TEN00307-05

Operation & Maintenance Manual

HYDRAULIC EXCAVATOR

PC78US-8

SERIAL NUMBERS 15001 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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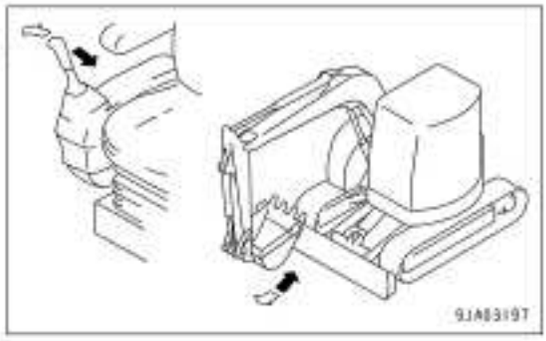
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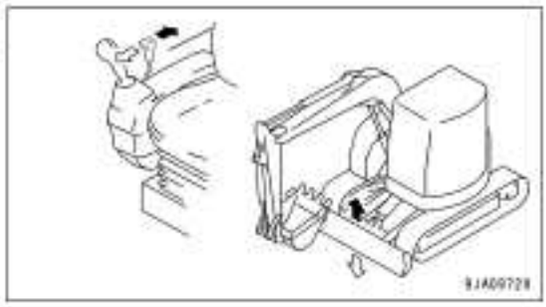
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- Bucket control
  Move the right work equipment control lever to the left or right to operate the bucket.



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



If the work equipment control levers are returned to the neutral position when the machine is stopped, even if the fuel control dial is set to FULL, the auto-deceleration mechanism will act to reduce the engine speed to a mid-range speed.

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 15 seconds 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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EVERY 2000 HOURS MAINTENANCE

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

CHECK ALTERNATOR, STARTING MOTOR

The brushes may be worn or the bearing may have run out of grease, contact your Komatsu distributor for inspection and repairs.
If the engine is started frequently, have this inspection carried out every 1000 hours.

CHECK ENGINE VALVE CLEARANCE, ADJUST

Special tools are needed for inspection and maintenance, please contact your Komatsu distributor.

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METHOD FOR INSTALLING EXTRA COUNTERWEIGHT

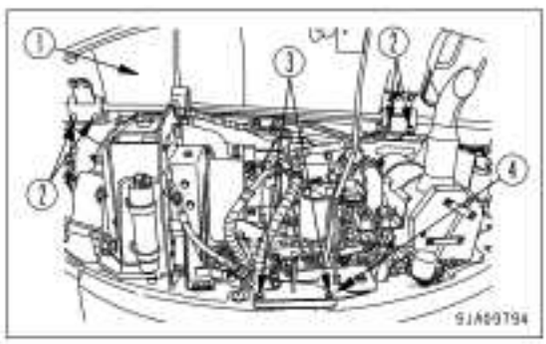
Installing Extra Counterweight

⚠ WARNING

- **For lifting up this machine, use a wire rope with sufficient strength to withstand the machine weight.**
- **Do not attempt to lift up the machine in a posture other than explained below. Otherwise there is the danger that the lifted machine may lose a balance in the air.**
- **Lift up the machine, keeping it level.**

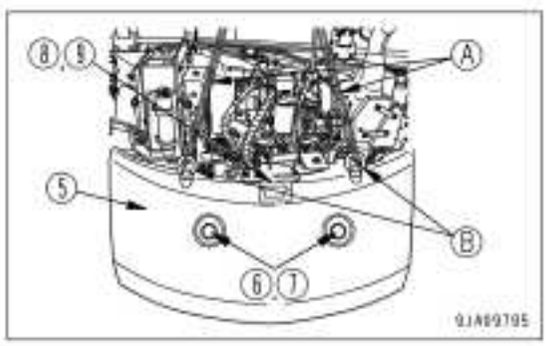
1. Open engine hood (1), loosen 4 bolts (2), then remove engine hood (1).

2. Loosen 2 bolts (3), then remove hood stopper bracket (4).



3. Using a crane, install extra counterweight (5) to the back of the standard counterweight.

REMARK
The optimum length of a wire rope for lifting should be as follows:
(A) Wire rope: Overall length 800 mm (31.5 in)
Diameter 9 mm (0.355 in)
(B) Eyebolt
Weight of extra counterweight: 220 kg (485 lb)



4. Fasten the extra counterweight with mounting bolts and washers (6) (7) and (8) (9).

	(6),(7)	(8),(9)
Bolt size	M24	M12
Q'ty	2	1
Bolt part No.	01010-D2490	01010-81255
Washer part No.	01643-72460	01643-31232
Tightening torque	785 to 980 Nm (80 to 100 kgm , 578.6 to 723.3 lbft)	785 to 980 Nm (80 to 100 kgm , 578.6 to 723.3 lbft)

5. Disconnect the wire rope from the crane.

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