

Operation & Maintenance Manual

HYDRAULIC
EXCAVATOR

PC600 -8
PC600LC-8

SERIAL NUMBERS 30001 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.

KOMATSU

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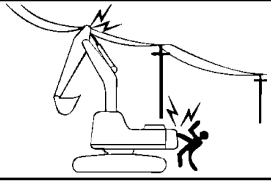
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(4) Caution for going close to electric cables (09801-03001)

⚠ DANGER



Hazardous voltage hazard.
Serious injury or death can occur if machine or attachments are not kept safe distance away from electric lines.

	VOLTAGE	SAFE DISTANCE
LOW VOLTAGE	100V 200V	2m
	6.600V	2m
	22.000V	3m
	66.000V	4m
SPECIAL HIGH VOLTAGE	154.000V	5m
	187.000V	6m
	275.000V	7m
	500.000V	11m

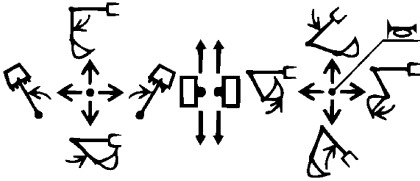
09801-03001

(5) Caution for operating pattern (09822-03000)

⚠ WARNING

In order to prevent an accident resulting in injury or death caused by error-operation, confirm the machine motion and indicated operating pattern, when operating machines. Pay attention to the circumference and operate slowly when confirming the machine motion.

ISO pattern



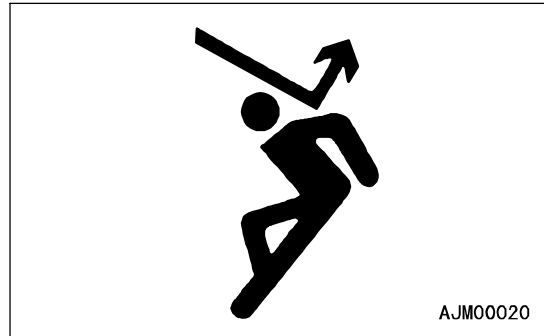
09822-03000

DO NOT GET CAUGHT IN WORK EQUIPMENT

The clearance in the area around the work equipment changes according to the movement of the link. If you get caught, you may suffer serious personal injury or death. Do not allow anyone to come close to any rotating or extending/retracting portion.

PRECAUTIONS RELATED TO PROTECTIVE STRUCTURES

The operator's compartment is equipped with a structure (ROPS, FOPS) to protect the operator by absorbing the impact energy. If the machine weight (mass) exceeds the certified value (shown on the ROLL-OVER PROTECTIVE STRUCTURE (ROPS) CERTIFICATION plate), ROPS will not be able to fulfill its function. Do not increase machine weight beyond the certified value by modifying the machine or by installing attachments to the machine. Also, if the function of the protective equipment is impeded, the protective equipment will not be able to protect the operator, and the operator may suffer injury or death. Always observe the following.



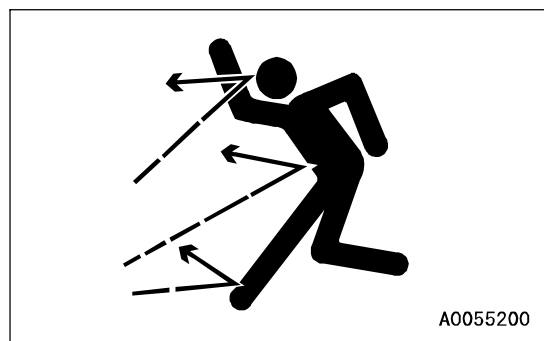
AJM00020

- If the machine is equipped with a protective structure, do not remove the protective structure and carry out operations without it.
- If the protective structure is welded, or holes are drilled in it, or it is modified in any other way, its strength may drop. Consult your Komatsu distributor before carrying out any modifications.
- If the protective structure is damaged or deformed by falling objects or by rolling over, its strength will be reduced and it will not be able to fulfill its function properly. In such cases, always contact your Komatsu distributor for advice on the method of repair.
- Even if the protective structure is installed, always fasten your seat belt properly when operating the machine. If you do not fasten your seatbelt properly, it cannot display its effect.

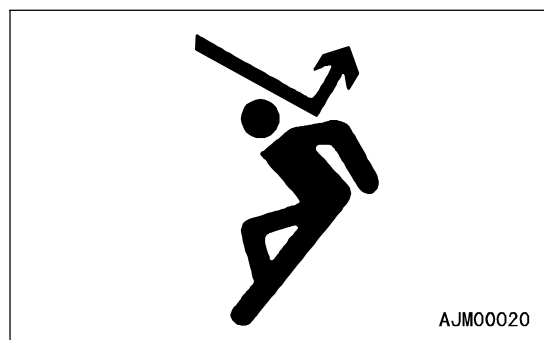
PROTECTION AGAINST FALLING, FLYING, INTRUDING OBJECTS

On jobsites where there is a hazard that falling objects, flying objects, or intruding objects may hit or enter the operator's cab, consider the operating conditions and install the necessary guards to protect the operator.

- When operating on jobsites, such as mines or quarries, where there is a hazard of falling rocks, install FOPS and a front guard, and always keep all the windows and doors closed when operating. In addition, always check that there is no one except the operator in the surrounding area. They may be hit by falling objects or flying objects.
- When carrying out demolition or breaker operations, install a front guard and always keep all the windows closed when operating. In addition, always check that there is no one except the operator in the surrounding area. They may be hit by falling objects or flying objects.
- If, furthermore, the machine is used for standard operations, it is also necessary to install additional guards, depending on the prevailing conditions at the jobsite.



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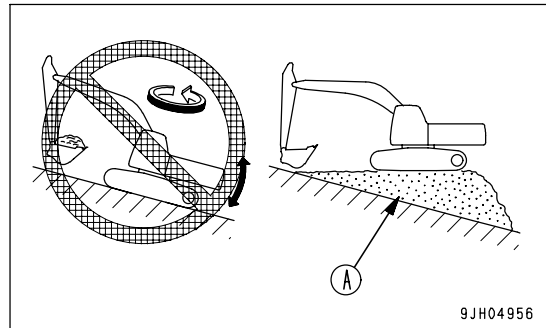


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In such a case, do not operate the machine without an additional guard. Be sure to consult with your Komatsu distributor about necessary guards.

OPERATING ON SLOPES

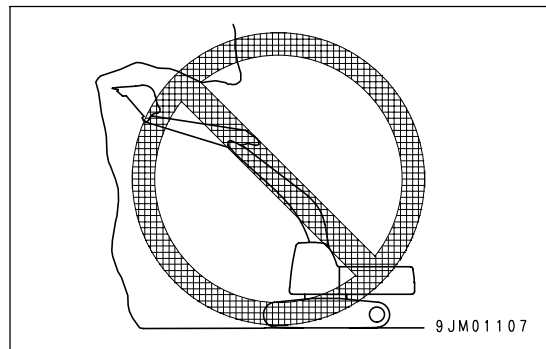
- When working on slopes, there is a hazard that the machine may lose its balance and turn over when the swing or work equipment are operated. This may lead to serious injury or property damage, so always provide a stable place when carrying out these operations, and operate carefully.
- Do not swing the work equipment from the uphill side to the downhill side when the bucket is loaded. This operation is dangerous, and may cause the machine to tip over.
- If the machine has to be used on a slope, pile the soil to make a platform (A) that will keep the machine as horizontal as possible.
- Do not work on a slope covered with the steel plates. Even with slight slopes there is a hazard that the machine may slip.



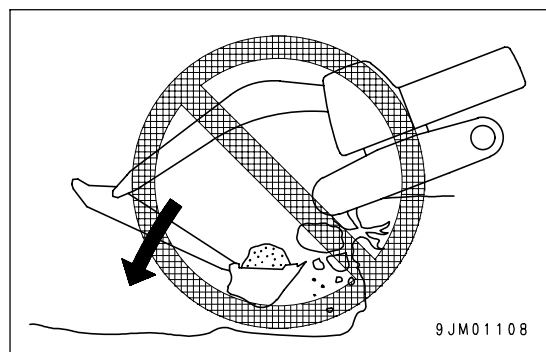
PROHIBITED OPERATIONS

If the machine rolls over or falls, or the ground at the working point collapses, or a structure being demolished collapses, it may lead to serious personal injury or death. Always observe the following.

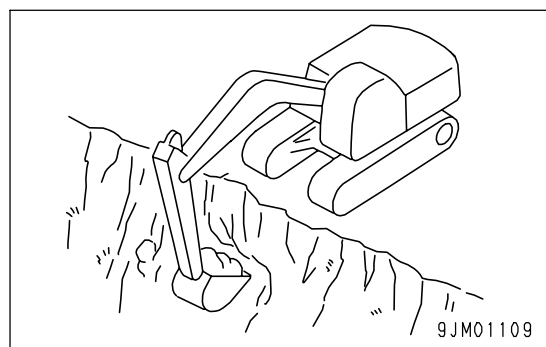
- Never dig the work face under an overhang. There is a hazard that rocks may fall or that the overhang may collapse and fall on top of the machine.



- Do not excavate too deeply under the front of the machine. The ground under the machine may collapse and cause the machine to fall.



- To make it easier to escape if there is any problem, set the tracks at right angles to the road shoulder or cliff with the sprocket at the rear when carrying out operations.



PRECAUTIONS FOR INSPECTION AND MAINTENANCE

PRECAUTIONS WHEN WELDING

Welding operations must always be carried out by a qualified welder and in a place equipped with proper equipment. There is a hazard of gas, fire, or electrocution when carrying out welding, so never allow any unqualified personnel to carry out welding.

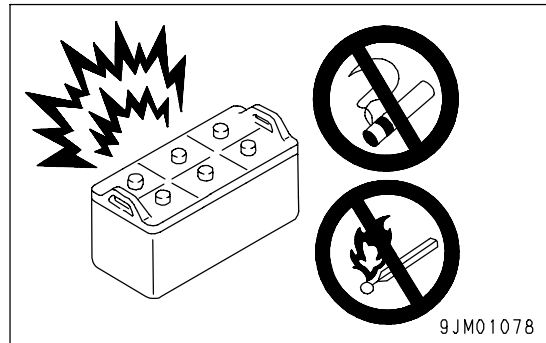
HANDLING BATTERY

Before inspecting or handling the battery, turn the key in the starting switch to the OFF position.

- **Danger of battery exploding**

When the battery is being charged, flammable hydrogen gas is generated and may explode. In addition, the battery electrolyte includes dilute sulphuric acid. Any mistake in handling may cause serious personal injury, explosion, or fire, so always observe the following.

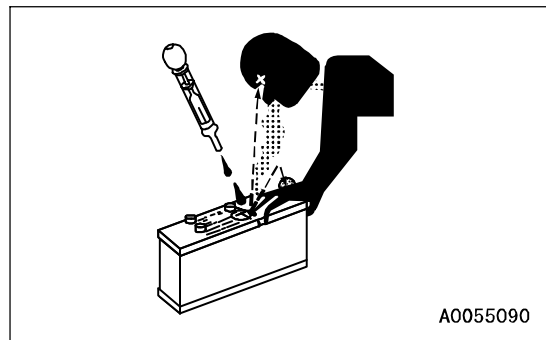
- Do not use or charge the battery if the battery electrolyte is below the LOWER LEVEL mark. This will cause explosion. Always carry out periodic inspection of the battery electrolyte level, and add distilled water (or commercially available battery filler solution) to the UPPER LEVEL mark.
- Do not smoke or bring any flame close to the battery.
- Hydrogen gas is generated when the battery is being charged, so remove the battery from the machine, take it to a well-ventilated place, remove the battery caps, then carry out the charging.
- After charging, tighten the battery caps securely.



- **Danger from dilute sulphuric acid**

When the battery is being charged, flammable hydrogen gas is generated and may explode. In addition, the battery electrolyte includes dilute sulphuric acid. Any mistake in handling may cause serious personal injury, explosion, or fire, so always observe the following.

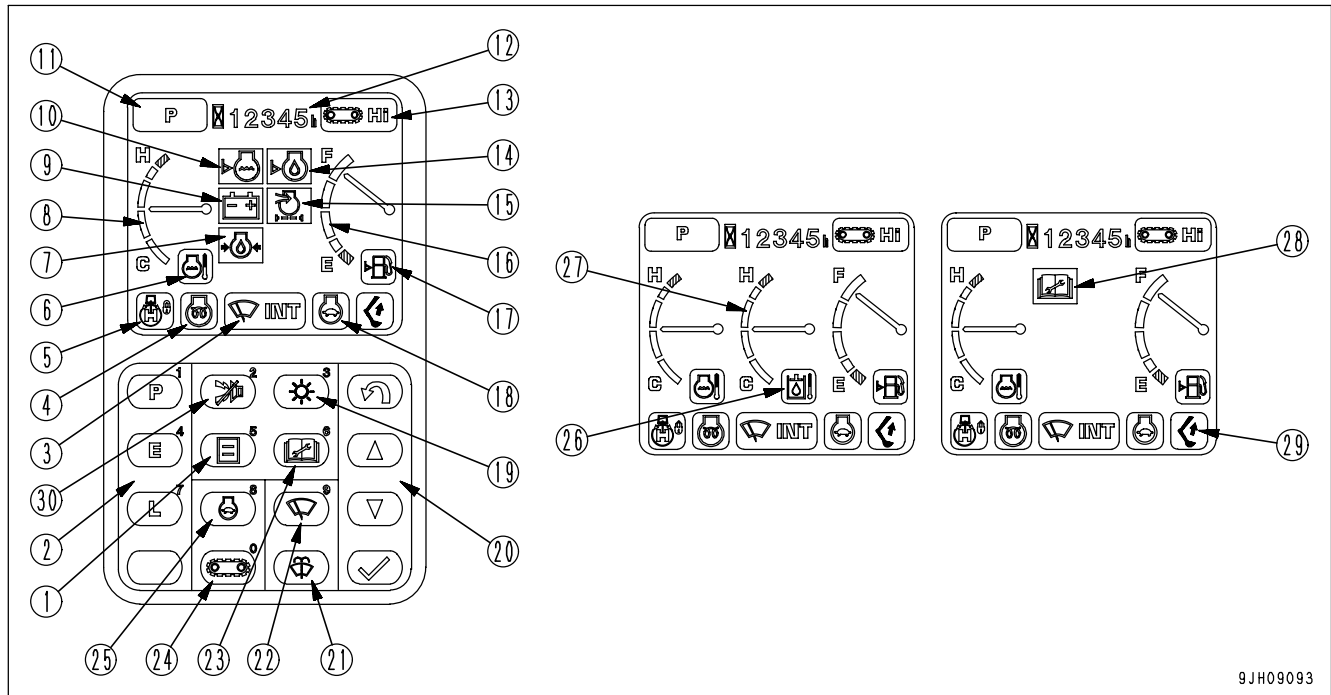
- When handling the battery, always wear protective goggles and rubber gloves.
- If battery electrolyte gets into your eyes, immediately wash your eyes with large amounts of fresh water. After that, get medical attention immediately.
- If battery electrolyte gets on your clothes or skin, wash it off immediately with large amounts of water.



- **Removing battery cables**

Before repairing the electrical system or carrying out electric welding, turn the starting switch OFF. Wait for approx. 1 minute, then remove the negative (-) battery cable to stop the flow of electricity.

Machine monitor



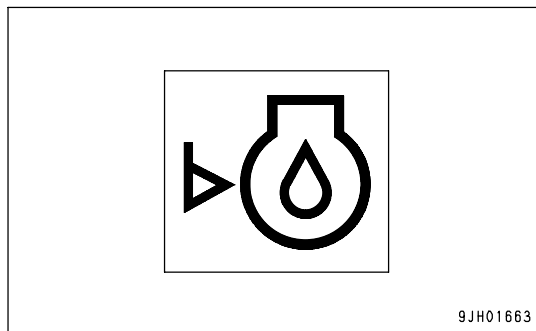
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- | | |
|--------------------------------------|--|
| (1) User mode adjustment switch | (16) Fuel gauge |
| (2) Working mode selection switch | (17) Fuel level monitor |
| (3) Wiper monitor | (18) Auto-deceleration monitor |
| (4) Engine pre-heating monitor | (19) Display control switch |
| (5) Swing lock monitor | (20) Input control switch |
| (6) Engine water temperature monitor | (21) Window washer switch |
| (7) Engine oil pressure monitor | (22) Wiper switch |
| (8) Engine water temperature gauge | (23) Maintenance switch |
| (9) Charge level monitor | (24) Travel speed selection switch |
| (10) Radiator coolant level monitor | (25) Auto-deceleration switch |
| (11) Working mode monitor | (26) Hydraulic oil temperature monitor |
| (12) Service meter | (27) Hydraulic oil temperature gauge |
| (13) Travel speed monitor | (28) Maintenance interval monitor |
| (14) Engine oil temperature monitor | (29) One-touch power max. monitor |
| (15) Air cleaner clogging monitor | (30) Alarm buzzer stop switch |

Engine Oil Level Monitor

Monitor (2) warns the operator that the oil level in the engine oil pan has dropped.

If oil level in the engine oil pan is low, the lamp lights up red, so check the oil level, and add oil.



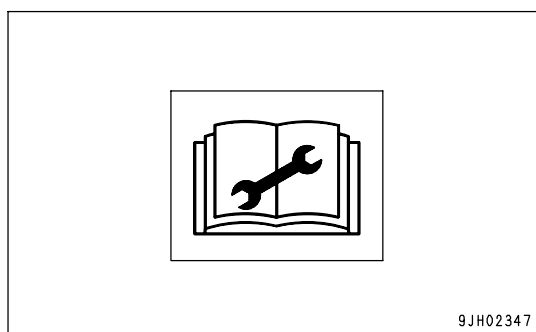
Maintenance Interval Monitor

This monitor (3) lights up red to warn the operator when the set time has passed from the time of the previous maintenance.

This monitor screen goes out after 30 seconds and switches to the normal screen.

- For details of the method of checking the maintenance interval, see "Maintenance Switch (PAGE 3-25)" in the Detailed controls and gauges.

If it is desired to change settings for the maintenance interval, have your Komatsu distributor change the settings.



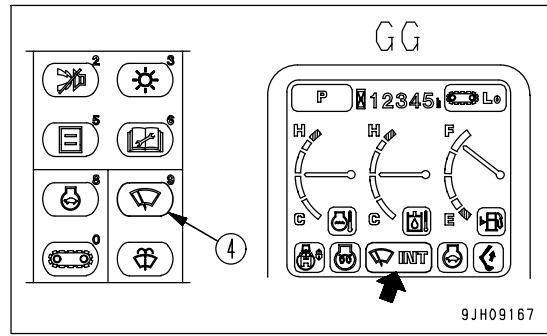
Wiper Switch

This switch (4) actuates the front window wiper.
 Each time the switch is pressed, it changes ON → INT → stop (OFF).

Monitor display portion GG INT lighted up: Wiper moves intermittently

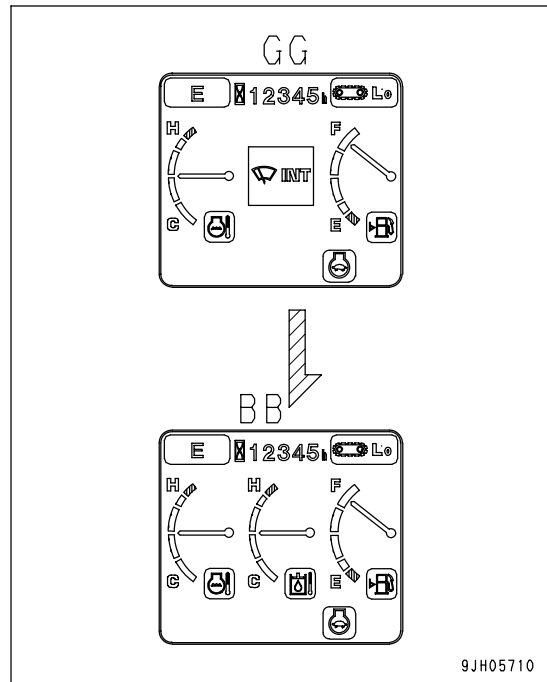
Monitor display portion GG ON lighted up: Wiper moves continuously

Monitor display portion GG OFF: Wiper stops



REMARK

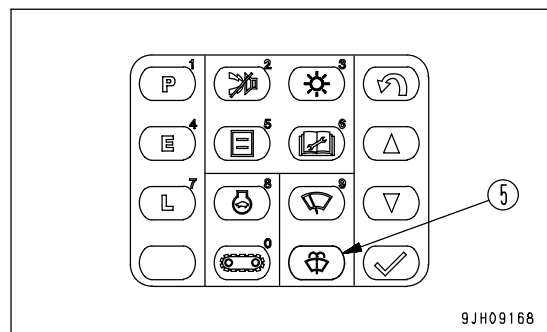
Each time that the wiper switch is operated, the mode is displayed in the center of display portion (GG). The screen returns to standard screen (BB) after 2 seconds.



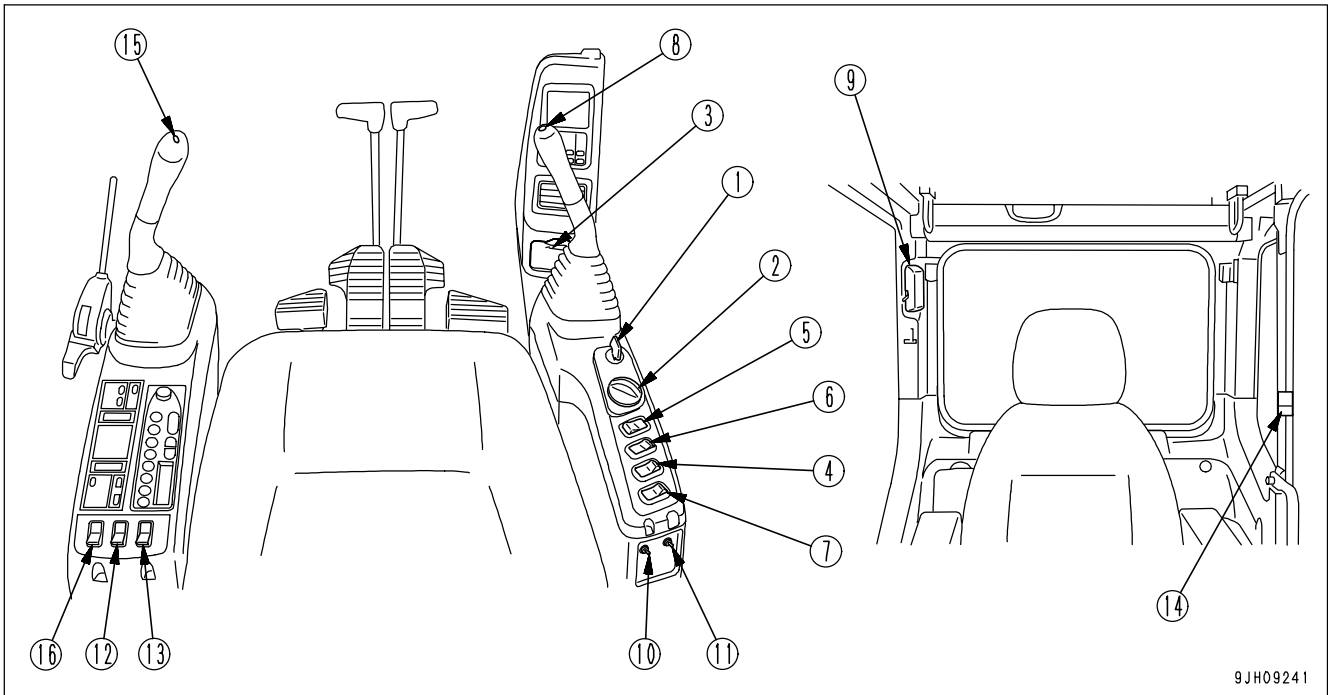
Window Washer Switch

This switch (5) is kept continuously pressed, window washer fluid is sprayed out on the front glass. When the switch is released, the spray stops.

- If switch (5) is kept pressed when the wiper is stopped, the window washer fluid will spray out, and at the same time, the wiper will be actuated continuously. When switch (5) is released, the wiper will continue to operate for 2 cycles, then stop.
- If the wiper is moving intermittently and switch (5) is kept pressed continuously, window washer fluid will spray out, and at the same time, the wiper will be actuated continuously. When switch (5) is released, the wiper will continue to operate for 2 cycles, then return to intermittent operation.



SWITCHES



9JH09241

- (1) Starting switch
- (2) Fuel control dial
- (3) Cigarette lighter
- (4) Machine push-up switch
- (5) Lamp switch
- (6) Swing lock switch
- (7) Boom shockless control switch (if equipped)
- (8) Horn switch
- (9) Room lamp switch
- (10) Emergency pump drive switch
- (11) Swing brake cancel switch
- (12) Revolving warning lamp switch (if equipped)
- (13) Lower wiper switch (if equipped)
- (14) Step light switch (if equipped)
- (15) One-touch power max. switch
- (16) Large capacity airflow condition blower switch (if equipped)

Starting Switch

Starting switch (1) is used to start or stop the engine.

(A): OFF position

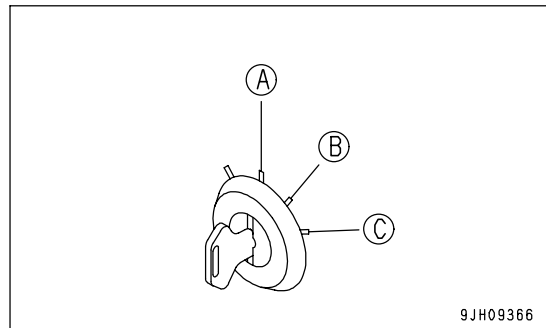
The key can be inserted or withdrawn. Switches for the electrical system (except room lamp), are all turned off and the engine is stopped.

(B): ON position

Electric current flows through the charging and lamp circuits. Keep starting switch key in the ON position while the engine is running.

(C): START position

This is the engine-start position. Keep the key at this position during cranking. Immediately after starting the engine, release the key. It will automatically return to the ON position (B).



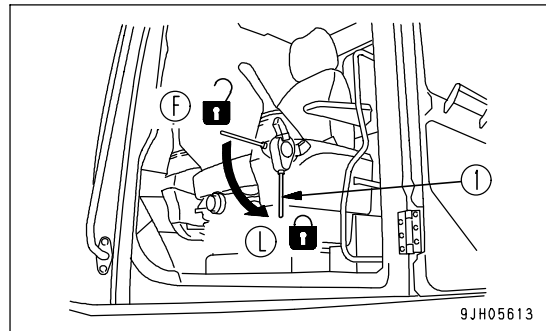
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SUN ROOF

(PC600,PC600LC pull up cab specification machine only)

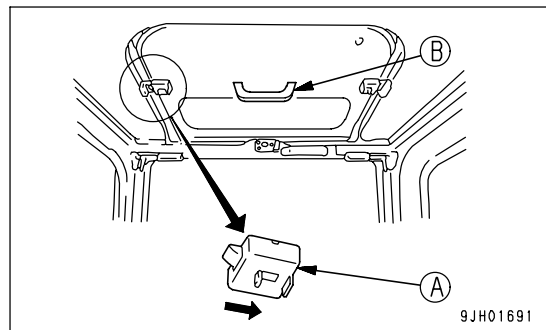
! WARNING

When standing up from the operator's seat, push lock lever (1) down securely to set it to LOCK position (L).
 If lock lever (1) is at the FREE position (F) and the control lever is touched by mistake, this may lead to a serious accident.



Opening

1. Set lock lever (1) securely to LOCK position (L).
2. Check for any ceiling window movement by pulling lock knob (A) located on front side, then push up and open the ceiling window grasping grip (B).



Closing

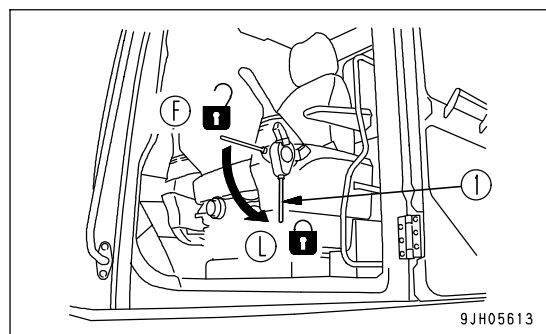
Hold grasping grip (B), lower the ceiling window, and apply lock (A). If the lock cannot be applied, open the ceiling window, then pull it in again and apply the lock.

WINDSHIELD

(PC600,PC600LC pull up cab specification machine only)

! WARNING

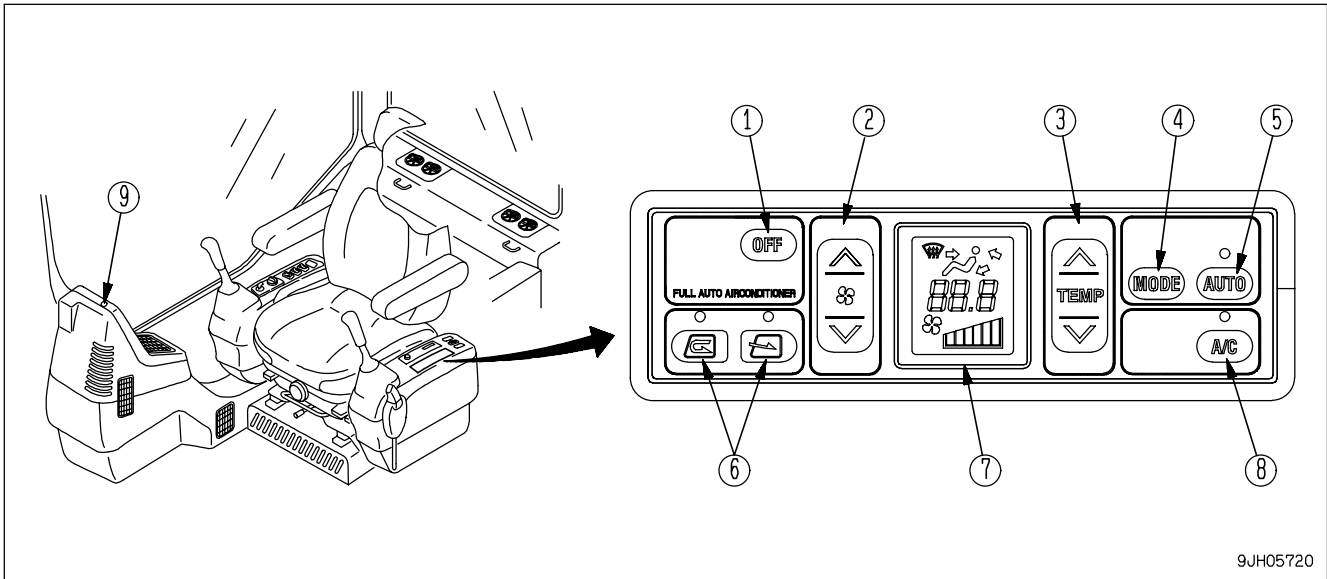
- When opening or closing the front window, bottom window, or door, always set lock lever (1) to LOCK position (L).
 If the control levers are not locked and they are touched by accident, this may lead to a serious accident.
- When opening or closing the window at the front of the cab, stop the machine on horizontal ground, lower the work equipment completely to the ground, stop the engine, then carry out the operation.
- When opening the front window, hold the grip securely with both hands, pull up, and do not let go until the automatic lock catch is locked.
- When closing the front window, the window will move quicker under its own weight. Hold the grips securely with both hands when closing it.



It is possible to stow (pull up) the front window in the roof of the operator's compartment.

AIR CONDITIONER CONTROLS

Air Conditioner Control Panel



9JH05720

- | | |
|--------------------------------|----------------------------------|
| (1) OFF switch | (6) FRESH/RECIRC selector switch |
| (2) Fan switch | (7) Display monitor |
| (3) Temperature control switch | (8) Air conditioner switch |
| (4) Vent selector switch | (9) Sunlight sensor |
| (5) Auto switch | |

OFF Switch

Switch (1) is used to stop the fan and air conditioner.

- When OFF switch (1) is pressed, the set temperature and air flow display on display monitor (7), the lamps above auto switch (5), and air conditioner (8) go out, and operation stops.

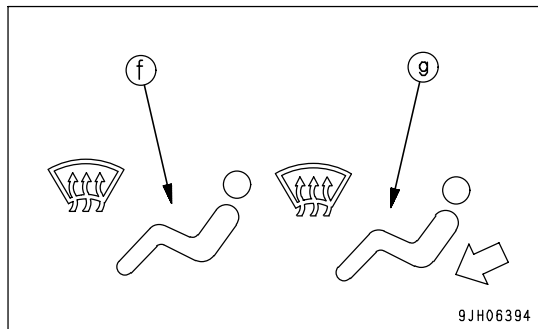
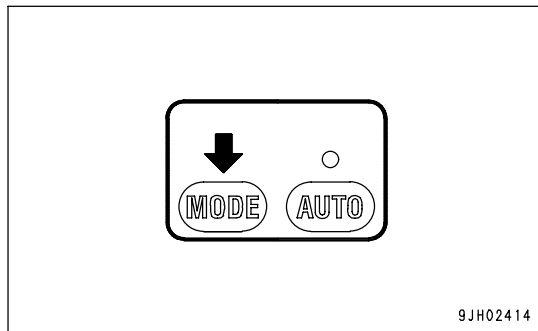
REMARK

When switch (1) is turned to the OFF position, the lamp above FRESH/RECIRC selector switch (6) does not go out, but this is not a problem.

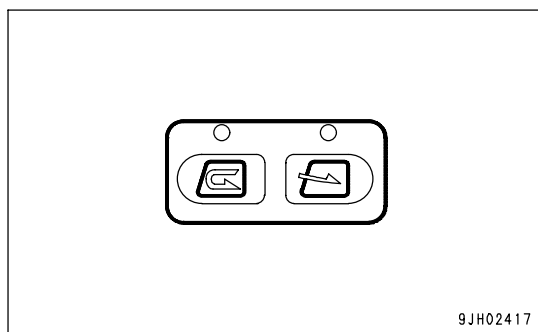


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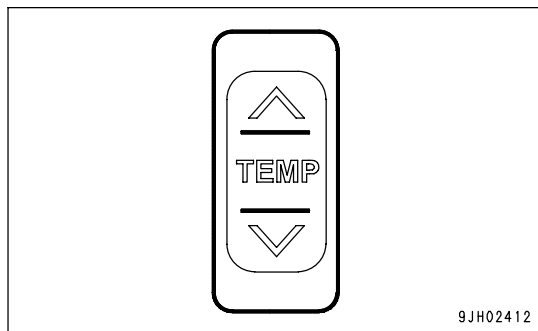
2. Press vent selector switch (4) and set vent display on the display monitor to (f) or (g) as shown in diagram on the right.



3. Press RECIRC/FRESH selector switch (6) and set it to take in fresh air.



4. Press temperature setting switch (3) and set temperature on the display (7) monitor to maximum heating.



CIRCUIT BREAKER

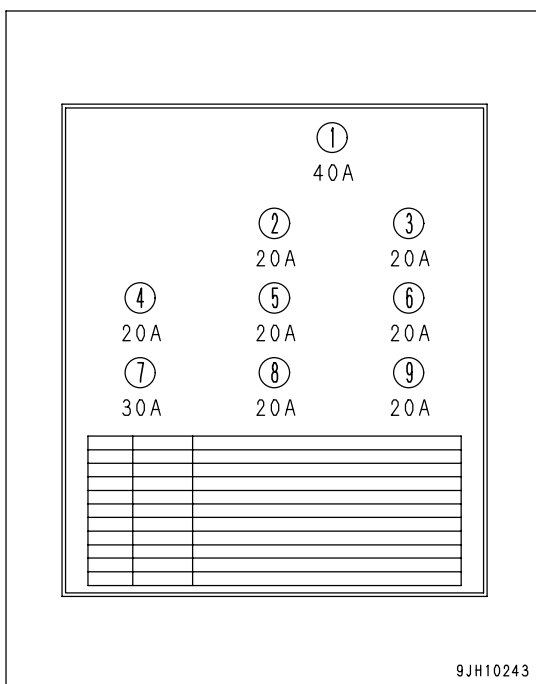
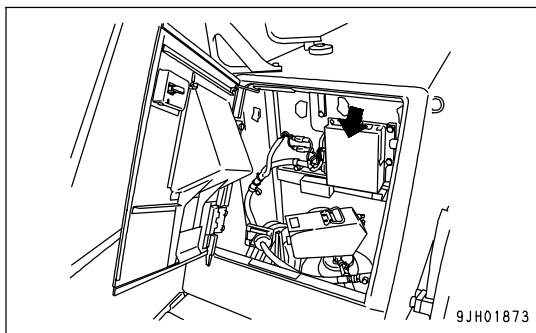
NOTICE

When resetting the circuit breaker, always turn the starting switch OFF first.

- If the starting switch does not work, even when the starting switch is turned on, open the circuit breaker box inside the grease pump box located at the front right of machine, and perform inspection.
- If an excess current is generated, the circuit breaker cuts off electrical current to protect electrical components and wiring from damage. To return the circuit electrical current to normal after it has been cut off, push in the reset button.
If the electric circuit is working normally, the reset button remains in. If the reset button pops out again immediately after it is pushed in, it is necessary to check the electric circuit.

REMARK

- The circuit breaker is a circuit protection device installed to circuits where large current flows. It protects the electrical components and wiring from damage caused by an abnormal current in the same way as a normal fuse. After repairing and restoring the location of the abnormality, there is no need to replace the breaker. It can be used again.
- If the starting motor does not work even when the starting switch is turned to the ON position, breaker (6) has probably cut off the circuit, so check and restore circuit breaker (6).
- If the electrical equipment does not work even when the fuse is replaced, breaker (1) or (9) has probably cut off the circuit, so check and restore circuit breaker (1) or (9).



No.	Fuse Capacity	Circuit Name
1	40A	Fuse 1 to 15
2	20A	Work equipment headlamp, right side headlamp
3	20A	Power supply grease pump
4	20A	Pump controller
5	20A	Cab upper headlamp
6	20A	Starting switch, Pump controller
7	30A	Engine controller
8	20A	Monitor, buzzer
9	20A	Fuse 16 to 20

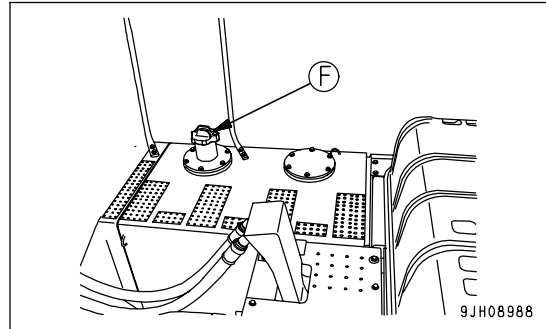
Check Fuel Level, Add Fuel

**WARNING**

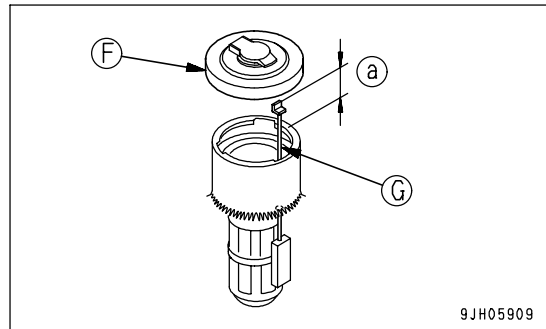
When adding fuel, never let the fuel overflow. This may cause a fire. If any fuel is spilled, wipe it up completely. Never bring flames near fuel because it is highly flammable and dangerous.

1. Open fuel filler cap (F) of the fuel tank.
2. When fuel filler cap (F) is opened, float gauge (G) comes up in proportion to the remaining fuel level in the tank.
Check that the fuel tank is full.
Inspect the fuel level both visually and with float gauge (G).
3. If the fuel tank is not full, supply fuel through the fuel filler until float gauge (G) rises to the maximum position.
(a: Approx. 50 mm (2 in))

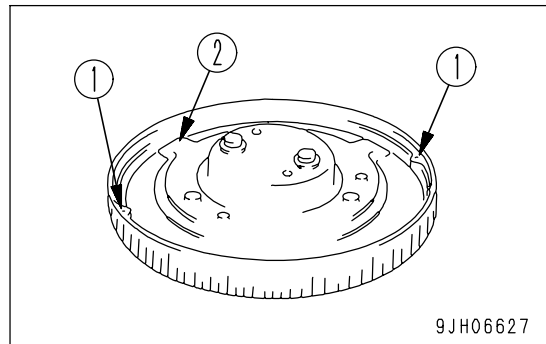
Fuel capacity: 880 liters (232.5 US gal)



4. When refueling is finished, push float gauge (G) straight down along the fuel filler cap (F), then tighten fuel filler cap (F) securely, taking care so that float gauge (G) will not get caught on claw (2) of the cap.

**REMARK**

If breather hole (1) in the cap is clogged, the pressure in the tank will drop and fuel will not flow. Clean the hole from time to time.



Seat Belt



WARNING

- Before fitting the seat belt, check that there is no problem in the belt mount bracket or mounting belt. If it is worn or damaged, replace the seat belt.
- Even if no problem can be seen in the belt, replace the seat belt every 3 years. The date of manufacture of the belt is shown on the back of the belt.
- Always wear the seat belt during operations.
- Fit the seat belt so that it is not twisted.

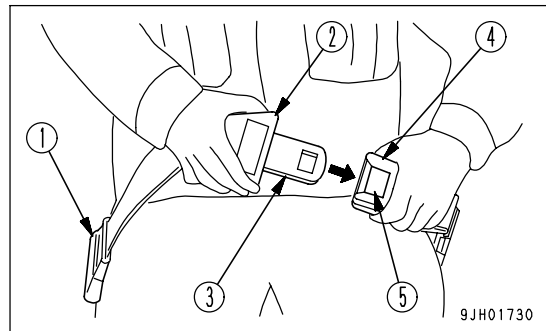
Fastening and Removing

This seat belt has a wind-in device, so it is not necessary to adjust the length.

Fastening Seat Belt

Hold grip (2) and pull the belt out from wind-in device (1), check that the belt is not twisted, then insert tongue (3) into buckle (4) securely.

When doing this, pull the belt lightly to check that it is properly locked.



Removing Belt

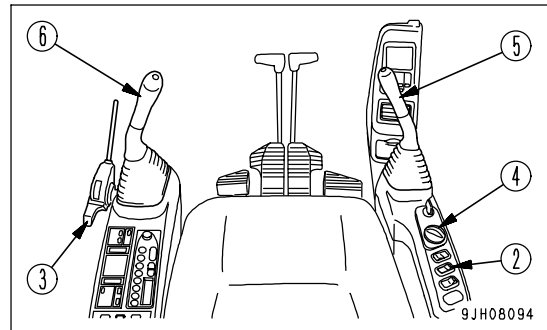
Press button (5) in buckle (4), and remove tongue (3) from buckle (4).

The belt is automatically wound in, hold grip (2) and return the belt slowly to wind-in device (1).

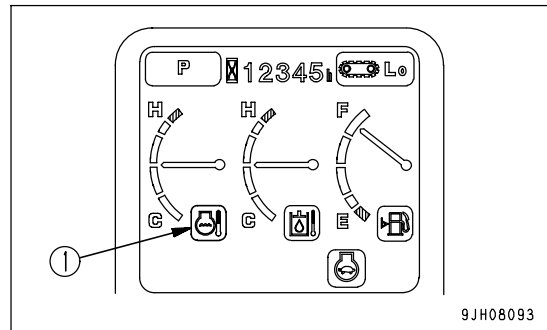
Hydraulic Equipment Warm Up

! WARNING

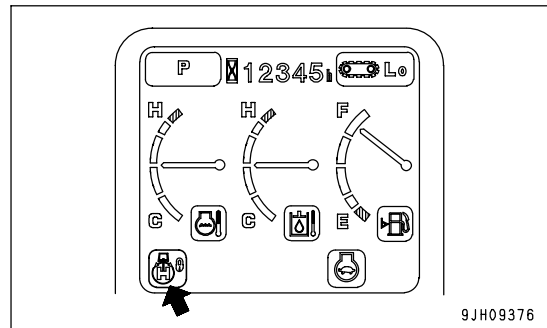
- Before carrying out the warm-up operation for the hydraulic equipment, turn the swing lock switch ON, check on the monitor that the swing lock is actuated, then start the warm-up operation.
- When warming up the hydraulic equipment, check that there is no person or obstacle in the surrounding area, then sound the horn and start the operation.
- Carry out the warm-up operation for the hydraulic equipment until the hydraulic oil temperature monitor displays green.
- The warm-up operation for the hydraulic equipment is necessary not only for the circuit between the pump and cylinders and between the pump and motor, but also for all the control circuits. Do not carry out the operation just for one cylinder or motor, or the operation just in one direction. Carry out the operation in both directions for the work equipment (boom, arm, bucket), swing, travel, and attachment (if equipped).



1. Check that engine water temperature monitor (1) displays green.
If it displays white, carry out additional warm up of the engine until engine water temperature monitor (1) displays green.
For details of the procedure, see "Engine Warm Up (PAGE 3-102)".



2. Turn swing lock switch (2) ON and check that the swing lock monitor lights up.



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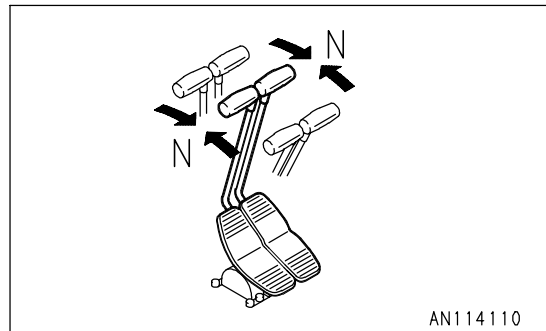
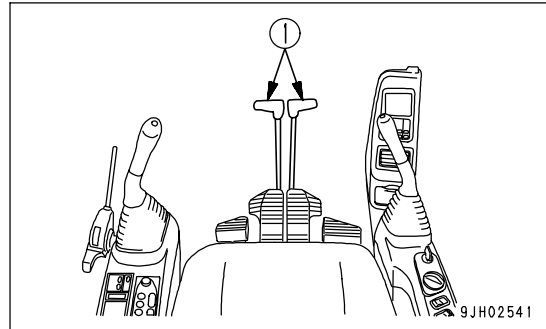
- Please note: If there is no response to CLICKING the link, please download this PDF first and then click on it.

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Stopping Machine

Avoid stopping suddenly. Give yourself ample room when stopping.

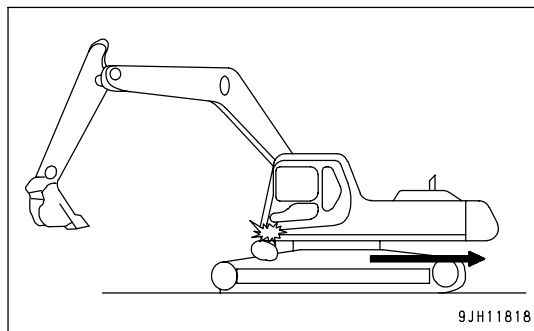
1. Put the left and right travel levers (1) in the neutral position, then stop the machine.



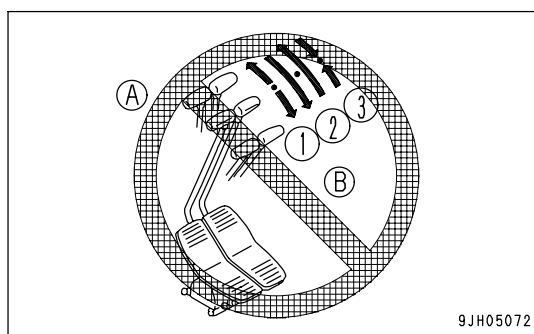
Swinging or Traveling When Rock Is on Top of Track Assembly

Do not swing the upper structure or travel if there is in the rock on top of the track assembly. It will contact the undercover or frame and cause damage. In the worst case, it may cause damage to the hydraulic equipment and result in a serious breakdown.

During operations, always check that there is no rock, pieces of rock, or mud on top of the track assembly.

**Sudden Lever or Pedal Shifting High Speed Travel**

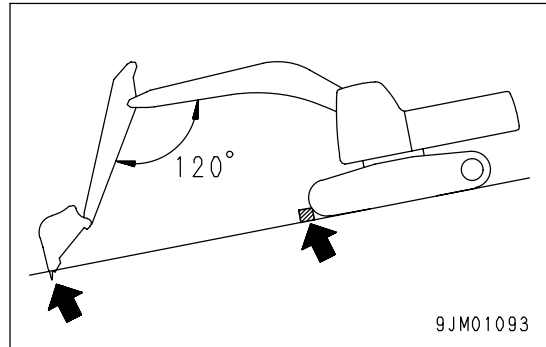
- (1) Do not operate the levers and pedals suddenly or take any other action to move the machine quickly.
- (2) Do not operate the levers or pedals suddenly from FORWARD (A) to REVERSE (B) (or from REVERSE (B) to FORWARD (A)).
- (3) Do not operate the levers or pedals suddenly (do not release them suddenly) to stop the machine when traveling at high speed.



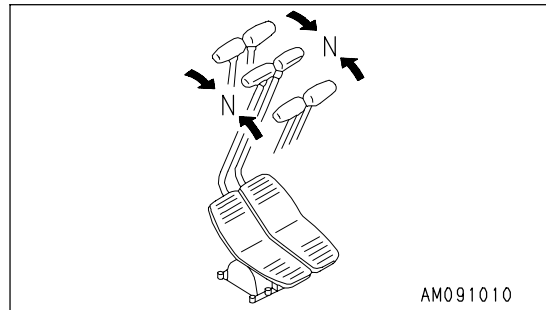
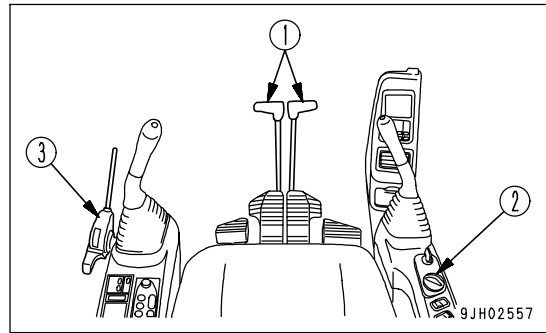
PARKING MACHINE

! WARNING

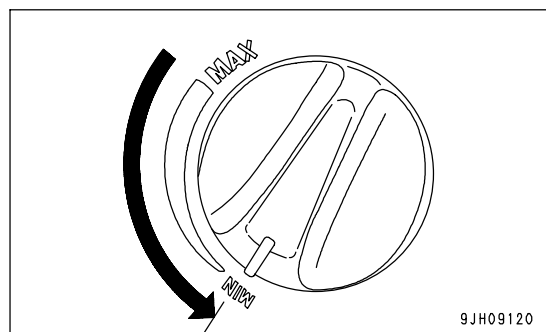
- Avoid stopping suddenly. Give yourself ample room when stopping.
- When stopping the machine, select flat hard ground and avoid dangerous places.
If it is unavoidably necessary to park the machine on a slope, insert blocks underneath the track shoes. As an additional safety measure, thrust the bucket into the ground.
- If the control lever is touched by accident, the machine may move suddenly, and this may lead to a serious accident.
Before leaving the operator's compartment, always set the lock lever securely to LOCK position.



1. Put left and right travel levers (1) in the neutral position.
The machine stops.

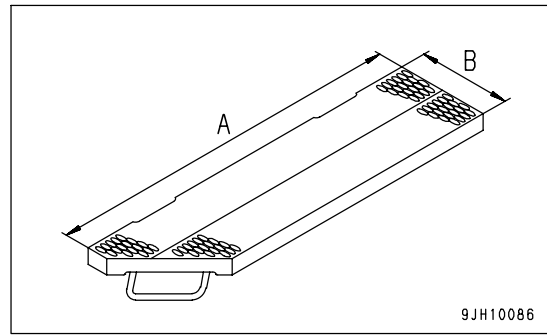


2. Turn fuel control dial (2) to lower the engine speed to low idle.



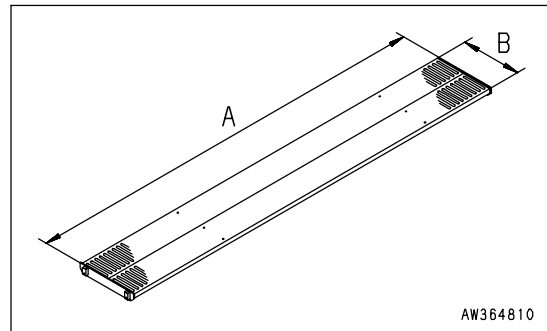
- Catwalk (1) (same for all models)

Item	Unit	PC600-8, PC600LC-8
A	mm (ft in)	1,910 (6'3")
B	mm (ft in)	500 (1'8")
Weight	kg (lb)	32 (71)

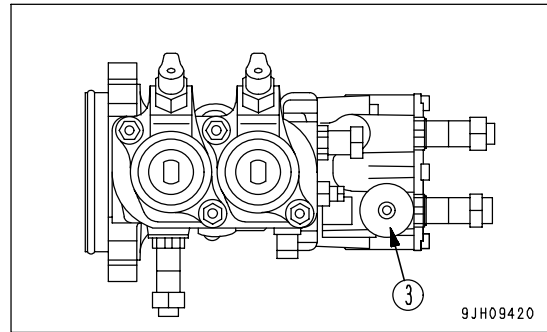


- Catwalk (2) (same for all models)

Item	Unit	PC600-8, PC600LC-8
A	mm (ft in)	2,310 (7'7")
B	mm (ft in)	500 (1'8")
Weight	kg (lb)	37 (82)



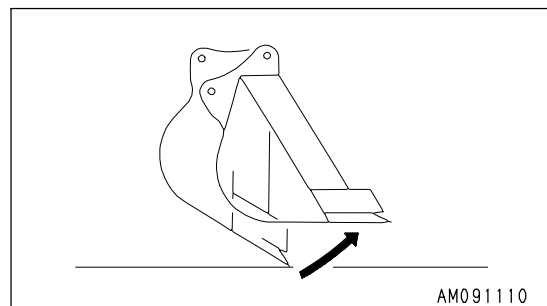
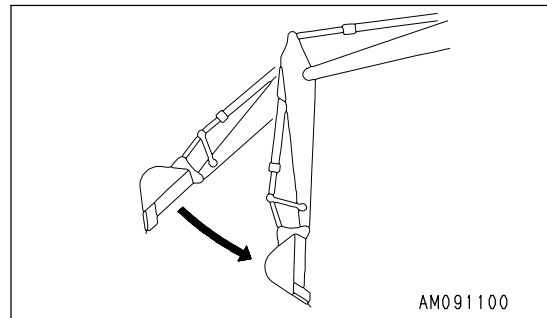
4. Carry out priming approx. 50 times with priming pump (3) of the supply pump.
5. Tighten butterfly nut (2) holding the lever of the priming pump securely.
Target tightening torque: 11.80 Nm (1.2 kgm , 8.7 lbft)
6. Turn the key in the starting switch to the START position. The engine will start.



PHENOMENA THAT ARE NOT FAILURES

Note that the following phenomena are not failures:

- When the arm control lever is operated to the IN position and the work equipment is lowered under no load from a high position, the arm speed will drop momentarily when the arm is more or less at the vertical position.
- When the bucket control lever is operated to the CURL position and the work equipment is lowered under no load from a high position, the bucket speed will drop momentarily when the bucket teeth are more or less at the horizontal position.
- The bucket or arm will fluctuate by itself during heavy-duty digging operations.



- When starting or stopping the swing, noise will be emitted from the brake valve.
- When going down a steep slope at low speed, a noise will be emitted from the travel motor brake valve.

Electronic Control System

If an error code is displayed on the machine monitor display, follow the self-diagnostic remedy table below.

Machine Monitoring System

Monitor display	Failure mode	Remedy
E02	TVC valve system error	When emergency pump drive switch is up, normal operations become normal, but carry out inspection immediately. (*)
E03	Swing brake system error	Carry out inspection immediately.
E10	Abnormality in electronic governor system (engine stopped)	Carry out inspection immediately.
E11	Abnormality in electronic governor system (abnormality in engine protection output)	It is possible to carry out normal working operations, but have inspection carried out immediately.
E14	Abnormality in throttle (abnormality in fuel control dial)	Move machine to a safe posture, and carry out inspection immediately.
E15	Abnormality in electronic governor system	It is possible to carry out normal driving operations, but have inspection carried out immediately.
E0E	Abnormality in network	<ul style="list-style-type: none"> • If the engine can be operated, set the machine to a safe posture, then have inspection carried out immediately. • If the engine is operated and stalls, turn the emergency pump drive switch is up set the machine to a safe posture, then have inspection carried out immediately. • Even if the engine is stopped, have inspection carried out immediately.
CALL	Operation cannot be continued	Move machine to a safe posture, and carry out inspection immediately.
If no error code is displayed but work equipment or swing cannot be operated		Carry out inspection immediately.

(*): For details of handling the emergency pump drive switch, see "Emergency Pump Drive Switch (PAGE 3-38)".

WEAR PARTS

Replace wear parts such as the filter element or air cleaner element at the time of periodic maintenance or before they reach the wear limit. The wear parts should be replaced correctly in order to ensure more economic use of the machine. When replacing parts, always use Komatsu genuine parts.

As a result of our continuous efforts to improve product quality, the part number may change, so inform your Komatsu distributor of the machine serial number and check for the latest part number when ordering parts.

WEAR PARTS LIST

The parts in parentheses are to be replaced at the same time.

Item	Part No.	Part Name	Q'ty	Change interval
Hydraulic oil filter	209-60-77531	Element	1	Every 1000 hours
	(07000-05180)	(O-ring)	(1)	
Engine oil filter	600-211-1340	Cartridge	2	Every 500 hours
Fuel main filter	600-319-3550	Cartridge	1	Every 1000 hours
Fuel pre-filter	600-319-4540	Cartridge	1	Every 500 hours
Corrosion resistor (if equipped)	600-411-1151	Cartridge	1	Every 1000 hours
Air conditioner RECIRC filter	20Y-979-6261	Filter	1	Every one year
Air conditioner FRESH filter	17M-911-3530	Element	1	Every one year
Air cleaner	600-185-6100	Element assembly	1	-
	600-185-6110 (600-184-1671)	Outer element assembly (O-ring)	1 (1)	
Bucket	21M-939-2281 (21M939-2291)	Tooth (KMAX type) (Pin)	5 (5)	-
	209-70-14181	Side cutter (left)	1	
	209-70-14191 (209-70-14210)	Side cutter (right)	1	
	(21T-32-11320)	(Bolt)	(12)	
	(01643-33080)	(Nut) (Washer)	(12) (12)	
Hydraulic tank breather	427-70-13610	Side Shroud	4	-
	21N-939-3330	(Pin)	(8)	
	(209-939--7110)	(Shim)	(16)	
	(209-939--7120)	(Shim)	(8)	
Line filter	20Y-60-21470	Element	1	Every 1000 hours
	285-62-17320	Element	1	
Line filter	07063-21200	Element	2	-
	(07000-13038)	(O-ring)	(2)	
	(07000-12055)	(O-ring)	(2)	
	(07002-11023)	(O-ring)	(4)	
Pilot strainer	704-28-00751	Strainer	1	-
	(07002-13334)	(O-ring)	(1)	
Additional filter for breaker (if equipped)	21M-970-1380	Element	1	-
	(07000-12011)	(O-ring)	(1)	
	(07000-12125)	(O-ring)	(1)	

MAINTENANCE PROCEDURE

INITIAL 100 HOURS MAINTENANCE (ONLY AFTER THE FIRST 100 HOURS)

Perform the following maintenance only after the first 100 hours.

- Clean strainer of PTO lubricating oil filter

For details of the method of maintaining, see EVERY 500 HOURS MAINTENANCE.

INITIAL 500 HOURS MAINTENANCE (ONLY AFTER THE FIRST 500 HOURS)

Carry out the following maintenance only after the first 500 hours of operation on new machines.

- Change oil in swing machinery case
- Change oil in PTO case
- Change oil in final drive case

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

For details of the method of replacing or maintaining, see EVERY 1000 HOURS and EVERY 2000 HOURS SERVICE.

CHECK AND ADJUST TRACK TENSION

! WARNING

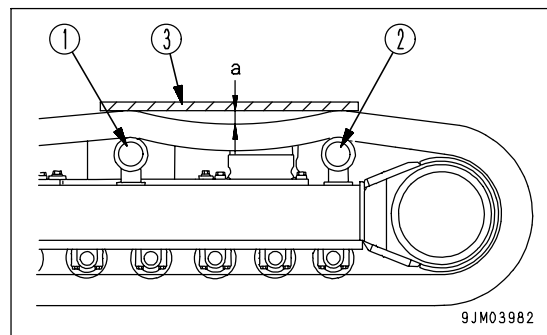
- For details of starting the engine and operating the work equipment, see "BEFORE STARTING ENGINE (PAGE 3-79)", "STARTING ENGINE (PAGE 3-98)", "AFTER STARTING ENGINE (PAGE 3-101)", and "WORK EQUIPMENT CONTROLS AND OPERATIONS (PAGE 3-118)" in the OPERATION section.

The wear of the pins and bushings on the undercarriage will vary with the working conditions and type of soil, so inspect the track tension frequently in order to maintain the standard tension.

Stop the machine on firm, horizontal ground when carrying out the inspection and maintenance.

Checking

1. Run the engine at low idle, then move the machine forward for a distance equal to the track length on ground, and slowly stop the machine.
2. Place wooden bar (3) on top of the track from No. 2 roller (1) to No. 3 roller (2).
3. Measure the maximum deflection between bottom surface of the wooden bar and top surface of the track shoe. Deflection "a" should be 10 - 30 mm (0.4 - 1.2 in).



If the track tension is not at the standard value, adjust it in the following manner.

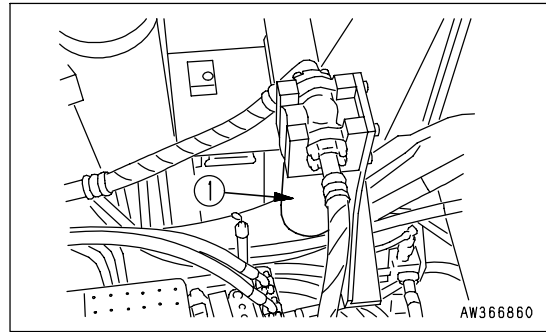
REPLACE BREAKER CIRCUIT ADDITIONAL OIL FILTER ELEMENT

(If equipped)



WARNING

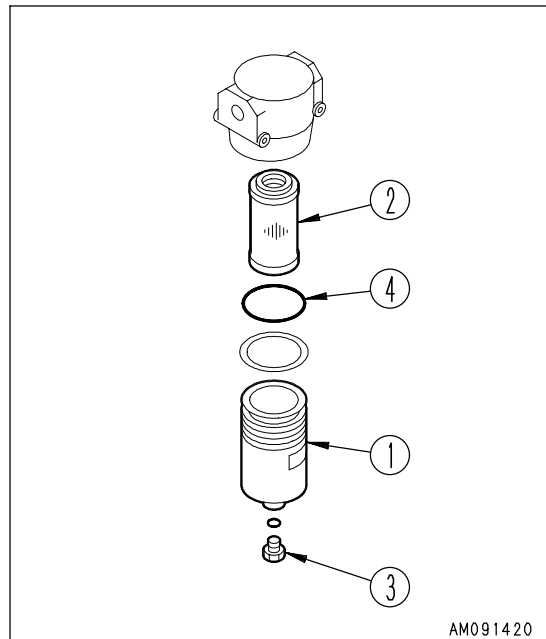
Parts and oil are at high temperature immediately after the engine is stopped and may cause serious burns. Wait for the oil temperature to go down before performing this operation.



- Prepare a container to catch the oil.
 1. Place a container under the filter element to catch the oil.
 2. Remove plug (3) from filter case (1) and drain the oil from the case.
 3. Turn filter case (1) to the left to remove it, then take out element (2).
 4. Clean the removed parts, then install new element (2) and O-ring (4).
 5. When installing, bring the case into contact with the filter holder, then tighten a further 1/2 turns.

NOTICE

For details of the replacement interval for the element, see "MAINTENANCE INTERVAL FOR HYDRAULIC BREAKER (PAGE 4-17)".



CHECK LEVEL OF BATTERY ELECTROLYTE

Carry out this procedure before operating the machine.

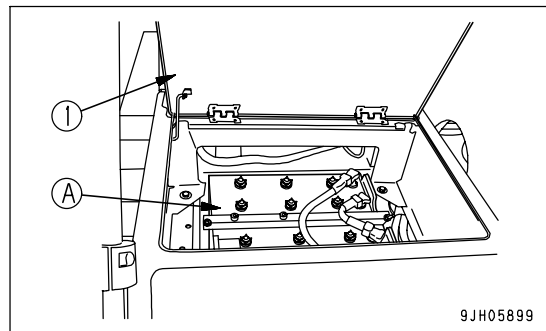
! WARNING

- Do not use the battery if the battery electrolyte level is below the LOWER LEVEL line. This will accelerate deterioration of the inside of the battery and reduce the service life of the battery. In addition, it may cause an explosion.
- The battery generates flammable gas and there is danger of explosion, do not bring fire or sparks near the battery.
- Battery electrolyte is dangerous. If it gets in your eyes or on your skin, wash it off with a large amount of water and consult a doctor.

NOTICE

- When adding distilled water to the battery, do not allow the battery electrolyte to go above the UPPER LEVEL line. If the electrolyte level is too high, it may leak and cause damage to the paint surface or corrode other parts.
- When adding distilled water in cold weather, add it before starting operations in the morning to prevent the electrolyte from freezing.

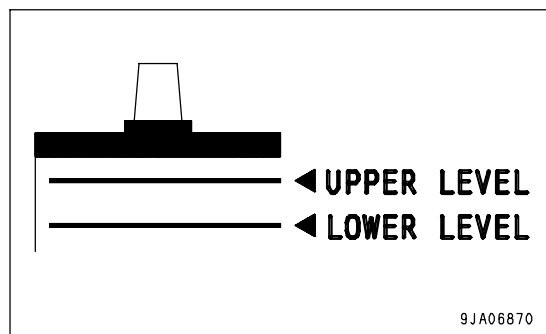
Inspect the battery electrolyte level at least once a month and follow the basic safety procedures given below. Open cover (1) at the rear left side of the machine. The batteries are installed at (A) part.



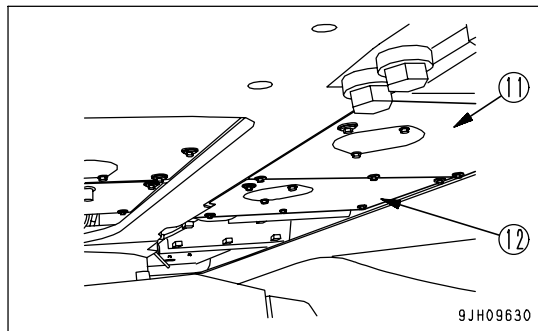
When Checking Electrolyte Level from Side of Battery

If it is possible to check the electrolyte level from the side of the battery, check as follows.

1. Use a wet cloth to clean the area around the electrolyte level lines and check that the electrolyte level is between the UPPER LEVEL (U.L.) and LOWER LEVEL (L.L.) lines. If the battery is wiped with a dry cloth, static electricity may cause a fire or explosion.

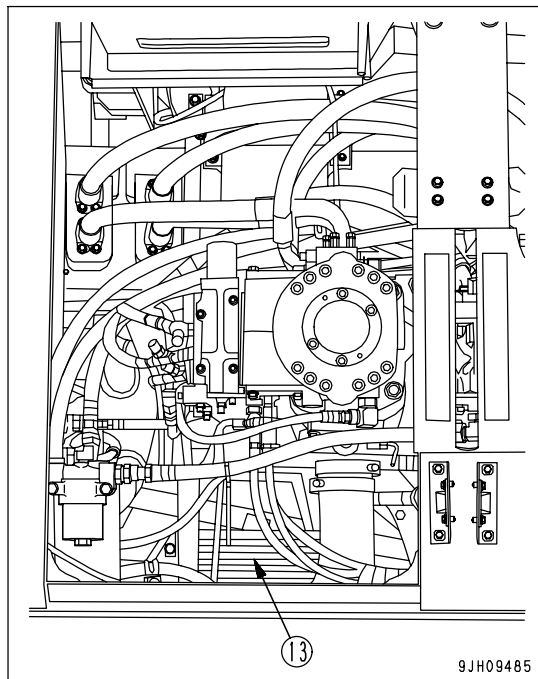


7. Remove undercover (11) and (12), then evacuate all mud, dirt, or leaves to the outside of the machine.
8. Push in cleaned net (3) back to the original place and secure it with screw (2).
9. Install cover (4) with bolts (5).
10. Install the undercover (11) and (12).

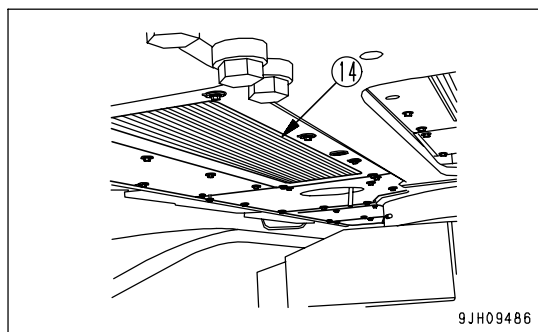


Next, clean and check the PTO oil cooler, too.

11. Open the door at the rear left of the machine.
12. Check the front face and rear face of PTO oil cooler (13), and use compressed air to blow off any mud, dirt, or leaves stuck to the cooler.



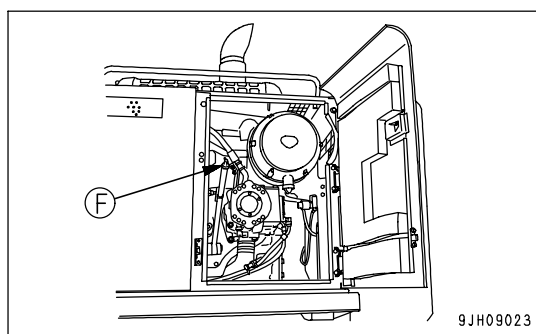
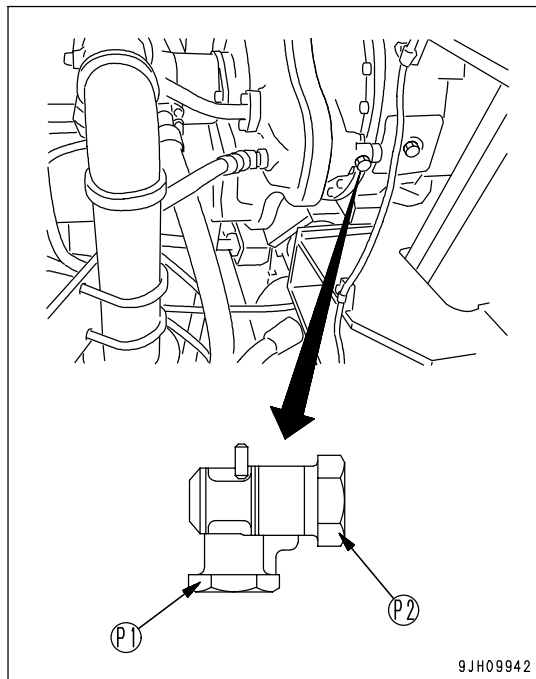
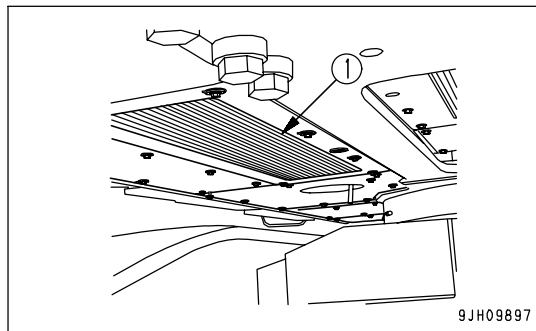
13. Remove undercover (14), then evacuate all mud, dirt, or leaves to the outside of the machine.
14. Install undercover (14).



1. Remove undercover (1).
2. Remove drain plug (P1) from the bottom of the PTO case.
3. Loosen drain plug (P2) and drain the oil from (P1).
4. After draining the oil, tighten plug (P2), then install plug (P1).
5. Refill the specified quantity of oil through oil filler (F).
6. Install undercover (1).

NOTICE

If excess oil is supplied, drain it to the specified amount to avoid overheating.



CHECK ALL TIGHTENING POINTS OF ENGINE EXHAUST PIPE CLAMPS

Please ask your Komatsu distributor to check the tightening of the clamps between the air cleaner - turbocharger - aftercooler - engine.

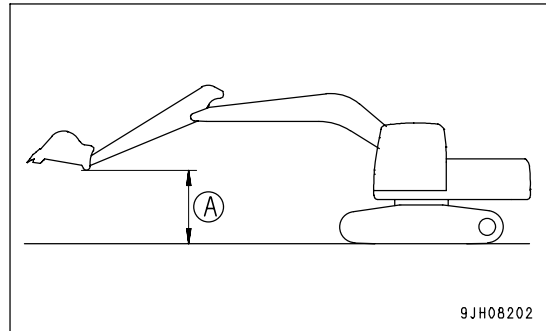
CHECKING FUNCTION OF ACCUMULATOR



When carrying out the inspection, check first that there is no person or obstacle in the surrounding area.

Check the nitrogen gas charge pressure as follows.

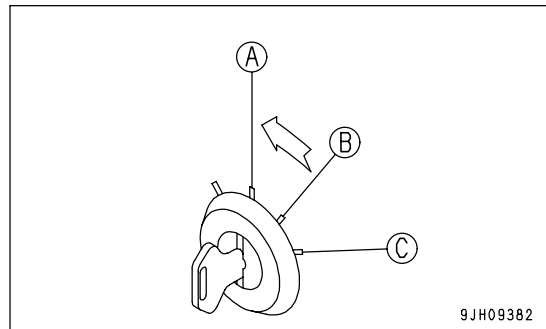
1. Stop the machine on firm, level ground.
2. Hold the work equipment in the maximum reach posture (arm fully out, bucket fully dumped) at a height (A) 1.5 m (4 ft 11 in) from the ground.



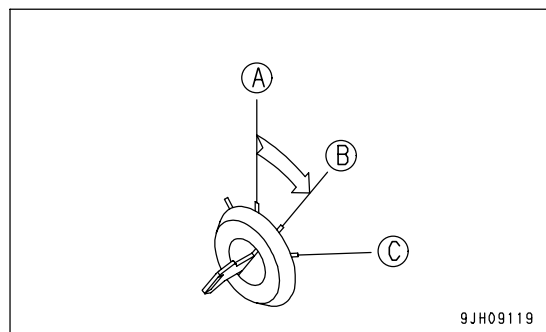
Carry out Steps 3 - 5 within 15 seconds.

When the engine is stopped, the pressure in the accumulator gradually goes down. For this reason, the check can only be carried out immediately after the engine is stopped.

3. Keep the work equipment at the maximum reach, turn the starting switch to the OFF position (A), and stop the engine.

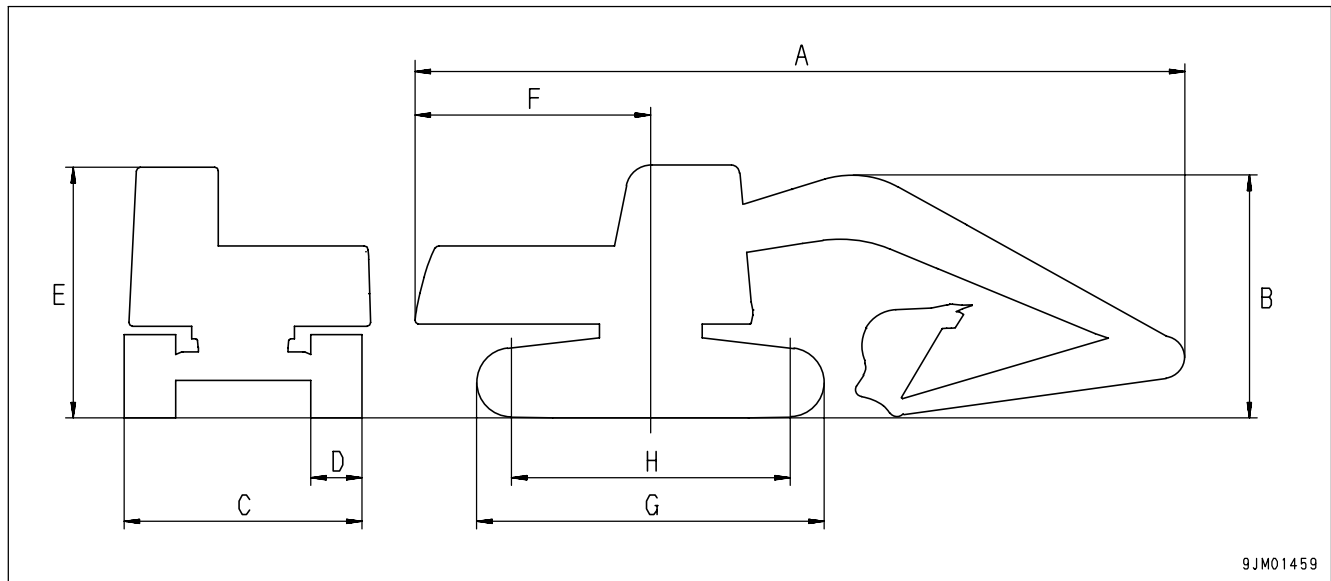


4. Turn the starting switch to the ON position (B).



SPECIFICATIONS

Item	Unit	PC600-8	PC600LC-8
Operating weight (including one person)	kg (lb)	56,600 (124,803)	57,600 (127,008)
Bucket capacity	m ³ (cu.yd)	2.7 (3.5)	2.7 (3.5)
Name of engine	-	KOMATSU SAA6D140E-5 deisel engine	
Rated horsepower of engine	kW (HP)/rpm	323 (439)/1,800	323 (439)/1,800
A Overall length	mm (ft in)	12,910 (42'4")	12,910 (42'4")
B Overall height	mm (ft in)	4,300 (14'1")	4,300 (14'1")
C Overall width	mm (ft in)	3,900 (12'10")	3,900 (12'10")
D Track shoe width	mm (ft in)	600 (1'12")	600 (1'12")
E Height of cab	mm (ft in)	3,290 (10'10")	3,290 (10'10")
F tail swing radius	mm (ft in)	3,675 (12'1")	3,675 (12'1")
G Overall length of track	mm (ft in)	5,340 (17'6")	5,690 (18'8")
H Tumbler center distance	mm (ft in)	4,250 (13'11")	4,600 (15'1")
Min. ground clearance	mm (ft in)	780 (2'7")	780 (2'7")
Traveling speed (low/high)	km/h (MPH)	3.0/4.9 (1.9/3.0)	3.0/4.9 (1.9/3.0)
Swing speed	rpm	8.3	8.3



Operation of counterweight remover



WARNING

- When operating the counterweight remover device, do not allow anyone to come close to the machine.
- When operating the counterweight remover device, be sure to apply the lock switches in the operator's cab compartment and in the hydraulic pump chamber.
- When removing or installing the counterweight, park the machine on the flat and solid ground free of fluctuations and stones, and then do the work.
- When removing or installing the counterweight, lower the work equipment to the ground to stabilize the machine.
- When removing or installing the counterweight, keep the engine running at low idling.
- While removing or installing the counterweight, keep a close watch on the counterweight, as it moves, to make sure that it moves without a hitch.
- When the counterweight is not secured to the revolving frame, never do the digging work (i.e. the operation of the work equipment, travel and swing). By the same token, never do the same when the counterweight is stretched.

NOTICE

- Be sure to apply grease after the counterweight is removed. For the greasing points, see "GREASING (PAGE 6-14)"
- In the counterweight removal and installation work, be sure to turn the remover control selector valve to the "REMOVAL / INSTALLATION" position before setting about the work. If this step is neglected, the hydraulic pump can be damaged, or the machine's life will be shortened.
- When the counterweight removal or installation work finishes, turn the remover control selector valve to the original position, and start ordinary work thereafter.

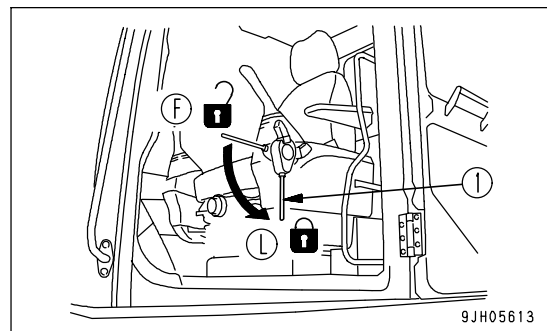
When lowering counterweight



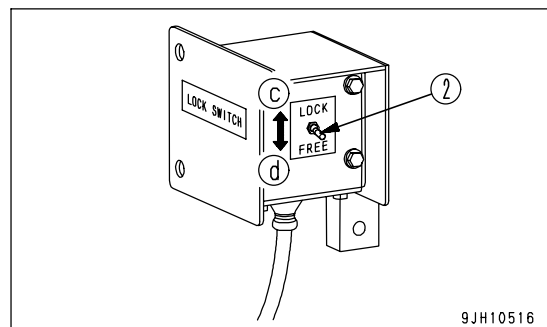
CAUTION

When switching the remover control selector valve, make sure that the engine pauses.

1. Make sure that lock lever (1) in the operator's cab is in the LOCK (L) position.

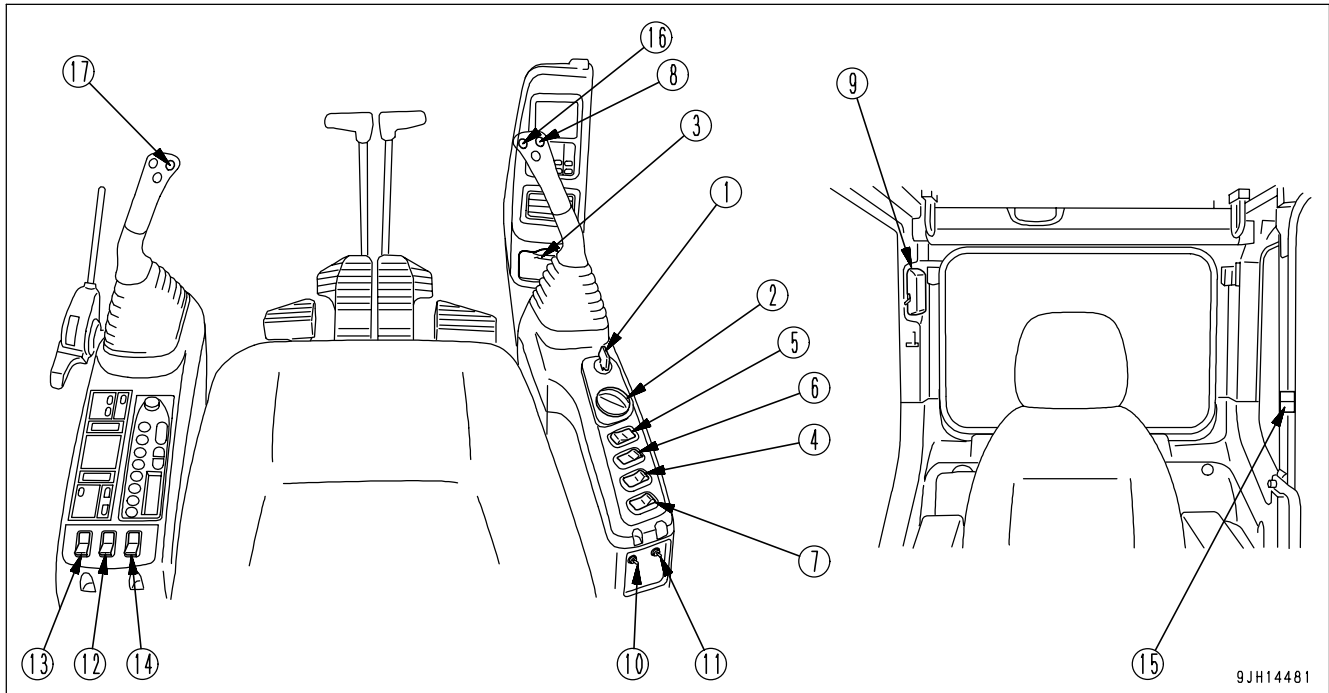


2. Turn lock switch (2) in the pump chamber to the LOCK (c) position.



EXPLANATION OF COMPONENTS

SWITCHES

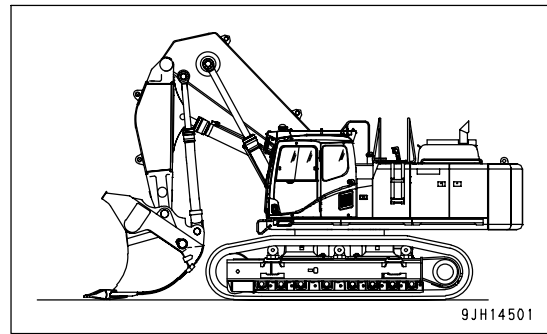


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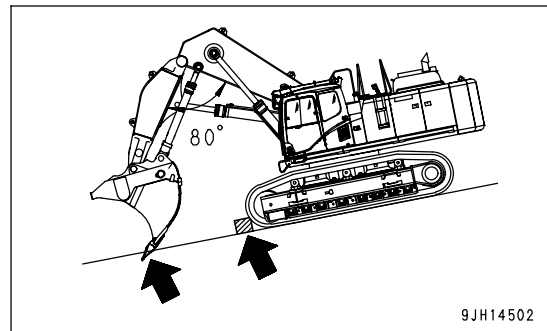
- | | |
|---|---|
| (1) Starting switch | (9) Room lamp switch |
| (2) Fuel control dial | (10) Emergency pump drive switch |
| (3) Cigarette lighter | (11) Swing parking brake release switch |
| (4) Machine push-up switch | (12) Revolving warning lamp switch (if equipped) |
| (5) Lamp switch | (13) Large capacity airflow air conditioner blower switch (if equipped) |
| (6) Swing lock switch | (14) Lower wiper switch (if equipped) |
| (7) Boom shockless control switch (if equipped) | (15) Step light switch (if equipped) |
| (8) Horn switch | (16) Bottom dump switch (open) |
| | (17) Bottom dump switch (close) |

PARKING MACHINE

- Park the machine on firm, level ground.
- Select a place where there is no hazard of landslides, falling rocks, or flooding.
- Lower the work equipment completely to the ground.



- If it is necessary to park the machine on a slope, always do as follows.
 - Set the work equipment on the downhill side and dig it into the ground.
 - In addition, put blocks under the tracks to prevent the machine from moving.



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