TEN00647-04

Operation & Maintenance Manual

HYDRAULIC
EXCAVATOR

PC88MR-10

SERIAL NUMBERS 7001 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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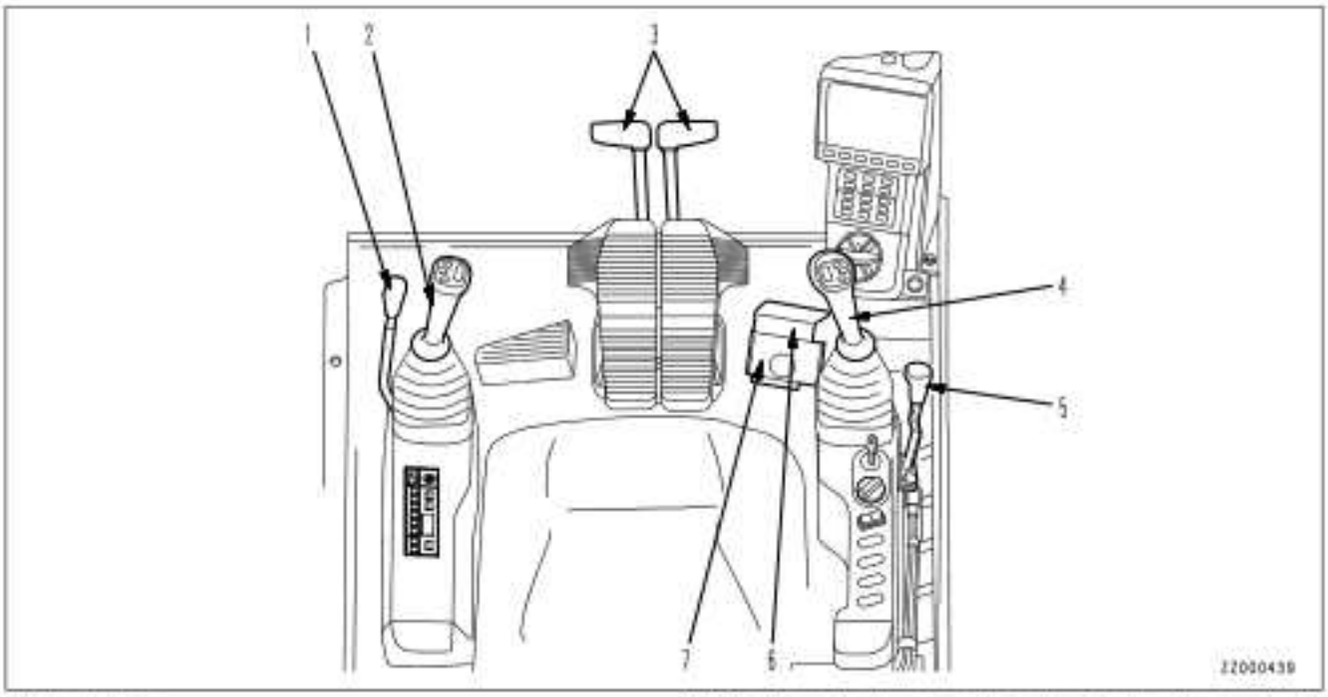
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CONTROL LEVERS AND PEDALS



(1) Lock lever

(2) L.H. work equipment control lever (with auto-deceleration system)

(3) Travel lever (with pedal and auto-deceleration system)

(4) R.H. work equipment control lever (with auto-deceleration system)

(5) Blade control lever (with auto-deceleration system)

(6) Swing lock cover

(7) Boom swing control pedal (with auto-deceleration system)

LOCK LEVER

⚠ WARNING

- **When leaving the operator's seat, set the lock lever securely to LOCK position. If the lock lever is not at LOCK position and the control levers or control switches are touched by mistake, it may lead to serious personal injury or death.**
- **Always check that the lock lever is in LOCK position.**
- **When pulling the lock lever up, or when pushing the lock lever down, be careful not to touch the work equipment control lever.**
- **Before setting the lock lever to FREE position, make sure that all levers and pedals are set to NEUTRAL position. If any of them is out of NEUTRAL position, the work equipment or machine may move suddenly and cause a serious personal injury or death.**

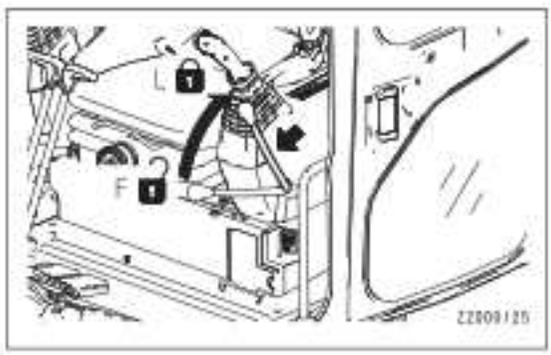
The lock lever is a device to lock the work equipment, swing, travel, and attachment control levers.

(L) LOCK position:

Even if a control lever or an attachment control switch is operated, machine does not move.

(F) FREE position:

The operator can operate the machine by operating the control levers and attachment control switches.



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Electrolyte temperature Charging rate (%)	20 °C {68 °F}	0 °C {32 °F}	-10 °C {14 °F}	-20 °C {-4 °F}
100	1.28	1.29	1.30	1.31
90	1.26	1.27	1.28	1.29
80	1.24	1.25	1.26	1.27
75	1.23	1.24	1.25	1.26

- As the battery capacity drastically drops in low temperatures, cover or remove the battery from the machine, store the battery in a warm place, and install it again the next morning.
- If the electrolyte level is low, add distilled water in the morning before beginning work. Do not add water after the day's work to prevent diluted electrolyte in the battery from freezing during the night.

PRECAUTIONS AFTER DAILY WORK COMPLETION

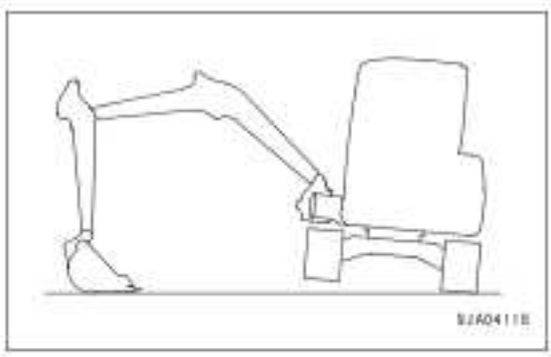
⚠ WARNING

Performing idling of the tracks is dangerous, stay well away from the tracks.

To prevent mud, water, or the undercarriage from freezing and making it impossible for the machine to move on the following morning, observe the following precautions.

- Remove all the mud and water from the machine body. In particular, wipe the hydraulic cylinder rods clean to prevent damage to the seal caused by mud, dirt, or drops of water on the rod from getting inside the seal.
- Place the machine on a firm, dry ground.
  If this is impossible, park the machine on boards.
  The boards prevent the tracks from freezing to the ground, and allow the machine to move the next morning.
- Open the drain valve and drain any water collected in the fuel system to prevent it from freezing.
- Fill up the fuel tank. This minimizes moisture condensation in the tank when the temperature drops.
- After operation in water or mud, remove water from undercarriage according to the procedure to extend undercarriage service life.

1. Run the engine at low idle and swing the upper structure 90 ° to bring the work equipment to the side of the track.
2. Set the machine in the posture shown in the figure.
   1) Operate the work equipment control levers, and lower the bucket bottom to the ground.
   2) Operate the work equipment control levers slowly, and push the ground with the bucket bottom to raise the track slightly.
3. Operate the travel lever and perform idle rotation of the track.
4. Repeat performing steps 1 to 3 for both of the right and left.



AFTER COLD WEATHER SEASON

When the season changes and the weather becomes warmer, do as follows.

Replace the fuel and oil for all equipment with the ones of the specified viscosity. For details, see "METHOD FOR USING FUEL, COOLANT AND LUBRICANTS ACCORDING TO AMBIENT TEMPERATURE".

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EVERY 100 HOURS MAINTENANCE

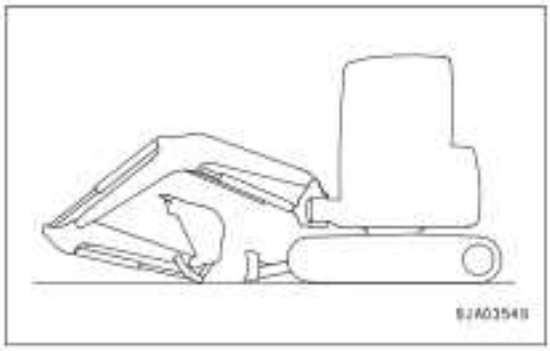
METHOD FOR LUBRICATING WORK EQUIPMENT

NOTICE

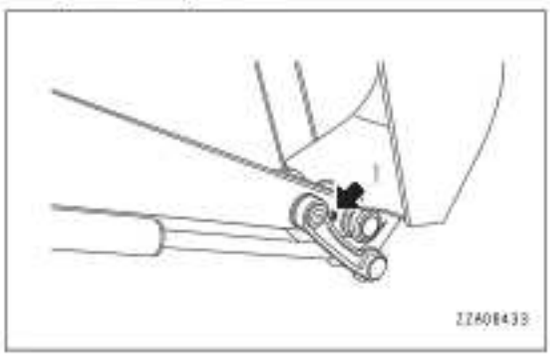
If any unusual noise is generated from any greasing point, perform greasing regardless of the greasing interval.
Perform greasing every 10 hours for the first 50 hours operation on a new machine.
After the machine is subjected to digging work in the water, be sure to grease the wet pins.

Prepare a grease pump.

1. Set the machine to the greasing posture shown on the figure, lower the work equipment to the ground, and stop the engine.



2. By using a grease pump, pump in grease through the grease fittings shown by arrows.
   (1) Arm and Bucket connection pin (1 place)
3. After greasing, wipe off any old grease that is pushed out.



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