TEN00230-06

Operation & Maintenance Manual

ARTICULATED
DUMP TRUCK

HM400-2

SERIAL NUMBERS 2372 and up

ecot3

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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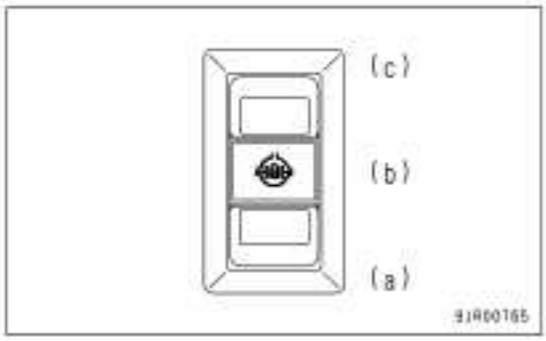
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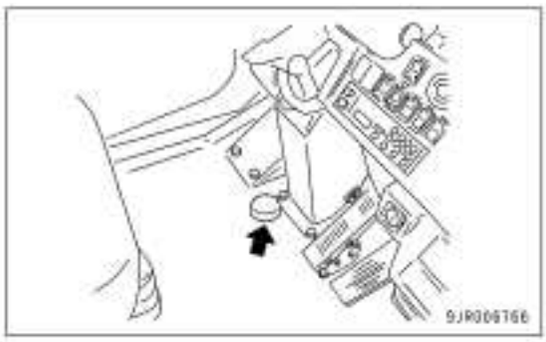
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LEFT AND RIGHT DIFFERENTIAL LOCK SWITCH

This switch (11) can be used to switch the conditions of the left and right differential locks.
When the switch is pressed and the left and right differential lock pedal is depressed, the left and right differential locks are actuated if the shift range is F3, F2, F1, R1, R2.
When the switch is at the neutral position, the left and right differential locks are not actuated.
Position (a): Front, center, rear left and right differential locks are actuated
Neutral position (b): Left and right differential locks are not actuated
Position (c): Center and rear left and right differential locks are actuated

For details when using the differential lock, see "OPERATION USING DIFFERENTIAL LOCK (PAGE 3-103)".



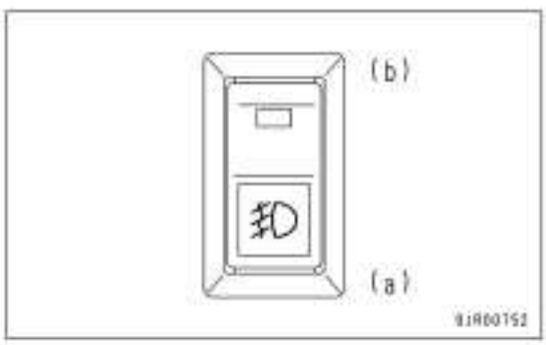


FOG LAMP SWITCH

(If equipped)
This switch (12) is used to switch on the fog lamp.

(a): Fog lamp goes out
(b): Fog lamp lights up

When working at night, the symbol inside the switch lights up regardless of the selected position of the switch.

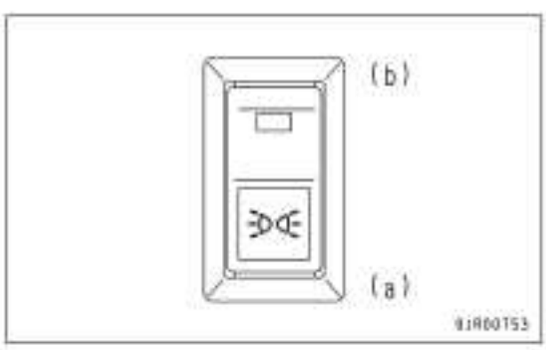


SIDE LAMP SWITCH

(If equipped)
This switch (13) is used to switch on the side lamp.

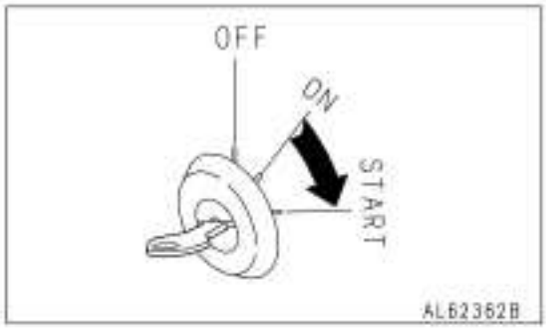
(a): Side lamp goes out
(b): Side lamp lights up

When working at night, the symbol inside the switch lights up regardless of the selected position of the switch.



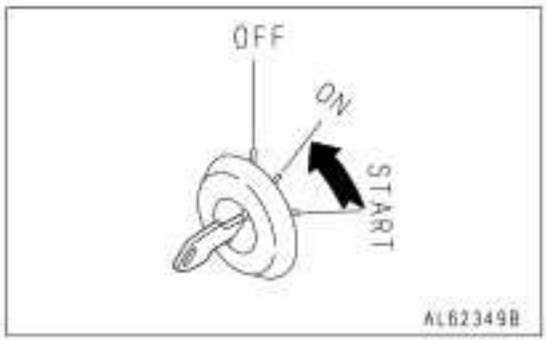
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2. After the preheater pilot lamp goes off, turn the key of the starting switch to the START position, and the engine will start.



REMARK
When starting the engine, the monitor may flash while the starting motor is turning, but if the monitor lamp goes out after the engine is started, there is no problem.

3. After the engine starts, release the key of the starting switch.



REMARK
If the engine fails to start, return the key of the starting switch to the OFF position, and then start the operation again from step 1. If the starting switch is not returned to the OFF position, the automatic preheater does not operate.

4. Just after the engine starts, do not depress the accelerator pedal but run the engine idle at low speed for at least 15 seconds.
   When the engine is started for the first time after the engine oil or engine oil filter is replaced, continue the low idle run for at least 20 seconds to circulate the engine oil in the engine.

REMARK
- Since the turbocharger rotates at very high speed, it is seized if not lubricated well. To prevent this, the turbo protect mechanism works for a certain time just after the engine starts, depending on the engine water temperature.

Engine water temperature	Turbo protect time
above 10°C (50°F)	0 sec
-10°C to 10°C (14°F to 50°F)	0 to 5 sec
below -10°C (14°F)	5 sec

- Just after the engine starts, the injection characteristics are changed for a certain time to keep the low idle speed a little high, depending on the engine water temperature. The engine acceleration characteristics are also changed so that the engine will be accelerated moderately.

Engine water temperature	Injection characteristics change time
above 20°C (68°F)	0 sec
0°C to 20°C (32°F to 68°F)	0 to 6 sec
-20°C to 0°C (-4°F to 32°F)	6 to 12 sec
-30°C to -20°C (-22°F to -4°F)	12 to 15 sec

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SERVICE PROCEDURE

INITIAL 250 HOURS SERVICE (ONLY AFTER THE FIRST 250 HOURS)

Perform the following maintenance only after the first 250 hours.

- Change oil in engine oil pan, replace engine oil filter cartridge
- Replace fuel prefilter cartridge
- Replace fuel main filter cartridge
- Replace transmission filter element (valve side, brake cooling side)
- Change oil in transmission case
- Change oil in brake oil tank, replace brake oil filter element
- Change oil in final drive case
- Change oil in differential case
- Replace hydraulic filter element
- Change oil in hydraulic tank

For details of the method of replacing or maintaining, see EVERY 500 HOURS, EVERY 1000 HOURS, EVERY 2000 HOURS SERVICE and EVERY 4000 HOURS SERVICE.

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