SEAM002403

Operation & Maintenance Manual

PC200,200LC-6
PC210,210LC-6 MIGHTY
PC220,220LC-6
PC230,230LC-6 MIGHTY

HYDRAULIC EXCAVATOR

SERIAL NUMBERS PC200,200LC-80001
PC210,210LC-30001 and up
PC220,220LC-50001
PC230,230LC-10001

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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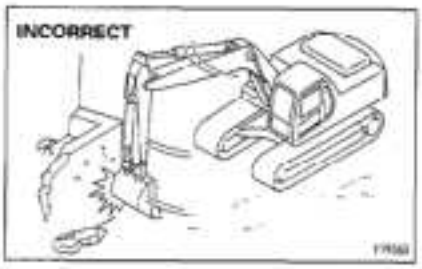
12.10 PROHIBITIONS FOR OPERATION

⚠ WARNING

- **If it is necessary to operate the work equipment control lever when the machine is traveling, stop the machine before operating the work equipment control lever.**
- **If the lever is moved inside the deceleration range, engine speed will suddenly rise. Operate the levers carefully.**
- **Never operate the machine on a rock bed (hard or soft rock).**

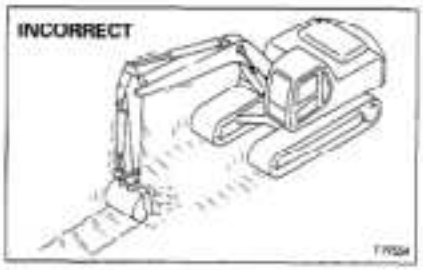
Prohibited operations using swing force

Do not use the swing force to compact soil or break earth mounds or walls.
When swinging, do not dig the bucket teeth into the soil.
These operations will damage the work equipment.



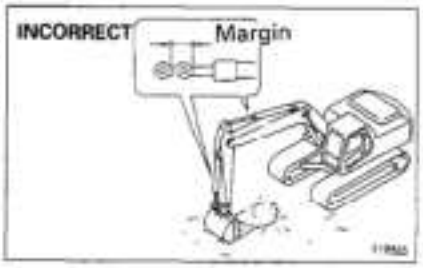
Prohibited operations using travel force

Do not leave the bucket dug into the ground and use the travel force to excavate. This will bring excessive force to bear on the rear of the machine.



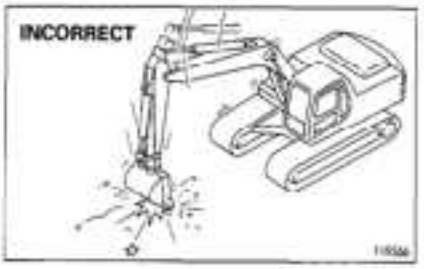
Precautions when operating hydraulic cylinders to end of stroke

If the cylinder is operated to the end of its stroke during operations, force will be brought to bear on the stopper inside the cylinder, and this will reduce the life of the machine. To prevent this, always leave a small safety margin when operating the cylinders.



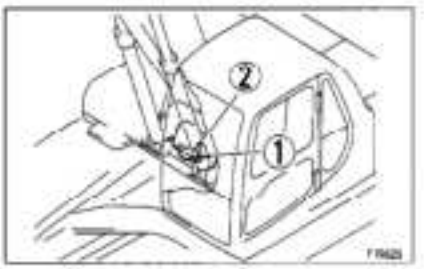
Prohibited operations using dropping force of bucket

Do not use the dropping force of the bucket as a pickaxe, breaker, or pile driver. This will bring excessive force to bear on the rear of the machine, and will not only damage the machine, but is also dangerous.



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24.6.2 CHECK SWING PINION GREASE LEVEL, ADD GREASE



Prepare a scale.

1. Remove bolts ① (2 bolts) on the top of the revolving frame and remove cover ②.

2. Insert a scale into the grease and check that the height of the grease in the portion where the pinion passes is at least 28 mm (1.1 in). Add more grease if necessary.

3. Check if the grease is milky white. If it is milky white, it is necessary to change the grease. Please contact your Komatsu distributor.

The total amount of grease is 21 ℓ (18.9 kg) (5.5 US gal, 4.6 UK gal[41.7 lb]).

4. Install cover ② with bolts ①.

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WHEN USING GENERAL ATTACHMENT SUCH AS CRUSHER

When the lock pin is set to the free position and the pedal is depressed at the front or rear portions, the attachment is actuated.



Precautions when using

- Check that the stop valve is at the FREE position.
- Confirm that the selector valve is set to the position for general attachments such as the crusher.

For details of the oil path, see "30.2 HYDRAULIC CIRCUIT".

- For other precautions when using the attachment, see the instruction manual provided by the attachment manufacturer.

30.5 LONG-TERM STORAGE

If the equipment is not to be used for a long period, do as follows.

- Set the stop valve to the LOCK position.
- Install the blind plugs and O-rings to the valves.
- Set the selector valve to the "when not use" position.
- Lock the lock pin to the lock position.

If the pedal is operated when there is no breaker or general attachment installed, it will cause overheating and other problems.

30.6 SPECIFICATIONS

Hydraulic specifications

- Max. flow when flow is joined:
  191 x 2 liter/min (50 x 2 US gal/min, 42 x 2 UK gal/min)
- Safety valve relief set pressure of service valve:
  27500 kPa (280 kg/cm², 3980 psi)
- Safety valve cracking pressure of service valve:
  24500 kPa (250 kg/cm², 3550 psi)
- Low pressure safety valve relief set pressure:
  20500 kPa (210 kg/cm², 2980 psi)
- Low pressure safety valve cracking pressure:
  15200 kPa (155 kg/cm², 2200 psi)

Other than these specifications, low pressure safety valve relief set pressure of 24500 kPa (250 kg/cm², 3550 psi) and low pressure safety valve cracking pressure of 20100 kPa (205 kg/cm², 2910 psi) are provided. Consult your Komatsu distributor.

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