TEN00378-03

Operation & Maintenance Manual

HYDRAULIC
EXCAVATOR

PC27MR-3
PC35MR-3

SERIAL NUMBERS PC27MR-20501 and up
PC35MR-16501

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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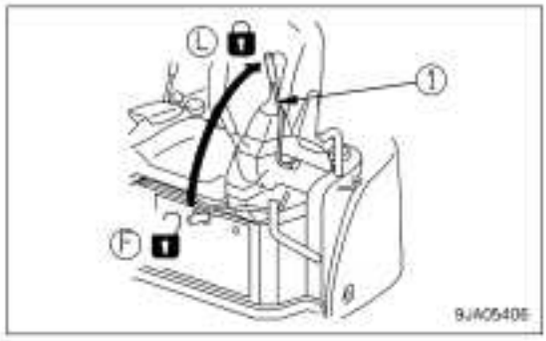
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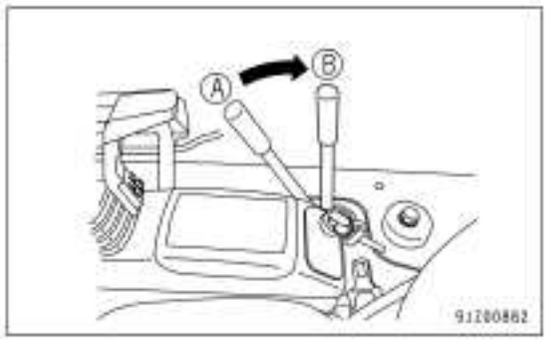
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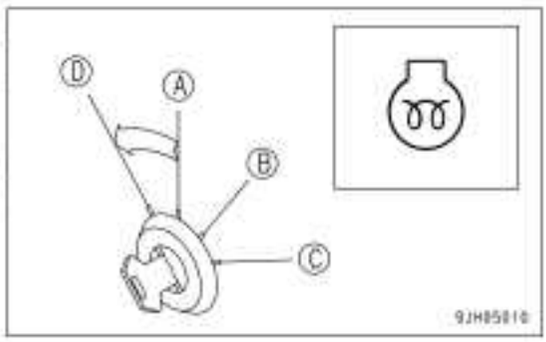
1. Check to make sure that lock lever (1) is at the LOCK position (L). If lock lever (1) is in the FREE position (F), the engine will not start.



2. Pull fuel control lever (2) to position (B) midway between low idling position (A) and the full position.

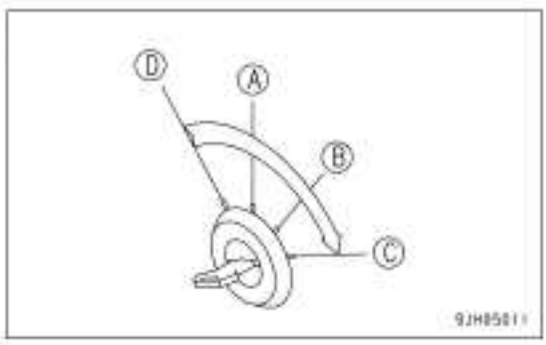


3. Hold the key in starting switch (3) at the HEAT position (D) and check that the buzzer sounds and engine pre-heating monitor (4) lights up, and that engine pre-heating monitor (4) flashes after that.
   After approx. 18 seconds, the buzzer sounds and engine pre-heating monitor (4) goes out to indicate that the pre-heating is completed.



REMARK
The monitor and gauge also light up when the key is at the HEAT position, but this does not indicate any problem.

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.



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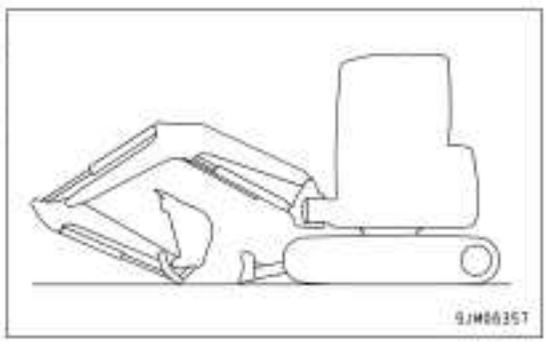
Lubricating Work Equipment

NOTICE

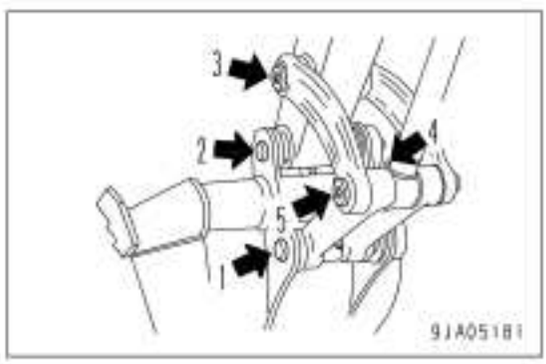
- **When breaking in a new machine, carry out lubrication every 10 hours for the first 100 hours of operation.**
- **If any abnormal sound comes from the greasing point, carry out greasing regardless of the inspection and maintenance interval.**
- **After carrying out digging work in water, always lubricate the pins that were under water.**

- Prepare a grease pump

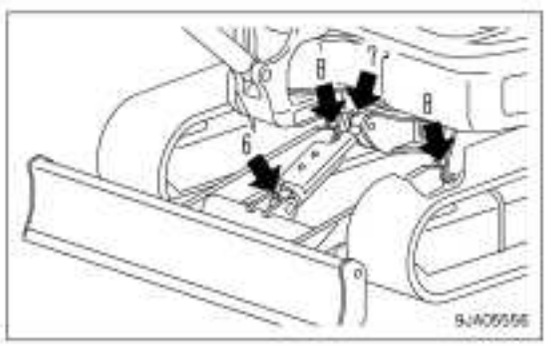
1. Set the machine to the greasing posture shown on the right diagram, lower the work equipment to the ground, then stop the engine.
2. Using a grease pump, pump in grease through the grease fittings shown by arrows.
3. After greasing, wipe off any old grease that was pushed out.



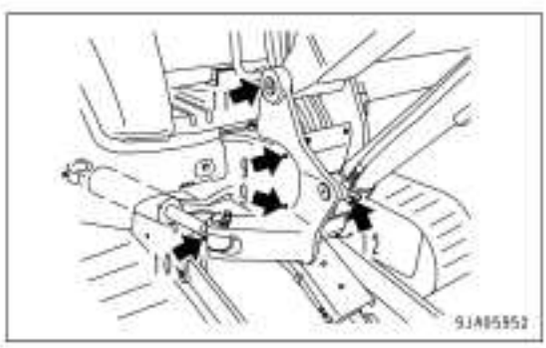
(1) Bucket - Link connecting pins (1 place)
(2) Arm - Bucket connection pin (1 place)
(3) Arm - Link coupling pin (1 place)
(4) Bucket cylinder rod end (1 place)
(5) Link coupling pin (1 place)



(6) Blade cylinder foot pin (1 place)
(7) Blade cylinder rod end (1 place)
(8) Blade foot pin (2 places)



(9) Boom swing bracket pin (2 places)
(10) Boom swing cylinder rod end pin (1 place)
(11) Boom foot pin (1 place)
(12) Boom cylinder foot pin (1 place)



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WINDSHIELD WASHER

(Machine equipped with operator's cab)

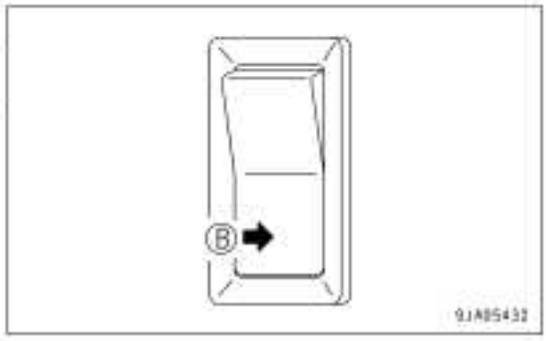
If the windshield washer is installed, operate it according to the following procedure.

WINDSHIELD WASHER OPERATION

- Wiper and window washer

  When the wiper is working and the switch is kept pushed to position (B), washer fluid is sprayed out.

  When the switch is released, it returns, and only the wiper operates.



NOTICE

If the windshield washer is operated continuously for more than 10 seconds or operated with the washer fluid tank empty, the motor may be broken.

CHECK WINDOW WASHER FLUID LEVEL, ADD FLUID

If air is mixed in the windshield washer fluid, check the fluid level of washer fluid tank in the engine compartment. If it is too low, supply the same kind of washer fluid as automobiles use.

At this time, take care that dust does not enter the tank.

Washer Fluid Dilution Ratio

The proportion differs according to the ambient temperature, so dilute the washer fluid with water to the following proportions before adding.

Area,season	Proportions	Freezing temperature
Normal	Washer fluid 1/3: water 2/3	-10°C (14°F)
Winter in cold area	Washer fluid 1/2: water 1/2	-20°C (-4°F)
Winter in extremely cold area	Pure washer fluid	-30°C (-22°F)

There are two types depending on the freezing temperature:

-10°C (14°F) (general use) and -30°C (-22°F) (cold area use), select according to the area and season.

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