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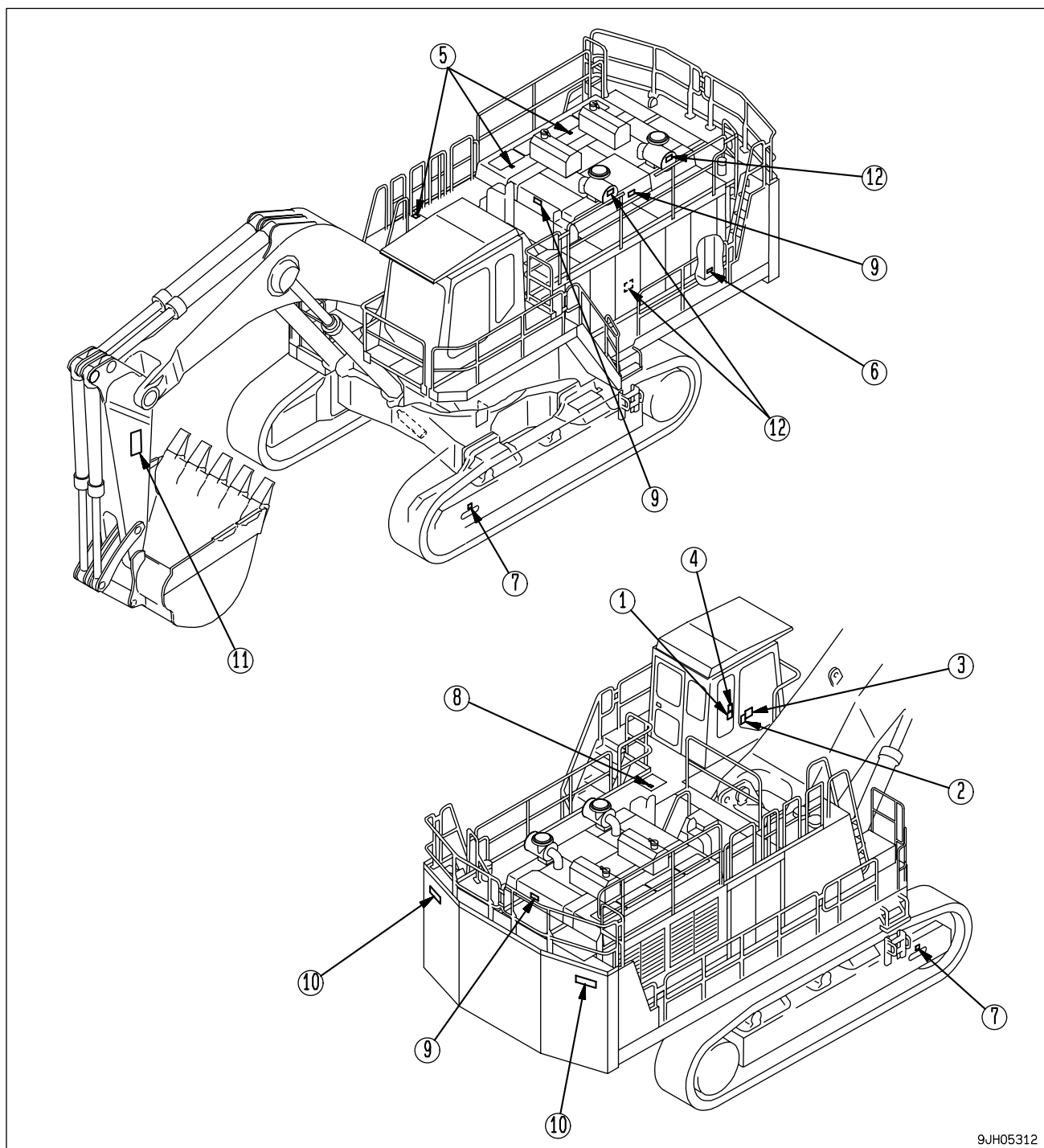
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POSITION FOR ATTACHING SAFETY LABELS



9JH05312

MOUNTING AND DISMOUNTING

- Never jump on or off the machine. Never get on or off a moving machine.
- If the machine starts to move when there is no operator on the machine, do not jump on to the machine and try to stop it.

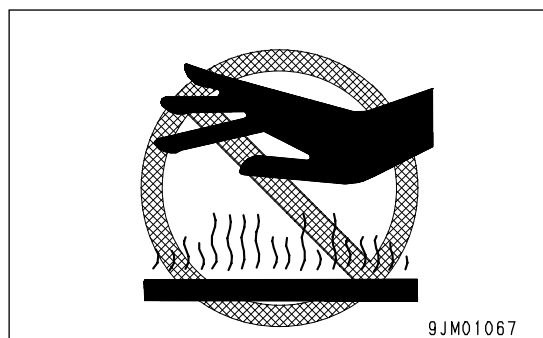
NO PERSONS ON ATTACHMENTS

Never let anyone ride on the bucket, grapple, clamshell, or other attachments. There is a hazard of falling and suffering serious injury.

BURN PREVENTION

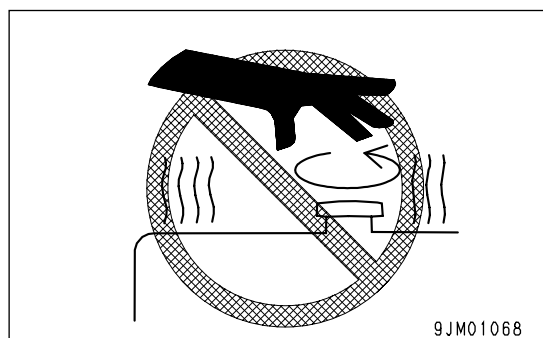
Hot coolant

- To prevent burns from hot water or steam spurting out when checking or draining the coolant, wait for the water to cool to a temperature where it is possible to touch the radiator cap by hand before starting the operation. Even when the coolant has cooled down, loosen the cap slowly to relieve the pressure inside the radiator before removing the cap.



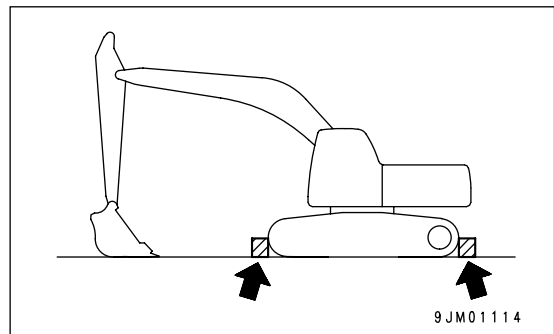
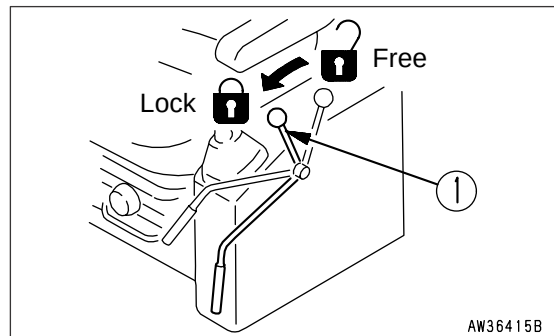
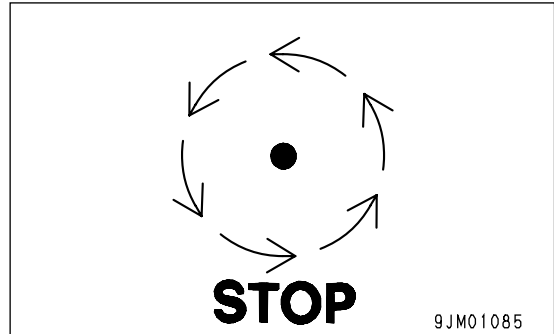
Hot oil

- To prevent burns from oil spurting out or from contact with hot parts when checking or draining the oil, wait for the oil to cool to a temperature where it is possible to touch the cap or plug by hand before starting the operation. Even when the oil has cooled down, loosen the cap or plug slowly to relieve the internal pressure before removing the cap or plug.



STOP ENGINE BEFORE CARRYING OUT MAINTENANCE

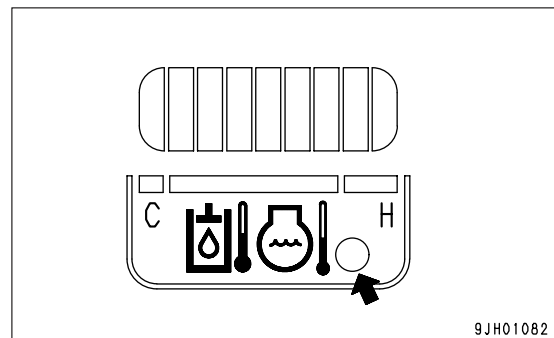
- Stop the machine on firm, level ground.
- Select a place where there is no danger of falling rocks, landslides, or flooding.
- Lower the work equipment completely to the ground and stop the engine.
- Place the work equipment control lever to the neutral position, set safety lock lever (1) to the LOCK position, then stop the engine.
- Put blocks under the track to prevent the machine from moving.



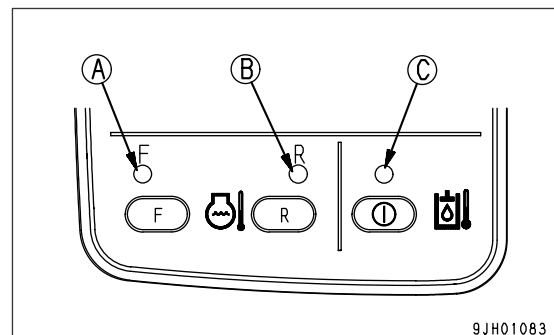
ENGINE WATER TEMPERATURE, HYDRAULIC OIL TEMPERATURE MONITOR

This monitor C (1) warns the operator that the engine water temperature or hydraulic oil temperature has risen. If the temperature becomes abnormally high, the monitor flashes.

- If the front engine cooling water temperature is abnormally high:
The overheat prevention system is automatically actuated and the engine speed goes down.
Monitor Lamp (A) of the display selector switch flashes and the cooling water temperature of the front engine is displayed on the engine cooling water and oil temperature gauge.
- If the rear engine cooling water temperature is abnormally high:
The overheat prevention system is automatically actuated and the engine speed goes down.
Monitor Lamp (B) of the display selector switch flashes and the cooling water temperature of the rear engine is displayed on the engine cooling water and oil temperature gauge.
- If the hydraulic oil temperature is abnormally high:
Monitor Lamp (C) of the display selector switch flashes and the hydraulic oil temperature is displayed on the engine cooling water and oil temperature gauge.



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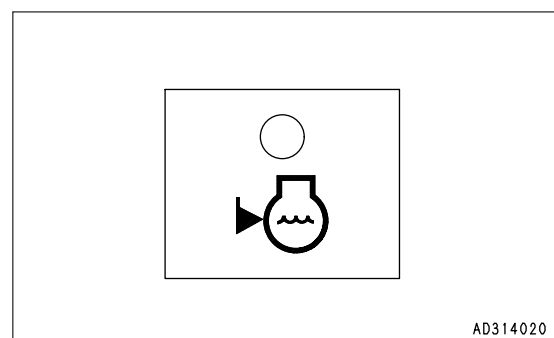


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RADIATOR COOLANT LEVEL MONITOR

This monitor C (2) warns that the radiator cooling water level is too low.

If the monitor lamp flashes, check the cooling water level in the radiator and sub-tank, and add water.



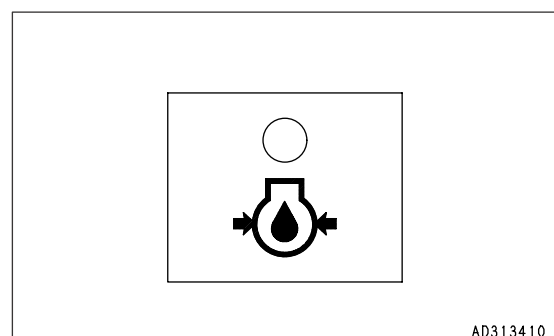
AD314020

ENGINE OIL PRESSURE MONITOR

This monitor C (3) flashes if the engine lubricating oil pressure goes below the normal value. If it flashes, stop the engine and check the lubricating system and the level of the oil in the oil pan.

REMARK

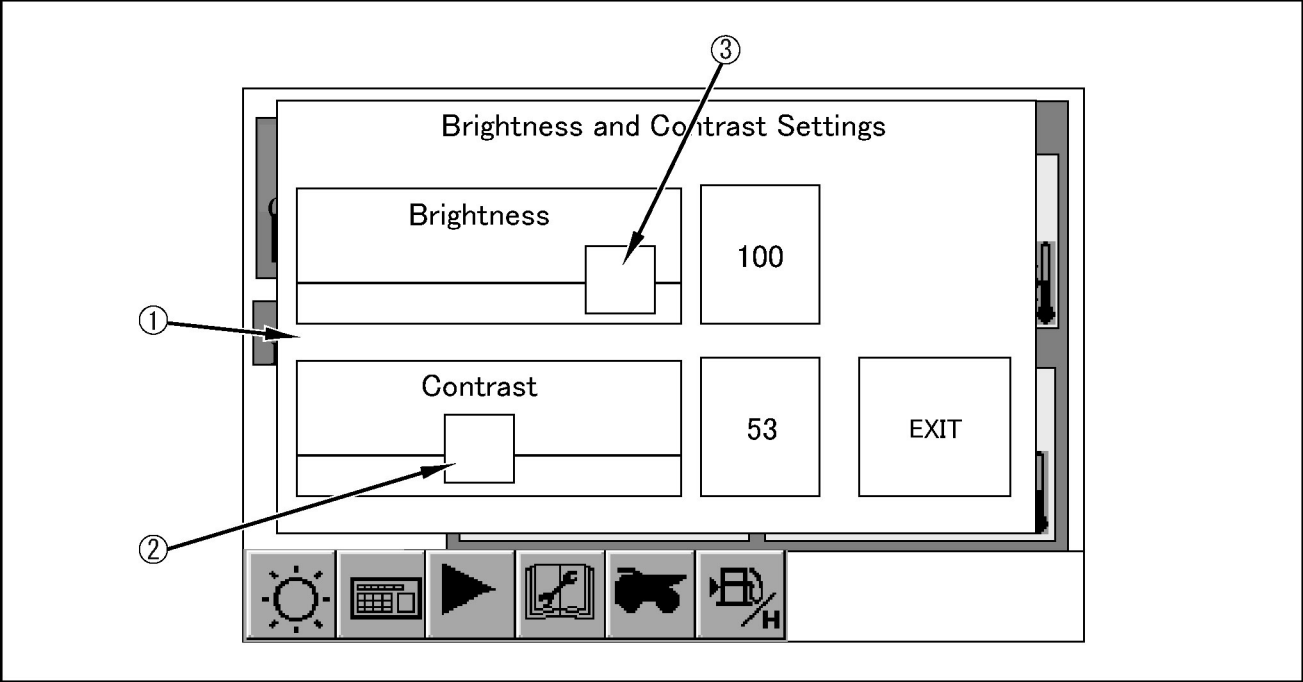
- While the starting switch is ON, the lamp remains lit and goes off once the engine is started. When the engine starts, the buzzer may sound for a short time, however, this does not indicate a fault.
- Stop the machine on level ground and check the monitor.
- Stop the engine, then turn the starting switch to the ON position and check that the monitor lights up for 3 seconds. If it does not light up, please contact your Komatsu distributor to have the monitor inspected.



AD313410

BRIGHTNESS CONTROL SCREEN

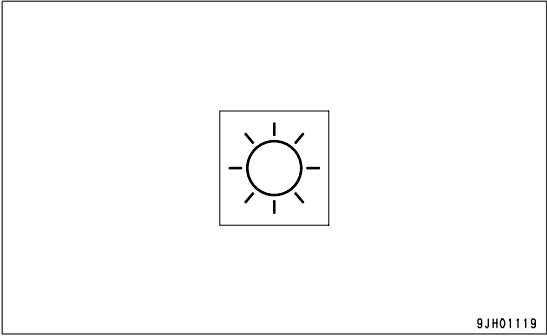
This screen is used to adjust the brightness and contrast of the machine management monitor screen.



(1) Brightness control screen	(3) Brightness control button
(2) Contrast control button	

Brightness control screen

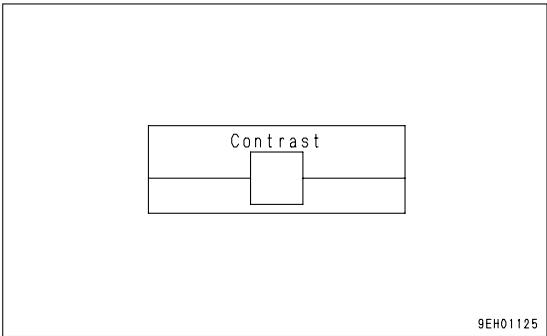
When selector button for the brightness control screen (1) on the normal screen is pressed, the sub-screen is displayed on top of the normal screen.



9JH01119

Contrast control button

This button (2) is used to adjust the contrast of the screen. Touch button (2) on the screen and slide it to the desired position.



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EMERGENCY STOP ITEMS

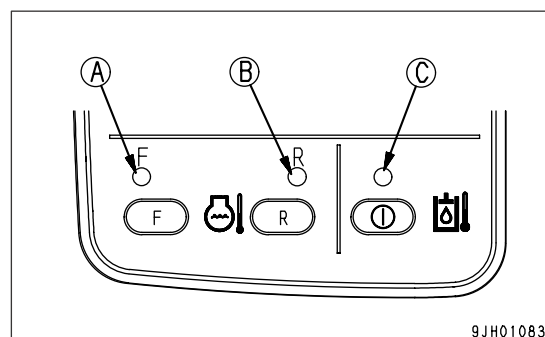
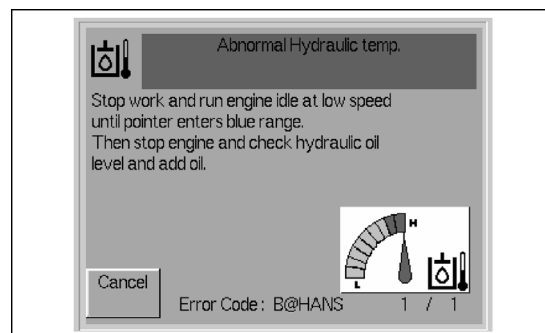
The item column on the emergency stop screen is displayed in a red band.

The emergency stop items are as follows.

Hydraulic oil temperature high

This emergency stop display warns the operator that the hydraulic oil temperature is abnormal.

- When engine is running
If the hydraulic oil temperature goes above 100°C, this warning is displayed, hydraulic oil temperature monitor lamp (C) on the machine monitor flashes, and the alarm buzzer sounds.
If this happens, stop operations, run the engine at low speed or stop it, and wait for the hydraulic oil temperature to go down.

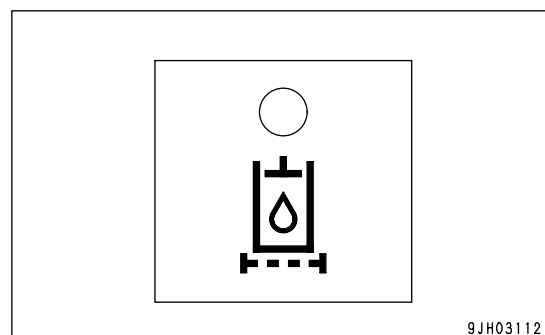
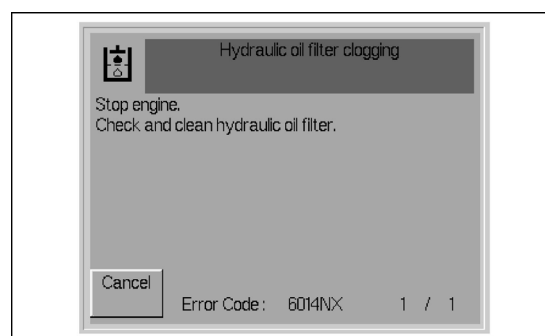


9JH01083

Hydraulic oil filter clogged

This emergency stop display warns the operator that the hydraulic oil filter is clogged.

- When engine is running
If the hydraulic oil filter becomes clogged during operations, this warning is displayed and the hydraulic oil filter clogged monitor lamp on the machine monitor flashes.
If this happens, stop operations, then stop the engine, and check, clean, or replace the hydraulic oil filter.

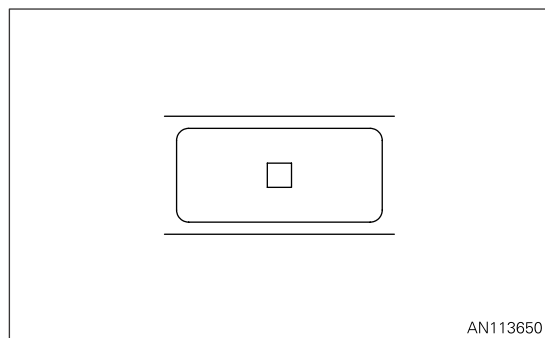


9JH03112

AIR FLOW SELECTOR SWITCH (MEDIUM)

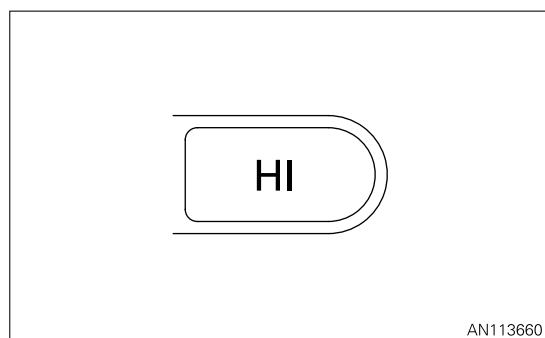
(Air conditioner control panel 1 and 2 the same)

This switch (4) is used to adjust the air flow blowing out from the air conditioner. When this switch is pressed, the air conditioner is set to MID, the middle of the three levels of air flow.

**AIR FLOW SELECTOR SWITCH (HIGH)**

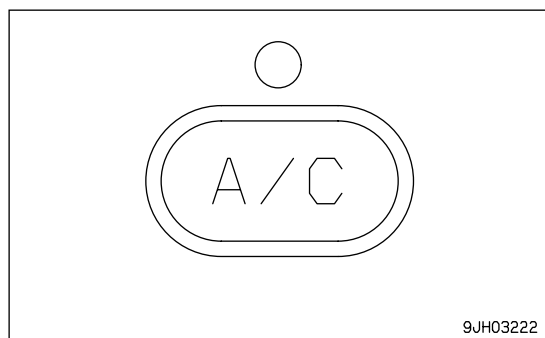
(Air conditioner control panel 1 and 2 the same)

This switch (4) is used to adjust the air flow blowing out from the air conditioner. When this switch is pressed, the air conditioner is set to HIGH, the largest of the three levels of air flow.

**AIR CONDITIONER SWITCH**

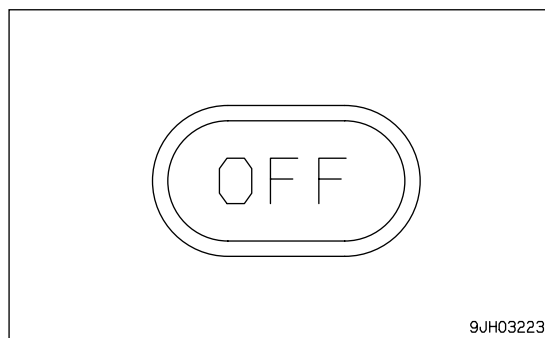
(Air conditioner control panel 1 and 2 the same)

This switch (5) is used to switch the air conditioner ON/OFF.

**OFF SWITCH**

(Air conditioner control panel 1 and 2 the same)

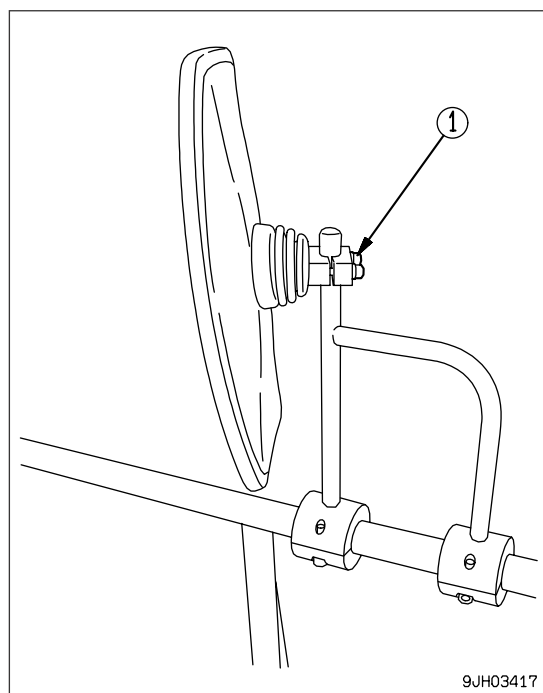
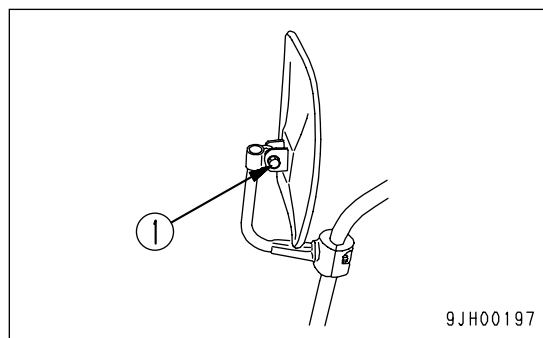
This switch (6) is use to stop the fan.



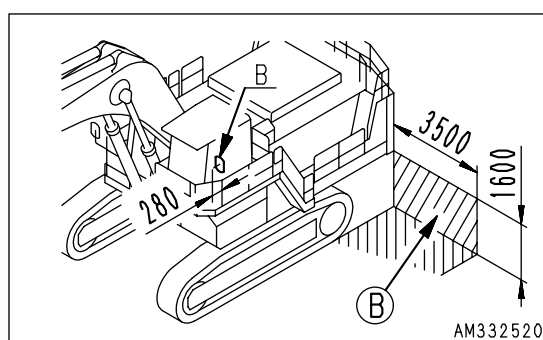
ADJUSTMENT OF MIRRORS

Loosen nut (1) mounting the mirror, and adjust to the position which gives the best view from the operator's seat of the blind spot to the left and right sides at the rear of the machine.

- Adjust the mirror mount so that it is possible to see any person (or object of height 1 m and diameter 30 cm) at the rear left and right of the machine.



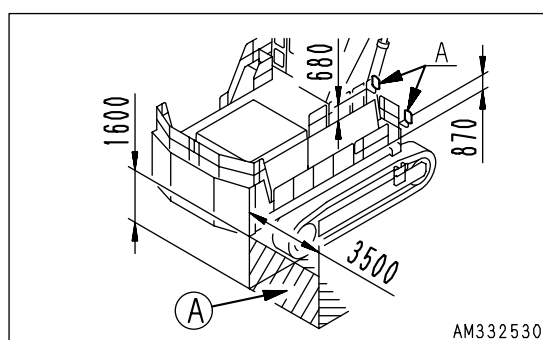
- Refer to dimensions shown in right chart for position of mirror.



- Field of visibility reference value is shown below.

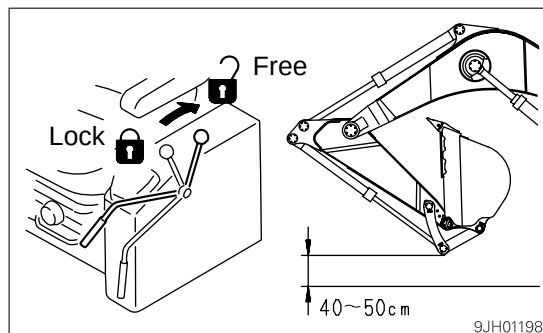
Mirror (A): Hatched (A) area (opposite side of (B)) to be visible (if equipped)

Mirror (B): Hatched (B) area to be visible.



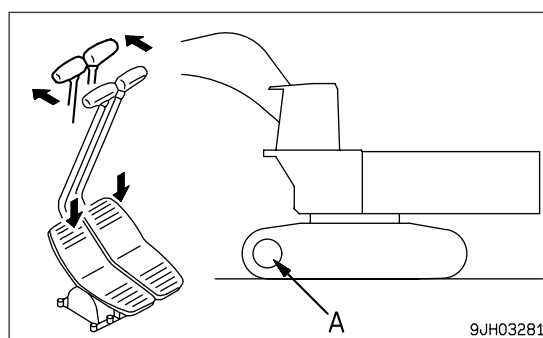
MOVING MACHINE BACKWARD

1. Set safety lock lever (4) in the FREE position, fold the work equipment, and raise it 40 to 50 cm from the ground.

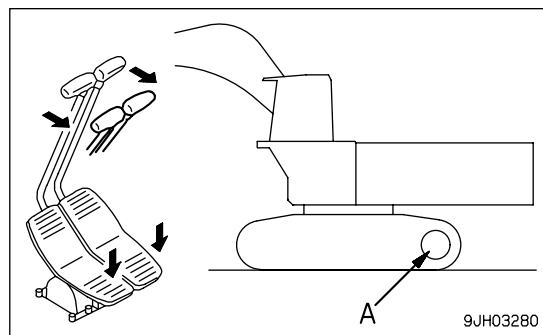


2. Operate right and left travel levers (5) or right and left travel pedals (6) as follows.

- When the sprocket (A) is at the rear of the machine
Pull levers (5) backward slowly or depress the rear part of pedals (6) to move the machine off.



- When the sprocket (A) is at the front of the machine
Push levers (5) forward slowly or depress the front part of pedals (6) to move the machine off.



3. For machines equipped with a travel alarm, check that the alarm sounds. If the alarm does not sound, please contact your Komatsu distributor for repairs.

AFTER DAILY WORK COMPLETION

WARNING

- Performing idle-running of the tracks is dangerous, so stay well away from the tracks.
- After completion of operations, fill the fuel tank to prevent the formation of water caused by condensation of moisture in the empty space in the tank when the temperature goes down.

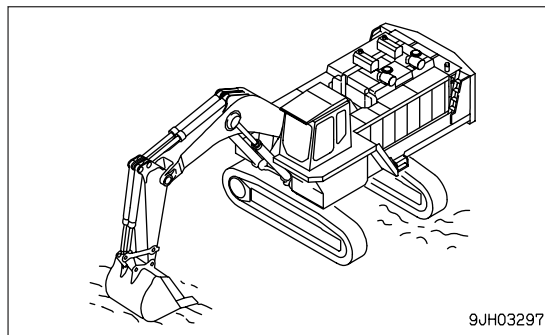
To prevent mud, water, or the undercarriage from freezing and making it impossible for the machine to move on the following morning, always observe the following precautions.

- Mud and water on the machine body should be completely removed. This is to prevent damage to the seal caused by mud or dirt getting inside the seal with frozen drops of water.
- Park the machine on hard, dry ground.

If this is impossible, park the machine on wooden boards.

The boards help protect the tracks from being frozen in soil and the machine can start next morning.

- Open the drain valve and drain any water collected in the fuel system to prevent it from freezing.
 - After operation in water or mud, remove water from undercarriage as described below to extend undercarriage service life.
1. Swing 90° with engine at low idling and bring the work equipment to the side of the track.
 2. Jack up the machine until the track is raised slightly from the ground. Rotate the track under no load. Repeat this procedure on both the left and right sides.



AFTER COLD WEATHER SEASON

When season changes and the weather becomes warmer, do as follows.

- Replace the fuel and oil for all parts with oil of the viscosity specified.

For details, see "USE OF FUEL, COOLANT AND LUBRICANTS ACCORDING TO AMBIENT TEMPERATURE (PAGE 4-10)".

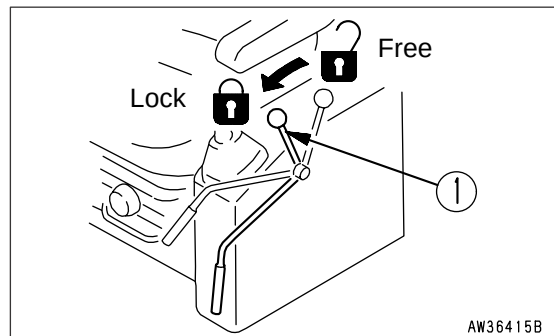
- If for any reason permanent antifreeze cannot be used, and an ethyl glycol base antifreeze (winter, one season type) is used instead, or if no antifreeze is used, drain the cooling system completely, then clean out the inside of the cooling system thoroughly, and fill with fresh soft water.

ADJUST BUCKET CLEARANCE

⚠ WARNING

It is dangerous if the work equipment moves by mistake when the clearance is being adjusted.

Set the work equipment in a stable condition, then stop the engine and lock the safety lock lever (1) securely.



If there is excessive free play on the coupling section of the bucket and arm, adjust the bucket clearance in the following manner.

1. Set the work equipment to the position shown in the diagram on the right, then stop the engine and set the lock lever (1) to the LOCK position.
2. Loosen 3 bolts (2), 6 bolts (3), plate (1) and plate (5).
3. Take out shims (4) equivalent in size to free play (a).

Thickness of shim (4) is 0.5 or 1.0 mm.

When free play (a) is less than a thickness of shim, do not compress the shims by tightening bolt (2).

4. Tighten 3 bolts (2) and 6 bolts (3).
- (A): Bucket
(B): Seal
(C): Arm

