TEN00239-00

Operation & Maintenance Manual

ARTICULATED
DUMP TRUCK

GALEO

HM350-1

SERIAL NUMBERS 1001 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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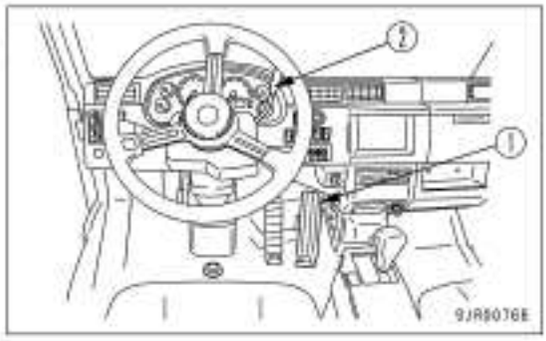
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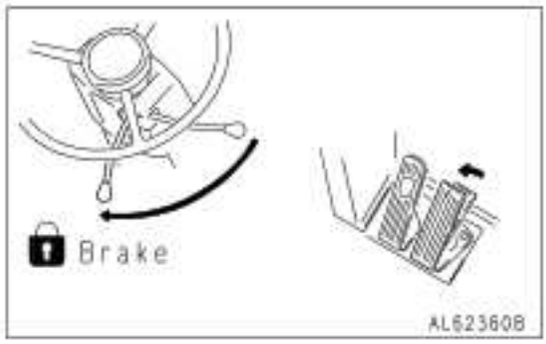
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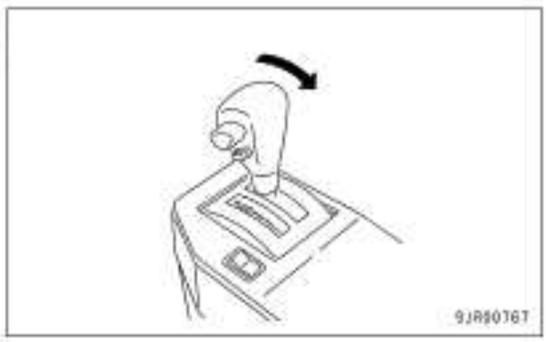
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1. Before starting to travel downhill, release accelerator pedal (1) and operate retarder control lever (2) to slow the machine down.

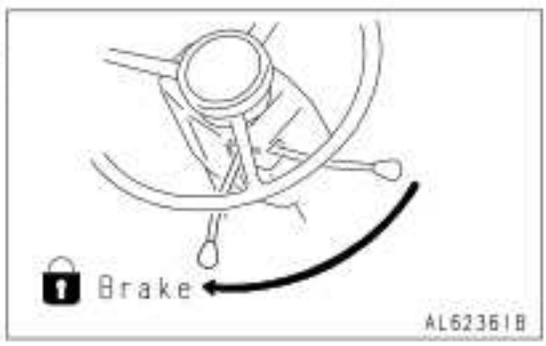




2. Move the shift lever to a position (5, 4, 3, 2) that matches the maximum permissible speed for the retarder brake performance.



3. When traveling downhill, operate retarder control lever (2), run the engine at a speed of at least 1800 rpm, and travel so that the retarder brake oil temperature gauge is in the white range.



For machines equipped with an exhaust brake, using the exhaust brake can provide more secure braking force for increased safety, and will also improve the durability of the brake.
For details of handling the exhaust brake, see "EXHAUST BRAKE SWITCH (PAGE 3-32)".

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Capacity \ Reservoir		Engine oil pan	Transmission case (Incl. brake oil tank)	Hydraulic tank	Front suspension (each)	Rear suspension (each)	Front differential case
Specified	Liters	56	270	267	6	4.2	17.5
	US gal	14.80	71.33	70.54	1.59	1.11	4.62
Refill	Liters	52	115	180	6	4.2	17.5
	US gal	13.74	30.38	47.56	1.59	1.11	4.62

Capacity \ Reservoir		Front final drive case (each)	Center differential case	Center final drive case (each)	Rear differential case	Rear final drive case (each)	Fuel tank	Cooling system
Specified	Liters	6.5	35.0	5.5	32.5	7.0	500	88
	US gal	1.72	9.25	1.45	8.59	1.85	132.10	23.25
Refill	Liters	6.0	35.0	4.5	32.5	6.0	495	75
	US gal	1.59	9.25	1.19	8.59	1.59	130.78	19.82

NOTICE

Use only diesel fuel.

The engine mounted on this machine employs electronic control and a high-pressure fuel injection device to obtain good fuel consumption and good exhaust gas characteristics. For this reason, it requires high precision for the parts and good lubrication. If kerosene or other fuel with low lubricating ability is used, there will be a big drop in durability.

Note 1: HTHS (High-Temperature High-Shear Viscosity 150°C), specified by ASTM D4741 must be equal to or higher than 3.5 mPa-S. Komatsu EOS0W30 and EOS5W40 are the most suitable oils.

Note 2: Powertrain oil has different properties from engine oil. Be sure to use the recommended oils.

Note .3: When the ambient temperature is higher than 45°C (113°F) and the machine operation hour is longer than 12 hours/day, then the use of EO50-CD instead of AXO80 is recommended.
Squealing of the brakes may occur with EO50-CD, but there is no problem with the brake performance or durability.

Note 4: Hyper grease (G2-T, G2-TE) has a high performance.
When it is necessary to improve the lubricating ability of the grease in order to prevent squeaking of pins and bushings, the use of G2-T or G2-TE is recommended.

Note 5: Supercoolant (AF-NAC)

1) The coolant has the important function of preventing corrosion as well as preventing freezing.
Even in the areas where freezing is not an issue, the use of antifreeze coolant is essential.
Komatsu machines are supplied with Komatsu Supercoolant (AF-NAC). Komatsu Supercoolant (AF-NAC) has excellent anticorrosion, antifreeze and cooling properties and can be used continuously for 2 years or 4000 hours.
Komatsu Supercoolant (AF-NAC) is strongly recommended wherever available.
2) For details of the ratio when diluting super coolant with water, see "CLEAN INSIDE OF COOLING SYSTEM (PAGE 4-26)".
When the machine is shipped from the factory, it may be filled with coolant containing 30% or more Supercoolant (AF-NAC). In this case, no adjustment is needed for temperatures down to -10°C (14°F). (never dilute with water)
3) To maintain the anticorrosion properties of Supercoolant (AF-NAC), always keep the density of Supercoolant between 30% and 68%.

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EVERY 1000 HOURS SERVICE

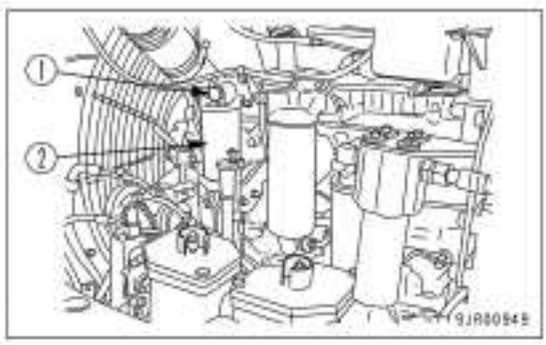
Maintenance for every 50, 250 and 500 hours should be carried out at the same time.

REPLACE CORROSION RESISTOR CARTRIDGE

⚠ WARNING

All the engine parts are at high temperature after the engine has been operated, so never replace the cartridge immediately after finishing operations.
Wait for the oil to cool down before replacing the cartridge.

- Prepare a filter wrench



1. Set valve (1) at the top of the corrosion resistor to the CLOSED position, to close it.
2. Set the container to catch the water under the cartridge.
3. Using a filter wrench, remove cartridge (2).
4. Clean the filter holder, coat the seal surface of the new cartridge thinly with oil, then install the cartridge.
5. When installing, tighten until the gasket contacts the seal surface of the filter holder, then tighten a further 2/3 turns.
   If the filter cartridge is tightened too far, the gasket will be damaged and this will lead to leakage of water. If the filter is too loose, water will also leak from the gap at the gasket, so always tighten the correct amount.
6. Set valve (1) to the OPEN position to open it.
7. After replacing the cartridge, start the engine and check that there is no leakage of water from the filter seal surface. If there is any leakage of water, check the tightening of the filter cartridge.

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