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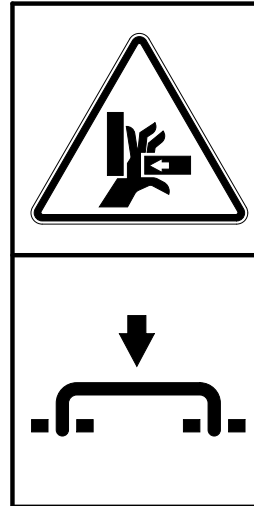
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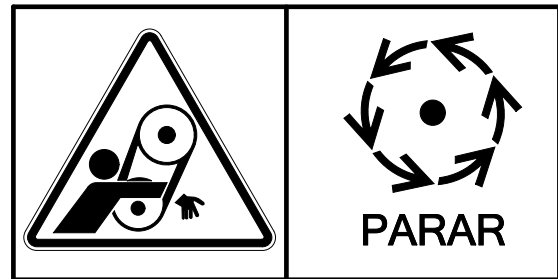


21070FW14

**20) ENGINE DOOR SHEARING (item 27)**

This warning label is positioned on the left side of the engine side cover.

- ⚠ Don't open the engine door during the engine's running.



2209SB0FW15

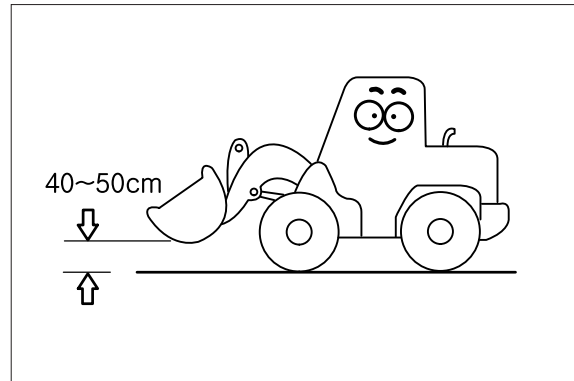
**21) SAFETY REAR WINDOW (item 28)**

This warning label is positioned on the right side window of the cab.

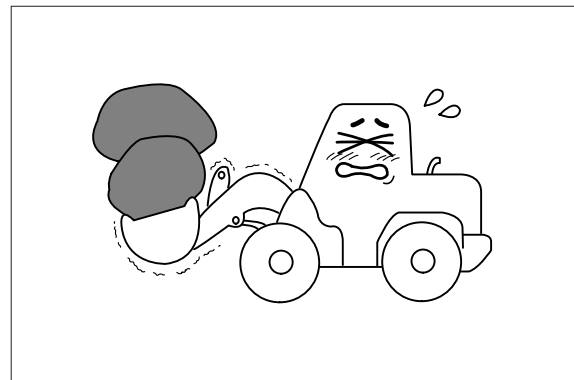
- ※ The rear window and right door serve as an alternate exit.



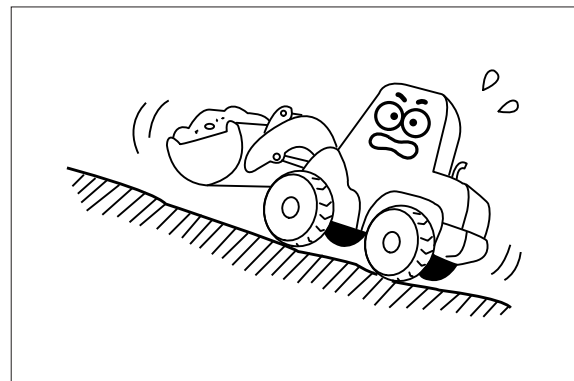
While traveling on public roads, lift the bucket 40~50 cm above the ground. Do not drive with the bucket loaded.



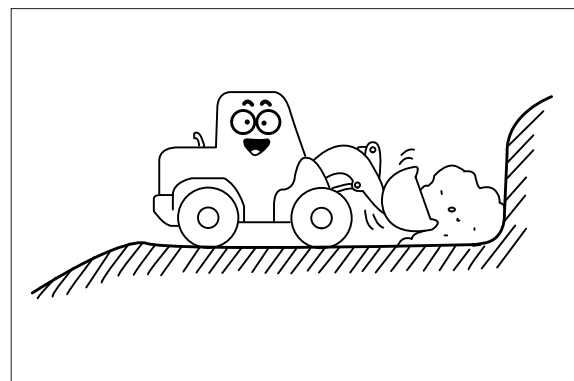
When the bucket is loaded, avoid sudden swinging or starting. Overloading is dangerous. Make sure the load does not exceed the permissible level.



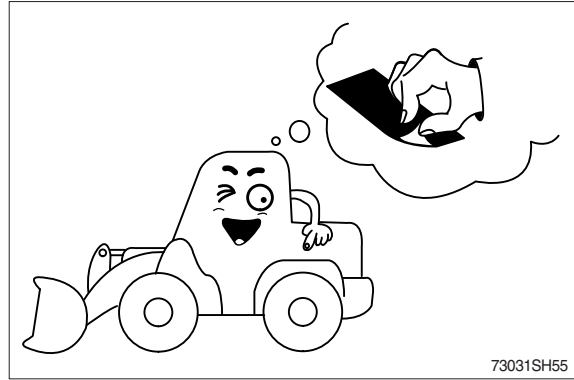
The operation on a slope is dangerous. Avoid operating the machine on a slope of over 10 degree.



Operate the machine after making ground flat when operation is required on a slope.



The anti-slip protection should be replaced if they have become worn or have been printed over.



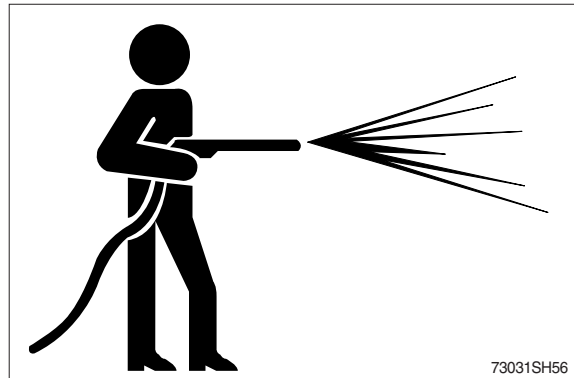
### KEEP THE MACHINE CLEAN

Spilled oil or grease, or scattered tools or broken pieces are dangerous because they may cause you to slip or trip.

Always keep your machine clean and tidy.

If water gets into the electrical system, there is danger that the machine may not move or may move unexpectedly.

Do not use water or steam to clean the sensors, connectors, or the inside of the operator's compartment.

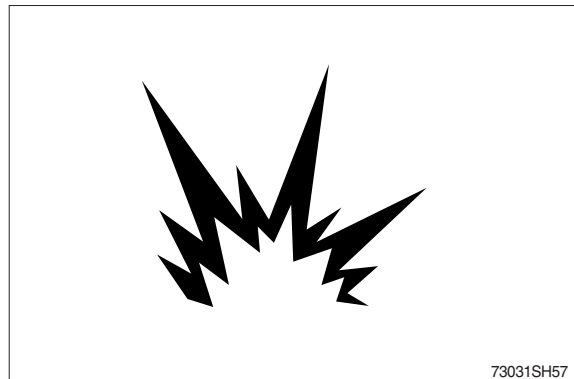


### HANDLING TIRES

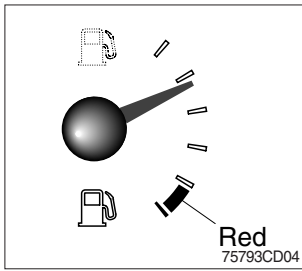
If tires are not used under the specified condition, they may overheat and burst or be cut and burst by sharp stones on rough road surfaces. This may lead to serious injury or damage.


To maintain safety, always keep to the suitable conditions : See page 6-29, 30.

**▲ Disassembly, reassembly, replacement and repair of tire requires special skills and equipment. Contact a tire repair shop.**

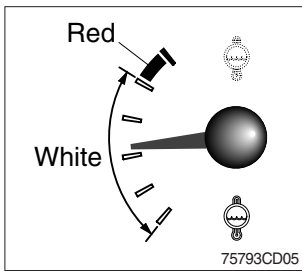



## (2) Fuel gauge



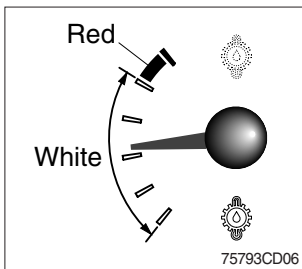
- ① This gauge indicates the amount of fuel in the fuel tank.
  - ② Fill the fuel when the indicator moves red range or  lamp blinks in red, refuel as soon as possible to avoid running out of fuel.
- ※ If the gauge indicates below red range even though the machine is on the normal condition, check the electric device as that can be caused by the poor connection of electricity or sensor.


## (3) Engine coolant temperature gauge



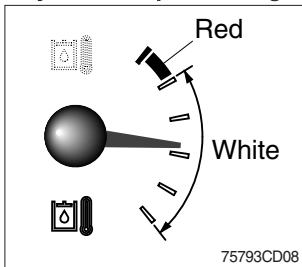
- ① This gauge indicates the temperature of coolant.
  - White range : 40~100°C (104~212°F)
  - Red range : Above 107°C (225°F)
- ② If the indicator is in the red range or  lamp blinks in red, turn OFF the engine and check the radiator and engine.


## (4) Transmission oil temperature gauge



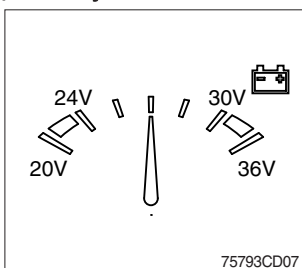
- ① This gauge indicates the temperature of transmission oil.
  - White range : 40~107°C (104~225°F)
  - Red range : Above 107°C (225°F)
- ② If the indicator is in the red range or  lamp blinks in red, it means the transmission is overheated. Be careful that the indicator does not move into the red range.

## (5) Hyd oil temperature gauge



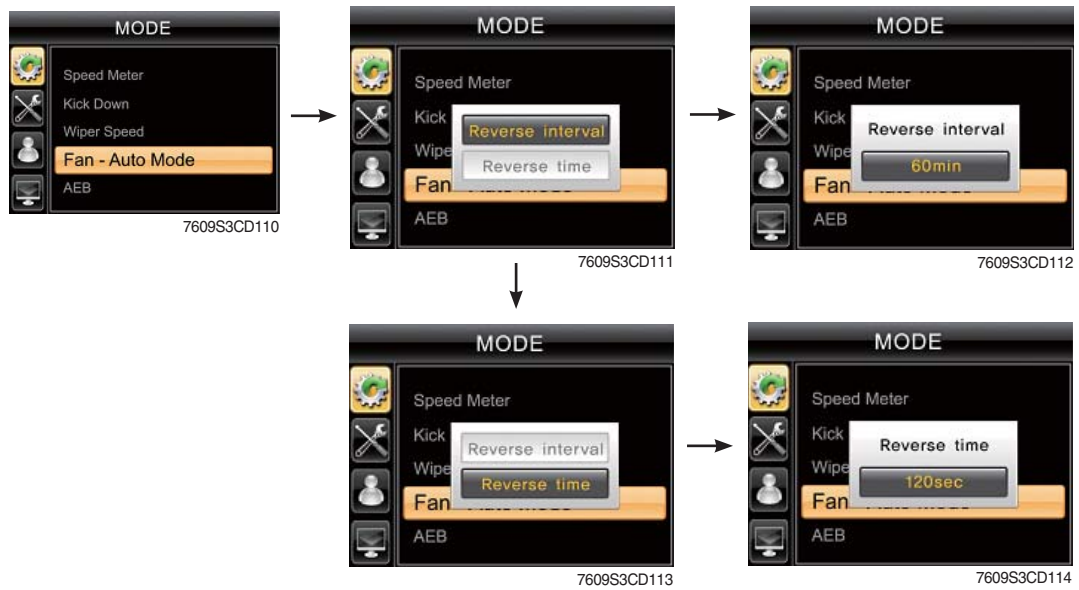
- ① This gauge indicates the temperature of hydraulic oil.
  - White range : 40~105°C (104~221°F)
  - Red range : Above 105°C (221°F)
- ② If the indicator is in the red range or  lamp blinks in red, reduce the load on the system.
- ③ If the gauge stays in the red range, stop the machine and check the cause of the problem.

## (6) Battery volt meter



- ① This gauge indicates the voltage in the charging system when the engine is running.
- ② If the indicator is below 24V, it means that the electricity is being discharged. If the indicator is above 30V, an unusually high voltage may damage the alternator. Check the charging system in both cases.

#### ④ Fan-auto mode



- Select reverse interval or reverse time.
- Set reverse interval (30~300 min) or reverse time (30~300 sec).
- ※ **Default : Interval (60 min), time (120 sec)**
- ※ Refer to page 3-27, fan control switch.

· Type display



A type



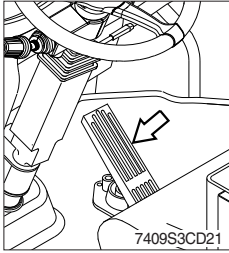
B type

③ Unit



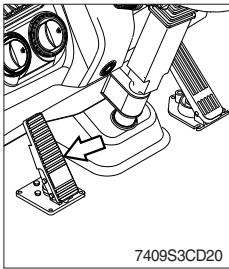
- Temperature : °C ↔ °F
- Distance : km ↔ mile
- Pressure : bar ↔ Mpa ↔ kgf/m<sup>2</sup> ↔ psi

### 3) ACCELERATOR PEDAL



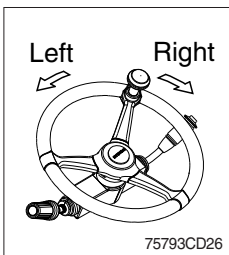
- (1) This pedal controls the engine speed. The engine speed will increase in proportion to the degree of force applied to this pedal.
- (2) Unless this pedal is pressed, the machine will run at low idling.

### 4) BRAKE PEDAL (service brake + clutch cut off function)



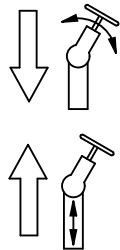
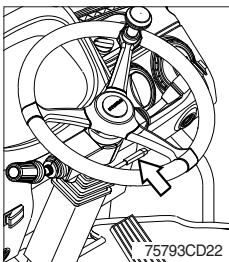
- (1) If the pedal is pushed down, this will generate braking force and bring the machine to a stop.
- (2) If the power train operation is to be cut off, set the clutch cut off mode switch to ON (L, M, H) and press the pedal.  
**▲ Even if the brake is applied while clutch cut off mode switch is OFF, power train will not cut off.**  
**※ Do not operate the machine with foot the brake pedal unnecessarily, or bring premature wear of brake disc.**
- (3) Clutch cut off function : Refer to page 3-29.

### 5) STEERING WHEEL



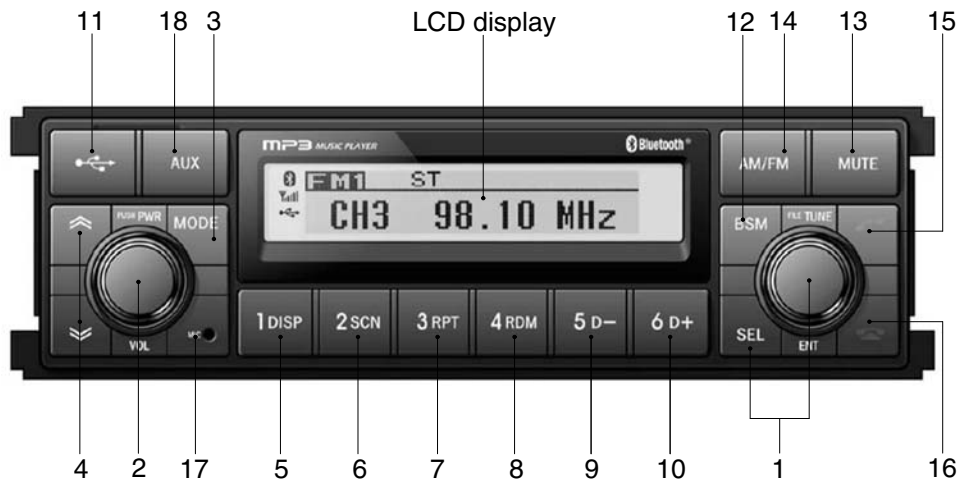
- (1) Two multi-motion cylinders in the center of the machine will operate the steering function.
- (2) If the steering wheel is turned to left, the machine will move to the left and turn it to the right, the machine will move to the right.

### 6) STEERING WHEEL LEVER























- (1) By pulling down the lever, the wheel is adjustable to tilt.  
· Tilting : 40°
- (2) By pulling up the lever, the wheel is adjustable to telescope.  
· Telescoping : 80 mm

■ Type B



■ FRONT PANEL PRESENTATION

- |   |   |  |    |   |   |
|---|---|--|----|---|---|
| 1 |    | ..... Audio selection button                                   | 10 |    | ..... Preset memory button 6<br>D+ ..... Directory up |
|   |   | ..... Audio selection knob                                     | 11 |   | ..... Aux function                                    |
| 2 |  | ..... Power and volume button                                  | 12 |  | ..... Preset scan (PS)<br>Best station memory (BSM)   |
| 3 |  | ..... Mode button<br>(select RADIO / USB / AUX)                | 13 |  | ..... Audio mute button                               |
| 4 |  | ..... UP / DOWN tuning button                                  | 14 |  | ..... AM / FM button (radio)                          |
|   |  |  | 15 |  | ..... Send  |
| 5 |  | ..... Preset memory button 1<br>DISP ..... ID3 v2 display      | 16 |  | ..... End   |
| 6 |  | ..... Preset memory button 2<br>SCN ..... File scan            | 17 |  | ..... MIC (microphone)                                |
| 7 |  | ..... Preset memory button 3<br>RPT ..... Repeat play selector | 18 |  | ..... Aux connector                                   |
| 8 |  | ..... Preset memory button 4<br>RDM ..... Random play selector |    |   |   |
| 9 |  | ..... Preset memory button 5<br>D- ..... Directory down        |    |   |   |

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## (2) Bluetooth function

### ① Pairing a bluetooth mobile phone or music player

A bluetooth connection must first be established between your bluetooth mobile phone or bluetooth music player and the bluetooth radio. The first step to connecting the bluetooth radio and bluetooth device is to introduce or "Pair" the bluetooth radio and bluetooth device together.

It is recommended that you have the instruction manual for your bluetooth mobile phone or music player with you during the pairing process described below to understand how to set your device to pair with the bluetooth radio.

- ※ It is recommended that all other bluetooth devices other than mobile phones are switched off during the registration or pairing process.

#### a. Connection method

- a) Press SEND button for 2 seconds in any mode, **PAIRING** appears on the bluetooth radio display.
  - b) Browse your mobile phone or music player menu to find the **SETTINGS** or **CONNECTIVITY** section to find the bluetooth connection section.
  - c) Find the command that may be called search for bluetooth device or discovery mode so that your bluetooth device can locate all the bluetooth devices within range that may be connected.
  - d) After the search is complete, **HFI AUDIO** should appear on your mobile phone or music player screen.
  - e) Select **CONNECT** or **SELECT** on your mobile phone or music player.
  - f) The mobile phone or music player should now prompt you to enter a PIN code. Enter 0000 into your bluetooth device and select OK.
  - g) The mobile phone or music player should confirm that it has established a new paired connection with the bluetooth radio.
  - h) The connecting process is now complete.
  - i) If the connecting process is successful, the bluetooth logo appears on the radio display and paired phone name (e.g. Samsung or LG) and **CONNECTED** appear on the display for 2 seconds.
  - j) Your bluetooth device is now ready for use with the bluetooth radio.
  - k) If the pairing failed, **FAIL** appears on the bluetooth radio display.
- ※ (a) The bluetooth radio allows a maximum of 6 bluetooth devices to be paired.
    - (b) Bluetooth technology only allows one phone to be connected to your bluetooth radio at one time.
    - (c) If a bluetooth music player is to be connected together with a mobile phone, refer to the page 3-56, **PLAYING MUSIC USING BLUETOOTH AUDIO**.
    - (d) Bluetooth connection with a mobile phone is normally established using the Hands-Free Profile (HFP). However, in some cases, the connection may use Head Set Profile (HSP) and some functions may not be available.
    - (e) As each mobile phone or music player brand and model has a different menu structure and control names, you may need to refer to the user manual of your bluetooth device for the correct procedure to connect to another bluetooth device.
    - (f) Once the bluetooth pairing is complete, automatic connection between mobile phone and the bluetooth radio is possible whenever the starting switch is switched ON.

The mobile phone must be set to automatically connect to the bluetooth radio to allow this automatic connection.

## ■ RADIO

### (1) Mode button



- ① Repeat press MODE button to select FM1, FM2 or AM.

### (2) Manual tuning button



- ① To manually tune to a radio station, simply turn encoder TUNE (2) left or right to increase or decrease the radio frequency.

### (3) Auto tuning button



- ① To automatically select a radio station, simply press Seek up or Track down button.



### (4) Station preset button





- ① In radio mode, pressing buttons (6) to (11) will recall the radio stations that are memorized. To store desired stations into any of the 6 preset memories, in either the AM or FM bands, use the following procedure :


- Select the desired station.
- Press and hold one of the preset buttons for more than 2 seconds to store the current station into preset memory. Six stations can be memorized on each of FM1, FM2, and AM.

## ■ RESET AND PRECAUTIONS

### 1) Reset function

Interfere noise or abnormal compressed files in the MP3 disc or USB instrument may cause extraordinary operation (or unit frozen/locking up). It's strongly recommended to use appropriate USB storage not cause any malfunction to the audio unit. In the unlikely event that the player fails to operate correctly, try out to reset unit by any of following two methods.

(1) press and hold   simultaneously for about 5 seconds. (without Bluetooth)

Press and hold   simultaneously for about 5 seconds. (with Bluetooth)

(2) Take out the fuse for the audio system in the vehicle once and then plug again.

※ It will be necessary to re-enter the radio preset memories as these will have been erased when the microprocessor was reset.

After resetting the player, ensure all functions are operation correctly.

### 2) Precautions

When the inside of the car is very cold and the player is used soon after switching on the heater, moisture may form on the disc or the optical parts of the player and proper playback may not be possible.

If moisture forms on the optical parts of the player, do not use the player for about one hour. The condensation will disappear naturally allowing normal operation.

(1) Operation voltage : 9~32 volts DC, negative

(2) Output power : 40 watts maximum (20 watts x 2 channels)

(3) Tuning range

Area	Band	Frequency range	Step
USA	FM	87.5~107.9 MHZ	200K
	AM	530~1710 KHZ	10K
EUROPE	FM	87.5~108.0 MHZ	50K
	AM	522~1620 KHZ	9K
ASIA	FM	87.5~108.0 MHZ	100K
	AM	531~1602 KHZ	9K
LATIN	FM	87.5~107.9 MHZ	100K
	AM	530~1710 KHZ	10K

#### ● AREA Selection :

- To select an area, press and hold related buttons at FM1 band for about 3 seconds.
- USA Area: Press and hold mode + 1DIS buttons for 3 seconds
- EUROPE Area: Press and hold mode + 2 buttons for 3 seconds
- ASIA Area: Press and hold mode + 3RPT buttons for 3 seconds
- LATIN Area: Press and hold mode + 4RDM buttons for 3 seconds.

(4) USB version : USB 1.1

(5) Bluetooth version : V2.1

(6) Bluetooth supported profile :

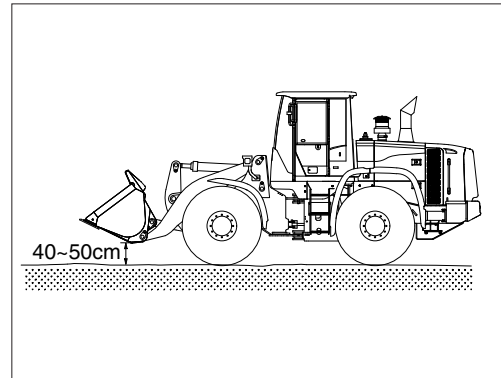
- A2DP : Advanced Audio Distribution Profile
- AVRCP : Audio/Video Remote Control Profile
- HFP : Hands-Free Profile

## 6. TRAVELING OF THE MACHINE

### 1) BASIC OPERATION

#### (1) Traveling posture

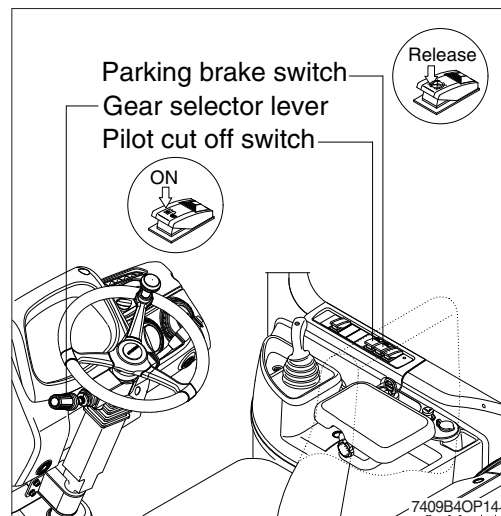
Lift the boom so that the bucket is placed 40-50cm above the ground.



#### (2) Traveling operation

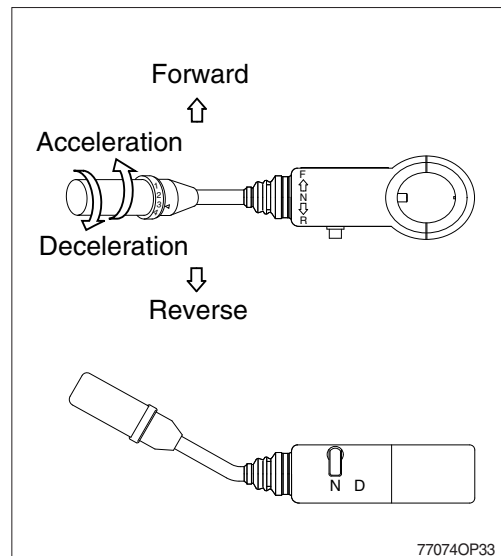
When warm-up operation is completed after the engine is started, move the machine according to the following procedure.

- ① Push the pilot cut off switch to the ON position.
- ② Release the parking brake.
- ③ Put the gear selector lever in the 1st stage of forward or backward direction and press gently the accelerator pedal to move the machine.



#### (3) Changing direction and speed

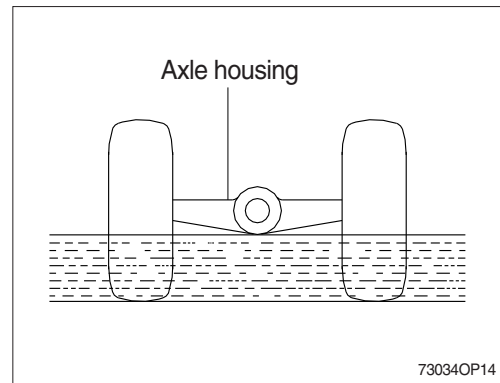
- ① The gear selector is designed for the mounting on the left side of the steering column.
- ② The positions (speeds) 1 to 4 are selected by a rotary motion, the driving direction Forward (F)-Neutral (N)-Reverse (R) by tilting the gear selector lever.
- ③ A neutral lock is installed as protection against inadvertent drive off.
  - Position N - Gear selector lever blocked in this position
  - Position D - Driving
- ④ When doing digging or dumping work, run the machine in the 1st or 2nd speed.



## 7) PRECAUTIONS DURING OPERATION

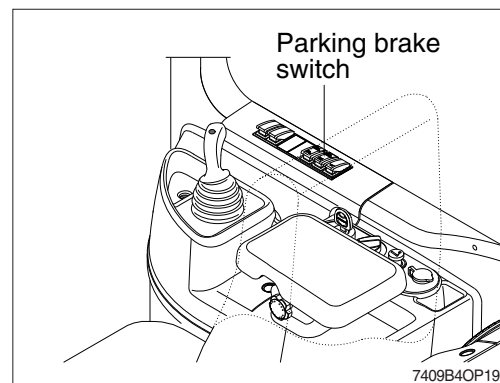
### (1) Permissible water level

- ① Do not work in water or damp ground deeper than the permissible depth (Up to lower part of the axle housing).
- ② After the work is completed, grease parts which has been immersed in water.



### (2) When the brake does not operate

- ① If the machine does not stop even though the brake pedal is applied, use the parking brake.
- ※ After using the parking brake as an emergency brake, ask Hyundai dealer to check complete brake system.

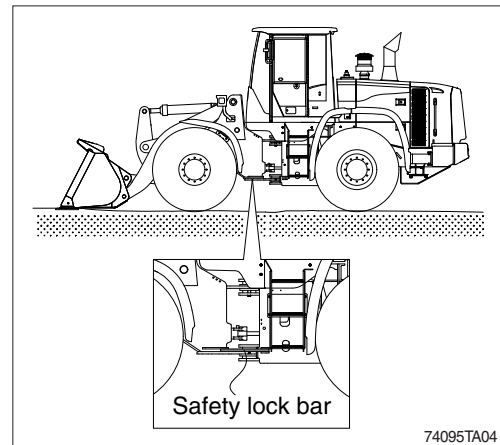


### (3) Precautions when driving on a slope

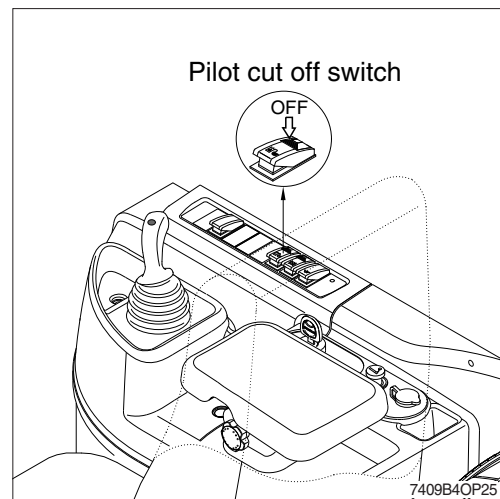
- ① When turn on a slope, lower the work equipment to lower its center of gravity. Avoid turn on a slope if possible.

## 4. FIXING THE MACHINE

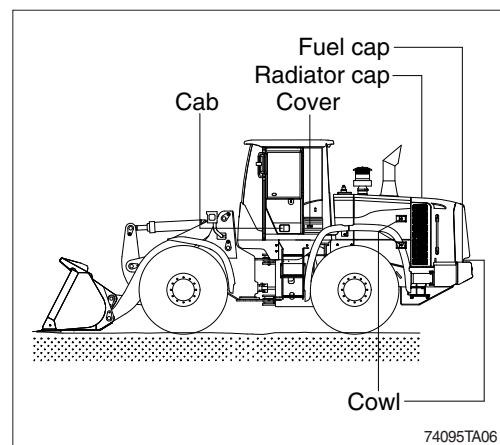
- 1) Fix front and rear frame by linking safety lock bar.
- 2) Push the parking brake switch.



- 3) Push the pilot cut off switch to the OFF position to prevent the hydraulic system from operating.
- 4) Stop the engine, turn the starting switch off and remove the key.



- 5) Secure all locks.

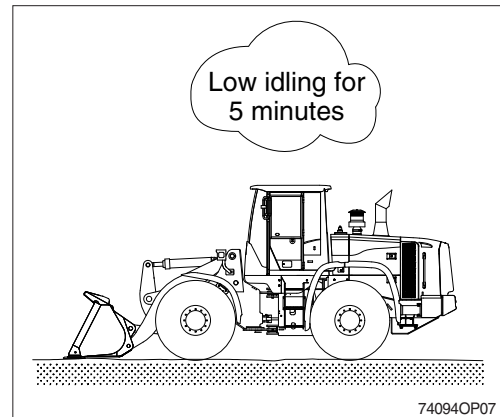


#### 4) RELIEVING THE PRESSURE IN THE HYDRAULIC SYSTEM

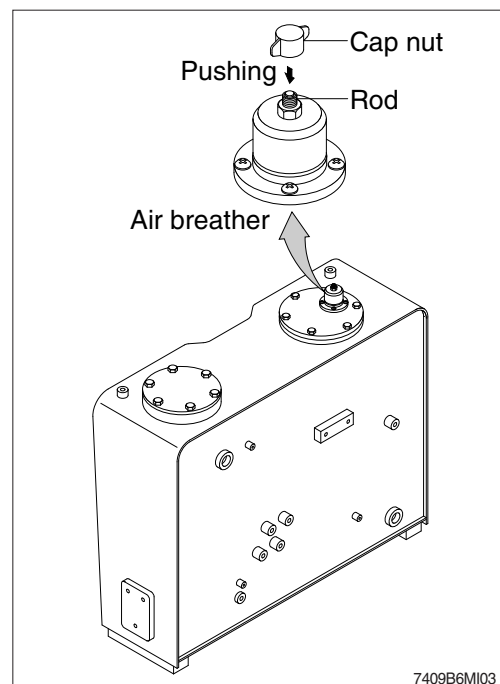
※ Spouting of oil can cause the accident when loosening the cap or hose right after the operating of the machine as the machine or oil is on the high pressure on the condition.

Be sure to relieve the pressure in the system before repairing hydraulic system.

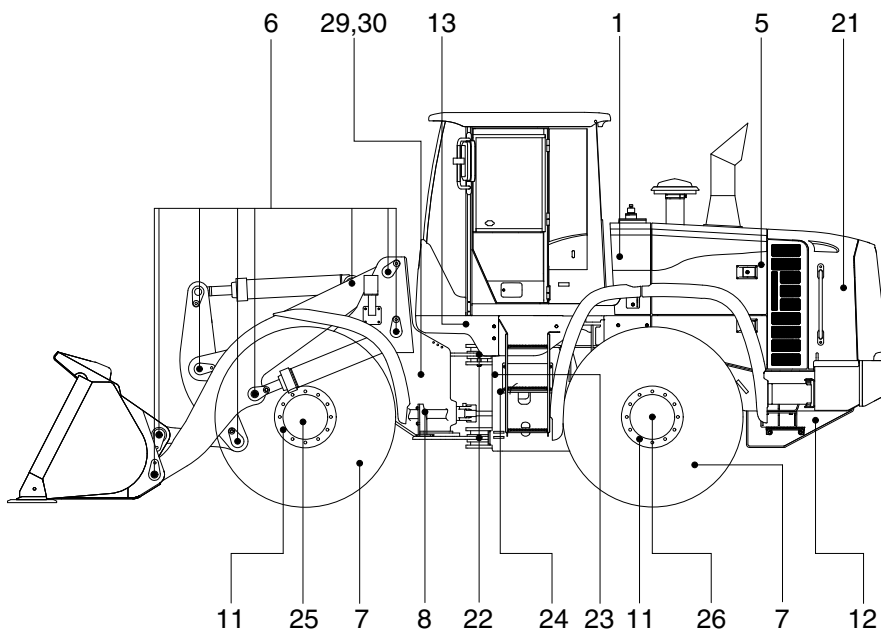
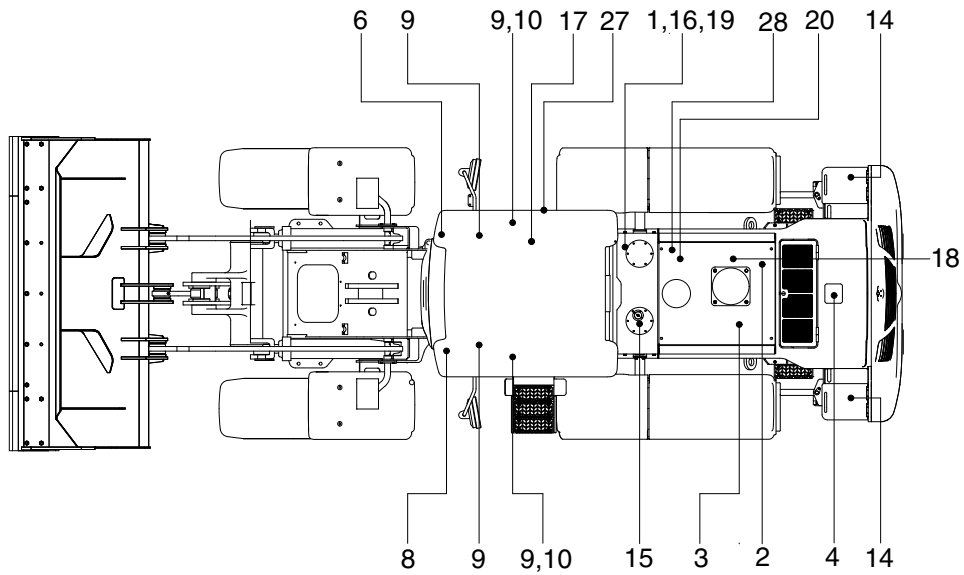
- (1) Place the machine in parking position, and stop the engine.



- (2) Rotate the cap nut counter-clockwise by hand and push the rod to release the air pressure.



## 5. MAINTENANCE CHART



7409B6M110

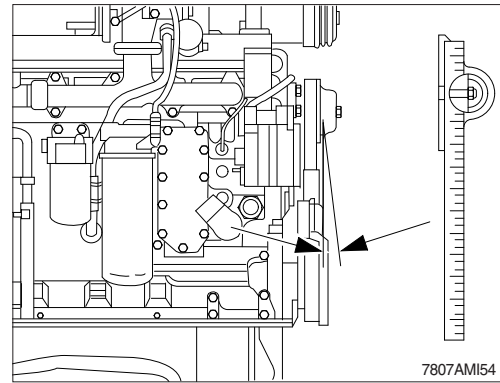
### Caution

1. Service intervals are based on the hour meter reading.
2. The number of each item shows the lubrication point on the machine.
3. Stop engine while filling oil, and use no open flames.
4. For other details, refer to the service manual.

(5) A worn tensioner that has play in it or a belt that “walks” off its pulley possibly indicates pulley misalignment.

※ **Maximum pulley misalignment is three degrees. This measurement can be taken with a straightedge and an inclinometer.**

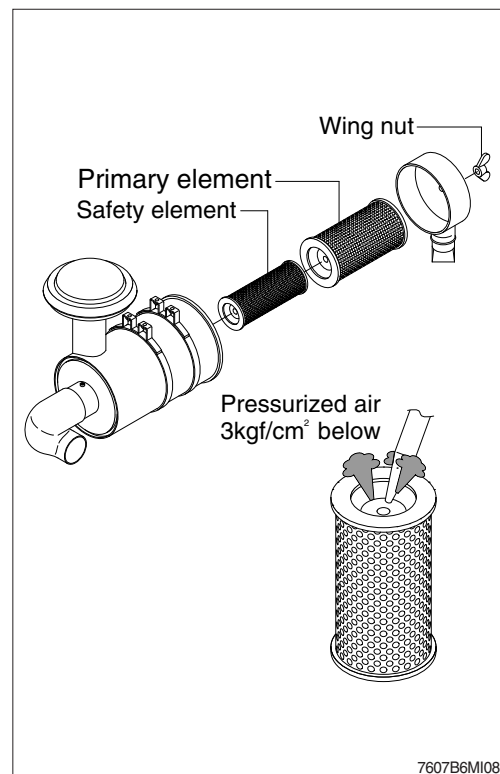
(6) Install the belt.



## 9) CLEANING OF AIR CLEANER

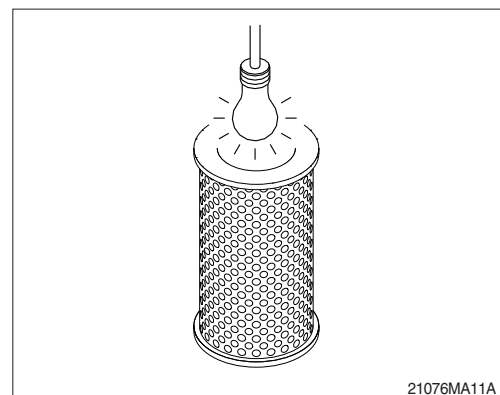
### (1) Primary element

- ① Loosen the wing nut and remove the element.
  - ② Clean the inside of the body.
  - ③ Clean the element with pressurized air.
    - Remove the dust inside of the element by the pressurized air (below 3 kgf/cm<sup>2</sup>, 40 psi) forward and backward equally.
  - ④ Inspect for cracks or damage of element by putting a light bulb inside of the element.
  - ⑤ Insert element and tighten wing nut.
- ※ **When the air cleaner warning lamp is ON, clean the primary element.**
- ※ **The primary element should be replaced if the warning lamp is ON after installation of a clean primary element, or if the exhaust smoke is still black.**
- ※ **Replace the primary element after 4 times cleanings.**

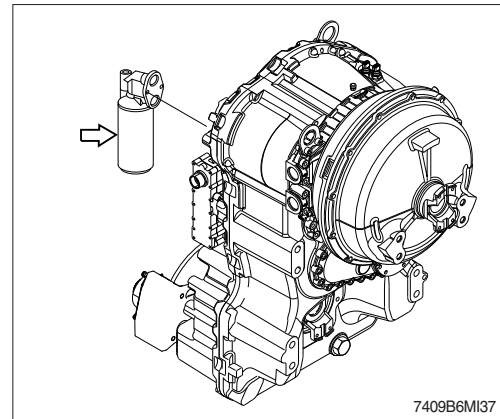


### (2) Safety element

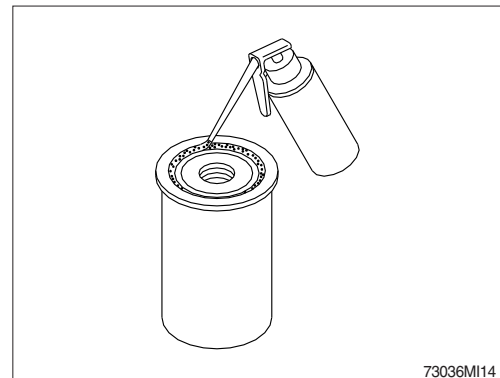
- ※ **The safety element should be replaced at the time the primary element is replaced.**
- ※ **Always replace the safety element. Never attempt to reuse the safety element by cleaning the element.**



- (6) Remove the transmission oil filter cartridge.  
Dispose of the used transmission oil filter cartridge properly.
- (7) Clean the filter cartridge mounting base.  
Remove any part of the filter cartridge gasket that remains on the filter cartridge mounting base.



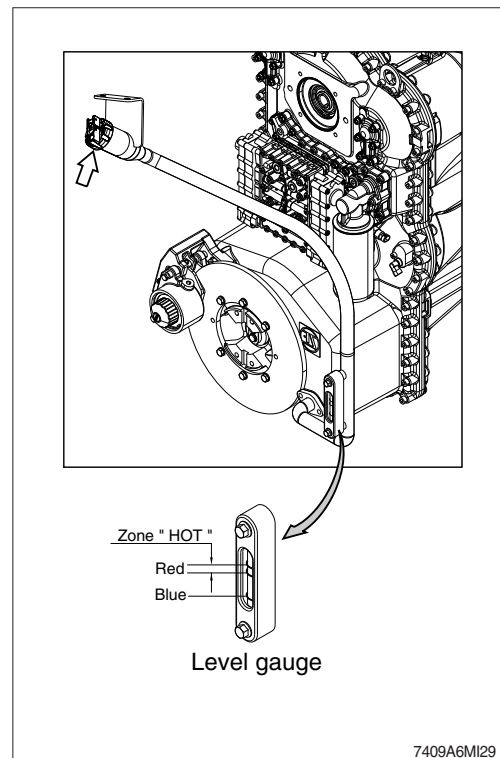
- (8) Apply a light coat of oil to the gasket of a new transmission oil filter cartridge.
- (9) Install the new transmission oil filter cartridge.  
Screw the filter in until contacts with the sealing surface is obtained and tighten it now by hand about 1/3 to 1/2 turn.



- (10) Fill the oil through level gauge inlet and check if the oil is at the appropriate level.
- (11) The proper oil amount is 25 liters. (6. U.S. gallons)

**▲ As the machine is hot after operation wait until the temperature has dropped.**

**▲ It is imperative to pay attention to absolute cleanliness of oil and filter.**  
Binding is in any case the marking on the oil level gauge.



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