Operation & Maintenance Manual

SEAM049000T

GALEO

PC128US-2
PC138US-2

HYDRAULIC EXCAVATOR

SERIAL NUMBERS PC128US-7731 and up
PC138US-1101

⚠ 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

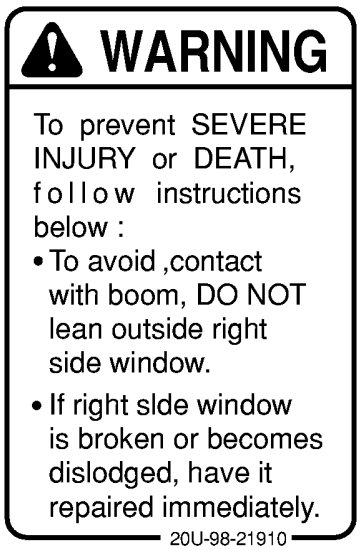
Komatsu has Operation & Maintenance Manuals written in some other languages. If a foreign language manual is necessary, contact your local distributor for availability.

KOMATSU

CONTENTS

(7) Precautions for stowage (09803-03000)

(8) Precautions for broken or becomes dislodged to the window (20U-98-21910)



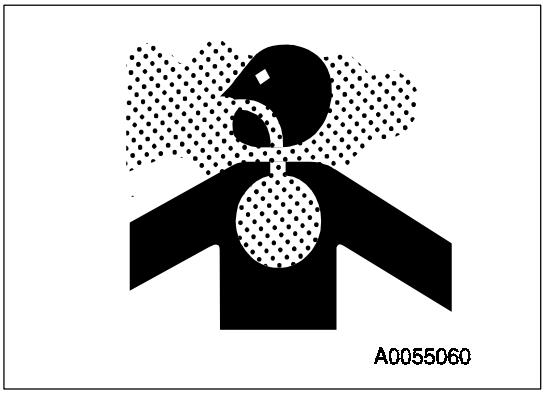
(9) Precautions for high-temperature cooling water (09668-03001)

(10) Precautions for high-temperature hydraulic oil (09653-03001)

Ventilation for Enclosed Area

Exhaust fumes from the engine can kill.

- If it is necessary to start the engine within an enclosed area, or when handling fuel, flushing oil, or paint, open the doors and windows to ensure that adequate ventilation is provided to prevent gas poisoning.



Signalman's Signal and Signs

- Set up signs to inform of road shoulders and soft ground. If the visibility is not good, position a signalman if necessary. Operators should pay careful attention to the signs and follow the instructions from the signalman.
- Only one signalman should give signals.
- Make sure that all workers understand the meaning of all signals and signs before starting work.

Emergency Exit from Operator's Cab

If for any reason, it becomes impossible to open the cab door, use the hammer supplied to break the window and use it as an emergency escape.

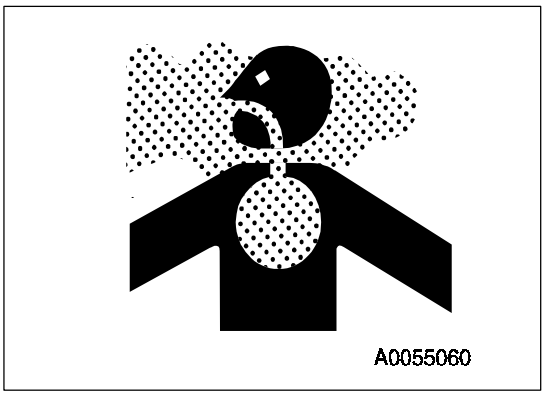
For details, see "EMERGENCY ESCAPE HAMMER (PAGE 3-30)" in this manual.

- When escaping, remove all the pieces of glass from the window frame first and be careful not to cut yourself on the glass. Be careful also not to slip on the broken pieces of glass on the ground.

Asbestos Dust Hazard Prevention

Asbestos dust in the air can cause lung cancer if it is inhaled. There is danger of inhaling asbestos when working on jobsites handling demolition work or work handling industrial waste. Always observe the following.

- Spray water to keep down the dust when cleaning. Do not use compressed air for cleaning.
- If there is danger that there may be asbestos dust in the air, always operate the machine from an upwind position. All workers should use an approved respirator.
- Do not allow other persons to approach during the operation.
- Always observe the rules and regulations for the work site and environmental standards.



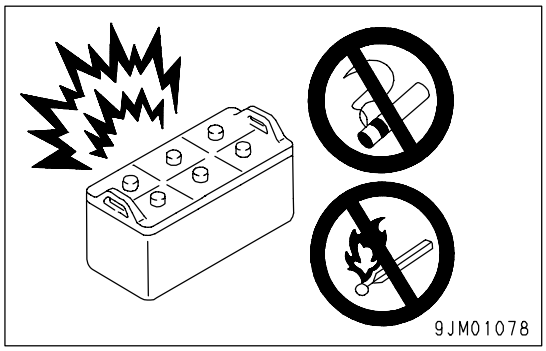
This machine does not use asbestos, but there is a danger that imitation parts may contain asbestos, so always use genuine Komatsu parts.

BATTERY

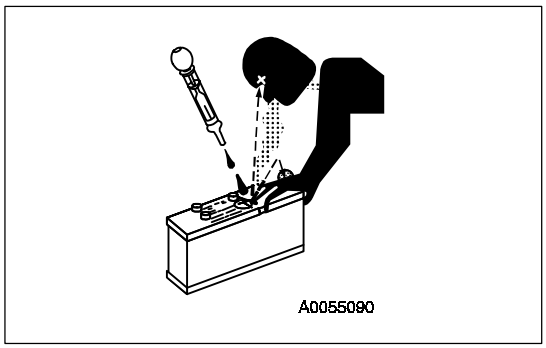
Battery Hazard Prevention

Battery electrolyte contains sulphuric acid, and batteries generate flammable hydrogen gas, which may explode. Mistaken handling can lead to serious injury or fire. For this reason, always observe the following precautions.

- Do not use or charge the battery if the battery electrolyte level is below the LOWER LEVEL line. This may cause an explosion. Always check the battery electrolyte level periodically and add distilled water to bring the electrolyte level to the UPPER LEVEL line.
- When working with batteries, always wear safety glasses and rubber gloves.
- Never smoke or use any flame near the battery.



- If you spill acid on your clothes or skin, immediately flush the area with large amount of water.
- If acid gets into your eyes, flush them immediately with large amount of water and seek medical attention.



- Before working with batteries, turn the starting switch to the OFF position.

As there is a hazard that sparks will be generated, always do as follows.

- Do not let tools or other metal objects make any contact between the battery terminals. Do not leave tools or other metal objects lying around near the battery.
- Always disconnect the negative (-) terminal (ground side) first when removing the battery; when installing the battery, connect the positive (+) terminal first, and connect the ground last. Tighten the battery terminals securely.
- Flammable hydrogen gas is generated when the battery is charged, so remove the battery from the chassis, take it to a well-ventilated place, and remove the battery caps before charging it.
- Tighten the battery caps securely.
- Install the battery securely to the determined place.

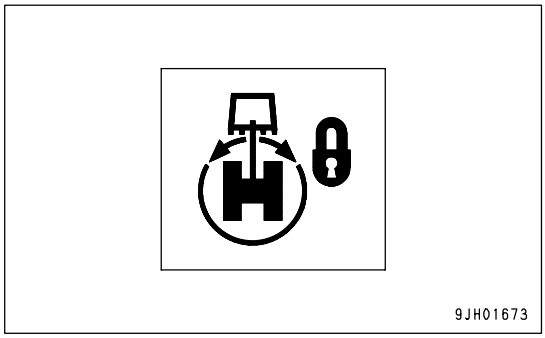
OPERATION

⚠ WARNING

Please read and make sure that you understand the SAFETY section before reading this section.

Swing Lock Monitor

This monitor(2) informs the operator that the swing lock is being actuated.
Actuated: Lights up
When the swing lock switch is turned ON (ACTUATED), the monitor lamp lights up.
When the swing holding brake relase switch is turned on, this monitor lamp flashes.

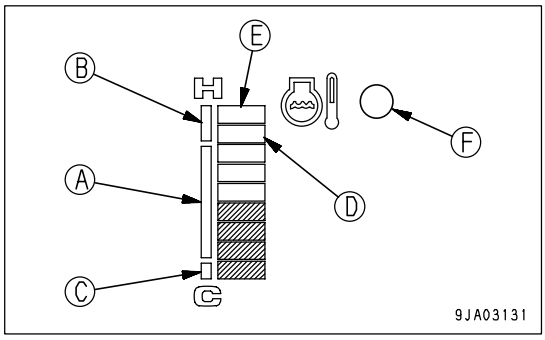


REMARK
The swing motor is equipped with a disc brake that mechanically stops the rotation. When the swing lock monitor lamp is lighted up, the brake remains applied.

Gauges and Meter

Engine Coolant Temperature Gauge

When the red range (B) lights up during machine operation, the engine overheat preventive system is actuated.
The engine overheat preventive system functions in the following manner.
When segment (D) lights up:
Engine cooling water temperature monitor lamp begins to flash.
When segment (E) lights up:
The engine speed is brought down to low idling, engine cooling water temperature monitor lamp (F) begins to flash and the warning buzzer begins to sound.



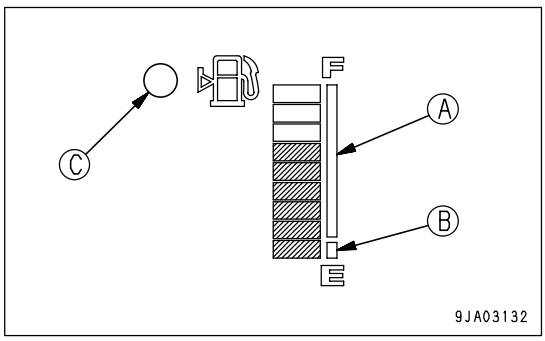
REMARK
- The engine overheat preventive system continues to function until the cooling water temperature goes down to the level of green range (A).
- Engine cooling water temperature monitor lamp (F) stops flashing, when the fuel adjusting dial is set at low idling, after the cooling water temperature goes down to the level of green range (A).

If only white range (C) remains lit after starting the engine, warm up the engine until green range (A) lights up.

Fuel Gauge

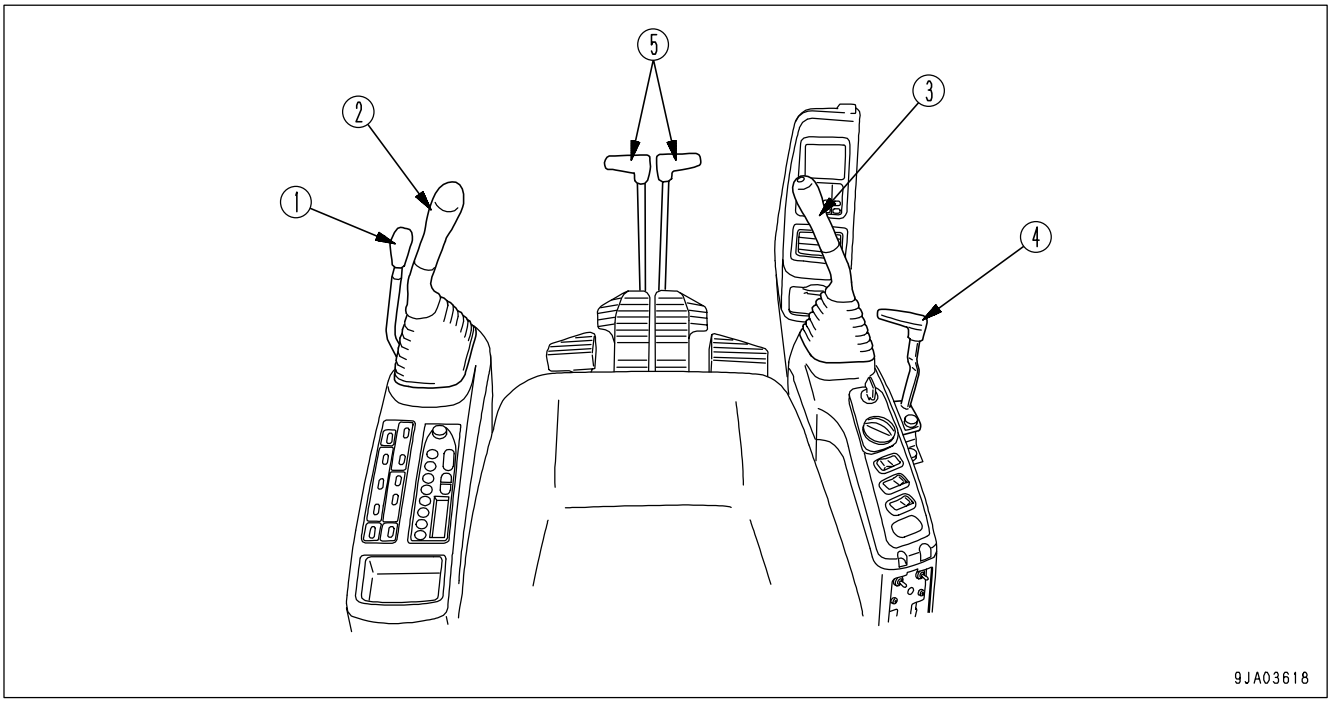
This meter (4) shows the fuel level in the fuel tank. During normal operation, the lamp should light up in the green range (A).
If the lamp in the red range (B) flashes during operation, there isles than 42 liters (11.10 US gal) of fuel remaining, so check and add fuel.

The correct level may not be displayed for a short time after the starting switch is turned to the ON position, but this is not an abnormality.



REMARK
When red range (B) in the fuel gauge lights up, fuel level monitor (C) begins to flash, too.

CONTROL LEVERS AND PEDALS



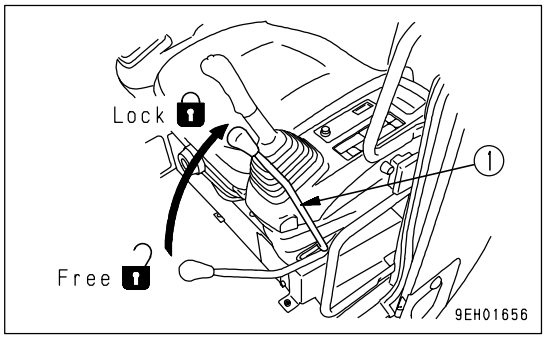
(1) Safety lock lever
(2) Left work equipment control lever
(3) Right work equipment control lever
(4) Blade control lever (Blade specification)
(5) Travel levers (machines with travel pedals)

Safety Lock Lever

WARNING

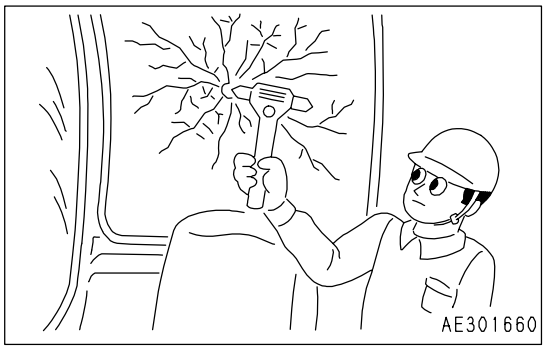
- **When leaving the operator's cab, be sure to move the safety lock lever to the LOCK position. If the safety lock lever is not in the LOCK position and a control lever is touched accidentally, that may cause a serious bodily injury.**
- **If the safety lock lever is not secured in the LOCK position, it may cause a serious bodily injury. Check that the lever is in the illustrated position.**
- **Be careful not to accidentally touch the work equipment control lever while pulling up the safety lock lever.**
- **Be careful not to accidentally touch the work equipment control lever while pushing down the safety lock lever.**

This lever (1) is a locking device for locking operation of the work equipment and attachments, swing and travel.
The lever is put to the LOCK position, when it is pulled up.
This safety lock lever is of a hydraulic locking type. Even if it is put to the LOCK position, the work equipment control lever and travel control lever can be moved, but neither machine nor the work equipment moves.



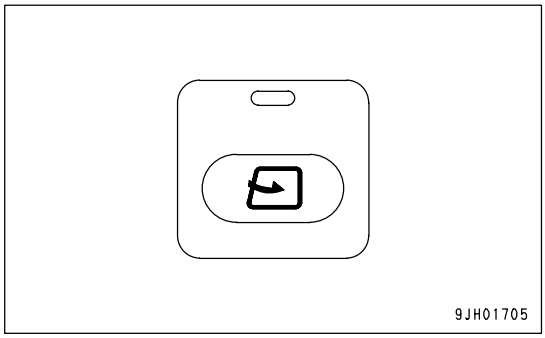
REMARK
The engine does not start, if the safety lock lever is not in the LOCK position. Make sure first that the safety lock lever is in the LOCK position, and then turn the engine starting switch.

To escape from the operator's cab, use hammer (A) to break the glass and escape through the window.



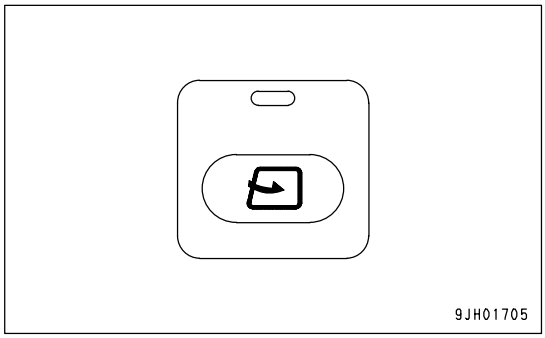
Air Circulation Selector Switch (External Air Circulation)

When switch (2) is pressed, fresh air is taken into the cab during heating or cooling.
This position is used to bring in clean fresh air into the cab or to remove the mist from the cab windows.



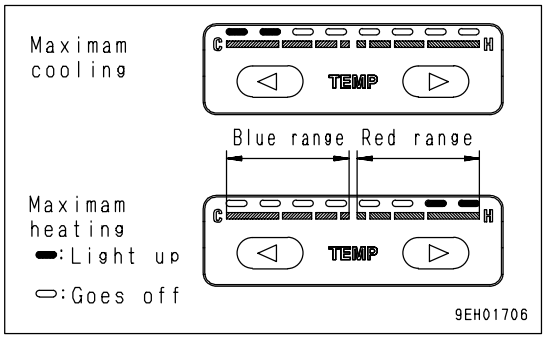
Air Circulation Selector Switch (Internal Air Circulation)

When switch (2) is pressed, the air inside the cab is recalculated and no fresh air is taken in from outside. This position is used when heating or cooling the cab quickly or when the outside air is dirty.

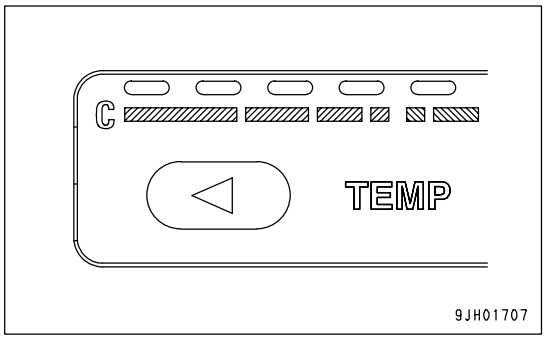


Temperature Control Switch (Cooling)

The closer to the "C" mark the lighting-up is in the range, the lower the room temperature is. Conversely the closer to the "H" mark the lighting-up is in the range, the higher the room temperature is
The indicator range is divided into 11 levels, but within each range the temperature changes sleeplessly.

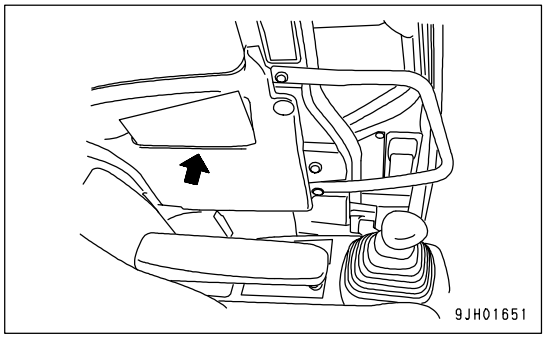


Use switch (3) to reduce the temperature.
Press this switch to reduce the temperature of the air sent from the air conditioner.
The more times the switch is pressed, the lower the blowing wind temperature becomes, as the indicator light moves to the "C".



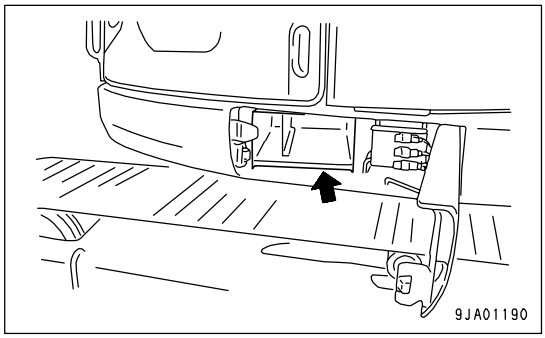
OPERATION MANUAL STORAGE

A magazine box is provided on the left side of the operator's seat for safekeeping the operation and maintenance manual and oil chart.
Always keep the Operation and Maintenance Manual in this pocket so that it is possible to read it at any time.



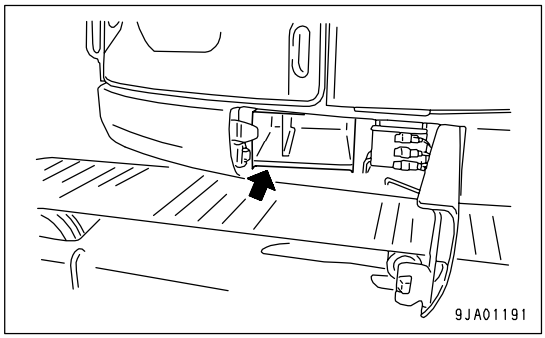
TOOL BOX

Open the door at the front of the tool box. The standard tool compartment is inside.
Put the tools in the supplied tool bag and store them in the tool compartment.



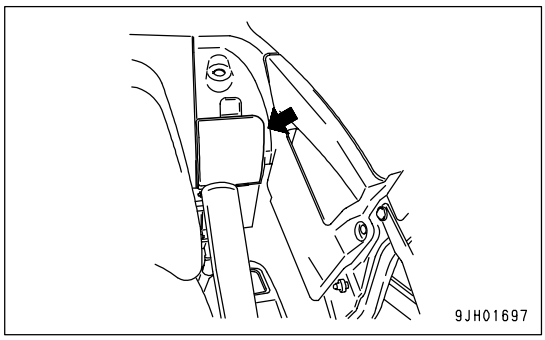
GREASE PUMP HOLDER

Open the door at the front of the tool box. The compartment to stow the grease pump is inside.
Pass the nozzle through the hole at the end, and push the grease gun holder fully in to store it.



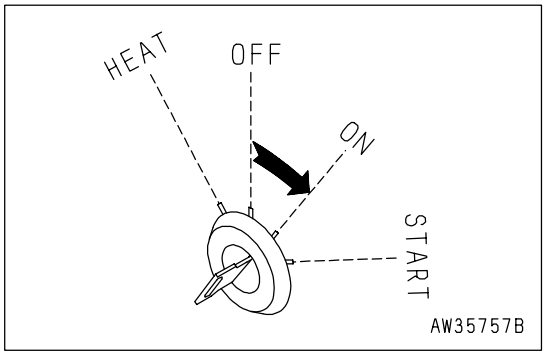
HOT AND COOL BOX

This is on the right side at the rear of the operator's seat. It is interconnected with the air conditioner: it stays warm when the heating is used, and stays cool when the cooling is used.

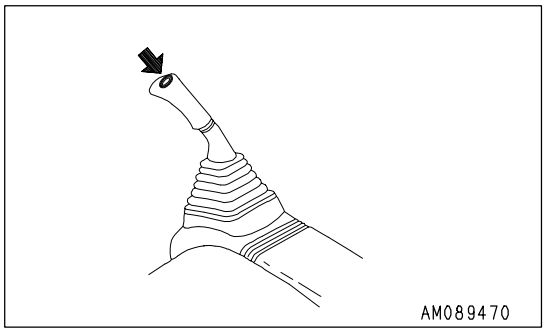


Horn Function - Check

1. Turn the starting switch to the ON position.



2. Confirm that the horn sounds immediately when the horn button is pressed.
   If the horn does not sound, please contact your Komatsu distributor for repair.



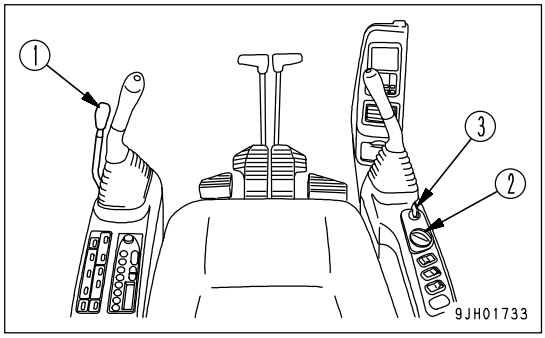
Starting Engine In Cold Weather

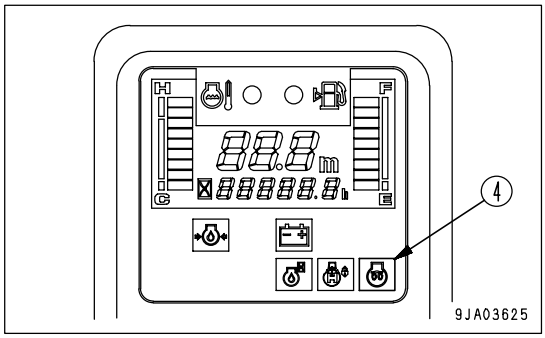
⚠ WARNING

- **Check that there are no persons or obstacles in the surrounding area, then sound the horn and start the engine.**
- **Never use starting aid fluids as they may cause explosions.**
- **Exhaust gas is toxic. When starting the engine in confined spaces, be particularly careful to ensure good ventilation.**

NOTICE

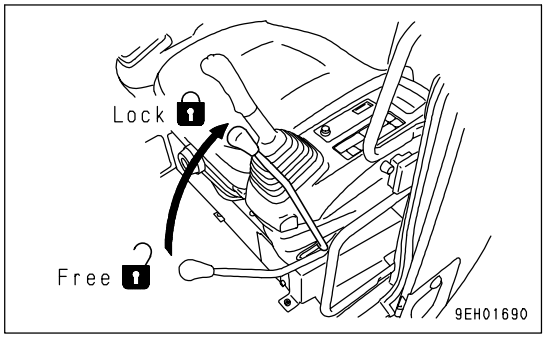
- **Do not try to start the engine with the fuel adjustment dial set near the full engine rotation. Otherwise the engine parts may be damaged.**
- **Do not keep the starting motor rotating continuously for more than 20 seconds.**
  If the engine fails to start, wait for about 2 minutes and repeat from Step 4.



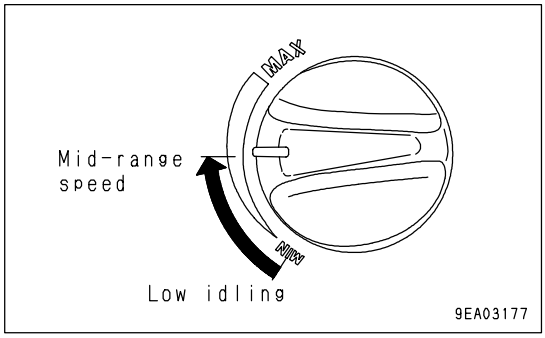


When starting in low temperatures, do as follows.

1. Check the safety lock lever (1) is at the LOCK position. If the safety lock lever is in the FREE position, the engine does not start.



2. Before starting the engine, check that fuel control dial (2) is at the low position.
3. Turn fuel control dial (2) to the center position between LOW IDLING and HIGH IDLING.



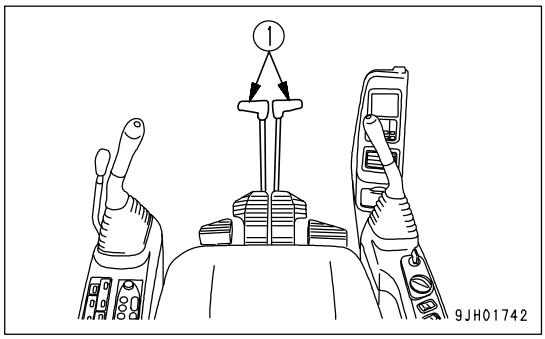
STEERING THE MACHINE

Steering

WARNING

Before operating the travel control levers, check the direction of the track frame (i.e. position of the sprocket) first. If the sprocket is at the front, the machine moves in the reverse direction to the operation of the travel lever.

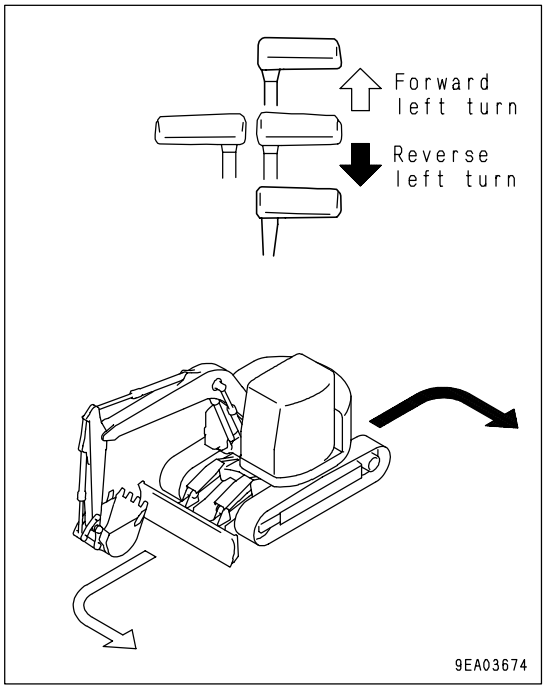
Use the travel levers to change direction.
Avoid sudden changes of direction as far as possible. In particular, when carrying out counter-rotation (spin turn), stop the machine first before turning.
Operate two travel levers (1) as follows.



Steering the Machine when Stopped

When turning to the left:
Push the right travel lever forward to turn to the left when traveling forward; and pull it back to turn left when traveling in reverse.

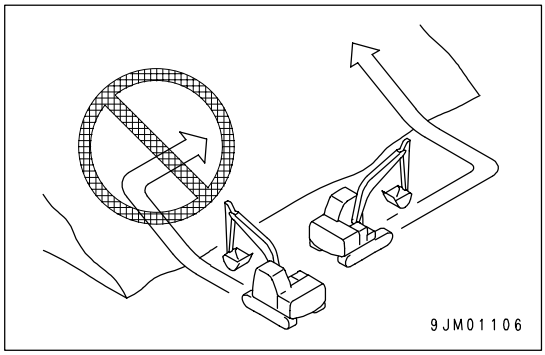
REMARK
When turning to the right, operate the left travel lever in the same way.

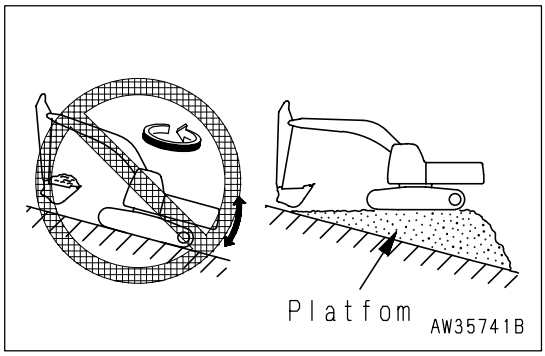


TRAVELING ON SLOPES

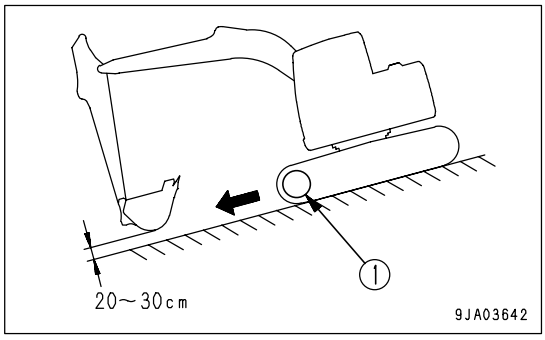
⚠ WARNING

- **Turning or operating the work equipment when working on slopes may cause the machine to lose it balance and turn over, so avoid such operations.**
  It is particularly dangerous to swing downhill when the bucket is loaded. If such operations have to be carried out, pile soil to make a platform on the slope so that the machine can be kept horizontal when operating.
- **Do not travel up or down steep slopes. There is danger that the machine may turn over.**
- **When traveling, raise the bucket approx. 20 to 30cm (8 to 12 in) from the ground.**
  Do not travel downhill in reverse.
- **Never turn on slopes or travel across slopes.**
  Always go down to a flat place to perform these operations. It may be longer, but it will ensure safety.
- **Always operate or travel in such a way that it is possible to stop safely at any time if the machine slips or becomes unstable.**
- **When traveling uphill, if the shoes slip or it is impossible to travel uphill using only the force of the tracks, do not use the pulling force of the arm to help the machine travel uphill. There is danger that the machine may turn over.**

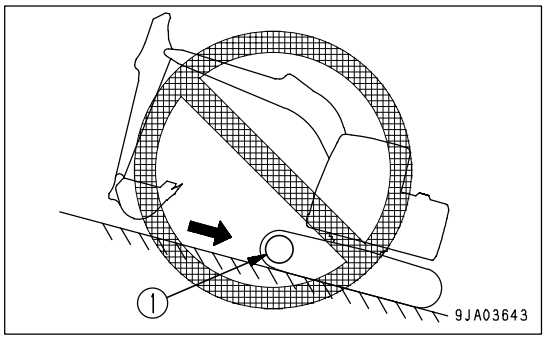




1. When traveling down steep hills, use the travel lever and fuel control dial to keep the travel speed low. When traveling down a steep hill of more than 15°, with the sprocket (1) side down, and set the work equipment to the posture shown in the diagram on the right, and lower the engine speed.



REMARK
Travel down fills with the sprocket (1) side down.
If the machine travels down with the sprocket (1) side up, the track tends to become loose, and that can cause skipping pitches.



Using Road Liners

Prohibited Works

Do not carry out the following types of work.

- Carrying out operations and steering on crushed rock, extremely rough hard rock, steel beams, scrap iron, or near the edges of steel plates will cause damage to the rubber shoes and road liners.
- In places such as river beds where there are large numbers of large and small boulders, the stones may get caught and damage the rubber shoes and road liners or make the shoes come off. If dozing operations are carried out when the shoes are slipping, this will reduce the life of the rubber shoes and road liner.
- Be careful not to get oil, fuel, or chemical solvent on the rubber shoes and road liners. If such a substance shold get on the shoes, remove it immediately. Furthermore, do not travel on road surfaces where oil has collected.
- When putting the machine into long-term storage (3 months or more), store the machine indoors where it is protected from direct sunlight or rain.
- Do not use the machine in high-temperature areas, such as areas where there is burning wood, steel plates that have been left under the hot sun, or places where asphalt has been laid.
- When the rubber parts of the road liner are so worn or broken that the head of the mounting bolts are scratched, replace the shoe immediately. If the bolt heads are broken, the bolt cannot be removed.
- When installing road liners, always install them to all links on both sides. If they are installed to only one part of the links, their durability will be greatly reduced.

Long Life Operations

Be careful of the following points when carrying out work.

- Avoid carrying out counterrotation turns on concrete surfaces. There is danger that the concrete surface will scrape off the rubber from the shoe.
- Avoid making sudden changes in direction. This may cause premature wear or damage to the rubber shoes and road liners.
- Avoid operating the steering when traveling over places where there is a big difference in height. When traveling over obstacles or places where there is a difference in height, drive the machine at right angles to the obstacle to prevent the shoes from coming off.
- If the machine has been raised using the bucket, lower it slowly.
- Avoid doing work with materials that produce oil when crushed (soya beans, corn, or remains of vegetables squeezed for oil); or wash the machine after use.
- Avoid handling materials that will attack the adhesion of the steel core, such as salt, ammonium sulphate, potassium chloride, potassium sulphate, or calcium superphosphate; or wash the machine after use.
- The adhesion of the core will be attacked by salt, so avoid using the machine in coastal areas.
- When handling salt, sugar, wheat, or soya beans, if there is any deep cut in the rubber shoes and road liners, these substances may get into the lugs or cut portion of the rubber. Always repair the rubber before use.
- Do not carry out work that involves scraping against walls or concrete embankments.
- Road liners slip extremely easily on snow or frozen roads. Be careful not to slip when traveling or working on slopes.
- The properties of road liners change when working in extermely cold places, and this will reduce the life of the rubber shoes and road liners.
- Because of the properties of rubber, use the road liners within a range of -25°C to +65°C (-13°F to +149°F).
- When carrying out bucket operations, be careful not to damage the road liners with the bucket.

COLD WEATHER OPERATION

COLD WEATHER OPERATION INFORMATION

If the temperature becomes low, it becomes difficult to start the engine, and the coolant may freeze, so do as follows.

Fuel And Lubricants

Change to fuel and oil with low viscosity for all components. For details of the specified visicosity, see "LUBRICANTS, FUEL AND COOLANT SPECIFICATIONS (PAGE 4-8)".

Cooling System Coolant

⚠ WARNING

- **Antifreeze is toxic. Be careful not to get it into your eyes or on your skin. If it should get into your eyes or on your skin, wash it off with large amount of fresh water and see a doctor at once.**
- **When changing the coolant or when handling coolant containing antifreeze that has been drained when repairing the radiator, please contact your Komatsu distributor. Antifreeze is toxic, so do not let it flow into drainage ditches or spray it on to the ground surface.**
- **Antifreeze is flammable, so do not bring any flame close. Do not smoke when handling antifreeze.**

NOTICE

- **Never use methanol, ethanol, or propanol-based antifreeze.**
- **Never use any water-leakage prevention agent or any antifreeze containing such an agent.**
- **Do not mix different types of antifreeze.**

For details of the antifreeze mixture when changing the coolant, see "Cooling System Coolant - Clean/Change (PAGE 4-21)".

Use a Permanent Antifreeze (ethylene glycol mixed with corrosion inhibitor, antifoam agent, etc.) meeting the standard requirements as shown below. With permanent antifreeze, no change of coolant is required for a year. If it is doubtful that an available antifreeze meets the standard requirements, ask the supplier of that antifreeze for information.

Standard requirements for permanent antifreeze

- SAE J1034
- FEDERAL STANDARD O-A-548D

REMARK

In areas where permanent antifreeze is not available, it is possible to use antifreeze whose main component is ethylene glycol and does not contain any corrosion inhibitor. (Such antifreeze can be used for the winter season only.) However, in such a case, the cooling water must be changed twice a year (spring and fall), so use permanent antifreeze as far as possible.

OTHER TROUBLE

Electrical System

- ( ): Always contact your Komatsu distributor when dealing with these items.
- In cases of abnormalities or causes which are not listed below, please contact your Komatsu distributor for repairs.

Problem	Main causes	Remedy
Lamp does not glow brightly even when the engine runs at high speed	• Defective wiring	(• Check, repair loose terminals, disconnections)
Lamp flickers while engine is running	• Defective adjustment of fan belt tension	(• Check, replace fan belt)
Charge level monitor does not go out even when engine is running	• Defective alternator • Defectivr wiring	(• Replace) (• Check, repair)
Abnormal noise is generated from alternator	• Defective alternator	(• Replace)
Starting motor does not turn when starting switch is turned to ON	• Defective wiring • Defective starting motor • Insufficient battery charge	(• Check, repair) (• Replace) • Charge
Pinion of starting motor keeps going	• Insufficient battery charge • Defective safety relay	• Charge (• Replace)
Starting motor turns engine sluggishly	• Insufficient battery charge • Defective starting motor	• Charge (• Replace)
Starting motor disengages before engine starts	• Defective wiring Defective ring gear and pinion • Insufficient battery charge	(• Check, repair) • Charge
Pre-heating monitor does not light	• Defective wiring • Defective heater relay • Defective monitor	(• Check, repair) (• Replace) (• Replace)
Oil pressure monitor does not light up when engine is stopped (starting switch at ON position)	• Defective monitor • Defective caution lamp switch	(• Replace) (• Replace)
• When outside of electric heater is touched by hand, it is not warm	• Defective wiring • Disconnection in electric heater • Defective operation of heater	(• Check, repair) (• Replace) (• Replace)

Oil And Fuel Storage

- Keep indoors to prevent any water, dirt, or other impurities from getting in.
- When keeping drum cans for a long period, put the drum on its side so that the filler port of the drum can is at the side. (To prevent moisture from being sucked in)
  If drum cans have to be stored outside, cover them with a waterproof sheet or take other measures to protect them.
- To prevent any change in quality during long-term storage, be sure to use in the order of first in - first out (use the oldest oil or fuel first).

Filters

- Filters are extremely important safety parts. They prevent impurities in the fuel and air circuits from entering important equipment and causing problems.
  Replace all filters periodically. For details, see the Operation and Maintenance Manual.
  However, when working in severe conditions, replace the filters at shorter intervals according to the oil and fuel (sulfur content) being used.
- Never try to clean the filters (cartridge type) and use them again. Always replace with new filters.
- When replacing oil filters, check if any metal particles are affixed to the old filter. If any metal particles are found, please contact your Komatsu distributor.
- Do not open packs of spare filters until just before they are to be used.
- Always use Komatsu genuine filters.

ELECTRIC SYSTEM MAINTENANCE

- It is extremely dangerous if the electrical equipment becomes wet or the covering of the wiring is damaged. This will cause electrical leakage and may lead to malfunction of the machine. Do not wash the inside of the operator's cab with water. When washing the machine, be careful not to let water get into the electrical components.
- Service relating to the electric system is check of fan belt tension, check of damage or wear in the fan belt and check of battery fluid level.
- Never install any electric components other than those specified by Komatsu.
- External electro-magnetic interference may cause malfunction of the control system controller, so before installing a radio receiver or other wireless equipment, please contact your Komatsu distributor.
- When working at the seashore, carefully clean the electric system to prevent corrosion.
- When installing electrical equipment, connect it to the special power source connector.
  Do not connect the optional power source to the fuse, starting switch, or battery relay.

MAINTENANCE PROCEDURE

INITIAL 250 HOURS MAINTENANCE (ONLY AFTER THE FIRST 250 HOURS)

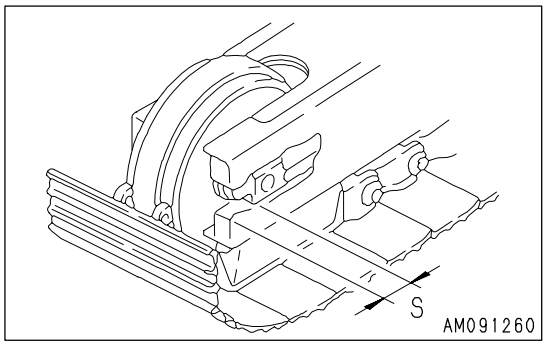
Carry out the following maintenance only after the first 250 hours of operation on new machines.

- Fuel Filter Cartridge - Replace
- Check and adjust engine valve clearance

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

For details of the method of replacing or maintaining, see the section on EVERY 500 HOURS and 2000 HOURS SERVICE.

4. Continue to pump in grease until dimension S becomes zero (0). If the tension is still loose, the pin and bushing are excessively worn, so they must be either turned or replaced. Please contact your Komatsu distributor for repairs.

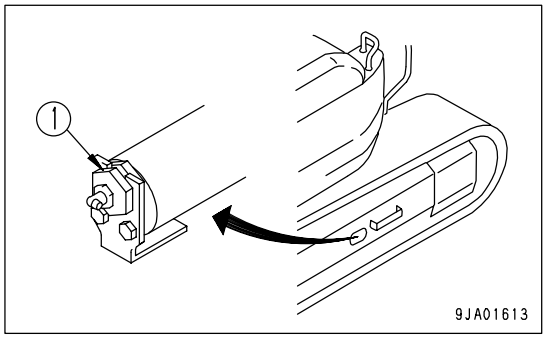


Loosening Track Tension

WARNING

It is extremely dangerous to release the grease by any method except the procedure given below.
If the track tension is not relieved by this procedure, please contact your Komatsu distributor for repairs.

1. Loosen plug (1) gradually to release the grease.
2. When loosening plug (1), turn it a maximum of one turn.
3. If the grease does not come out smoothly, move the machine forwards and backwards a short distance.
4. Tighten plug (1).
5. To check that the track tension is correct, run the engine at low idling, move the machine forward a distance equal to the length of track on ground, then stop the machine.
6. Check the track tension again, and if the tension is not correct, adjust it again.



Breaker Circuit Additional Oil Filter Element - Replace

(If equipped)

WARNING

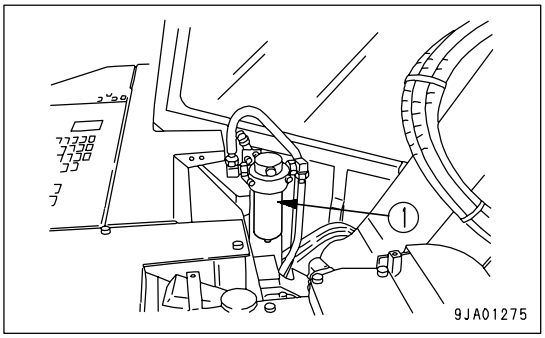
- **After the engine is stopped, the parts and oil are at high temperature, so there is danger of burns. Wait for the temperature to go down before starting the operation.**
- **When removing the cap from oil filler port (F), turn it slowly to release the internal pressure, then remove it carefully.**

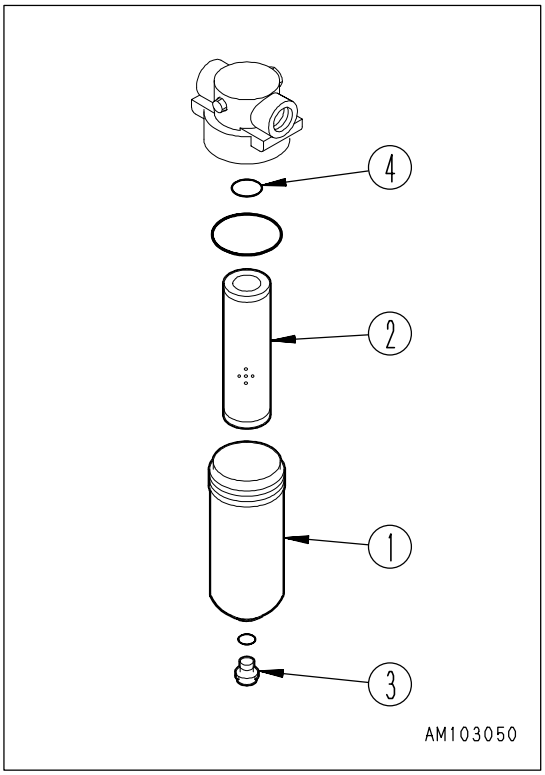
NOTICE

For details of the replacement interval for the element, "MAINTENANCE INTERVAL FOR HYDRAULIC BREAKER (PAGE 4-15)".

- Prepare a container to catch the oil.

1. Place a container under the filter element to catch the oil.
2. Turn filter case (1) to the left to remove it, then take out element (2).
3. Remove plug (3) from filter case (1).
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.





EVERY 100 HOURS MAINTENANCE

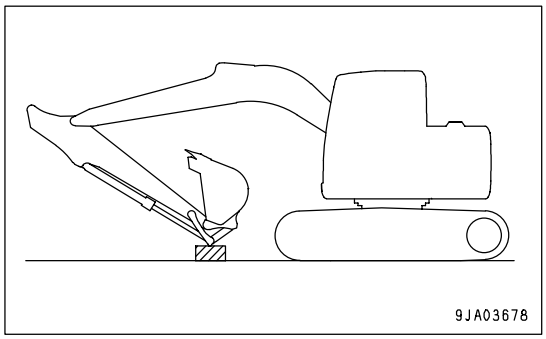
Maintenance for every 50 hours service should be carried out at the same time.

Lubricating

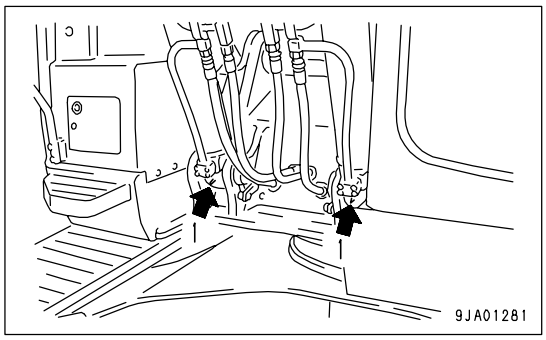
NOTICE

- **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.**

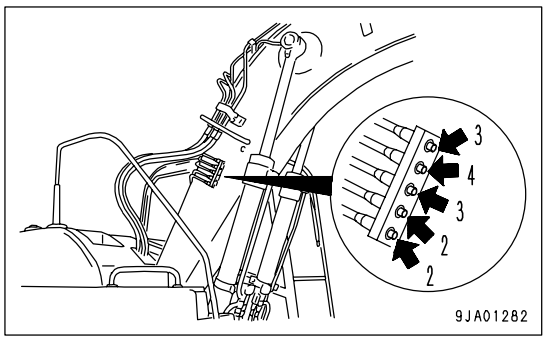
1. Set the machine to the greasing posture shown on the right, lower the work equipment to the ground, then stop the engine.
2. Using a grease pump, pump in grease through the grease fittings shown by arrows.
3. After greasing, wipe off any old grease that was pushed out.



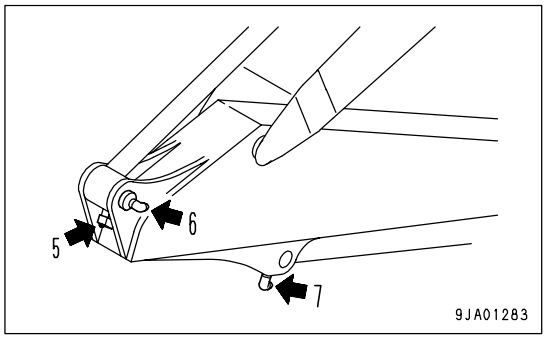
(1)Boom cylinder foot pin (2 points)



(2)Boom foot pin (2 points)
(3)Boom cylinder rod end pin (2 point)
(4)Arm cylinder foot pin (1 point)



(5)Boom-Arm coupling pin (1 point)
(6)Arm cylinder rod end pin (1 point)
(7)Bucket cylinder foot pin (1 point)



Air Conditioner Air Filter (If Equipped) - Clean

WARNING

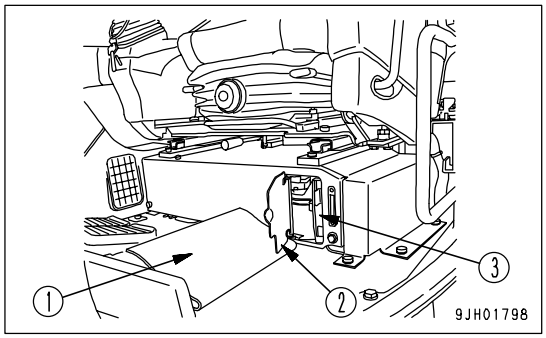
If compressed air is used, there is danger that dirt may fly and cause personal injury.
Always wear safety glasses, dust mask, and other protective equipment.

NOTICE

- **The guide for cleaning the filter is 500 hours, but if the machine is used on an extremely dusty jobsite, reduce the maintenance interval and clean the filter more frequently.**
- **When washing the floor, be careful not to get water on the air conditioner system.**

Internal Filter - Clean

1. Roll up floor mat (1) on the front left part of the floor in the operator's cab, and open cover (2).
2. Take out internal filter (3).
3. Clean internal filter (3) with compressed air. If there is oil stuck to the filter or it is extremely dirty, wash it in a neutral agent. After washing, dry it thoroughly before using it again.



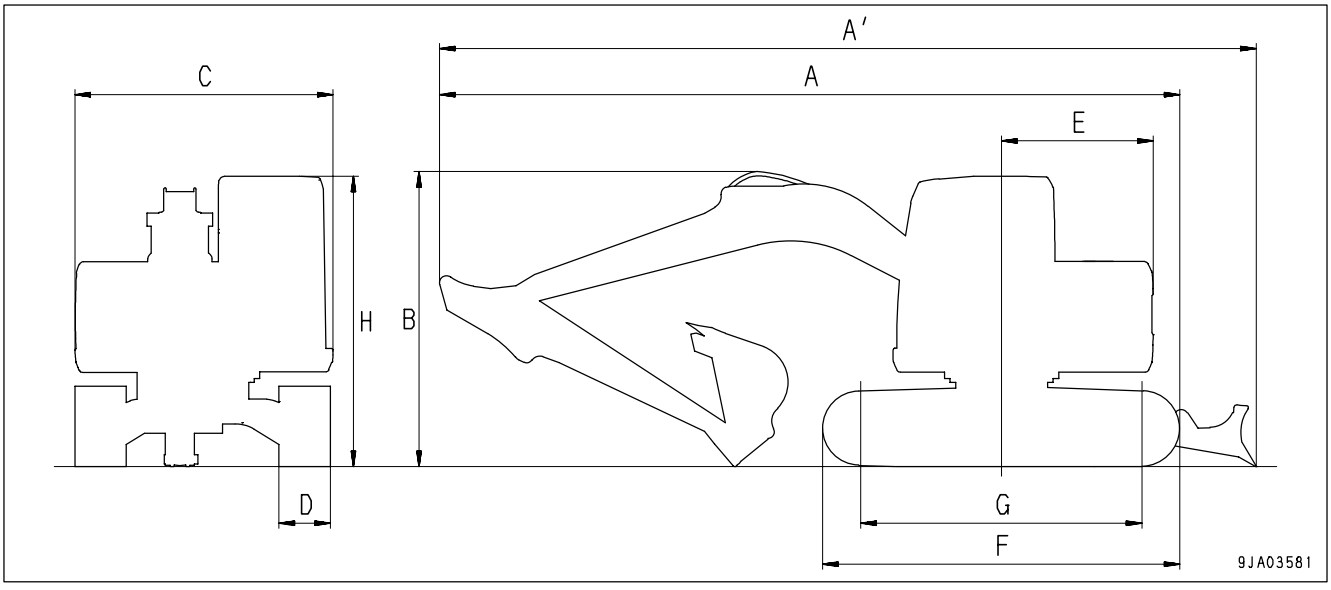
REMARK
If the clogging of the filter cannot be removed by blowing it with compressed air or washing in water, replace the filter with a new one.

4. Install cleaned filter (3), close cover (2) and spread floor mat (1) flat.

SPECIFICATIONS

PC128US-2

	Item	Unit	Standard specified	Blade specified
	Machine weight	kg (lb)	12,950 (28,555)	13,450 (29,657)
	Bucket capacity	m^3 (cu.yd)	0.45 (0.59)	
	Name of engine	-	KOMATSU S4D102E-1 diesel engine	
	Engine horsepower	kW (HP)/rpm	64 (86)/2,200	
A	Overall length (standard specified)	mm (ft in)	7,220 (23'8")	-
A'	Overall length (blade specified)	mm (ft in)	-	7,955 (26'1")
B	Overall height	mm (ft in)	2,850 (9'4")	
C	Overall width	mm (ft in)	2,515 (8'3")	
D	Track width	mm (ft in)	500 (1'8")	
E	Radius of upper structure	mm (ft in)	1,480 (4'10")	
F	Length of track	mm (ft in)	3,480 (11'5")	
G	Tumbler center distance	mm (ft in)	2,750 (9'0")	
H	Height of cab	mm (ft in)	2,810 (9'3")	
	Min. ground clearance	mm (ft in)	390 (1'3")	
	Travel speed (Low/High)	km/h (MPH)	3.2/5.1 (2.0/3.2)	
	Continuous swing speed	rpm	11.0	

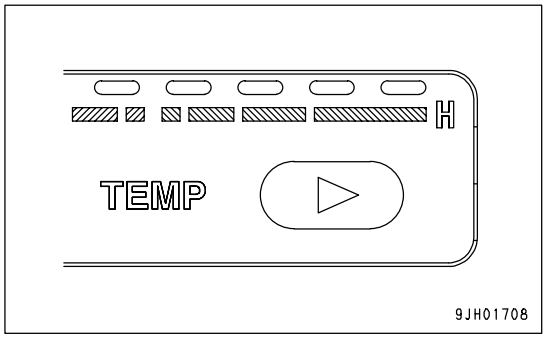


Temperature Control Switch (Heating)

Use switch (3) to increase the temperature.

Press this switch to increase the temperature of the air sent from the air conditioner.

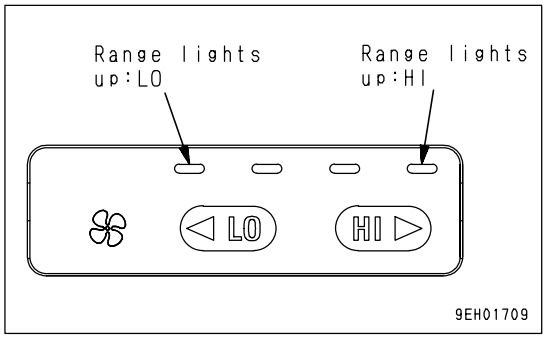
The more times the switch is pressed, the lower the blowing wind temperature becomes, as the indicator light moves to the "H".



Air Flow Selector Switch

The further it is moved into the LO range (rear of machine), the smaller the air flow becomes; the further it is moved into the HI range (front of machine), the greater the air flow becomes.

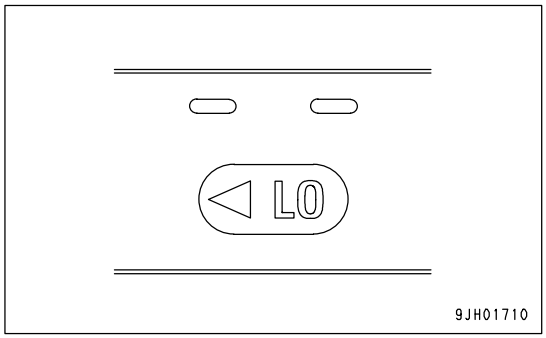
he range is divided into 4 levels.



Air Flow Selector Switch (Low)

Switch (4) is used to set the flow of air from the air conditioner to Low.

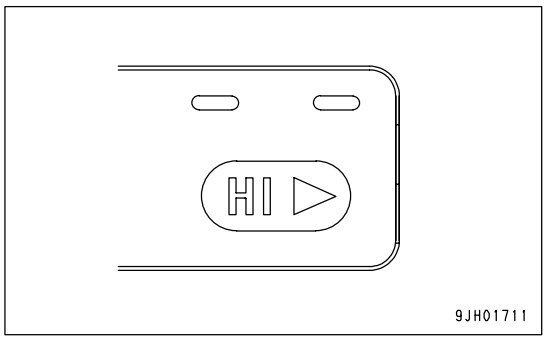
Press this switch to reduce the air flow. The further it is moved into the LO range (rear of machine), the smaller the air flow becomes.



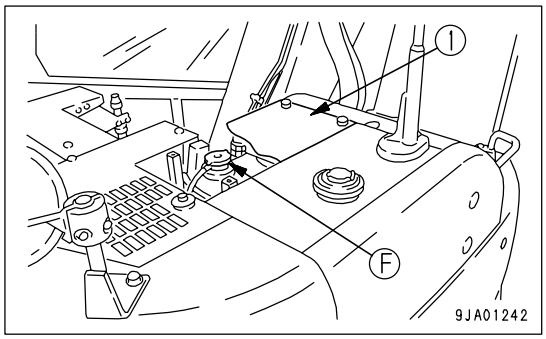
Air Flow Selector Switch (High)

Switch (2) is used to set the flow of air from the air conditioner to High.

Press this switch to increase the air flow. The further it is moved into the HI range (front of machine), the greater the air flow becomes.



6. Remove cover (1) at the top surface of the hydraulic tank, then slowly loosen oil filler cap (F) to release the internal pressure.



7. After checking that the oil temperature is low, remove the covers from the inlet port and outlet port (2 places). Be careful that no dirt or mud is stuck to the hose mouthpiece.
   If the O-ring is damaged, replace it with a new part.
8. Connect the hose at the attachment side.
   When doing this, check the direction of flow of the oil and be careful not to make any mistake.
9. Turn the rotor of the stop valves installed to the inlet and outlet piping at the side of the arm to the FREE position.
10. After installing the attachment, check the oil level in the hydraulic tank.