SEAMU424KD10

Operation & Maintenance Manual

WA420-1LC

WHEEL LOADER

SERIAL NUMBERS **WA420-1 :A25001** and up

WARNING

Unsafe use of this machine may cause serious injury or death. Operators and maintenance personnel must read this manual before operating or maintaining this machine. This manual should be kept near the machine for reference and periodically reviewed by all personnel who will come into contact with it.

NOTICE

Komatsu has Operation & Maintenance Manuals written in some other languages. If a foreign language manual is necessary, contact your local distributor for availability.

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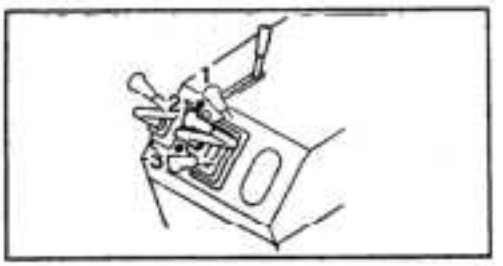
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OPERATION

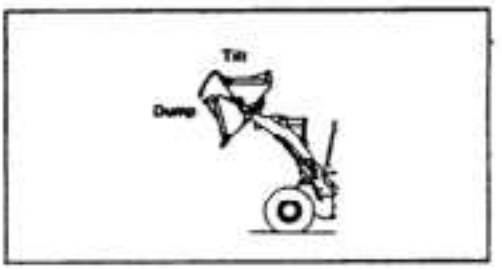
BUCKET CONTROL LEVER

This lever operates the bucket.

(1) Tilt:
(2) Hold: The bucket is kept in the same position.
(3) Dump:



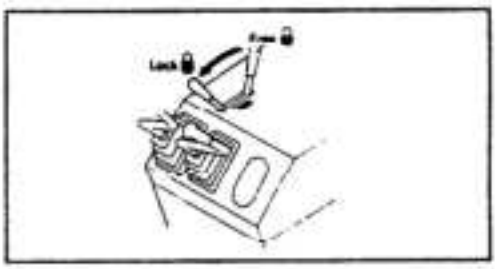
* When the bucket control, lever is pulled further from (1) position, the lever is stopped in this position until bucket reaches the preset position of positioner, and the lever is backed to hold position.



SAFETY LOCK

This is used to lock the lift arm and bucket control levers.

WARNING! When parking or leaving the machine, or when performing maintenance, always lower the bucket to the ground, put the work equipment levers in hold position and check that safety lock lever is locked.

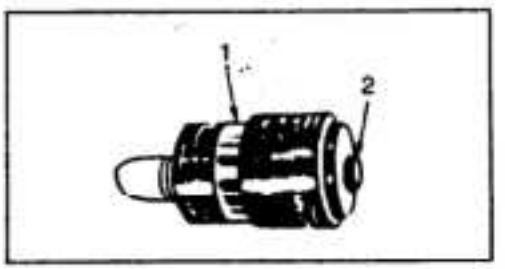


AIR CLEANER SERVICE INDICATOR

This device indicates clogging of the air cleaner element. When red piston (1) appears in the transparent part of the indicator, the element is clogged. Immediately clean element.

After cleaning, push indicator button (2) to return red piston to original position.

Service indicator is on air cleaner in engine hood.



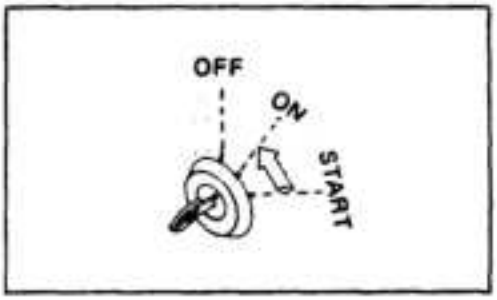
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OPERATION

* The standard specification machine is designed to work in ambient temperature from −20to 40°C.

  When operating the machine at temperatures below −20°C,special equipment is needed. Contact your distributor for details.

* For machines where the air dryer is installed as an option, in cold temperatures below −10°C,when operating the machine after it has been stopped for several hours, run the engine for at least 10 minutes after starting before moving the machine.



CAUTIONS AFTER COMPLETION OF WORK

1. Mud and water on the machine body should be completely removed.

   Park the machine on concrete or hard ground. If this is impossible, park the machine on wooden boards. This will prevent the accessories from freezing to the ground thereby preventing machine movement the next morning. Particular attention should be given to water drops collected on the surface of the hydraulic cylinder piston rods. Such droplets must be fully wiped off because if water is frozen to the rod when the cylinder is utilized, the cylinder oil seals may be damaged.

2. Drain water collected in the air tanks and fuel system so that such water may not be frozen at night.

3. As battery capacity drops at low ambient temperature, cover the battery or remove it from the machine to be kept warm at night.

AFTER COLD WEATHER

When weather becomes warm, perform the following without fail:

* Replace lubricating oils for various units with the ones specified for warm-weather use.

* Drain antifreeze coolant (without corrosion inhibitor), flush the inside of cooling system completely, and fill with clean soft water (such as city water).

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The use of a quality engine lubricating oil combined with appropriate oil and filter change intervals are critical factors in maintaining engine performance and durability.

SAE 15W-40 multi-viscosity oil meeting the American Petroleum Institute (API) Classification of CE/SF is recommended. CD/SF oil may be used in areas where CE/SF oil is not available.

A sulfated ash limit of 1.0 mass percent is suggested for optimum valve and piston deposit and oil consumption control. The sulfated ash **must not** exceed 1.85 mass percent. The sulfated ash limit of 1.85 mass percent has been placed on all engine lubricating oils recommended for use in the engine. Higher ash oils can cause valve and/or piston damage and lead to excessive oil consumption.

The API service symbol displays the following information. The upper half of the symbol displays the appropriate oil categories; the lower half may contain words to describe oil energy conserving features. The center section identifies the SAE oil viscosity grade.

Oil viscosity recommendations are as follows:

The use of a multi-graded lubricating oil has been found to improve oil consumption control and improve engine cranking in cold temperatures while maintaining lubrication at high operating temperatures.

While SAE 15W-40 multi-viscosity oil is recommended for most operating climates, refer to the previous chart for oil viscosity recommendations for extreme climates.

Limited use of low viscosity oils, such as SAE 10W-30 may be used for easier starting and providing sufficient oil flow at ambient temperatures below +23°F (-5°C). However, continuous use of low viscosity oils can decrease engine life due to wear.

Do not use special "break-in" lubricating oils for a new or rebuilt engine. Use the same type of oil during the "break-in" as specified for normal operation.

Arctic Operation

If an engine is operated in ambient temperatures consistently below -10°F (-23°C) and there are no provisions to keep the engine warm when it is not in operation, use a synthetic CE/3F or CD/SF engine oil with adequate low temperature properties such as SAE 5W-20 or 5W-30.

The oil supplier **must** be responsible for meeting the performance service specifications.

IMPORTANT: The use of a synthetic base oil does not justify extended oil change intervals. Extended oil change intervals can decrease engine life due to factors such as; corrosion, deposits and wear.

Additional information regarding lubricating oil availability throughout the world is available in the "E.M.A. Lubricating Oils Data Book for Heavy Duty Automotive and Industrial Engines." The data book may be ordered from the Engine Manufacturers Association, One Illinois Center, 111 East Wacker Drive, Chicago, IL U.S.A. 60601. The telephone number is (312) 644-6610.

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