TEN00694-03

Operation & Maintenance Manual

DUMP TRUCK **HD785-7**

SERIAL NUMBERS 30822 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.

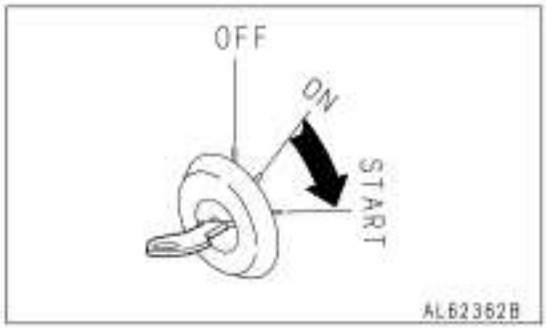
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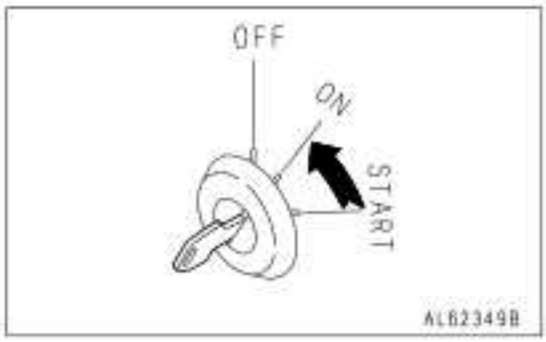
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2. After the preheater pilot lamp goes off, turn the key of the starting switch to START position, and the engine will start.



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 OFF position, and then start the operation again from step 1. If the starting switch is not returned to 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 coolant temperature.

Engine coolant temperature	Turbo protect time
Above 10°C (50°F)	0 sec
-10°C to 10°C (14°F to 50°F)	0 to 25 sec
Below -10°C (14°F)	25 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 coolant temperature. The engine acceleration characteristics are also changed so that the engine will be accelerated moderately.

Engine coolant 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.

- Replace transmission oil filter element
- Change oil in transmission, brake cooling oil tank, wash strainer
- Replace transmission, brake cooling oil filter element
- Replace steering, hoist oil tank filter element
- Change oil in final drive case
- Change oil in differential case
- Change oil in steering, hoist oil 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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CHECK BRAKING CAPACITY OF RETARDER BRAKE

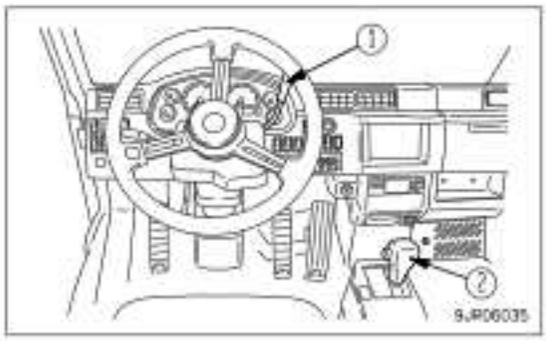
⚠ WARNING

When checking the braking capacity of the retarder brake, there is danger that the machine may suddenly move and be damaged or cause serious personal injury. Always do the following.

- **Select a wide, flat area with sufficient distance to make it possible to stop the machine if it suddenly moves.**
- **If the machine suddenly moves when the braking capacity of the retarder brake is being checked, reduce the engine speed immediately, move the gear shift lever to the N position, and depress the brake pedal to stop the machine.**
- **If inspection is carried out when the dump body pilot lamp is lighted up and the shift indicator is at F1, there is danger of damage to the internal parts of the transmission.**
  When carrying out inspection, seat the dump body securely and check that the body pilot lamp has gone out. In addition, set the gear shift lever to the "D" position and check that the shift indicator shows F2.

Check the braking capacity of the retarder brake as follows.

1. Stop the machine on flat ground and pull retarder control lever (1) fully.
2. Set shift lever (2) to D position, gradually raise the engine speed. If the machine does not move even when the engine speed reaches 1200 rpm, it is normal.
3. Lower the engine speed, set gear shift lever at N position. If any problem is found, ask your Komatsu distributor for repair.



NOTICE

If the dump body is not seated and the parking brake is at "TRAVEL", the speed range is set to F1, even when the gear shift lever is at "D" position.

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