

GRADER, ROAD MOTORIZED: DIESEL DRIVEN, 12 FT
BLADE (CATERPILLAR MODEL 12) W CATER-
PILLAR ENGINE MODEL D-333NA

Reference: LO 5-3805-209-15-1, 2, 3 and C9100-IL

Intervals are based on normal hours of operations. Reduce to compensate for abnormal operations and severe conditions. During inactive periods, sufficient lubrication must be performed for adequate preservation.

Clean fittings before lubricating.

Relubricate after washing or fording.

A dotted circle indicates a drain below.

Clean parts with SOLVENT, dry-cleaning, or with OIL, fuel, Diesel. Dry before lubricating.

Lubricate points indicated by dotted arrow shafts on both sides of equipment.

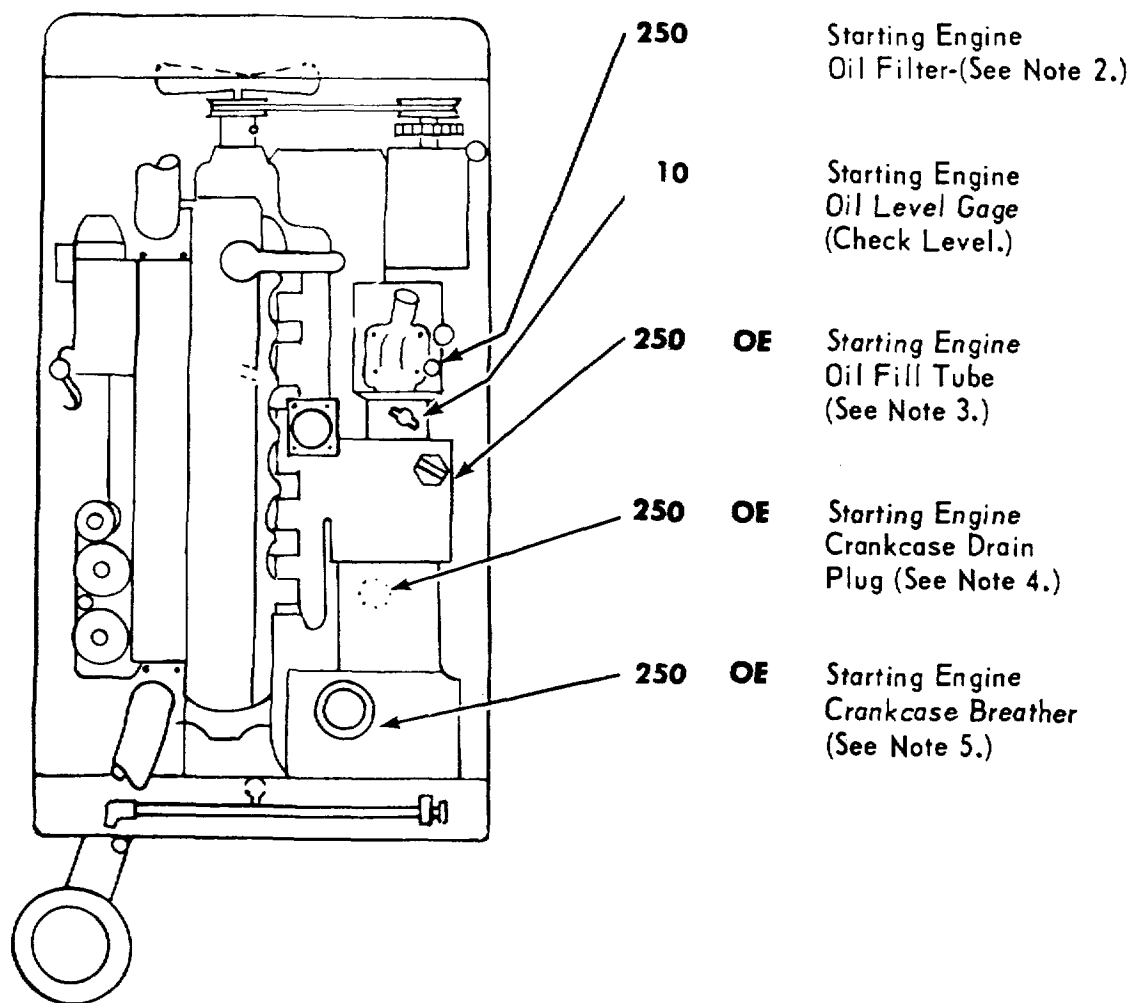
Drain gearcase and crankcase when hot. Fill and check level.

FOLD

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LUBRICANT • INTERVAL

INTERVAL • LUBRICANT



STARTING ENGINE ONLY

KEY

LUBRICANTS	CAPACITY	EXPECTED TEMPERATURES			INTERVALS
		Above +32°F	+ 40°F to -10° F	0°F to -65°F	
OE-01L, Engine Heavy Duty					Intervals given are in hours of normal operation.
Starting Engine Crankcase		OE30 or SPEC MIL-L-45199	OE10-or SPEC MIL-L-45199	OES	
OES-OIL, Engine Sub-zero					

- NOTES:
- FOR OPERATION OF EQUIPMENT IN PROTRACTED COLD TEMPERATURES BELOW -10 F. Remove lubricants prescribed in the key for temperatures above -10°F. Clean parts with SOLVENT, dry-cleaning. Relubricate with lubricants specified in the key for temperatures below -10°F.
 - STARTING ENGINE OIL FILTER. Replace the filter every 250 service hours. Remove filter (1) from base (2) by turning filter counter clockwise. Be sure gasket (3) is seated properly in the end of the new filter. Tighten filter by turning it one turn, or to a torque of 8 to 10 pounds feet, and after the filter gasket first touches the base.
 - STARTING ENGINE FILL TUBE. Refill the crankcase to the full mark on the gage. Start and run the starting engine at least one minute, stop the engine, check the oil level again.
 - STARTING ENGINE OIL PAN DRAIN. Drain engine oil when warm.
 - STARTING ENGINE BREATHER. Wash and oil the breathe element at each oil change period. 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:

HAROLD K. JOHNSON,
General, United States Army,
Chief of Staff

OFFICIAL:

J. C. LAMBERT,
Major General, United States Army,
The Adjutant General

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