE OIL FILTER. 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 between high and low marks on dipstick.

6. COMPRESSOR OIL FILTER. Each 100 hours, remove filter element, clean housing and filter element. Reassemble oil filter, operate compressor for 5 minutes, check for leaks, check separator oil level and bring to "FULL" mark.

**WARNING**

**Before servicing compressor oil system, open service valve to atmosphere to relieve all pressure in the system.**

7. OIL SEPARATOR ELEMENT. Each 4000 hours, replace the oil separator element.

**WARNING**

**Do not attempt to clean the element or re-use the element because of its clean appearance. Metal salts are deposited on the element as the oil is separated from the air. Pollution of metal salts on the element will lower the flash point and can cause a fire in the separator. Destroy used element to prevent accidental re-use.**

8. WHEEL BEARINGS. Each 1000 hours, remove wheels, clean and inspect all parts, replace worn or damaged parts, repack bearings, and assemble.

9. LUBRICANTS. The following is a list of lubricants with military symbols and applicable specification numbers.

OE/HDO	MIL-L-2104
GAA	MIL-G-10924
OEA	MIL-L-46167
(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 12-25A Operator and Organizational maintenance requirements for Rotary Air Compressors.

**TA 220163**

**LO 5-4310-338-12**

**PIN: 054767-000**