TEN00466-01

Operation & Maintenance Manual

HYDRAULIC EXCAVATOR

PC78US-8

SERIAL NUMBERS 16029 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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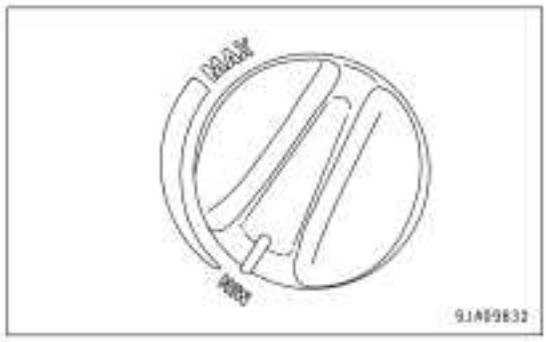
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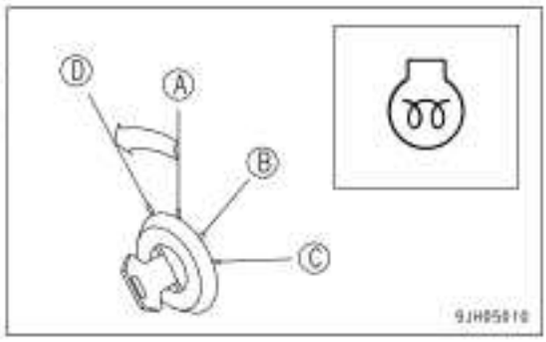
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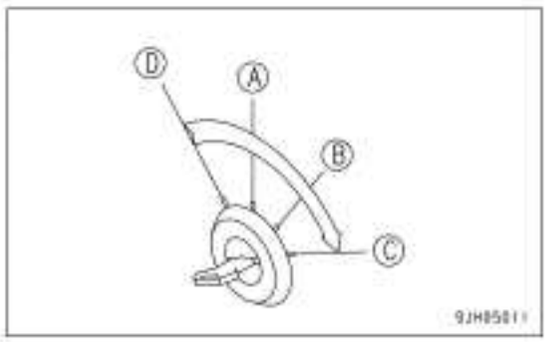
2. Before starting the engine, check that fuel control dial (2) is at the low position.



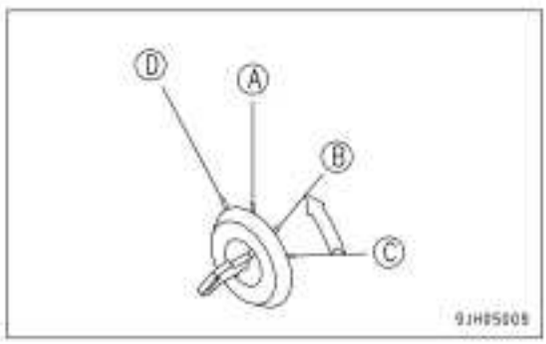
3. Hold the key in starting switch (3) at HEAT position (D) and check that preheating monitor (4) lights up.
After approx. 30 seconds, preheating monitor (4) will flash for 10 seconds to inform the operator that the preheating has been completed.



4. When engine pre-heating monitor (4) goes off, turn the key in stating switch (3) to the START position (C) to start the engine.



5. When the engine starts, release the key in starting switch (3). The key will automatically return to ON position (B).



6. Keep the engine idle for the initial 15 seconds right after it has been started, and do not operate any control lever or the fuel adjustment dial during that time.

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EVERY 5000 HOURS MAINTENANCE

Carry out the periodic maintenance work of every 100, 250, 500 and 1000 hours of operation at the same time.

CHANGE OIL IN HYDRAULIC TANK, CLEAN STRAINER

⚠ WARNING

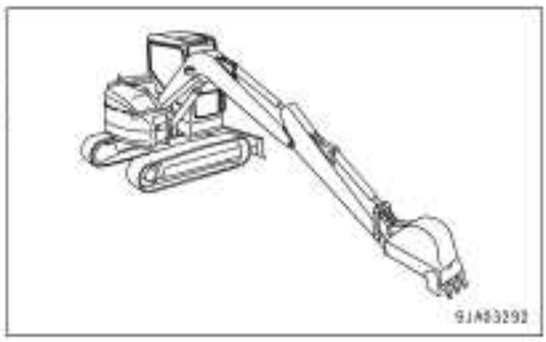
- **The parts and oil are at high temperature immediately after the engine is stopped, and may cause burns. Wait for the temperature to go down before starting the work.**
- **When removing the oil filler cap, turn it slowly to release the internal pressure, then remove it.**

NOTICE

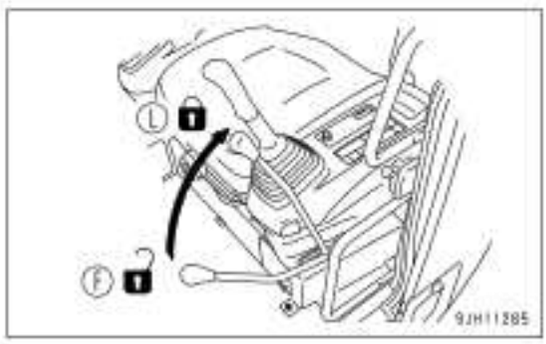
If the machine is equipped with a hydraulic breaker, the hydraulic oil will deteriorate much faster than during normal bucket operations. For details, see "MAINTENANCE INTERVAL FOR HYDRAULIC BREAKER (PAGE 4-17)" when carrying out maintenance.

- Refill capacity: 56 liters (14.8 US gal)
- Prepare a handle (for the socket wrench).

1. Swing so that the drain plug at the bottom of the hydraulic tank is in the middle between the left and right tracks.
2. Pull in the arm and bucket cylinders, swing the boom to the central position, lower the boom, and put the teeth in contact with the ground.
3. Lower the blade.



4. Set the lock lever to the LOCK position (L) and stop the engine.



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METHOD FOR INSTALLING EXTRA COUNTERWEIGHT

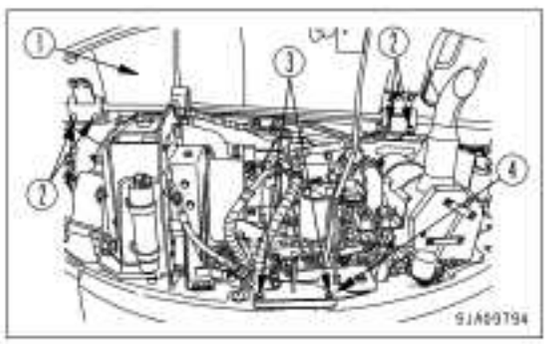
Installing Extra Counterweight

⚠ 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.**

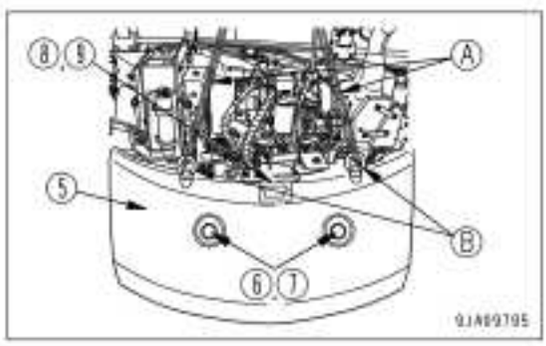
1. Open engine hood (1), loosen 4 bolts (2), then remove engine hood (1).

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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