UEAM004912

Operation & Maintenance Manual

PC210-8, PC210LC-8
PC210NLC-8
PC230NHD-8
PC240LC-8
PC240NLC-8

HYDRAULIC EXCAVATOR

SERIAL NUMBER	
PC210, PC210LC-8	- K51095 and up
PC210NLC-8	- K51095 and up
PC230NHD-8	- K50114 and up
PC240LC-8	- K50304 and up
PC240NLC-8	- K50304 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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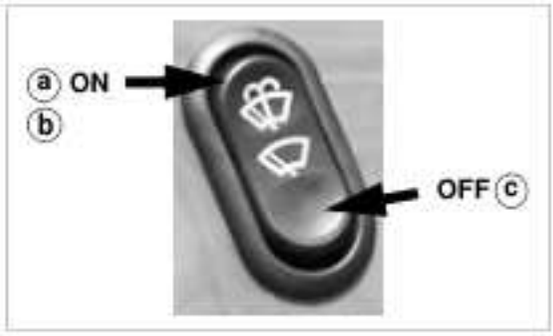
Roof Wiper Switch

This switch (12) is used to turn on the roof wiper and to operate the washer. The switch has 3 positions:

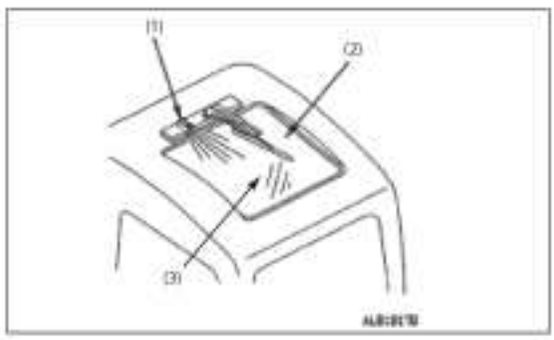
(a) ON: Is with the rear end of the switch down. The wiper is on.

(b) ON: Is with the rear end of the switch pressed and held down. The wash/wipe is on.

(c) OFF: The wiper/washer system is off.



1. Nozzle
2. Ceiling window
3. Ceiling wiper



Lower Wiper Switch

When this switch (13) is pressed, the lower wiper is turned on.

(a) ON: Lower wiper operates.

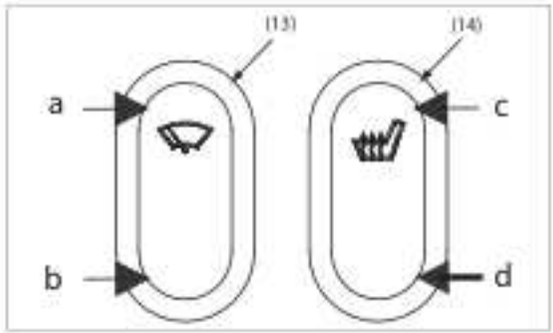
(b) OFF: Lower wiper stops.

Heated Seat

When the switch (14) is pressed, the heater will operate provided the ambient temperature is sufficiently low.

(c) ON: Heater operates. (see Note below)

(d) OFF: Heater stops.



Note: There is a temperature thermostat fitted in the seat cushion, the heater only operates when the temperature is low (approx. 7° C or below).

Quick Coupler Switches

To operate the Quick Coupler circuit switches (15) on the RHS console and (16) on the LH PPC lever must be operated together. Refer to "Hydraulic Quick Coupler see OPERATION (6-6)" for an explanation of these switches operation.

1st Attachment Proportional Control Switch

This switch (17) is a roller proportional control switch used to operate the 1st attachment circuit (e.g. crusher, clamshell open/close). Refer to "MACHINE READY FOR ATTACHMENT (6-9)" for warnings and explanation of operation.

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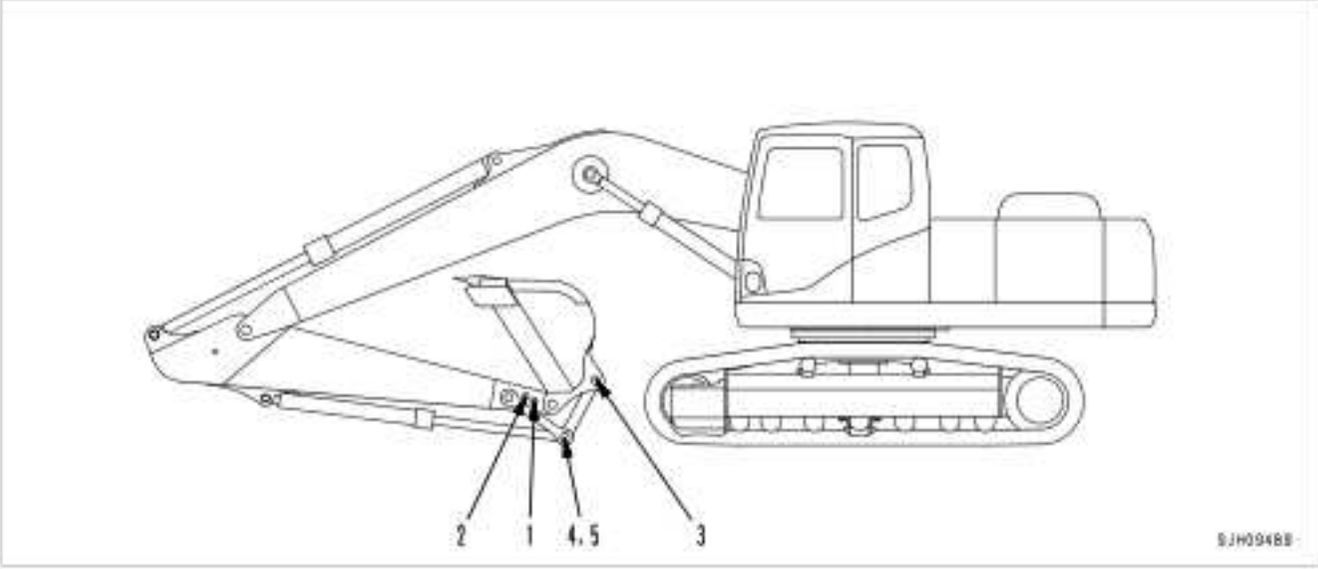
EVERY 100 HOURS MAINTENANCE

LUBRICATING (MANUAL GREASE SYSTEMS)

NOTICE

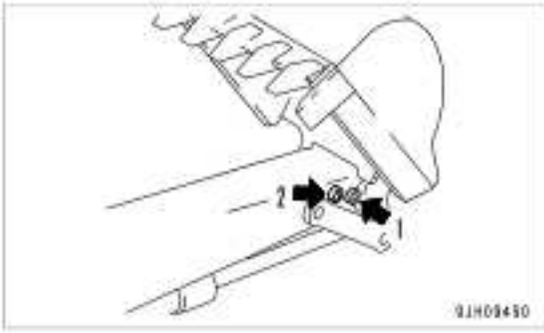
- **If any abnormal noise is generated from any greasing point, carry out greasing regardless of the greasing interval.**
- **Carry out greasing every 10 hours for the first 50 hours on a new machine.**
- **After the machine was subjected to jobs in the water, be sure to grease the wet pins.**

1. Set the work equipment in the greasing posture below, then lower the work equipment to the ground and 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) Arm - Bucket coupling pin (1 place)

(2) Arm - Link coupling pin (1 place)



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EXPLANATION OF LIFTING CAPACITY CHART PC210, PC210LC, PC210NLC, PC230NHD-8 2 PIECE BOOM

LEGEND
A : Reach from swing centre
B : Bucket hook height

OF : Lifting capacity (rating overfront)
OS : Lifting capacity (rating overside)

LEGEND

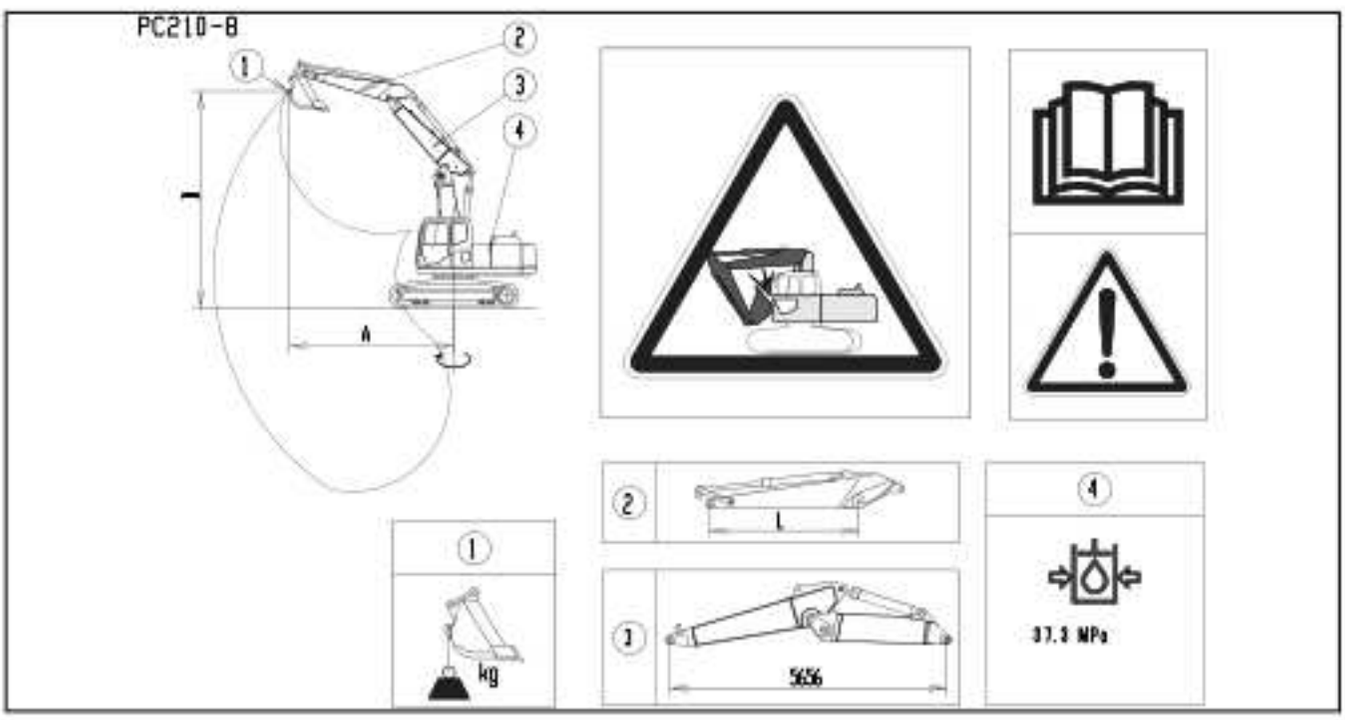
(1) Position of lifting point
(2) Arm length:
(3) Boom length
(4) Hydraulic pressure: 37.2 MPa

WORKING CONDITIONS:

- WITH BUCKET (0.78m^3 ISO).(650 kg)
- IF OBJECT HANDLING IS PERFORMED WITH OTHER TOOL INSTALLED, THE WEIGHT DIFFERENCE OF THE TOOL SHALL BE DEDUCTED FROM THE VALUES OF THIS TABLE.
- WITH FULLY EXTENDED BUCKET CYLINDER.
- ON A COMPACT HORIZONTAL LEVEL GROUND.

PC210-8 with 600mm width shoe
PC210LC-8 with 700mm width shoe
PC210NLC-8 with 500mm width shoe
PC230NHD-8 with 550mm width shoe

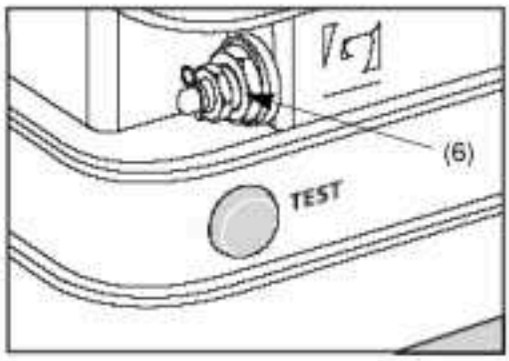
Loads do not exceed 87% of hydraulic capacity or 75% of tipping capacity (* load limited by hydraulic capacity rather than tipping)



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Method of filling grease reservoir

- Remove the dust cap from the filler coupling (6).
- Carefully clean the filler coupling and the filler coupling on the filler hose.
- Fix the filler hose on the filler coupling
- Fill the reservoir up to the maximum level indicated on the reservoir.
- Remove the filler hose and fit the dust cap
- Fix the filler hose on the filler coupling of the filler pump so that the filler hose stays clean.



REMARK
Do not fill the reservoir before you have a low level indication on the in-cab display.

Recommended Komatsu pumps for filling grease reservoir

- For quick and efficient grease reservoir filling, a manual barrel pump with quick connector hose fitting should be used. It will be necessary to install a matching quick connector fitting to the grease reservoir, in place of the grease nipple.
- An alternative method of filling from grease cartridges is also available in the form of a trigger hand pump.
- Note - If a barrel pump or trigger hand pump are not available, then in an emergency, it is possible to re-fill the reservoir through the grease nipple using a manual pump.


Remove nipple and fit male quick connector

Grease reservoir filling equipment available through Komatsu dealer.

20 litre Barrel Pump (grease not supplied)

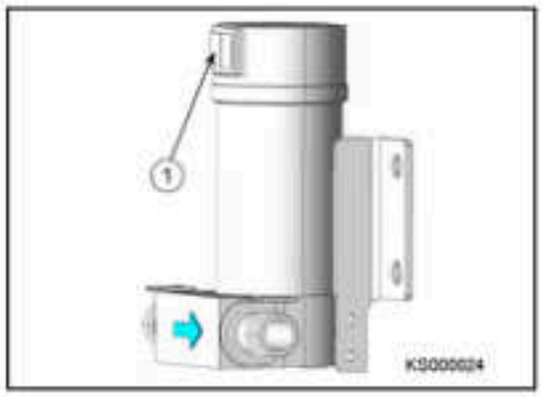


Trigger Pump (grease cartridge not supplied)



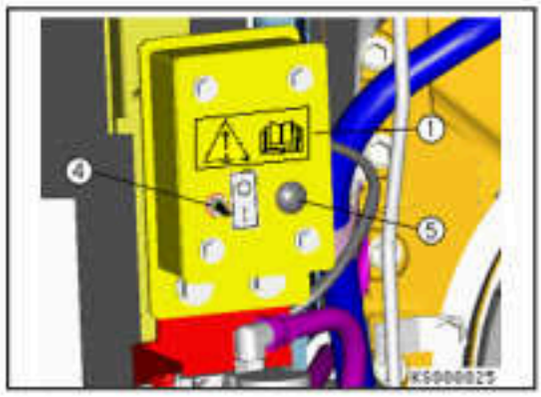
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3. **a) Refuel Pump without Auto Shut-off Refuel System.**
Switch ON the refuel pump using switch (1) on the pump assembly to begin refuelling. Once desired level of fuel is achieved, turn OFF refuel pump using switch (1).
A float gauge (G) will rise out of the filler neck of the tank when it is nearing full capacity. Position of tip (a) of float gauge when the tank is full : 50mm.



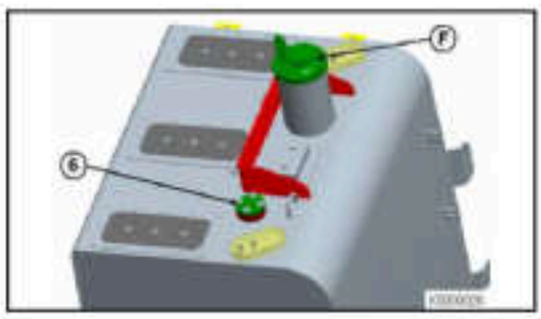
3. **b) Refuel Pump with Auto Shut-off Refuel System.**
Refuel Switch Box (1) is located on the right hand side pump compartment. Switch ON the master switch of the refuel system (4) on the refuel switch box. To start refuelling press switch (5) once. Refuelling will continue automatically until the tank has reached capacity (float switch (6) will reach its limit and the pump will stop). It is important to ensure the machine is parked on level ground and monitor refuelling to avoid fuel overfill or spillage.

Refuelling can be stopped at any time by turning off the master switch (4).



If more fuel is needed in the fuel tank after the float switch has stopped the pump, press and hold switch (5). When switch (5) is pressed and held, the refuel pump will fill tank. Releasing switch (5) will stop the refuel pump in this override condition. When using this override, the level of the tank must be monitored to prevent overfilling and fuel spillage. If fuel is allowed to overflow stop refuelling immediately by turning off the master switch

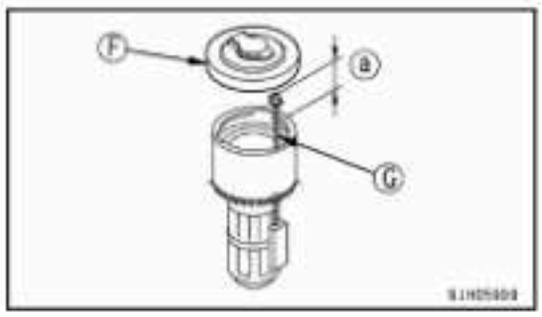
After finishing refuelling make sure the master switch (4) is returned to the OFF position.



4. After refuelling is complete:
(a) Push float gauge (G) straight down with fuel filler cap (F), be careful not to get the float gauge (G) caught in the tab of the fuel filler cap (F) and tighten fuel filler cap (F) securely.

(b) Tighten strainer valve cap (H) to the closed position (K) to prevent leakage of fuel left in the hose.

(c) Replace the fuel hose into storage tray (3).





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