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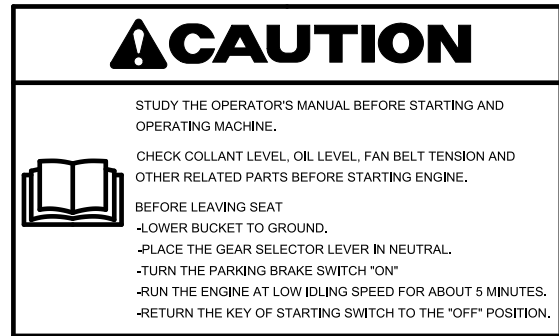
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9) ENGINE START CAUTION (item 13)

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

▲ Study the operator's manual before starting and operating machine.



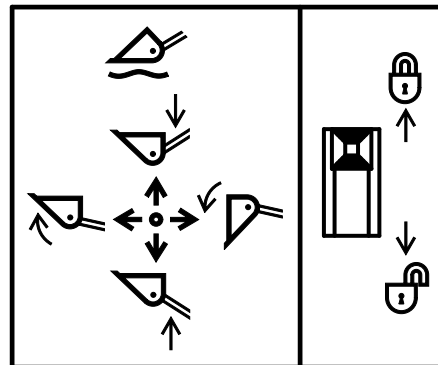
77070FW08

10) CONTROL IDEOGRAM (item 14)

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

▲ Confirm the operation of control lever and working device before operating the machine.

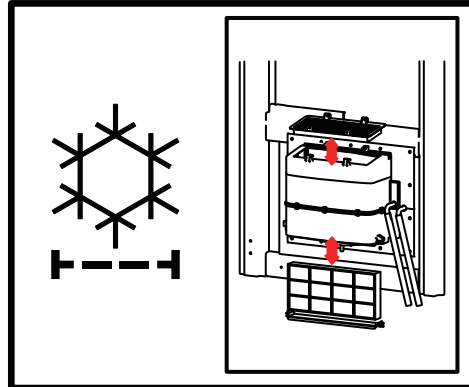
※ Refer to the page 4-9 for details.



11) AIR CONDITIONER FILTER (item 15)

This warning label is positioned on the air-conditioner filter.

※ Periodic and proper inspection, cleaning and change of filter prolong air conditioner life time and maintain good performance.

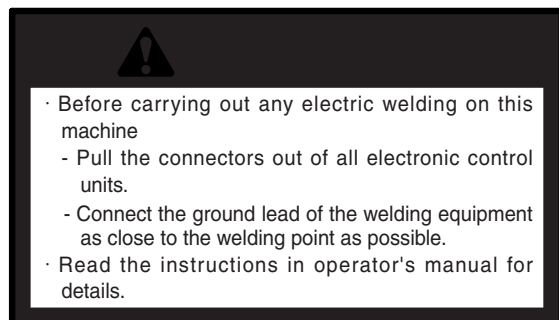


12) ELECTRIC WELDING (item 16)

This warning label is positioned on the side of the battery box.

▲ Before carrying out any electric welding on this machine

- Pull the connectors out of all electronic control units.
- Connect the ground lead of the welding equipment as close to the welding point as possible.



7803AFW20

※ Refer to the page 6-48 for details.



WARNING

CALIFORNIA PROPOSITION 65

Breathing diesel engine exhaust exposes you to chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

- Always start and operate the engine in a well-ventilated area.
- If in an enclosed area, vent the exhaust to the outside.
- Do not modify or tamper with the exhaust system.
- Do not idle the engine except as necessary.

For more information go to www.P65warnings.ca.gov/diesel.

When handling coolants

After operation of the machine the coolant is of high temperature and high pressure, and is retained inside the engine radiator and the heater line. Direct contact of the skin with the coolant may result in serious burns. Open the cap of the radiator only after the engine has sufficiently cooled and the pressure has dropped to a safe level.



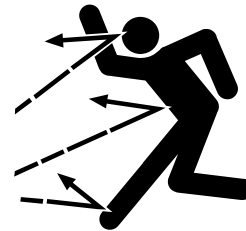
Coolant contains toxic and combustible ethylene glycol, and should be handled in a cool, well-ventilated place only when wearing protective goggles, protective gloves, protective clothing, and a gas mask.



Avoid inhaling airborne particles or spray from coolant. If the substances make contact with skin or eyes that are not protected by personal protection gear, immediately wash the skin and eye with flowing water for 20 minutes or longer.

When working in a place subject to airborne particles and falling objects,

Make sure you wear a safety helmet, protective goggles and safety shoes to prevent injury from such particles and objects. Earplugs or earmuffs may be necessary when working in a noisy place.



When working in places with a high level of noise

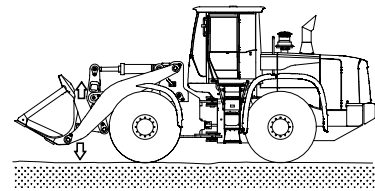
When the operator is exposed to the noise exceeding 90 dB (A) for 8 hours or longer, wear earplugs or earmuffs.



Cautions to Be Taken When Driving the Machine

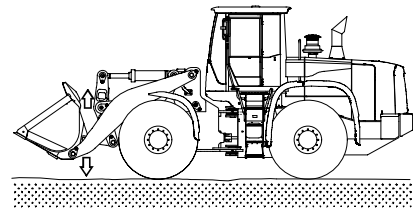
- If you operate the machine with the parking brake on, it may cause serious damage to the parking brake disk.
- Select the appropriate gear for the driving speed.
- Do not change direction when driving the machine at max. speed as this may cause serious damage to the transmission.
- Only drive the machine for short distances on the road.
- Make sure you fully comply with the local road traffic regulations and legislation of your country when driving on the road.
- Please note that the machine is wider and travels at a lower driving speed than other vehicles on the roads.
- Pay attention to any vehicles behind your vehicle, and allow them to overtake your vehicle safely.
- Check the following conditions before driving the machine on the public road :
 - Remove any dirt and sand from the machine.
 - Empty the bucket and move it to the driving position (40~50 cm above the ground) and fix it.
 - Close the windshield. Turn the working light off.
 - Wear the seat belt.
 - Use the lighting devices, such as the headlights, emergency warning light and rotating beacon, pursuant to the local road traffic legislation.
 - Pay attention to people in the vicinity of the machine.
 - Do not operate the machine on roads or bridges where the machine exceeds the weight limit.
 - Familiarize yourself fully with the width, length and height of the machine.
 - Check the tire pressure.
 - When traveling for a long distance, stop the machine after every 40 km or on an hourly basis, and take a break.
 - Check the level of fuel and coolant.
 - Never shift the gear to the neutral position when driving down a slope.
 - Changing direction when operating the machine on a slope is dangerous.
 - Do not drive on a slope of 30° or more.
 - Drive slowly when traveling the machine on rough terrain or moving over obstacles.
 - Install chains on the tires when operating the machine on slippery roads covered with snow or rainwater, and do not attempt to start, stop or turn the machine suddenly.
 - Be sure to avoid any obstacles when traveling the machine on paths.

Driving position



Regular lubrication (during storage)

- Breaking the lubrication film on parts may cause abnormal abrasion during the next operation.
- Start up the engine once a month, perform all of the functions, and apply lubrication oil to every part.
- Check the level of the engine oil and coolant when starting the engine up, and top them up if necessary.
- Thoroughly wipe off any rust-proofing oil from the cylinder and piston rod.
- Sufficiently warm up the engine after starting the engine, and repeat operation of the attachments several times to wear in the parts sufficiently.
- Fully charge and store the battery.
- Store the battery separately for a long period of time under extremely cold weather conditions.
- Check the tire pressure.

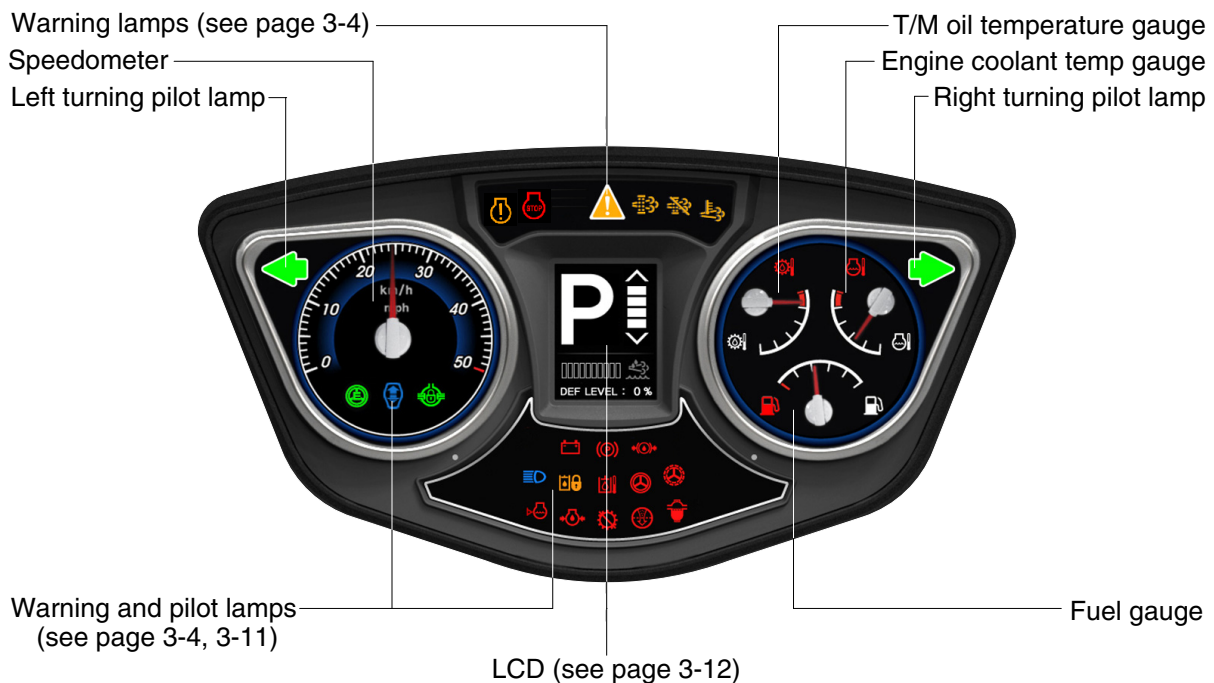


2. CLUSTER

1) STRUCTURE

The cluster consists of gauges, lamps and LCD as shown below, to warn the operator in case of abnormal machine operation or conditions for the appropriate operation and inspection.

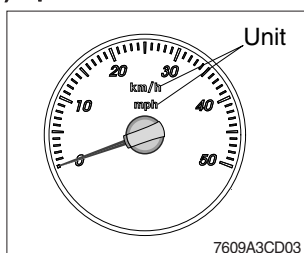
- Gauges : Indicate operating status of the machine.
 - Warning lamps : Indicate abnormality of the machine.
 - Pilot lamps : Indicate operating status of the machine.
 - LCD : Indicates selected the driving speed and direction.
- ※ The cluster installed on this machine does not entirely guarantee the condition of the machine. Daily inspection should be performed according to chapter 6, MAINTENANCE.
- ※ When the cluster provides a warning immediately check the problem, and perform the required action.



760F3CD02

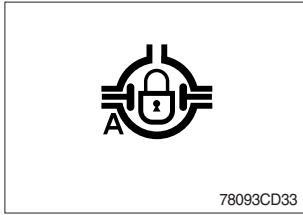
2) GAUGE

(1) Speedometer



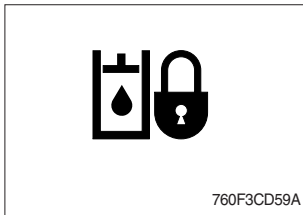
- ① The speedometer displays the speed of machine in mph and km/h.
- ※ The unit (km/h or mph) can be set by the display set up menu of the monitor and selected unit is displayed. Refer to page 3-33.

(5) Differential lock pilot lamp (option)



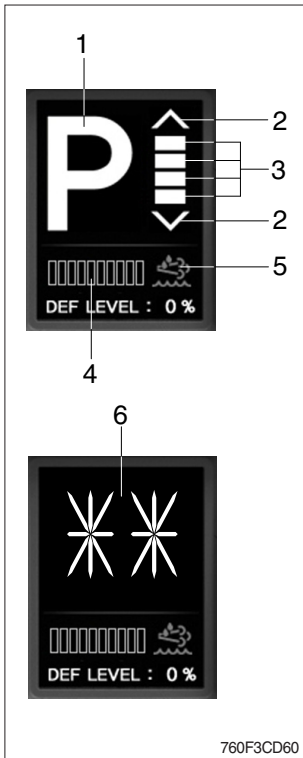
- ① This lamp lights ON when the differential lock function is operating.
 ※ Refer to page 3-45.

(6) Pilot cut off pilot lamp



- ① This lamp lights ON when the pilot cut off switch is pressed.
 ※ Refer to page 3-45.

5) LCD



(1) The LCD can be used with the gear selector.

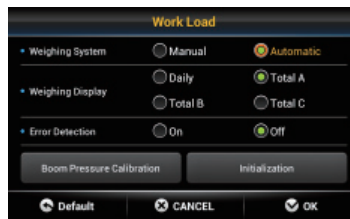
It indicates speed, driving direction, DEF/AdBlue® level and transmission warning.

No	Symbol	Meaning	Remark
1	△ · ▽ · N	Actual gear display	Forward, reverse, neutral
	1, 2, 3, 4, 5		Actual gear
	P		Parking brake mode active
2	^ , v	Forward, reverse	FWD 1 REV 1 FWD 5 REV 5
3	≡	Gear range display	
4		DEF/AdBlue® level	Display the amount of liquid in the DEF/AdBlue® tank
5		DEF/AdBlue® level warning lamp	Fill the DEF/AdBlue® when the lamp ON or blinks in red. - ON : DEF/AdBlue® level 5~10% - Blink : DEF/AdBlue® level below 5% ※ If the lamp ON or blinks in red 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.
6	LF, LR	Limp home gear	-
	**	Oil temperature too low, no gear available	Warm up engine / transmission
	WS	Warning sump temperature	Alternate between WS and actual gear / direction while driving, in neutral only displayed WS if no fault is detected ※ Cool down transmission
	WT	Warning torque converter temperature	Alternate between WS and actual gear / direction while driving, in neutral only displayed WS if no fault is detected ※ Cool down transmission

⑥ Work load mode

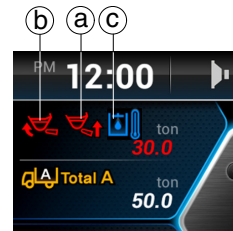


760F3CD33A



760F3CD33B-1

- Weighing system : Set the workload measurements.
- Weighing display : Set the display on main display screen.
- Initialization : Workload initialization.
- Error detection : Set error detection ON/OFF.
 - OFF : Errors are not displayed.
 - ON : ①, ② and ③ are displayed on main display screen.
 - ① The boom lift was performed too fast.
 - ② The bucket was not in the fully tilted back position while bucket was in the weigh range.
 - ③ The hydraulic temperature is low (below 40 °C).
- Boom pressure calibration : See the page 3-26 for details.

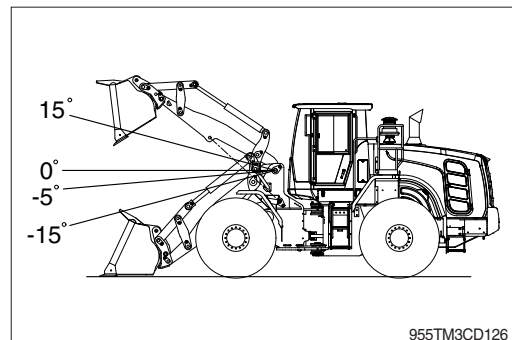


760F3CD33CK

※ Refer to page 3-42 for details.

※ Weighing system

- The weight indication in bucket is calculated by measuring boom position and boom pressure.
- ① The weight is '0.0 ton' when the boom is placed at below -15°.
- ② The weight is indicated when the boom is placed at the range (-5°→15°).
- ③ The weight is calculated when the boom is placed at above -5° and boom is lowered below -15° after dumping operation.



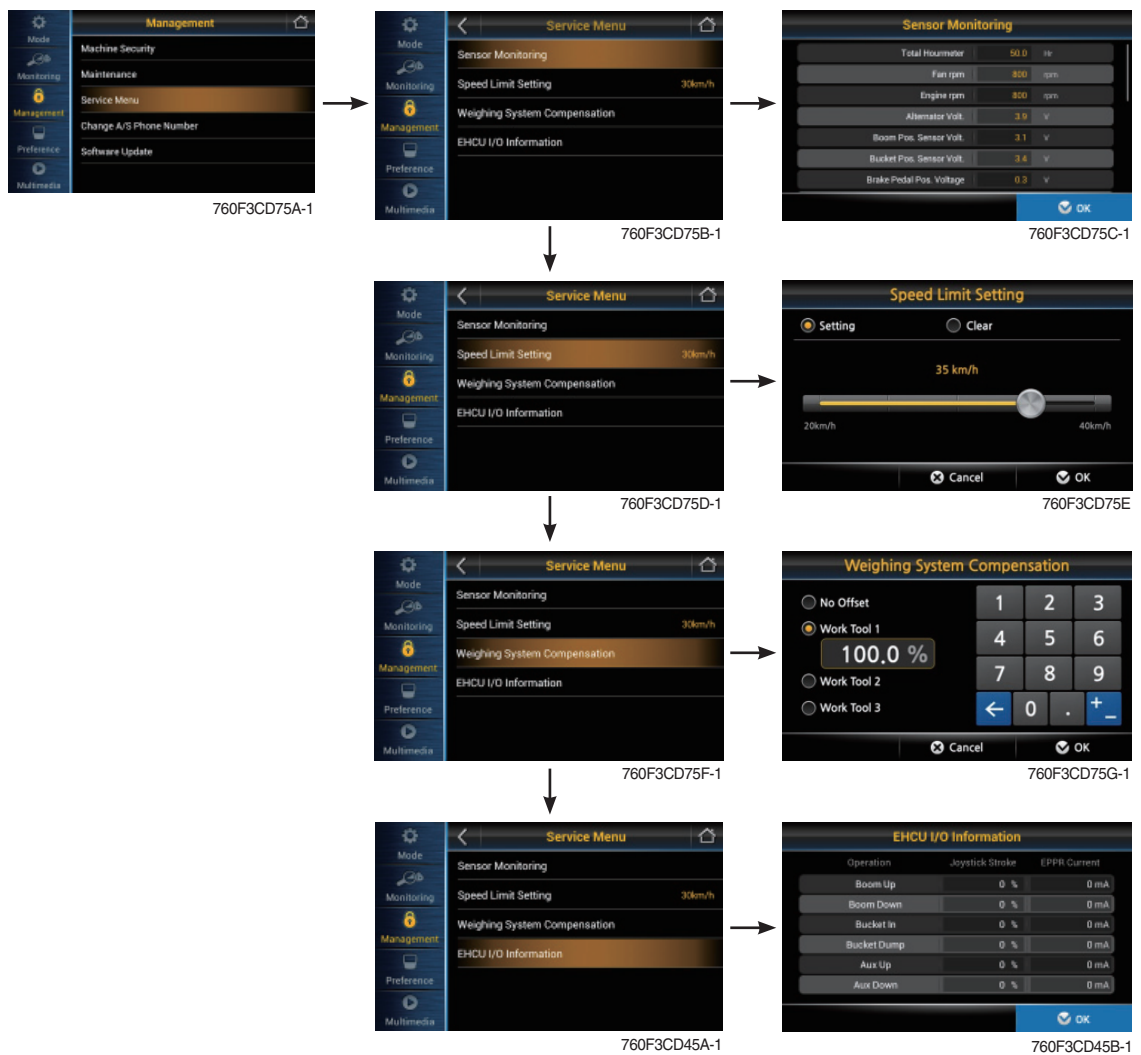
955TM3CD126

In order to recheck weight, go to the ② after changing boom position (below -15°).

- Dump operation : It is checked by bucket cylinder's stroke change (over 250 mm).

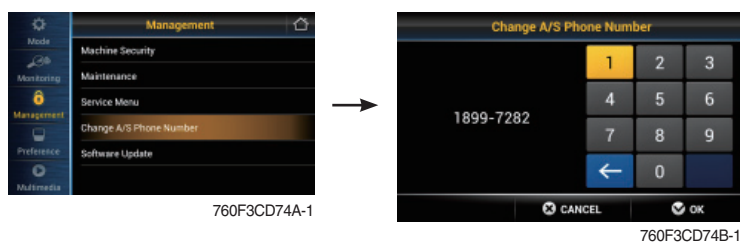
※ The temperature for the hydraulic oil must be raised to at least 40 °C (104 °F) before operation.

③ Service menu



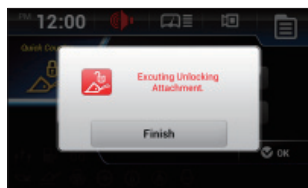
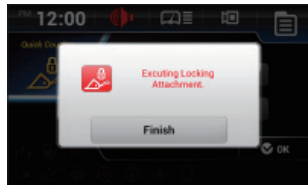
- **Sensor monitoring** : Display information of each sensors.
- **Speed limit setting** : 20~40 km/h (5 km/h intervals)
- **Weighing system compensation**
 - Calibration workload depending on work tool.
 - ※ **Only for the service person. Do not adjust arbitrary.**
- **EHCU I/O information**
 - Real time monitoring (joystick stroke, EPPR current).

④ Change A/S phone number and software update



- **Change A/S phone number** : Check and change of contact information for customer service.
- **Software update** : Update file in USB memory.

(9) Quick coupler switch (option)



① Locking attachment

- The quick coupler pins move in the engaged position and buzzer sounds.
- The green pilot lamp is turned ON.

※ Check for engagement as followings.

- a. Put down pressure on the attachment.
- b. Back up the machine and make sure that there is no movement between the quick coupler and attachment.

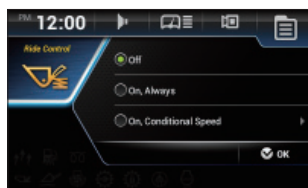
② Unlocking attachment

- The quick coupler pins move in the disengaged position and buzzer sounds.
- The red pilot lamp is turned ON.

⚠ Always check that the attachment is properly secured to the attachment quick coupler by pressing the front part of the attachment against the ground.

⚠ Never use an attachment before you have checked its mounting.

(10) Ride control switch (option)



① ON, Conditional speed

- Select **ON, conditional speed** in order to turn on the automatic ride control. The automatic ride control automatically turns on when the travel speed exceeds a preset speed. (forward / backward 1~15 km/h)
- The blue pilot lamp is turned ON.

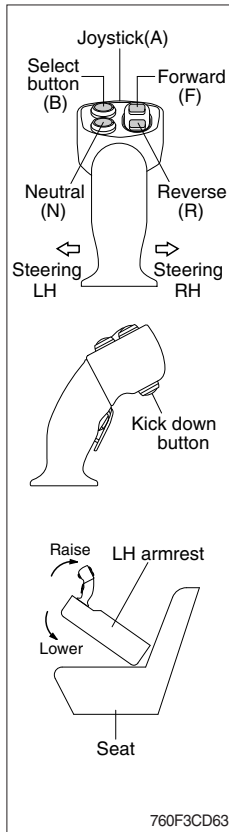
② ON, Always

- Select **ON, Always** in order to turn on the system for ride control regardless speed. The ride control will smooth the ride of the machine during travel.
- The green pilot lamp is turned ON.

③ OFF

Select **OFF** in order to turn off the system for the ride control.

6) JOYSTICK STEERING CONTROL LEVER (option)




- (1) The system has the following functions concentrated to a collapsible arm rest : steering, forward/reverse drive and kickdown function.
- (2) This means that during normal loading work, the operator does not need to touch the steering wheel.

- (3) The joystick steering pilot lamp on the cluster will be ON when the lever steering is activated.

▲ When operating on a public road, the steering wheel should always be used and the joystick steering be disconnected. Also when operating at high speeds (above 20 km/h) on a work site, always use the steering wheel.

(4) Joystick (A)

- ① Joystick steering can be enabled after following conditions have been satisfied.
 - Engine is running. - Operator is seated on the seat.
 - LH armrest is placed to the lowered position.
 - Gear selector lever is in neutral.
 - RCV is deactivated. - Joystick (A) is placed in normal position.
 - Parking brake is disengaged, but the machine speed is zero.
 - ② After above conditions are met, press the select button (B). Then joystick steering pilot lamp  on the cluster will be ON and joystick steering can be activated.
 - ③ Steering will remain enabled until machine speed is zero and one of the following conditions is met.
 - LH armrest is raised. - Parking brake is engaged.
 - Gear selector lever is in forward or backward position.
 - Operator is not seated on the seat. - Press the select button (B).
- ※ The steering wheel works as usual, even if the joystick steering is activated.

(5) Forward/reverse selection button

F : Forward drive

N : Neutral


R : Reverse drive

- ① To be able to operate the forward/reverse drive, the system must first be activated using select button (B).

※ **The ordinary gear selector control should be in neutral.**

- ② When this function is engaged, it is possible to operate the forward-reverse drive. If the ordinary gear selector control is activated at the same time as the joystick steering is activated, the ordinary gear selector control overrides any selection made by the joystick steering.

To reactivate the joystick steering, the ordinary gear selector control must first be moved to neutral and the system again be activated.

- ③ The FNR select pilot lamp  on the cluster will be ON when the forward/reverse selection is activated.

(6) Kick-down button : Refer to page 3-47.

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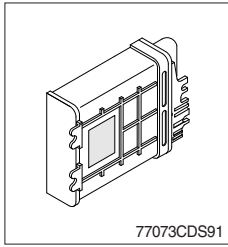
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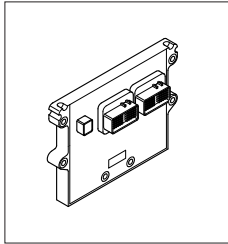
11) TRANSMISSION CONTROL UNIT (TCU)



(1) The control unit is shifting the required speeds fully-automatically under consideration of the following criteria.

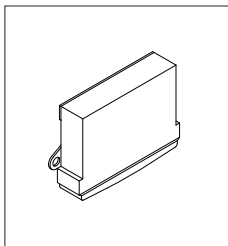
- Gear selector lever position
- Driving speed
- Load level

12) ENGINE CONTROL MODULE (ECM)

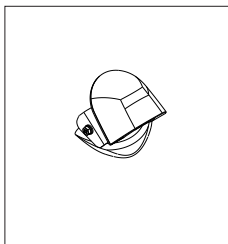


The engine control module (ECM) is the control center of the engine system.

13) CONTROL UNIT



14) REAR CAMERA



Refer to page 3-35.

(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 3-74, 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 :

- a. Select the desired station.
- b. 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

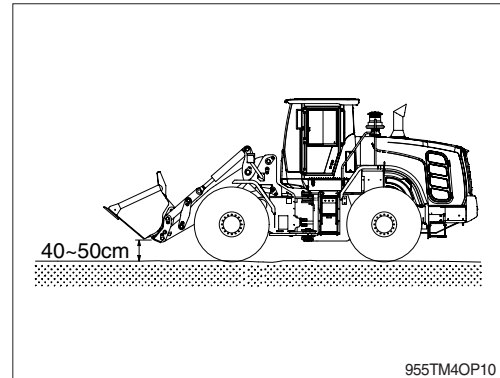
6. TRAVELING OF THE MACHINE

1) BASIC OPERATION

※ Secure the engine hood in the fully closed position prior to traveling the machine.

(1) Traveling posture

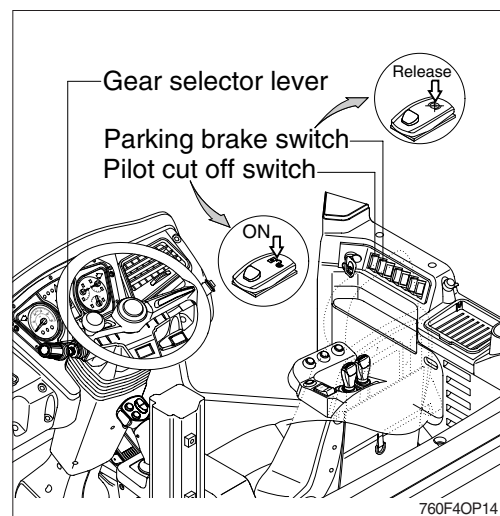
Lift the boom so that the bucket is placed 40-50cm above the ground.



(2) Traveling operation

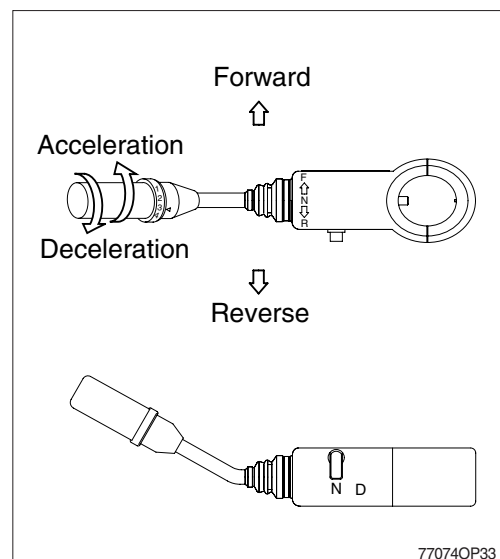
When warm-up operation is completed after the engine is started, move the machine according to the following procedure.

- 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

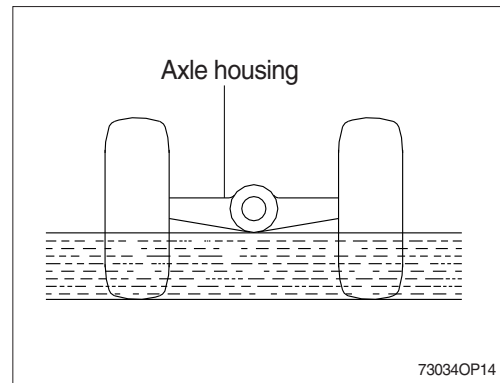
- ① The gear selector is designed for the mounting on the left side of the steering column.
- ② The positions (speeds) 1 to 4 are selected by a rotary motion, the driving direction Forward (F)-Neutral (N)-Reverse (R) by tilting the gear selector lever.
- ③ A neutral lock is installed as protection against 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

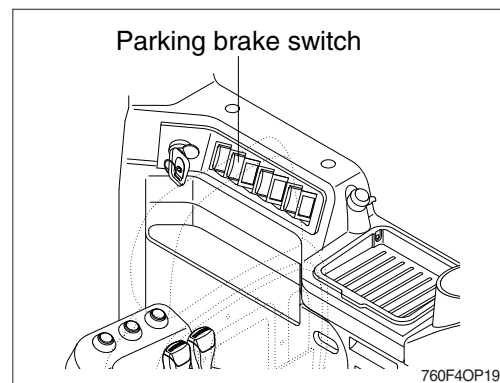
(1) Permissible water level

- 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.

9) MANUAL OPERATION OF ENGINE HOOD

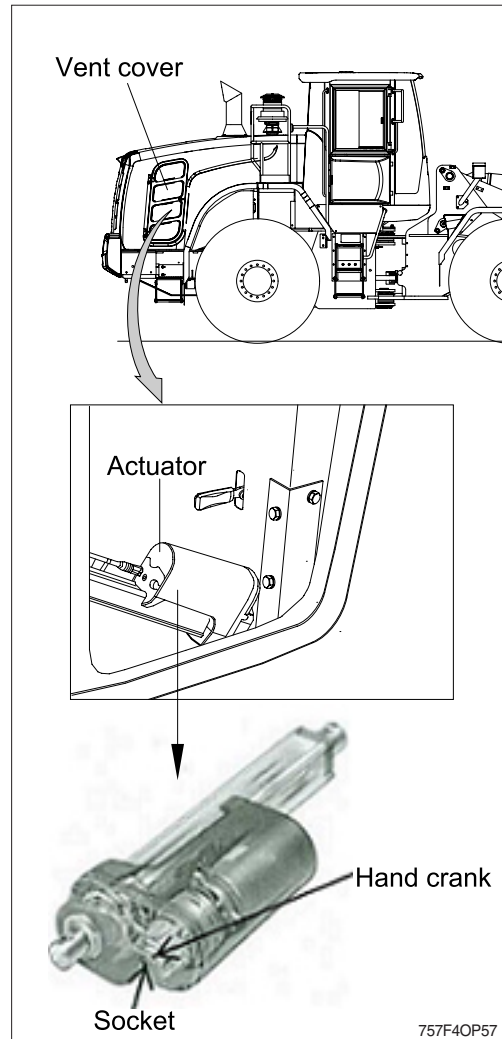
The engine hood can be operated manually.

(1) Open the RH vent cover.

(2) Remove the socket (Keep the socket to reuse) and turn the hand crank (6mm hexagon wrench) to open engine hood.

※ When the actuator is operated as a hand crank, it must be operated by hand or carefully by tool otherwise there is a risk of overloading and damage of actuator.

※ The master switch has to turn OFF during manual operation.



3) WHEN THE ENGINE DOES NOT WORK

When towing the machine with the engine stopped, do it in the following order.

- (1) The transmission oil does not lubricate the system, so remove the front and rear drive shafts.

- (2) Loosen the steering cylinder as the steering operation is not workable.

Even if the brake is in good condition, the brakes can only be used a limited number of times.

There is no change in the operating force for the brake pedal, but the braking force is reduced each time the pedal is depressed.

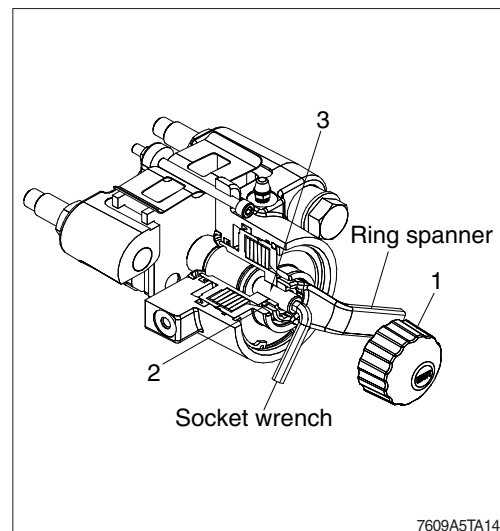
- (3) The parking brake is activated by spring and released by hydraulic pressure. If the engine does not work, the brake will be activated.

- ① Release the screw cap (1) in a counter-clockwise direction and unscrew it.
- ② Release the lock nut (2) and unscrew it back to the end of setting screw (3).
- ③ Rotate the setting screw (3) in a clockwise direction until the brake disc is completely free.

▲ In this condition the machine has no parking brake facility and thus must be protected from rolling away by different means. The brake must be adjusted before recommissioning.

- (4) Connect firmly between the traction machine and the towed machine.

Position each traction machine at the front and rear of the machine to be towed.



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4. MAINTENANCE CHECK LIST

Scheduled maintenance is the normal maintenance necessary to provide proper and efficient machine operation. To protect your investment and prolong the service life of your machine, follow the scheduled maintenance list below.

1) EVERY 10 HOURS SERVICE

Check items	Service	Page
Hydraulic oil level	Check, Add	6-31
Engine oil level	Check, Add	6-15
Radiator coolant level	Check, Add	6-17
Belt tension & damage	Check	6-22, 23
Fuel pre-filter element (water)	Drain	6-25
DEF/AdBlue® tank	Check, Add	6-29

2) EVERY 50 HOURS SERVICE

Check items	Service	Page
Attachment pins	Lubricate	6-44
Tire (air)	Check, Add	6-34
Drive shaft (flange bearing, front, center, rear)	Lubricate	6-41
Steering cylinder pins	Lubricate	6-41
Rear axle pivot	Lubricate	6-41
Fuel tank (water, sediment)	Drain	6-25

3) INITIAL 250 HOURS SERVICE

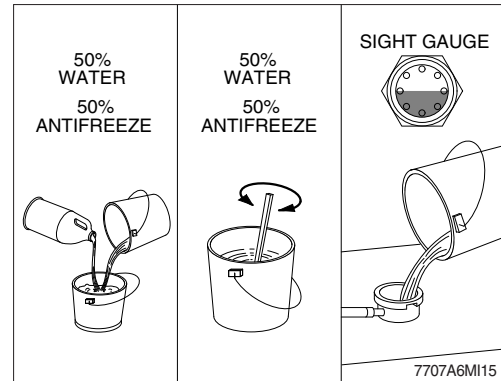
Check items	Service	Page
Engine oil	Change	6-15, 16, 17
Engine oil filter	Replace	6-15, 16, 17
Fuel filter element	Replace	6-26
Fuel pre-filter element	Replace	6-25
Transmission oil	Change	6-37, 38
Transmission oil filter	Replace	6-37, 38
Front axle oil	Change	6-40
Rear axle oil	Change	6-40
Hydraulic oil return filter	Replace	6-32
Pilot line filter element	Replace	6-33

(3) Cooling system filling

① Use a mixture of 50 percent soft water and 50 percent ethylene glycol antifreeze to fill the cooling system. Refer to the page 6-9.

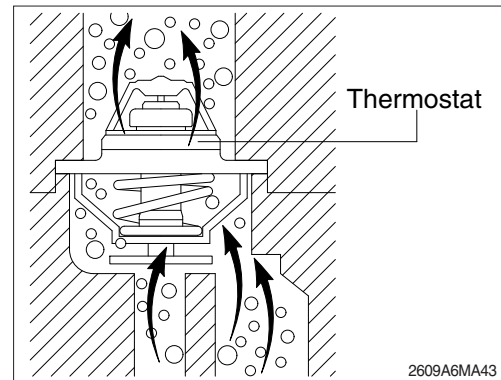
※ **Never use water alone for coolant.**
This can result in damage from corrosion.

※ **Do not use hard water such as river water or well water.**



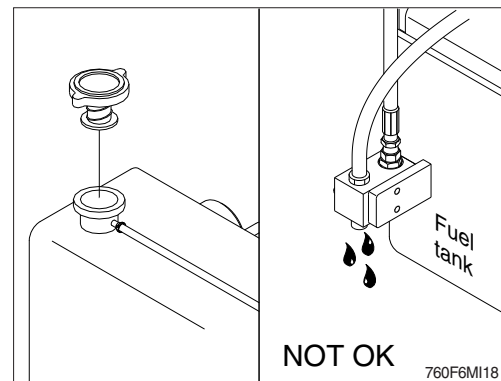
② The system has a maximum fill rate of 19 liters (5.0 U.S. gallons) per minute. Do not exceed this fill rate.

※ **The system must be filled slowly to prevent air locks.**
During filling, air must be vented from the engine coolant passage.



③ Install the cap. Operate the engine until it reaches a temperature 80°C (176°F), and check for coolant leaks.

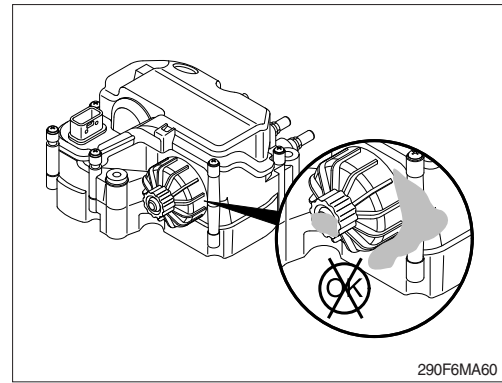
Check the coolant level again to make sure the system is full of coolant.



18) DEF/AdBlue® DOSING UNIT FILTER

- (1) Inspect the area around the seal and vent of DEF/AdBlue® dosing unit filter cap for signs of leakage.

※ Turn OFF the master switch.



- (2) Unscrew the DEF/AdBlue® supply module filter cap. A 30 mm wrench can be used on the cap to aid in removal.

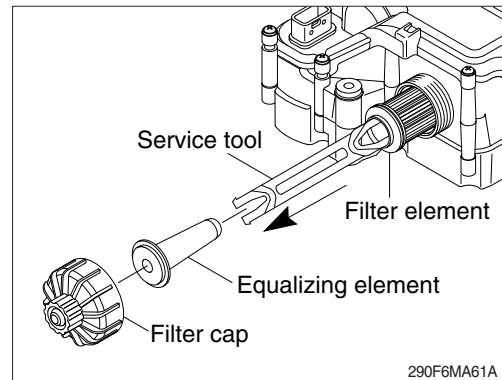
- (3) Remove the filter equalizing element.

- (4) Remove the old filter element.

A disposable service tool is included with the filter to aid in filter removal. Use the appropriate end of the tool, depending on the color of the plastic on the filter.

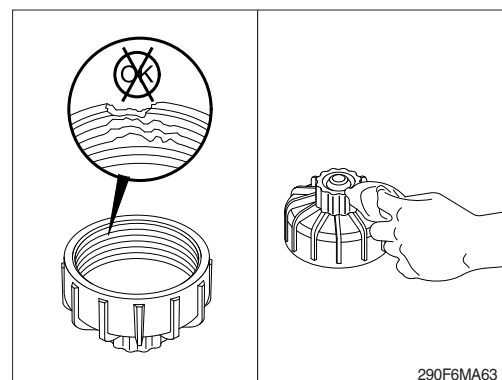
When inserting the tool a "click" sound can be heard which indicates proper engagement with the filter.

※ If the filter element and equalizing element are removed from the aftertreatment DEF/AdBlue® tank, they must be discarded and replaced; regardless of condition.



- (5) Clean and inspect the filter cap

- ① Clean the aftertreatment DEF/AdBlue® tank cap and threads on the DEF/AdBlue® tank with warm water and a clean cloth.
- ② Check the condition of the threads on the filter cap, if the threads are damaged, replace the filter cap.



33) CHANGE THE AXLE OIL

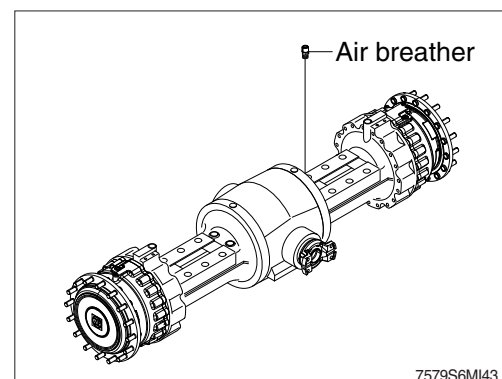
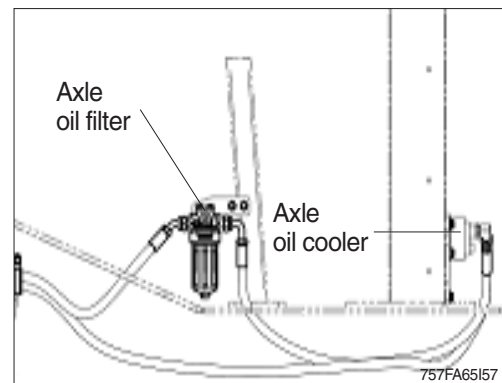
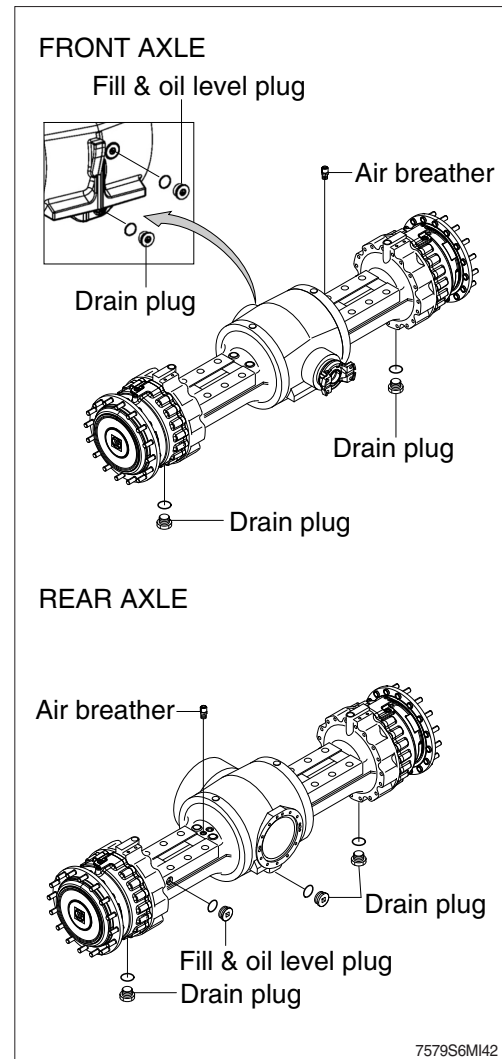
- (1) Place a case under drain plug to catch oil.
- (2) Remove the air breather to relieve internal pressure.
- (3) The basic condition for a correct oil change of the axle is horizontal plane of installation in every direction.
Place machine in a horizontal position.
- (4) All plugs must be cleaned carefully before opening.
- (5) Loosen drain plugs and drain oil.
- (6) Provide drain plugs with new O-ring and install them.
- (7) Fill up oil to the overflow on fill & level plug.
 - Oil amount
 - Front axle : 32 ℓ (8.5 U.S. gal)
 - Rear axle : 24 ℓ (6.3 U.S. gal)
 - **If equipped with axle oil cooler (option)**
- (8) Replace front axle oil filters.
- (9) Run the engine for five minutes at low idle on flat ground.
- (10) Fill up oil to the overflow on fill & level plug at low idle and install plugs.
 - Oil amount
 - Front : 38 ℓ (axle only 32 ℓ)

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

※ **If a work requires frequent use of brake, replace it earlier than normal change interval.**

34) CLEANING AXLE BREATHER

- (1) Remove dust or debris around the breather.
- (2) Remove the breather and wash it with cleaning oil.



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