TEN00507-01

Operation & Maintenance Manual

HYDRAULIC EXCAVATOR

PC27MR-3
PC35MR-3

SERIAL NUMBERS PC27MR-21001 and up
PC35MR-18001

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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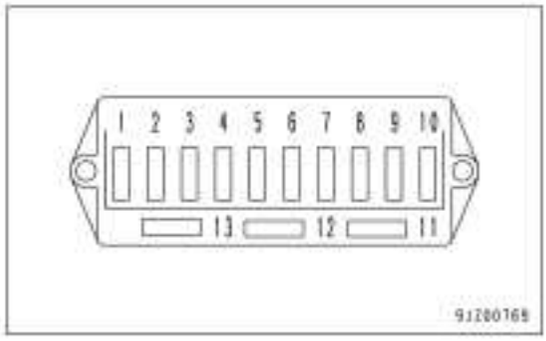
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Fuse Capacities and Circuit Names

• Fuse box (1)

No.	Fuse capacity		Name of circuit
	Canopy specification	Cab specification	
1	10A	30A	Working lamp
2	10A		Horn, fuel pump
3	10A		Monitor panel, buzzer, speed boost solenoid
4	10A		OPT power supply (1)
5	10A	20A	Heater, travel alarm buzzer, air conditioner (Cab specification)
6	10A		External power supply
7	15A		Engine stop solenoid (Canopy specification) OPT power supply (2) (Cab specification)
8	-	20A	Room lamp, radio, windshield wiper, cigarette lighter
9	30A		OPT power supply (2) (Canopy specification) Engine stop solenoid (Cab specification)
10	10A	10A	Battery, PPC solenoid
11	30A		Spare
12	15A	20A	Spare
13	10A		Spare

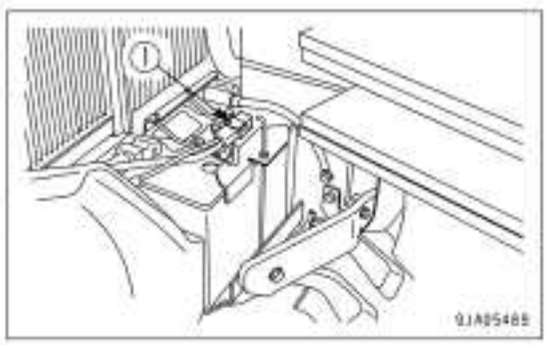


BLOCK FUSE

If the starting motor does not turn even when the starting switch is turned to the ON position, block fuse (1) is probably blown, so open the cover at the right side of the machine and check or replace the fuse.

This is at the top surface of the battery.

For details of the method of opening and closing the cover on the right side of the machine, see "COOLING COVER (PAGE 3-27)".

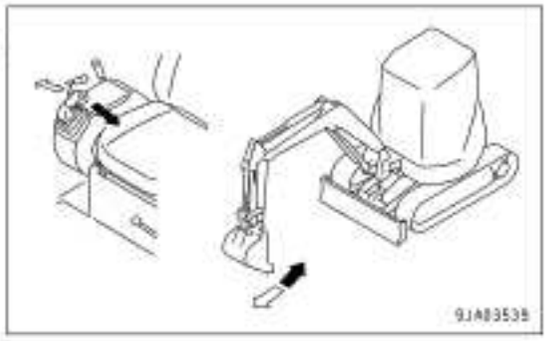


REMARK

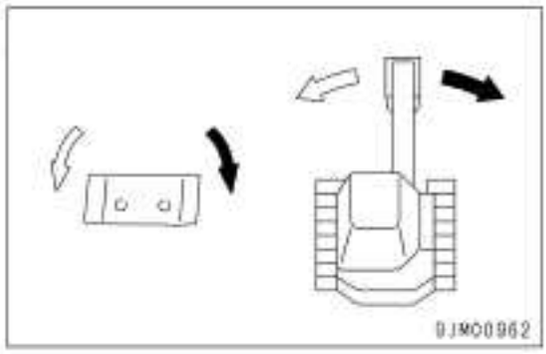
A block fuse is a large fuse wire installed to the circuit where a large-capacity current is flowing. It acts in the same way as a normal fuse to protect the electrical equipment and wiring from burning out under abnormal current.

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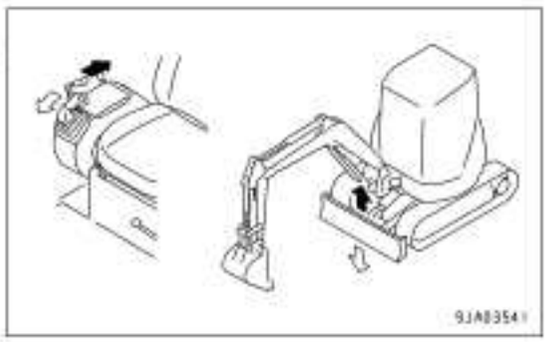
- Bucket control
  Move the right work equipment control lever to the left or right to operate the bucket.



- Boom swing operation
  The boom swing operation can be carried out with the boom swing control pedal.



- Blade control
  Move the lever on the right side of the operator's seat to the front or rear to operate the blade.



REMARK
The control circuit on this machine is equipped with an accumulator. Even if the engine is stopped, if the starting switch key is turned to the ON position within a short time after stopping the engine, and the lock lever is set to the FREE position, it is possible to use the lever operation to lower the work equipment to the ground.
This procedure can also be used for releasing the remaining pressure in the hydraulic cylinder circuits or for lowering the boom after loading the machine onto a trailer.

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GREASE

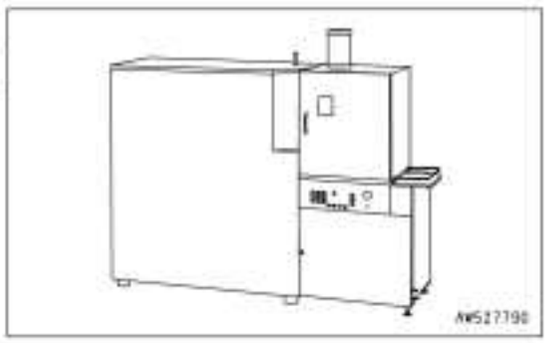
- Grease is used to prevent seizure and noises at the joints.
- This construction equipment is used under heavy-duty conditions. Always use the recommended grease and follow the change intervals and recommended ambient temperatures given in this Operation and Maintenance Manual.
- Grease fittings not included in the maintenance section are grease fittings for overhaul, so they do not need grease.
  If any part becomes stiff after being used for long time, add grease.
- Always wipe off all of the old grease that is pushed out when greasing.
  Be particularly careful to wipe off the old grease in places where sand or dirt sticking in the grease would cause wear of the rotating parts.

CARRYING OUT KOWA (Komatsu Oil Wear Analysis)

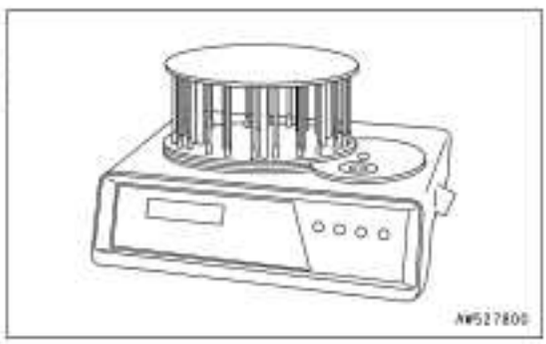
KOWA is a maintenance service that makes it possible to prevent machine failures and downtime. With KOWA, the oil is periodically sampled and analyzed. This enables early detection of wear of the machine drive parts and other problems.
We strongly recommend you to use this service. The oil analysis is carried out at actual cost, so the cost is low, and the results of the analysis are reported together with recommendations which will reduce repair costs and machine downtime.

KOWA ANALYSIS ITEMS

- Measurement of density of metal wear particles
  This uses an ICP (Inductively Coupled Plasma) analyzer to measure the density of iron, copper, and other metal wear particles in the oil.



- Measurement of quantity of particles
  This uses a PQI (Particle Quantifier Index) measurer to measure the quantity of iron particles of 5μm or more, enabling early detection of failures.



- Others
  Measurements are made of items such as the ratio of water in the oil, density of the COOLANT, ratio of fuel in the oil, and dynamic viscosity, enabling a highly precise diagnosis of the machine's health.

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