TEN00434-03

Operation & Maintenance Manual

HYDRAULIC EXCAVATOR

PC228US -8
PC228USLC-8

SERIAL NUMBERS 50082 and up

ecot3

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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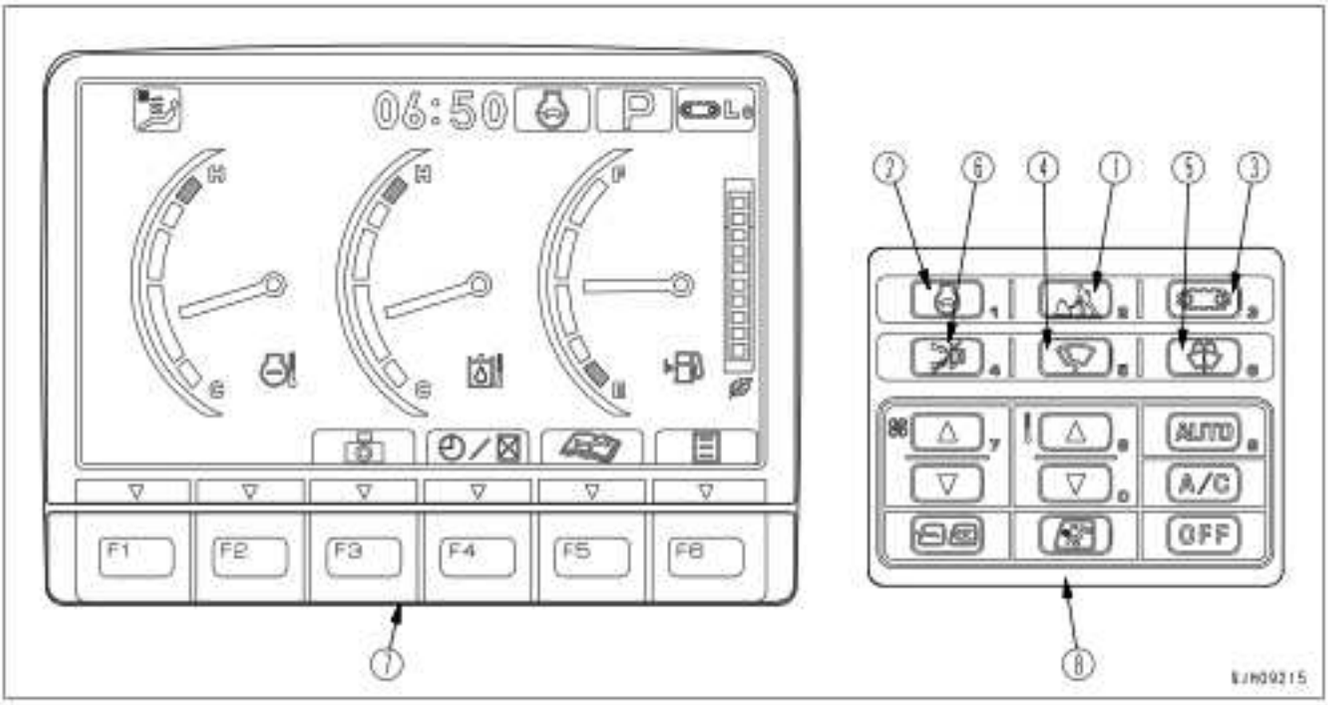
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Monitor Switches Portion

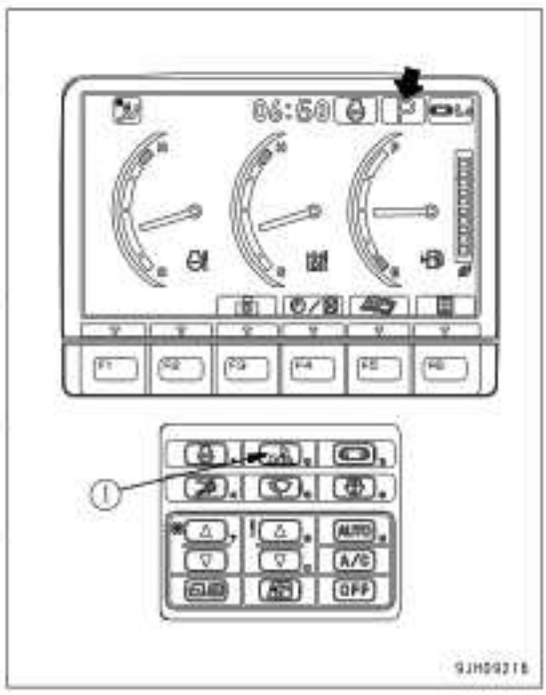


(1) Working mode selector switch
(2) Auto-deceleration switch
(3) Travel speed selector switch
(4) Wiper switch
(5) Window washer switch
(6) Buzzer cancel switch
(7) Function switches
(8) Air conditioner switch

Working Mode Selector Switch

Use this switch (1) to set the movement or power of the work equipment.
The operation becomes easier if the mode is selected to match the content of the operation.
P mode: For heavy-load operations
E mode: For operation with emphasis on fuel consumption
L mode: For fine control operations
B mode: For breaker operations
ATT mode: For double-acting circuit attachment, such as crusher (attachment-ready machines)

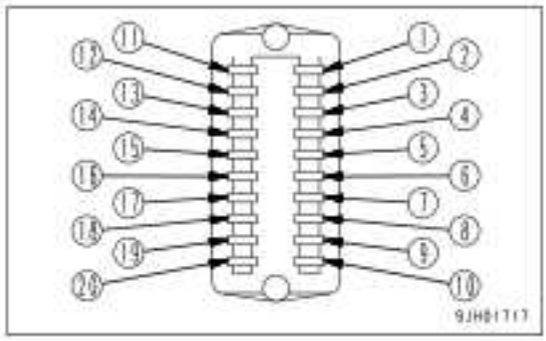
- When the monitor first appears, it is automatically set to the mode in use when it was started the previous time.
- Press switch (1) to display the working mode selection screen. For each set mode, the pilot monitor at the top right of the monitor display shows P, E, L, B, ATT.



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Fuse Capacities and Circuit Names

No.	Fuse capacity	Name of circuit
(1)	10 A	Relay for lamp, Emergency actuation circuit
(2)	30 A	Solenoid valve
(3)	10 A	PPC lock solenoid
(4)	10 A	Window washer, Cigarette lighter
(5)	10 A	Horn
(6)	10 A	Auto preheater
(7)	10 A	Beacon
(8)	20 A	Lamp
(9)	10 A	Radio, Speaker, Left knob switch
(10)	5 A	Air conditioner
(11)	20 A	Air conditioner unit
(12)	10 A	Spare
(13)	10 A	OPT lamp
(14)	10 A	OPT power source (1)
(15)	10 A	OPT power source (2), Travel alarm, 12 V power port
(16)	10 A	Radio backup, Room lamp
(17)	20 A	Starter switch, Monitor, Controller
(18)	5 A	Air conditioner
(19)	30 A	Engine controller
(20)	5 A	Engine controller

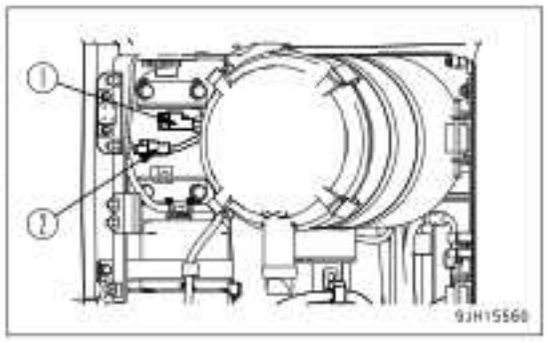


FUSIBLE LINK

If the engine starting motor does not work when the engine starting switch key is turned to START position, fusible links (1) and (2) are suspected of disconnection. In that case, open up the door at the machine's left rear to check and replace.

(1): For 24 V permanent power supply (30 A)

(2): For 24 V power supply for starting motor at rear of battery relay (65 A)

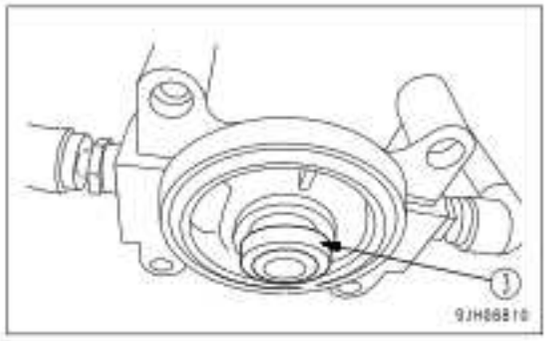


REMARK

A fusible link refers to the large-sized fuse wiring installed in the high current flow portion of the circuit to protect electrical components and wiring from burning, in the same way as an ordinary fuse.

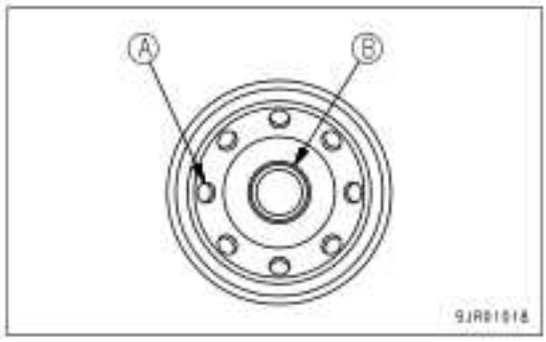
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- Replace inner seal (3) with a new part.



NOTICE

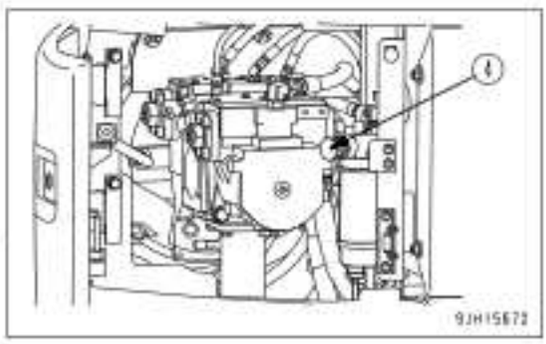
- **Do not fill the new filter cartridge with fuel.**
- **Remove cap (B) and install the filter cartridge.**



6. When installing, tighten until the packing surface contacts the seal surface of the filter head, then tighten it 3/4 of a turn.
   If the filter cartridge is tightened too far, the packing will be damaged and this will lead to leakage of fuel. If the filter cartridge is too loose, fuel will also leak from the packing, so always tighten the correct amount.
7. Turn the valve (1) at the bottom of the fuel tank to OPEN position (O).
8. After completing the replacement of filter cartridge (2), bleed the air.

Bleed the air as follows:

9. Fill the fuel tank with fuel (to the position where the float is at the highest position).
10. Loosen the knob of feed pump (4), pull it out, then pump it in and out until the movement becomes heavy.



REMARK

- It is not necessary to remove the plug at the top of the fuel prefilter and fuel main filter.
- After the engine runs out of fuel, use the same procedure to operate feed pump (4) and bleed the air.

11. Push in the knob of feed pump (4) and tighten it.
12. After replacing the filter cartridge, start the engine and run it at Low idle (MIN) for 10 minutes.
    Check for leakage of oil from the filter seal surface. If any oil is leaking, check the tightening of the filter cartridge. If there is still oil leakage, repeat steps 1 to 4 to remove the filter cartridge, and if any damage or embedded foreign material in the packing surface is found, replace it with a new cartridge and repeat steps 5 to 12 to install it.

REMARK

Sometimes some air is still left inside water separator after air bleeding, but the engine can be started by operating feed pump (4) until its motion gets hard. The remaining air is naturally bled when the water separator is left as it is for some time after the engine comes to a stop.

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