TEN00523-03

Operation & Maintenance Manual

HYDRAULIC
EXCAVATOR

PC290LC-10

SERIAL NUMBERS 15001 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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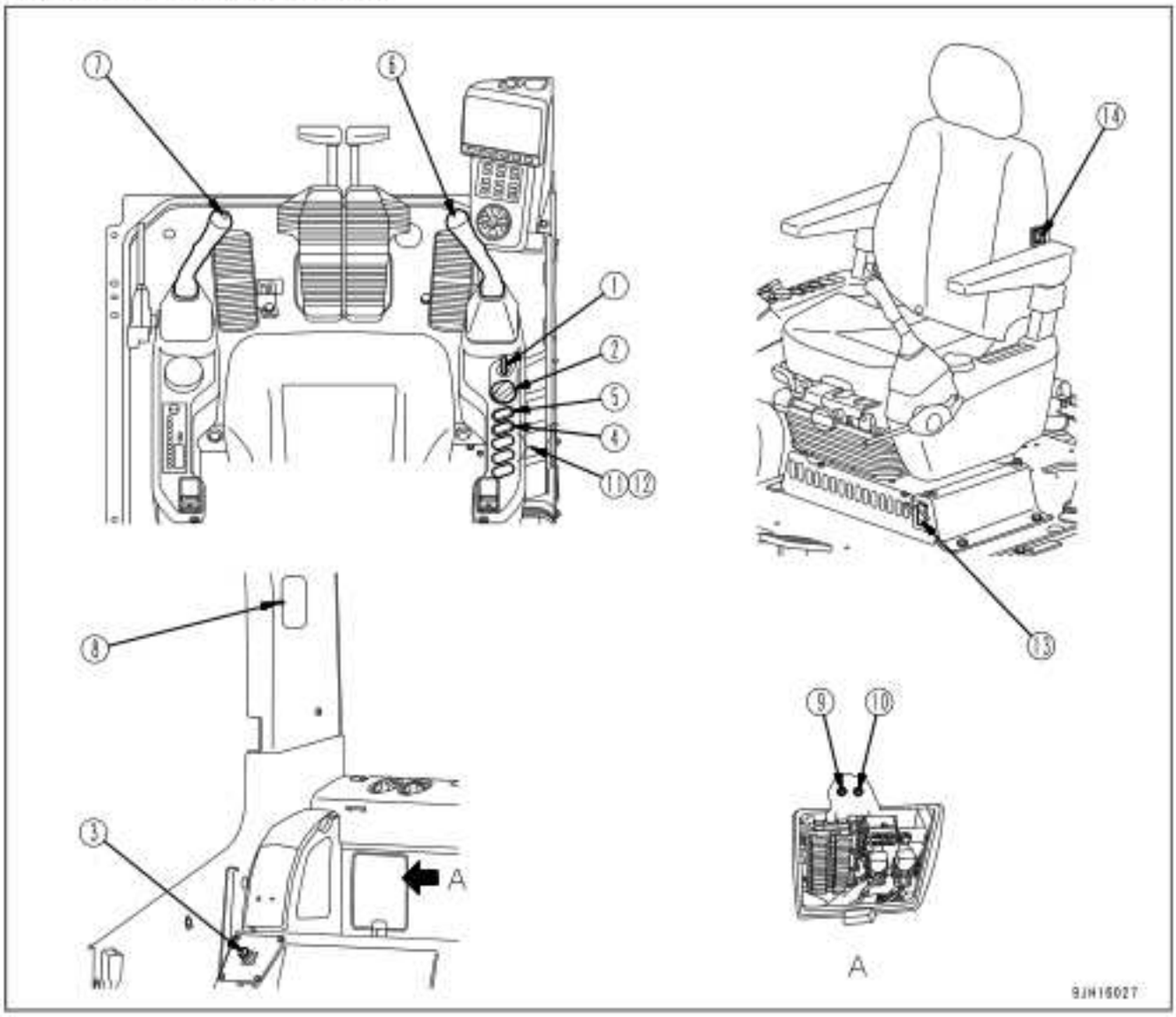
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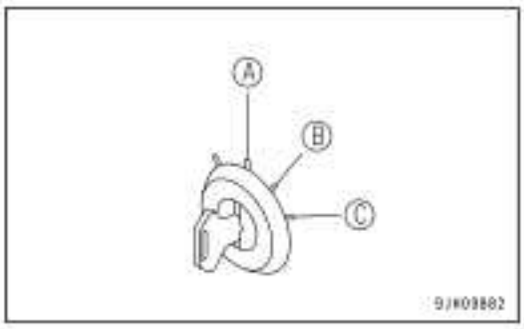
SWITCHES (PC220-Q13C-04D-K-00-A)



(1) Starting switch
(2) Fuel control dial
(3) Cigarette lighter
(4) Swing lock switch
(5) Lamp switch
(6) Horn switch
(7) One-touch power max. switch
(8) Room lamp switch
(9) Emergency pump drive switch
(10) Swing brake cancel switch
(11) Revolving warning lamp switch (if equipped)
(12) Ceiling window wiper switch (if equipped)
(13) Engine shutdown secondary switch
(14) Seat heater switch

STARTING SWITCH (ALL-AKB0-043-K-00-A)

Starting switch (1) is used to start or stop the engine.
(A): OFF position
The key can be inserted or withdrawn. Switches for the electrical system (except room lamp), are all turned off and the engine is stopped.
(B): ON position
Electric current flows through the charging and lamp circuits. Keep starting switch key in ON position while the engine is running.



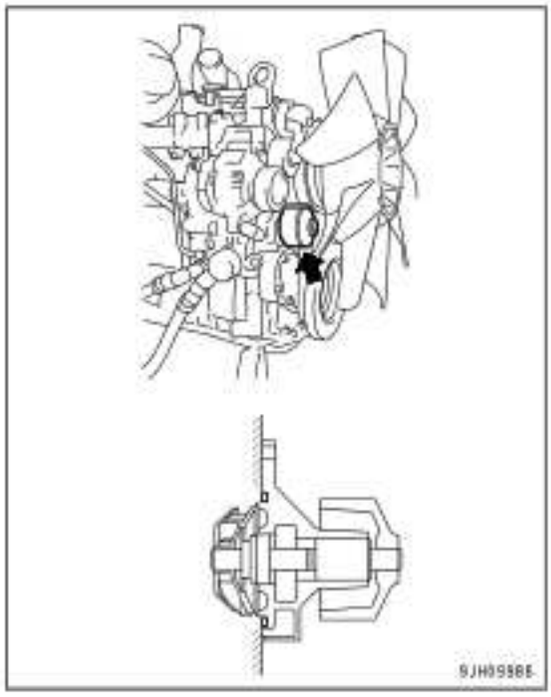
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EVERY 4000 HOURS MAINTENANCE (ALL-33F0-015-A-00-A)

Maintenance for every 100, 250, 500, 1000 and 2000 hours should be carried out at the same time.

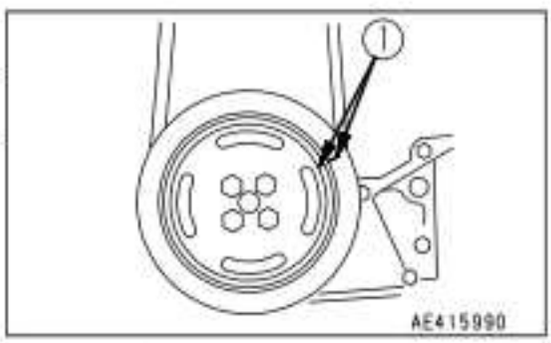
CHECK WATER PUMP (ALL-BA10-360-K-00-A)

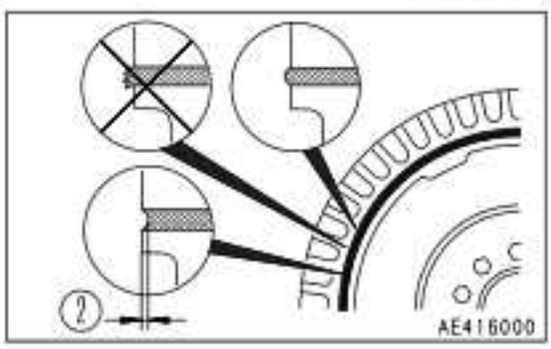
Check for leakage of water and oil around the water pump. If any problem is found, ask your Komatsu distributor to carry out disassembly, repair, or replacement.



CHECK VIBRATION DAMPER (ALL-A5E0-360-K-00-A)

For the check and replacement of the vibration damper, special tools are required. Ask Komatsu Ltd. or your Komatsu distributor for the replacement. It has to be replaced with a new one in the following cases.
Mating mark (1) is stamped both on the damper hub and on the inertia member of the vibration damper to show any misalignment between the two.
If this misalignment exceeds 1.6 mm (0.06 in), or if there is any dent (2) found on the damper metal surface deeper than 3.2 mm (0.1 in), then the vibration damper must be replaced.





CHECK STARTING MOTOR (ALL-AK70-360-K-00-A)

Ask your Komatsu distributor to have the starting motor checked.
If the engine is started frequently, have this inspection carried out every 1000 hours.

REPLACE ACCUMULATOR (FOR CONTROL CIRCUIT) (PC-PL40-923-K-00-A)

Replace the accumulator every 2 years or every 4000 hours, whichever comes sooner.

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HYDRAULIC CIRCUIT (PC220-RA18-043-K-00-A)

NOTICE

- **The return circuit when a breaker is installed must return directly to the return filter, so do not use it in the mode other than B mode.**
- **The standard set pressure of the safety valve of the service valve is 24.5 MPa {250 kg/cm², 3,560 PSI} if you select B mode set at the shipment from the plant and it becomes 29.9 MPa {305 kg/cm², 4,340 PSI} when ATT/P or ATT/E mode is selected. Depending on the attachment, it may be necessary to adjust the pressure. Ask your Komatsu distributor for the adjustment.**

Switching the hydraulic circuit

- Depending on the type of attachment, set the working mode on the monitor as follows.
- The hydraulic circuit and the set pressure of the safety valve in the service valve switch according to the working mode selected.

Attachment	Working mode	Hydraulic circuit	Set pressure of safety valve of service valve
Breaker or other attachment with one-way circuit	B mode	Return circuit automatically becomes the circuit that does not pass through control valve	When shipped from factory: 24.5 MPa {250 kg/cm², 3,560 PSI}
Crusher or other attachment with two-way circuit	ATT/P or ATT/E mode	Return circuit automatically becomes the circuit that does not pass through control valve	When shipped from factory: 29.9 MPa {305 kg/cm², 4,340 PSI}

Depending on the attachment, it is necessary to change the oil flow in the service circuit.
For details of setting the oil flow, see "ATTACHMENT OPERATIONS (PAGE 6-19) ".

Switching of breaker and general attachment

- When optional attachment is installed and working mode is set to B mode
  (1) Breaker circuit (one-way circuit) is formed.
  (2) Hydraulic oil flowing through breaker circuit passes through additional filter for breaker.
  (3) Relief valve is set to low pressure.
  When shipped from factory: 24.5 MPa (250 kg/cm², 3,560 PSI)
  (4) Maximum oil flow can be adjusted in user mode.
- If ATT/P or ATT/E mode is turned on when the optional attachment is installed
  (1) Crusher circuit (2-way circuit) is formed.
  (2) Hydraulic oil flowing through crusher circuit does not pass through additional filter for breaker.
  (3) Relief valve is set to high pressure.
  When shipped from factory: 29.9 MPa (305 kg/cm², 4,340 PSI)
  (4) Maximum oil flow can be adjusted in user mode.

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