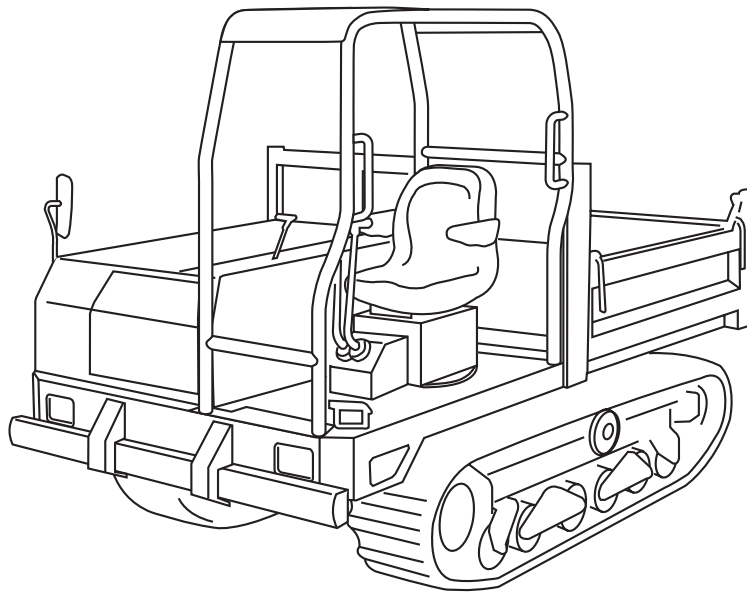


Off-road Rubber Track Dumper **S25A**

OPERATOR'S MANUAL



⚠ WARNING

Read this manual completely before operating or maintaining this machine. Failure to follow safety precautions could result in serious injury and death.

Keep this manual for future reference by you and by all those who operate and maintain this machine

3670 5605 001

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Authorized Dealer

Notice to Users and Maintenance Personnel

Thank you for purchasing this machine.

Always be sure to read and understand this manual thoroughly before using your machine. This will enable you to use it correctly.

WARNING

The machine can be very dangerous if the safety precautions in this manual and on the labels attached to this machine are not followed. Always follow the instructions and safety precautions, or serious injury or death could result.

This machine should only be used for its intended purpose: hauling and dumping.

Any other use could be dangerous.

Also driving this machine on a public road or a road regarded as a public road may be illegal.

Do not modify this machine. Also do not remove the safety cover of the body before running. A serious accident could result.

Notice to the Owner

CAUTION

Be sure that everyone who uses this machine, including those who rent or lease this machine, receives a copy of the Operator's Manual and understands the importance of reading and following the information in this manual.

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<Guarantee Certificate>

Attached to the end of this manual

※ Receive the guarantee certificate together with a receipt after you have received instructions for handling this machine

<Appendix>

“Instruction manual for engine”

※ Be sure to read it together with this manual.

1. Introduction

1.1 Purpose of This Manual

The purpose of this manual is to provide detailed information needed for the safe and effective use of this machine to those who operate or maintain the machine.

1.2 Structure of This Manual

This manual contains the following chapters.

1. Introduction

This section explains the purpose and structure of the manual and the warning labels used in the manual. It also describes the warning labels attached to the machine.

2. After-sales Service

This section covers items related to the after-sales service for this machine.

3. Rules for Safe Operation and Maintenance

This section covers general safety items that must be followed when operating or using this machine.

4. Component Names and Functions

This section explains the names and functions of the parts of the machine.

5. Product Specifications

This section gives the specifications of this machine. It also gives details about the tool bag.

6. Operation

This section explains the preparations before operating the machine, the order of operation, and the method of operation.

7. Maintenance

This section gives information about periodic inspection, use of coolant, lubricants, and grease, and cleaning, replacing, adjusting, and maintenance of the machine after use.

8. Storage (Long-term Storage)

This section gives information about storage (long-term storage) of the machine.

9. Troubleshooting

This section describes the action to take if any problem occurs.

10. Transporting Machine

This section explains the methods and precautions when transporting the machine.

1.3 Warning Words Used in This Manual

To indicate the level of danger (or the degree of the failure), the following four signal words are used to identify the safety messages in this manual. Their meaning are as follows.

Signal word	Meaning
 DANGER	Indicates an imminently hazardous situation which, if not avoided by following these instructions and precautions, will result in death or serious injury.
 WARNING	Indicates a potentially hazardous situation which, if not avoided by following these instructions and precautions, could result in death or serious injury.
 CAUTION	Indicates a potentially hazardous situation which, if not avoided by following these instructions and precautions, may result in minor or moderate injury
<u>NOTICE</u>	This word is used for precautions that are recommended or to emphasize the importance of information.

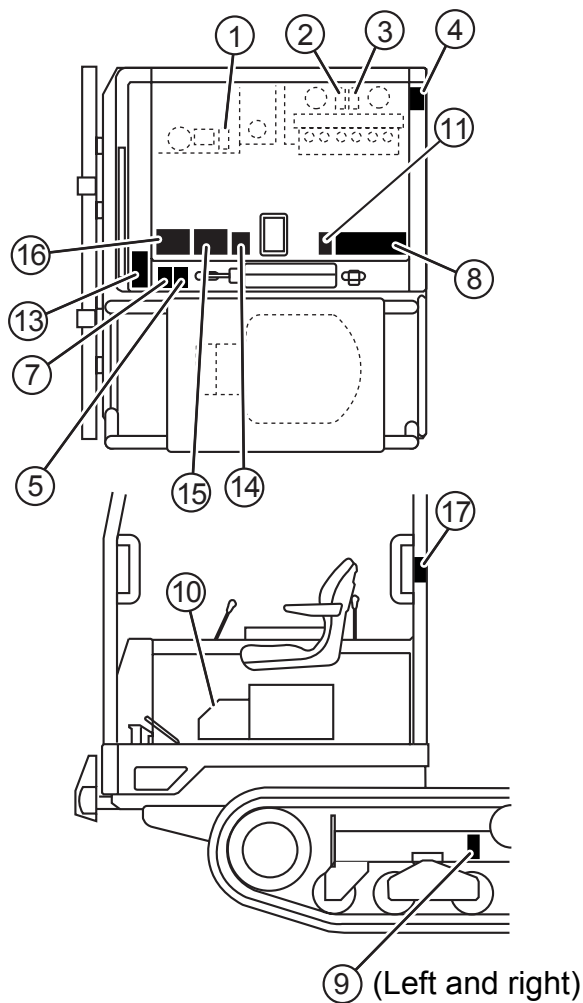
1.4 Warning Labels Attached to This Product

To indicate the level of danger (or the degree of the failure), the following four signal words are used to identify the safety messages in this manual. Their meanings are as follows.

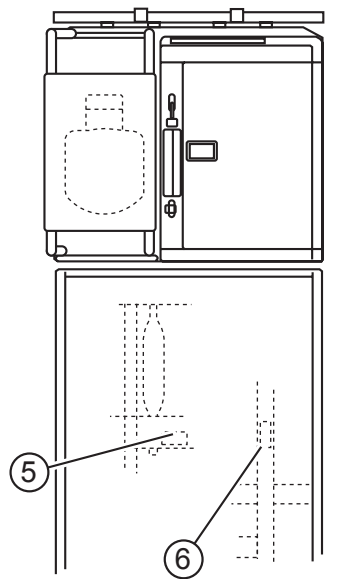
NOTICE

Replace these labels immediately if they have been removed, have fallen off, or have become illegible. Use the part numbers on the label to order replacement labels from dealer.

<Both Models>

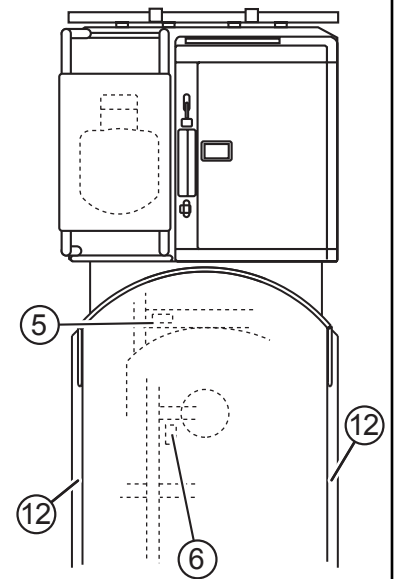


<One-side-dump>

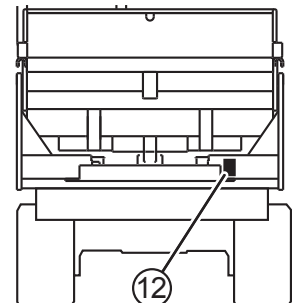
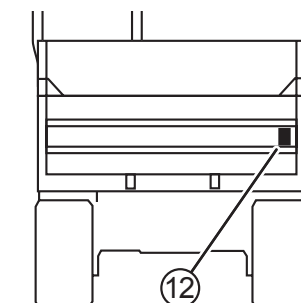


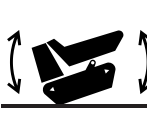
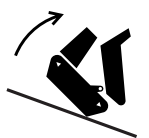
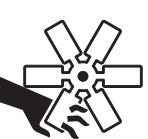
(Back of load-deck)

<Turn & Dump>



(Back of load-deck)



① ⚠ DANGER!  Explosion hazard. Flammable liquid present. Keep away all ignition sources. Never drill, cut with gas, hit or disassemble. 36705138001	② ⚠ WARNING!  Hazardous voltage. Use of unapproved test probes or conductive objects is strictly prohibited. See operation manual. 36775047001	③ ⚠ WARNING!  Hot liquids. Burn hazard. Do NOT open the radiator cap after operating this machine. 36775045001	④ ⚠ WARNING!  Fall hazard. Do not stand on top of the machine. 36705136001		
⑤ ⚠ WARNING!  Hot surfaces. Do NOT touch. 36775043001	⑥ ⚠ DANGER!  Crush hazard. To prevent death or serious injury, do NOT place any part of your body under the loading deck. 36775046001	⑦ ⚠ WARNING! ⚠ WARNING!   Accelerate or decelerate slowly. Sudden starts, stops, or turns can cause tip-over. Avoid running over obstacles. Never operate on a slope steeper than 25 degrees. Observe load limit when operating on a slope below that angle. 36705141000			
⑧ ⚠ CAUTION!  Noise Hazard. Wear approved ear protection during operation.	⚠ WARNING!  Read and FULLY understand the operator's manual before use or maintenance.	⚠ WARNING!  Electric shock hazard. Keep away from electric power lines and utility poles.	⚠ WARNING!  Moving fan blades can sever hand and fingers. Keep hands away to avoid injury.	⚠ WARNING!  Moving belts can entangle hand and arm. Keep hands away to avoid injury.	⚠ DANGER!  Power sources. Hydraulic and electric power sources are present. Lockout ALL energy sources before servicing. 36705143000
⑨ ⚠ WARNING!  Track adjuster valve can fly off. Adjuster cylinder is under pressure. Loosen valve for less than one turn to release pressure before removing. 36705135001	⑩ ⚠ CAUTION · ACHTUNG · ATTENTION When rotating the seat, first slide the seat to front position and then lift up the seat bracket lock lever for shifting the position. After rotating and lock the seat, the seat should be slid and fixed backwards position to secure backwards motion space of the travel levers. When the seat is remaining at front position, it is impossible to pull travel levers backwards. Zum Rückwärtsdrehen des Fahrersitzes erst Sitz ganz nach vorne schieben, dann Sitzverriegelung lösen. Nachdem Fahrersitz gedreht wurde und Sitzverriegelung geschlossen ist, Fahrersitz ganz nach hinten schieben und einrasten, um Betätigung der Fahrhebel nicht zu behindern. Verbleibt Fahrersitz in vorgeschobener Lage ist es Unmöglich die Fahrhebel nach hinten zu ziehen. Lorsque vous tournez le siège, vous devrez tout d'abord le faire glisser jusqu'à sa position avant, puis remonter le levier de blocage de rotation du montant support de siège pour changer la position. Après avoir fait tourner et avoir verrouillé le siège, on devra le faire glisser et vers l'arrière pour garantir l'espace de mouvement vers l'arrière des leviers de déplacement. Lorsque le siège reste en position avant, il est impossible de tirer les leviers de déplacement vers l'arrière. 36705101000			⑪ ⚠ WARNING!  Upset hazard. To avoid serious injury or death, do NOT rotate and dump on an incline. 36775048001	

12

! WARNING!

Impact hazard.
Keep away from
the machine in
operation. The
machine or its
equipment may
move suddenly.

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13

**! WARNING! AVERTISSEMENT! WARNUNG! AVVERTENZA!**

Always stop the engine and apply the parking brake before leaving the machine.
When the steering lever is touched while the engine is running, the machine will move.

Arrêtez toujours le moteur et serrez le frein de parking avant de quitter la machine. Une action sur les leviers de translation alors que le moteur tourne engendre le déplacement de la machine.

Stellen Sie den Motor ab und betätigen Sie aus Sicherheitsgründen immer die Parkbremse bevor Sie die Maschine verlassen. Wenn Sie bei laufendem Motor die Fahrpedalhebel betätigen, beachten Sie bitte, dass die Maschine sich entsprechend in Bewegung setzt.

Spegner sempre il motore ed azionare il freno di parcheggio prima di scendere dalla macchina.
Toccare le leve dello sterzo quando il motore è in moto causa il movimento della macchina.

5234 5067 000

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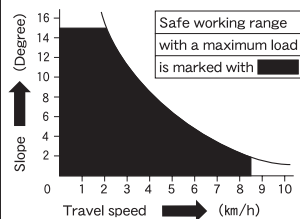
14

! CAUTION

Never overload dump body. Do not exceed speed limits in chart below when traveling down a steep slope.

If you are going too fast, the brake may not be able to stop the machine.

When traveling downhill with a load, lower speed as slope becomes steeper.



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15

**! WARNING**

Do not start the engine in a closed room. Exhaust gas may cause gas poisoning.

**! WARNING**

When a load is put on in an unbalanced way, it could cause the machine to turn over. Therefore, be sure to put a load on equally.

**! WARNING**

Loading and unloading of this machine should be done slowly on a horizontal and solid ground at slow speed and in an empty state of the vehicle by using running boards. The vehicle should go up in forward gear and go down in backward gear. Loading and unloading of this machine should be done carefully because the center of gravity may move suddenly. Changing the direction on the running boards could cause the machine to fall off and therefore should not be done.

! WARNING

● When checking is done with the load-carrying deck body raised, you could get caught in the load-carrying deck body. Therefore, extend the dump cylinder completely and stop the engine, and then, lock the dump lever and support the load-carrying deck body securely with the load-carrying deck body drop prevention rod.

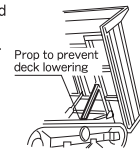
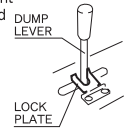
● Operation of the dump lever should be performed on a horizontal and solid ground as much as possible. In sloped areas and uneven areas, the center of gravity moves and the machine could turn over.

● Before operating the dump lever, make sure that there is no person around the load-carrying deck body.

● Before operating the dump lever to lower it, remove the drop prevention rod located below the load-carrying deck body. If the dump lever is operated with the drop prevention rod not removed, the frame and drop prevention rod could be damaged.

● Do not drive the machine with the load-carrying deck body raised. Not only the field of view is bad, but also the center of gravity becomes high and the machine could turn over.

● With the load-carrying deck body raised, do not leave the machine as it is. If another person touches the dump lever by mistake, the load-carrying deck body will go down and could cause an accident.



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16

! CAUTION

1. This machine does not fall under the "car" category in the Road Transportation Vehicle Act. Do not drive it on public roads.
2. Before moving the machine, make sure that there is no person around it. In joint work, be sure to give a signal with the horn.
3. Do not carry out work with the indicated load capacity exceeded.
4. Do not allow anyone other than the operator to ride on the machine.
5. Exercise caution when driving the machine on a shoulder of a road, cliffy area, and soft ground.
6. Turning the machine at high speed may cause it to turn abruptly and turn over.
7. When parking the machine, observe the following points.
 - 1) Apply the parking brake.
 - 2) Stop the engine and pull out the key.
 - 3) Use stopper for the crawlers.
8. When storing the machine, wait until the exhaust pipe cools down completely, and then, store it in a place with no combustible material located nearby.

! CAUTION

Driving the machine in an inclined area may cause a serious accident resulting in injury or death due to overturning or runaway machine. Therefore, observe the following points strictly.

- 1) Do not drive the machine in sloped areas with an inclination of 15 degrees or more.
- 2) When going down sloped areas with an inclination of 10 to 15 degrees, set the high speed/low speed change-over switch at the "low speed" position to reduce the engine speed, and then, drive the machine at low speed.

! CAUTION

When the outside air temperature is 0°C or less, perform warming-up for five minutes or more before using the machine. Driving the machine before the engine and hydraulic equipment become warm enough will not only shorten the lives of the engine and hydraulic equipment, but also cause erroneous operation.

! CAUTION

When turning the seat, take care not to touch the operation lever. Moving the operation lever while the seat is being turned may cause the linkage to break down.

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17

**! WARNING!**

The protection offered by this ROPS will be impaired if it has been altered, damaged, or has been involved in an overturn. Inspect ROPS, seatbelts, and their attaching components daily for cracks, deformations, or other unsafe conditions. Seatbelts must be worn while operating vehicle. Failure to properly use and maintain ROPS, seatbelts, and their attaching components may result in severe injury or death to the operator or a bystander.

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36775056000

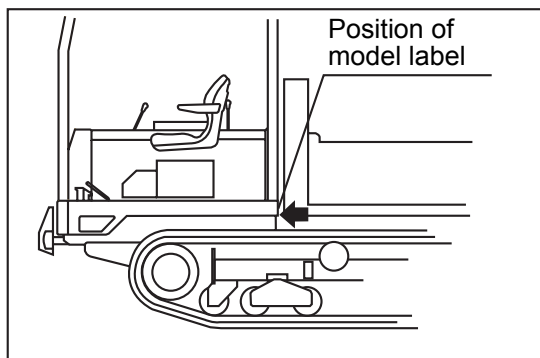
2. After-sales Service

After-sales Service

Consult your CANYCOM representative regarding service orders or any questions or problems that may arise when using the Off-road Rubber Track Dumper.

Please refer to the product model that you own or use, and the product serial number speified on the label (see illustration below for location of the label).

<Position of Model Label>



<Model Label>



← Product model

← Serial number

3. Rules for Safe Operation and Maintenance

This section contains safety precautions to follow when operating and maintaining the machine. Read and understand the precautions in this section as well as throughout this manual and follow them when operating or maintaining the machine. Failure to follow safety precautions could result in property damage, serious injury or death to the operator or bystanders.

3.1 Training

All operators and mechanics should receive practical instructions from their employer or renter. Such instructions should cover the following issues:

- **It is essential to familiarize yourself with the controls, safety labels and the proper use of the machine.**
- **Never allow people unfamiliar with these instructions to operate or service the machine. Do not let anyone under 18 years of age to operate this machine. Local regulations may restrict the minimum age for operating the machine. Consult your local authority.**
- **The operator is responsible for the accidents or hazards caused to other people or their property.**
- **This machine has a riding capacity for one person only. Do not carry passengers other than the operator.**
- **Always keep in mind that care and concentration is required when working with ride-on machines.**
- **Loss of control on a slope cannot be regained by the application of the brake. The main reasons for loss of control are:**
 - **insufficient grip of tracks.**
 - **excessive speed.**
 - **misjudging of the ground conditions, especially slopes.**
 - **excessive load.**
 - **incorrect distribution of load.**

3.2 Preparation

WARNING

Fuel is highly flammable. See Adding Fuel, page 19, for important safety information on handling fuel.

- Always wear protective footwear, long trousers, hardhat, safety glasses and ear protection when operating or servicing the machine. Proper clothing will minimize the chance of injury. Do not operate the equipment if you have long hair, loose clothing, or jewelry; all of which may get tangled in moving parts. Do not operate the machine barefoot or with open sandals.
- Prepare beforehand the working rules and procedures such as signaling and traffic control for the work place. Following such rules will reduce the risk of accidents.
- Never handle fuel or grease, service the engine, or recharge the battery in the presence of fire or spark.
- Perform the daily pre-startup inspection before starting the machine. Repair or replace damaged parts before starting the machine.

3.3 Operation

This machine is intended for carrying sand and dirt. Carrying other materials may damage the machine. Avoid carrying liquid concrete. That will damage the machine.

The stability of the machine is affected by the speed, rate of steering, terrain and the load. Always pay close attention to these factors or a loss of control or tip over could occur, resulting in property damage, serious injury or death.

General Driving

- Do not operate the engine in a confined space where dangerous carbon monoxide fumes can accumulate.
- Do not touch the engine, muffler or exhaust pipe while the engine is running or soon after it has stopped. These areas will be very hot and can cause burns.
- Do not operate the machine under the influence of alcohol or drugs.
- Always check for obstacles before operating on new terrain.

- Before starting the engine and moving the machine, scan around your surroundings and make sure all persons and other vehicles are a safe distance away from the machine. Sound the horn to warn bystanders.
- On the machine equipped with the optional ROPS, always keep the ROPS in the extended position when in use. Fold the ROPS only when it is absolutely necessary to do so when transporting the machine.
- On the machine equipped with the ROPS, always wear the seat belt when in use.
- Always stay seated in the operator's seat when driving the machine. Never operate the steering lever off of the machine.
- On a slippery surface, travel slowly and exercise caution to reduce the chance of skidding or sliding out of control. Never operate on ice.
- Always make certain that there is no obstacle or a person behind the machine when backing up. After confirming that it is safe to back up, move slowly and avoid sharp turns.
- To reduce the risk of tip over, pay special attention when encountering an obstacle or a slope, or when braking on a slope or during a turn. See Driving on a Slope on the next page.
- Never attempt to drive over a large obstacle such as rock or fallen tree.
- Always travel slowly and use extra caution when operating on unfamiliar terrain. Be alert when traveling on changing terrain.
- Never operate on terrain that you are not comfortable with. Avoid terrain that is so rough, slippery or loose that you feel like you could tip over.
- Do not operate the machine near the edge of a cliff, an overhang or a slide area.
- Do not make sudden maneuvers. A sudden start, stop, or turn can make the machine lose control and could cause a tip over. Be especially cautious when traveling on soft or wet ground.

- Drive at a safe speed, taking into account the surface gradient, surface conditions and load.
- Use an observer to help direct the machine when the visibility is poor, terrain is rugged or hilly, or maneuvering room is limited. The observer should be able to see the machine and its immediate surroundings, and should give pre-arranged signals to direct the operator.

Driving on a Slope

WARNING

- Never use on a slope steeper than 20 degrees.
 - Driving on a slope can be dangerous. It can result in a tip over and cause serious injury or death. Take the following precautions.
- Always follow proper procedures for driving on a slope as described in this manual.
 - Driving on a slope in a wrong manner can cause a loss of control or a vehicle tip over. Check the terrain carefully before attempting to drive on a slope.
 - Never drive on a slope that you are not comfortable with. Avoid a slope that is so rough, slippery, or loose that you feel like you could tip over.
 - When driving up a slope, proceed at a steady rate of speed and throttle position.
 - Never move the throttle lever or the control stick suddenly.
 - If the engine stalls or loses traction during a climb and cannot make it to the top of the slope, do not try to turn the machine around. Carefully back down slowly, straight down the slope.
 - Drive straight up or down slopes. Avoid turning on a slope.
 - When going over the top of a slope, go slow; an obstacle, a sharp drop, or another vehicle or person could be on the other side of the crest.
 - Avoid driving the machine across a slope.
 - Without a load, drive the machine backwards up a slope (operator's seat toward the top) when climbing, and drive it forward when going down a slope.

- With a load, drive the machine forward up a slope (operator's seat away from the top) when climbing, and drive it backwards when going down a slope. Be especially cautious when operating on a slope with a load.
- When driving down a slope, use the steering levers so that the machine travels down at the minimum speed. Use the engine speed to help keep the machine speed low.

Loading and Driving with a Load

- The maximum payload for this machine is 24.5kN (5511lbs). Do not exceed this maximum payload under any circumstance.
- Do not operate on a slope steeper than 20 degrees when carrying a load. Do not carry more than 1250 kg (2755lbs) when operating on a slope between 15 and 20 degrees.
- Load cargo in the bucket so the weight is evenly distributed. When carrying a cargo, strap the cargo to the load deck to prevent the cargo from shifting. Ensure that cargo does not obstruct the operator's field of view.
- When carrying a load, drive at a reduced speed. Allow a greater distance for braking.
- Before crossing a bridge or an overpass, make certain that the total combined weight of the machine, the load and the driver is within the stated weight limit for the bridge or the overpass. Then, proceed carefully and at a constant speed.

Dumping/Turning

When turning the bucket and dumping material from the bucket, take the following precautions.

- Always follow the proper procedures for dumping or turning as described in this manual.
- Only operate the bucket with the engine running.
- Always stay seated in the operator's seat when dumping or turning the bucket. Never operate the dump or turn lever off of the machine.
- Perform the dump operation on a flat, level and stable surface whenever possible. Raising or lowering the load deck on a slope or rough terrain could result in a tip over.
- Pay special care when dumping with the bucket turned to a side. Be tentative when raising the bucket which is turned to a side.

- Make certain that all persons are at a safe distance away from the machine when raising, lowering, or turning the bucket.
- Do not move the machine or leave it unattended with the bucket in the raised position.
- Engage the bucket safety prop if you must place any part of your body under the bucket in the raised position.

Parking

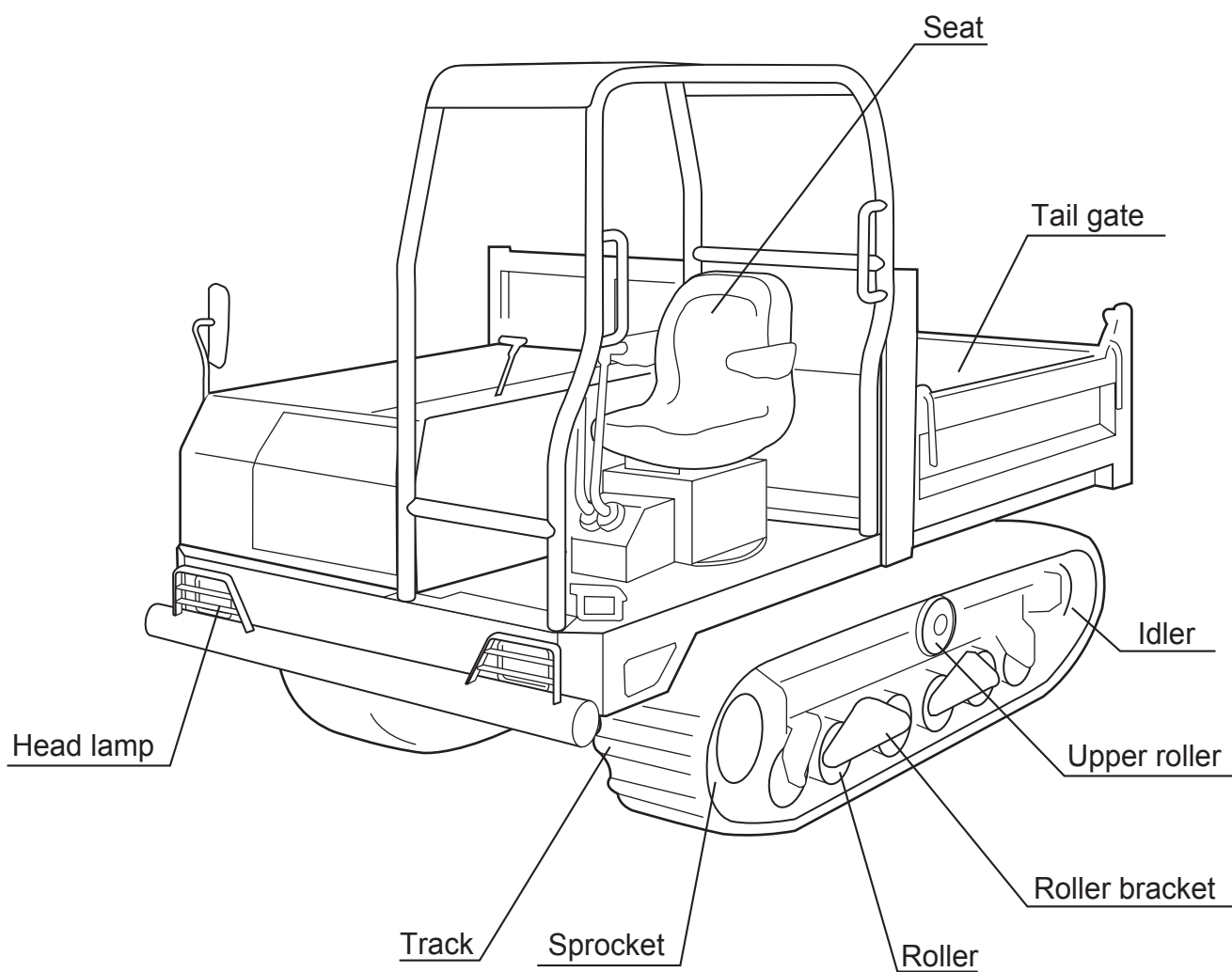
- Park the machine on a flat, level and stable surface. Never park on a slope steeper than 15 degrees. Avoid parking on a slope less than 15 degrees. If parking on a slope less than 15 degrees is unavoidable, turn the bucket straight, apply the parking brake and block the tracks at the lower end of the machine.
 - Without a load, park the machine with the operator's seat facing downhill
 - With a load, park the machine with the operator's seat facing uphill
 - Do not park sideways on a slope.
- Observe all the previous precautions for driving, driving on a slope, loading and driving with a load, and dumping.
- Whenever you park the machine, apply the parking brake and stop the engine. Remove the key whenever you leave the machine unattended to prevent unauthorized use or accidental starting.
- Diesel fuel is flammable and can be explosive. When parking the machine indoors, make certain that the building is well ventilated and that the machine is not close to any source of flame or spark, including appliances with pilot lights.

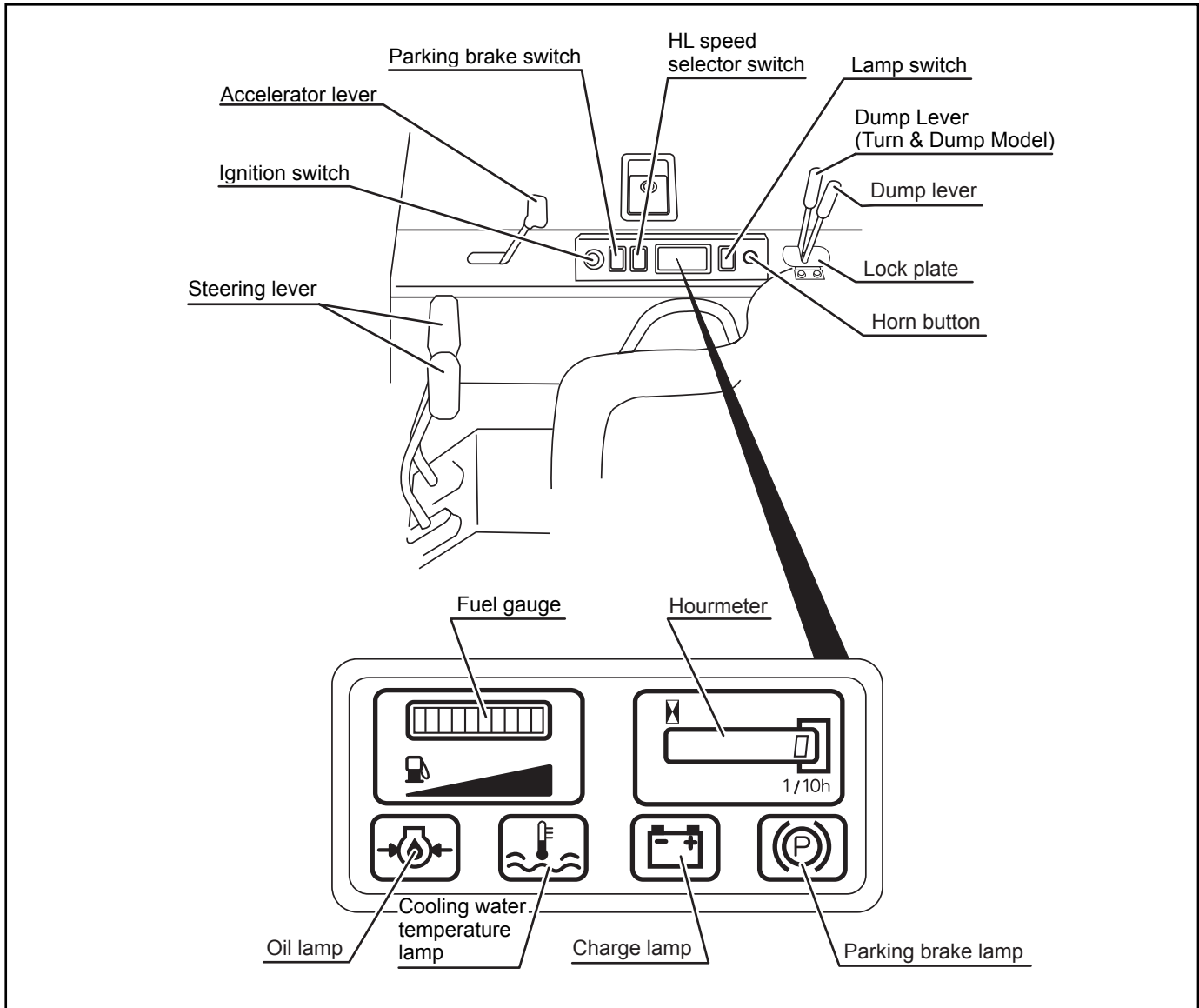
3.4 Servicing

- Do not service the machine when the engine is running. If it is absolutely necessary to run the engine while servicing, pay attention to the moving parts.
- Do not operate the engine in a confined space where dangerous carbon monoxide fumes can accumulate.
- Make sure all hydraulic line connectors are tight and all hydraulic hoses and lines are in good condition and leak-free before applying hydraulic pressure to the system.
- Keep your body and hands away from pinhole leaks or nozzles that eject hydraulic fluid under high pressure. Use paper or cardboard, not your hands, to search for leaks. Hydraulic fluid escaping under pressure can have sufficient force to penetrate the skin and cause serious injury.
- Check all fuel lines on a regular basis for tightness and wear. Tighten or repair them as needed.
- If the engine must be running to perform a service, keep hands, feet, clothing and any part of the body away from any moving part, especially the cooling fan and the belts at the side of the engine.
- Do not touch the engine, muffler, or exhaust pipe while the engine is running or soon after it has stopped. These areas will be very hot and can cause burns.
- The engine must be shut off before checking or adding oil.

4. Component Names and Functions

Locations





Component Names and Functions

- Accelerator lever This increases or decreases the engine speed.
- Steering lever This is used when turning the machine and when changing the direction or travel (FORWARD or REVERSE). (See page 21)
- Dump lever This is used to raise or lower the dump body.
- Lock plate This is used to lock the dump lever.
- HL speed selector switch This is used to switch the travel speed between [HI] and [LO].
- Parking brake switch This is used when parking the machine. (When the parking brake switch is at the [P] position, the machine does not move even when the steering lever is operated.)
- Lamp switch Press the switch to light up the head lamps.
- Horn Press this button to sound the horn.
- Turn and dump lever This is used when turning the load deck body.
(Turn & Dump model)

- Ignition switch This also acts as the main switch.
When the key is turned to the [I] position, electric current passes through the electrical circuits of the machine. If the key is turned further to the [⚙] position, the starting motor is cranked. If the key is turned to the [⚡] position, electricity flows to the glow lamp.
- Cooling water temperature lamp This lights up when the engine cooling water temperature rises abnormally (overheats).
- Oil lamp This shows if the engine oil pressure is normal. When the engine starting switch is turned to the [I] position, it lights up, and if the conditions are normal it will go out after the engine starts.
- Parking brake lamp This lights up when the parking brake switch is at the [P (parking)] position.
- Charge lamp This displays the condition of the battery charge. When the engine starting switch is turned to the [I] position, it lights up, and if the condition is normal, it will go out after the engine starts.
- Fuel gauge This shows the remaining amount of fuel.
- Hourmeter This displays the total number of hours that the machine has been working in units of 0.1 hour.

5. Product Specifications

5.1 Specifications of This Product

NOTICE

Make sure that you understand the specifications of this machine and use the machine properly.

Model and Type				S25A	
				One-side-dump	Turn & Dump
Mass		kg (lbs)		2230 (4916)	2430 (5357)
Max. payload capacity		kN (lbs)		24.5 (5511)	
Dimensions	Overall length		mm (in)	3295 (129.7)	3665 (144.3)
	Overall width		mm (in)	1775 (69.9)	1775 (69.9)
	Overall height		mm (in)	2370 (107.5)	
	Ground contact length of track		mm (in)	1960 (77.2)	
	Track tread		mm (in)	1230 (48.4)	
	Min. ground clearance		mm (in)	295 (11.6)	
	Load deck floor height		mm (in)	770 (30.3)	910 (35.8)
Load deck dimensions	Inside dimensions	Length	mm (in)	1685 (66.3)	2155 (84.8)
		Width	mm (in)	1420 (55.9)	1300 (51.2)
		Height	mm (in)	370 (14.6)	495 (19.5)
	Payload	Struck	m ³ (cu ft)	0.89 (31.4)	1.03 (36.4)
		Heaped	m ³ (cu ft)	1.26 (44.5)	1.40 (49.4)
Engine	Model			Kubota V2203	
	Type			4-cycle, water-cooled, in-line type, swirl chamber	
	Cylinder - bore x stroke		mm (in)	87 x 92.4 (3.43 x 3.64)	
	Total displacement		cm ³ (cu in)	2197 (134)	
	Max. output		kW (HP) /rpm	34.1 (45.7) /2800	
	Max. torque		N·m (lbf·ft) /rpm	139.6 (102.9)/1600 to 1800	
	Starting system			Electric starter	
	Fuel used			Diesel fuel	
	Rate of fuel consumption		g/kW·h (oz/PS·h)	251 (6.53)	
	Fuel tank capacity		L (US gal)	45 (11.9)	
	Lubricating oil capacity		L (US qt)	9.7 (10.2)	
	Cooling water capacity		L (US qt)	7.2 (7.6)	
	Battery type			100E41R	
	Battery capacity		V/AH	12/80	

Model and Type				S25A	
				One-side-dump	Turn & Dump
Travel performance	Travel speed	Gearshifting		HST (2-stage selection)	
		High speed	km/h (mph)	0 to 11 (0 to 6.8)	
		Low speed	km/h (mph)	0 to 6 (0 to 3.7)	
		Min. turning radius	m (ft)	2.0 (6.56)	
		Gradeability	degrees	30 (Empty)	
HST oil capacity			L (US gal)	36 (9.5)	
Power train	Main gearshifting method			HST (2-speed motor)	
	Steering system			2 pumps, 2 motors	
	Brake system			Hydraulic type	
	Track			320 x 58 x 90	
Dump system	Dump system			Hydraulic dump	
	Load deck type			One-side dump	Turn & Dump
	Hydraulic pump	Type		Gear pump	
		Max. speed	rpm	2800	
		Max. discharge	liter (US qt) /min	31 (32.8)	
		Relief setting pressure	MPa (psi)	15.7 (2277)	11.8 (1711)
	Cylinder - bore x stroke		mm (in)	80 x 407 (3.14 x 16.02)	
	Performance	Max. lifting angle	degrees	60	85
		Lifting time	sec	Approx. 4.0	Approx. 7.4
		Lowering time	sec	Approx. 3.0	Approx. 5.3
	Hydraulic oil			Shared with HST	
Turn device	Turn system			-	Hydraulic (twin cylinder)
	Max. turn angle		degrees	-	Right: 90 ~ Left: 90
	Turn time		sec	-	About 6.0
	Cylinder - bore x stroke		mm (in)	-	60 x 250 (2.36 x 9.84)

*These specifications are subject to change without notice for improvement.

5.2 Details of Tool Bag

No.	Part Name	Q'ty	Remarks
1	Operation and Maintenance Manual (this manual) * This manual gives details of parts (recommended parts).	1	
2	Instruction manual for engine	1	

6. Operation

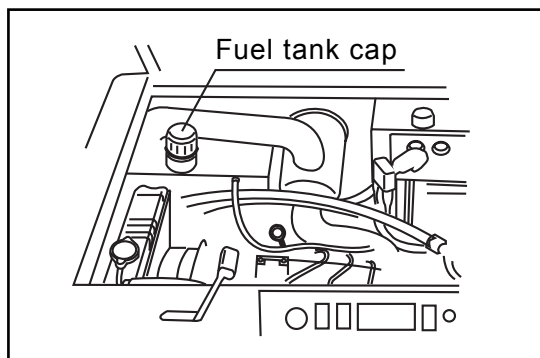
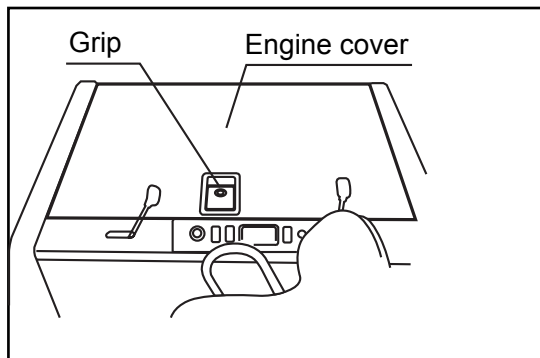
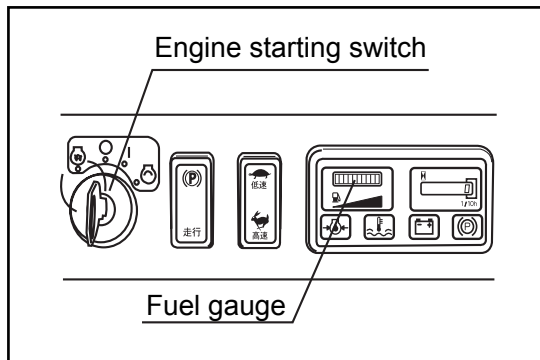
- Before reading this section, be sure to read Section 3 “Rules for safe Operation and Maintenance”(see page 7-13).
- When operating the machine, always follow the instructions in this section. Do not operate the machine unless you are familiar with the operation of all controls and safety devices.

6.1 Preparation Before Operation

6.1.1 Adding Fuel

⚠ DANGER

- When adding fuel, never bring any flame (lighted cigarette, etc.) near the fuel or engine. This will cause the fuel to ignite.
- Always stop the engine before adding fuel.
- Do not overfill so that fuel spills out of filler cap. Wipe up any spilled before starting engine.



Inspection

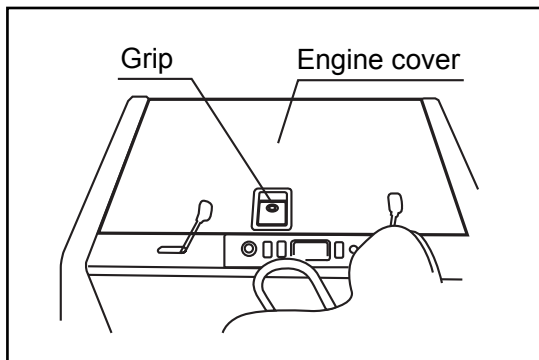
1. Turn the engine starting switch to the [I] position and check the fuel gauge visually to see if the fuel level is low. If the fuel level is low, add fuel.

Adding Fuel

1. Open the engine cover.
2. Open the fuel tank cap and add fuel.
3. After refueling, replace the fuel tank cap and tighten it finger tight. Wipe up any spilled fuel.

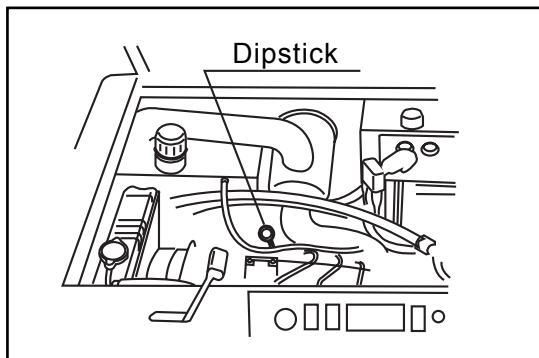
Fuel to use: Diesel fuel

Fuel tank capacity: 45 liter

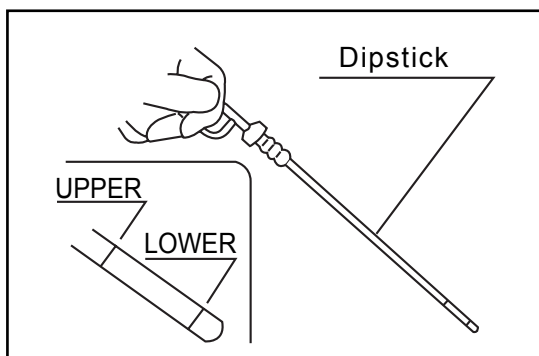


6.1.2 Checking Engine Oil Level and Adding Oil

1. Open the engine cover.



2. Pull out the dipstick.

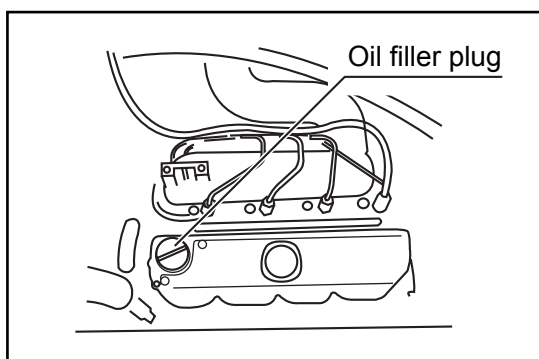


3. Check the engine oil level.

Engine oil level: Between [UPPER] and [LOWER] lines. (Do not fill above the UPPER line.)

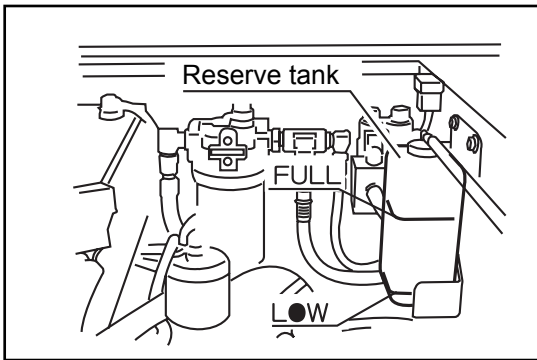
Reference:

Oil capacity up to UPPER line on dipstick: 9.7 liter



4. If the oil level is not within the specified range, remove the oil filler plug and add the specified oil.

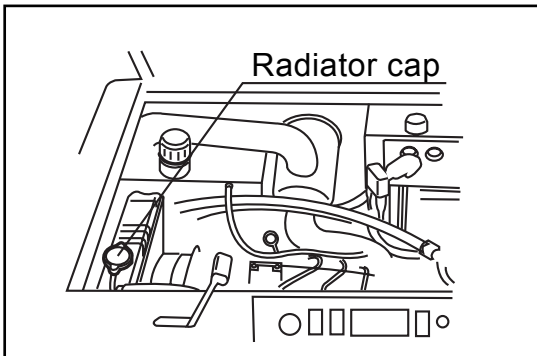
Oil to use: See page 34



6.1.3 Checking Engine Cooling Water Level and Adding Water

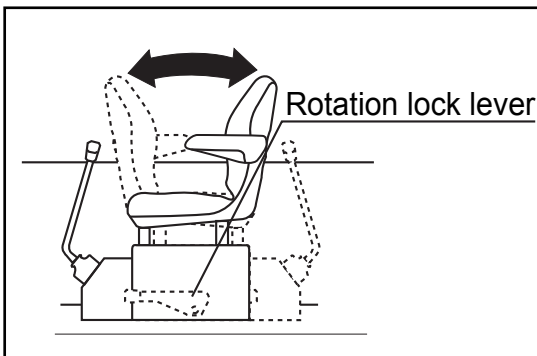
1. Open the engine cover. (See page 19)
2. Check the engine cooling water level visually to check that it is between the [FULL] and [LOW] lines. If the level is low, add water. (See page 42)

Cooling water amount: 7.2 liter



CAUTION

If the radiator cap is opened during operation or immediately after stopping, boiling water may spurt out and cause burns. Always wait for the cooling water to cool down before opening the cap (approx. 30 minutes after stopping the engine).

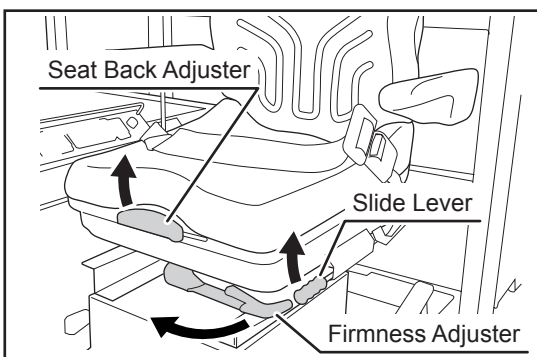


6.1.4 Adjusting Position of Seat

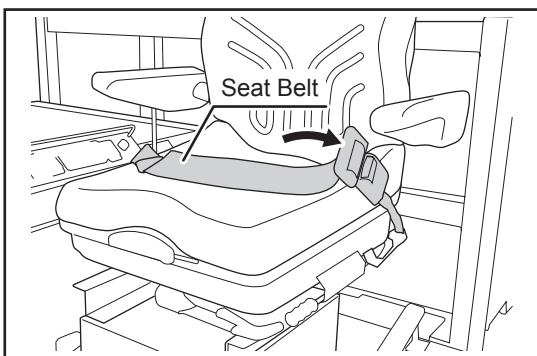
1. Pull the rotation lock lever up to make it possible to turn the seat.

NOTICE

When the seat is turned, the direction that the seat is facing is **FORWARD** for operation of the steering lever.



2. Pull up the slide lever to adjust the seating position.
3. Pull up the seat back adjuster to adjust the seat back angle to your liking.
4. Pull the firmness adjuster to adjust the seat firmness to suit your weight and preference. Pull the adjuster lever fully to undo it.



6.1.5 Using Seat Belt

1. Buckle up the seat belt. Adjust the seat belt so that it fits snugly over the pelvis.

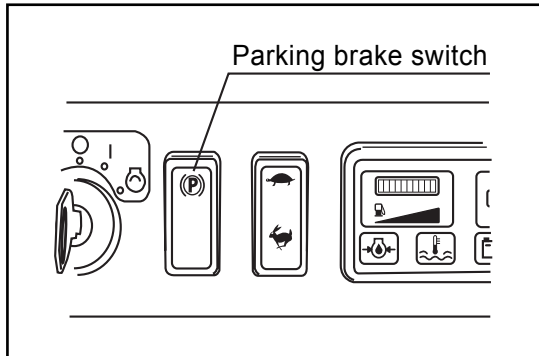
CAUTION

For ROPS to provide effective protection, always wear seat belt.

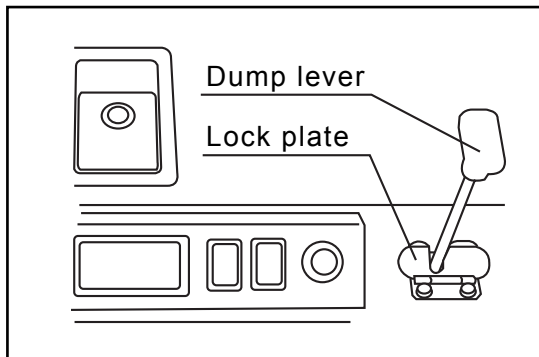
6.2. Starting

⚠ DANGER

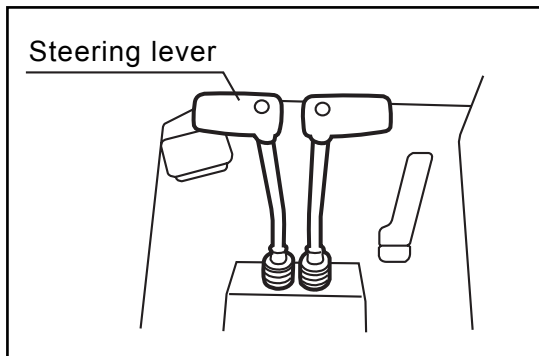
Before starting the engine, check that there is no flammable material around the engine and start the engine in a place with good ventilation.



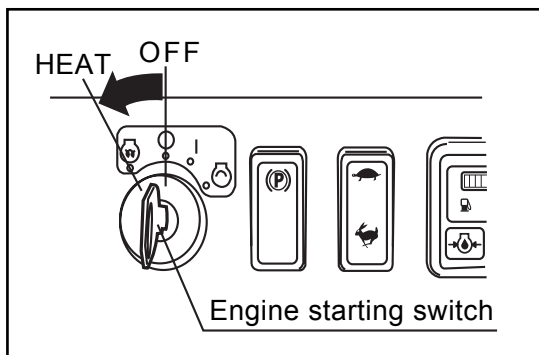
1. Check that the parking brake switch is at the [P(parking)] position.



2. Check that the dump lever is locked at the [HOLD] position.



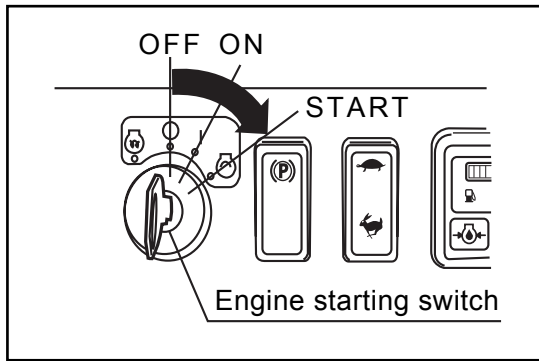
3. Check that the steering levers are at the [N] position.



4. Turn the key in the engine starting switch to the [⚠ (HEAT)] position and carry out the warming-up operation thoroughly.

NOTICE

- Carry out preheating for approx. 10 seconds when starting in normal temperature and for approx. 20 to 30 seconds when starting in cold weather (ambient temperature below -5°C).
- There is no need to carry out preheating if the engine is already warmed up.



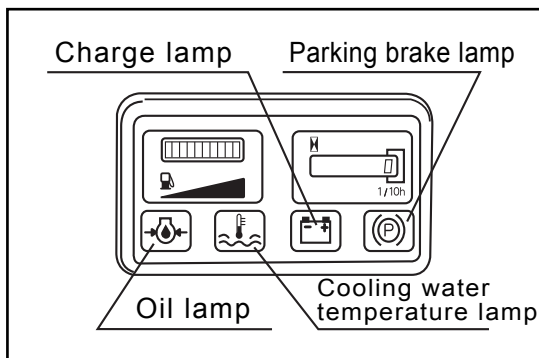
5. Turn the key in the engine starting switch to the [ (START)] position and start the engine. (When the engine starts, release the key immediately. The key will automatically return to the [I(ON)] position.)

NOTICE

- If the engine does not start, do not crank the starting motor continuously for more than 15 seconds. Return the key to the ON position, wait for 30 seconds, then try to start the engine again.
- Avoid frequent starting of the starting motor. Once the starting motor starts, run it continuously for a short time to charge the battery.

CAUTION

Never turn the engine starting switch to the [ (START)] position when the engine is running. This will break the starting motor or cause failure of the engine.



6. Check that the warning lamps (oil lamp, cooling water temperature lamp and charge lamp) are off.

NOTICE

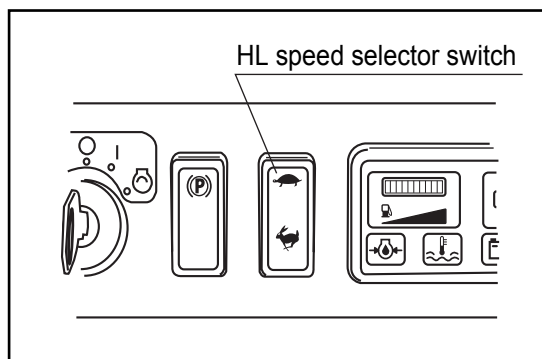
If the condition of the item for these warning lamps is normal, they will go out when the engine starts. If they stay lighted up after the engine has started, go to Section 9 “Troubleshooting” and take the appropriate action. (See page 57)

7. Carry out the warming-up operation for 5 minutes under no load.

NOTICE

- Carry out the warming-up operation thoroughly in winter or in cold areas. If the machine is operated before the engine is properly warmed up, the life of the engine and hydraulic equipment will be reduced.
- The first week (approx. 40 to 50 hours) after purchasing the machine is the breaking-in period, so do not apply any excessive load to the machine when operating it.

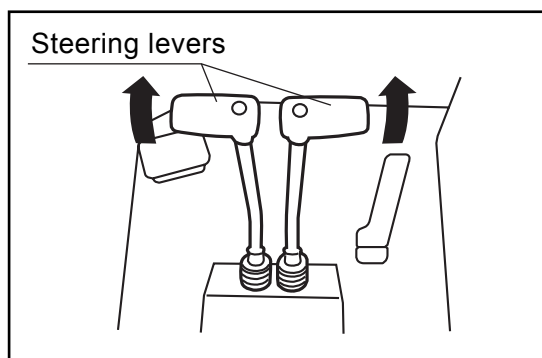
6.3 Operating



1. Check that the area to the front, rear, left, and right of the machine is safe.
2. Operate the parking brake switch to the [TRAVEL] position.
3. Push the HL speed selector switch to the [↙ (LO)] or [↘ (HI)] position. For details of the travel speed at each speed position, see Section 5 "Product specification". (See page 17)
4. Operate the accelerator lever to the [↘ (HI)] position, (or depress the accelerator pedal) to raise the engine speed.

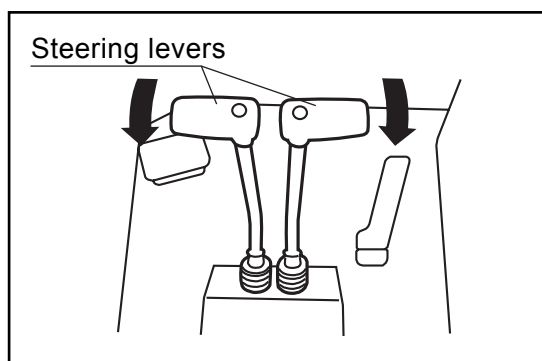
NOTICE

When the seat is turned, the direction that the seat is facing is FORWARD for operation of the steering lever.



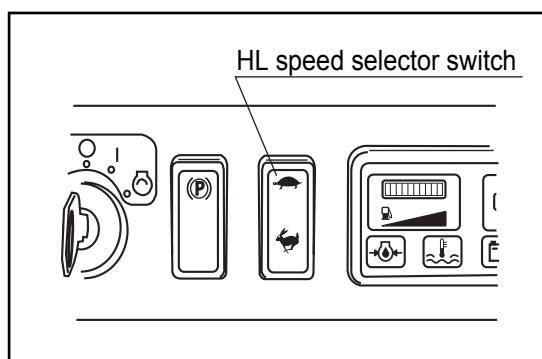
When Traveling Forward

5. Operate both steering levers gradually to the front and move the machine off slowly forward. The machine travel speed can be adjusted as desired by the amount that the steering levers are operated.



When Traveling in Reverse

6. Operate both steering levers gradually to the rear and move the machine off slowly in reverse. The machine travel speed can be adjusted as desired by the amount that the steering levers are operated.



When Shifting Speed

7. Operate the HL speed selector switch to the desired position to select [↙ (LO)] or [↘ (HI)]. (When traveling, it is possible to change direction without stopping the machine.)

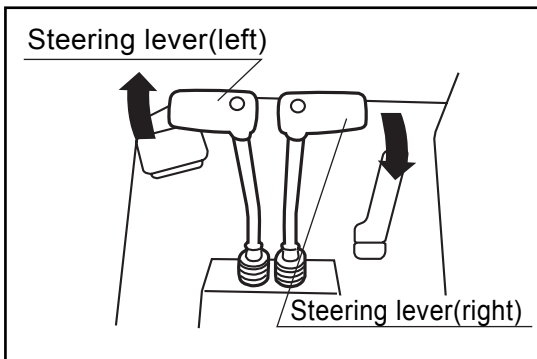
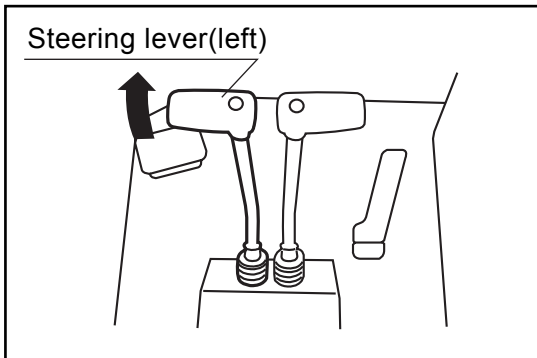
When Turning

⚠ DANGER

- Do not make sudden turns when driving the machine. Sudden turns can eject the operator or make the machine, turn over, causing serious injury or death.
- Always check that the surrounding area is safe before turning.

When Turning Right

8. To turn right, push the left steering lever slowly to the front.



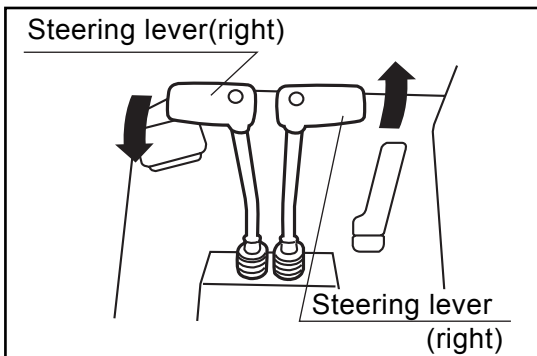
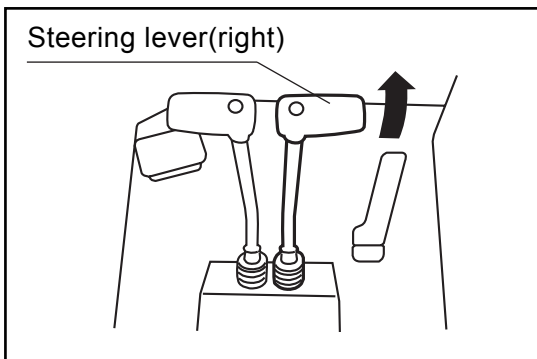
9. When turning sharply to the right, push the left steering lever to the front, and pull the right steering lever back.

⚠ DANGER

Do not make sudden turns when driving the machine. The operator may be thrown from the machine; the machine may also turn over resulting in serious injury or death of the operator or bystanders.

When Turning Left

8. To turn left, push the right steering lever slowly to the front.



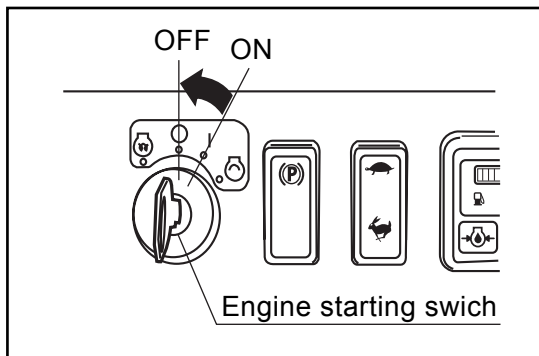
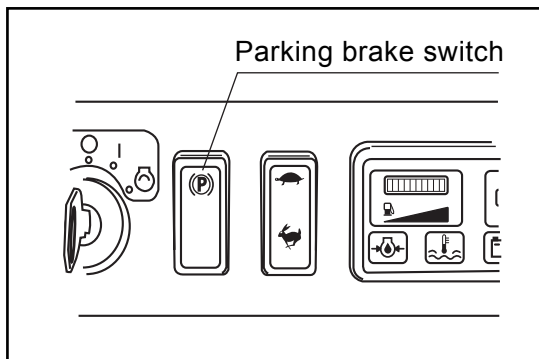
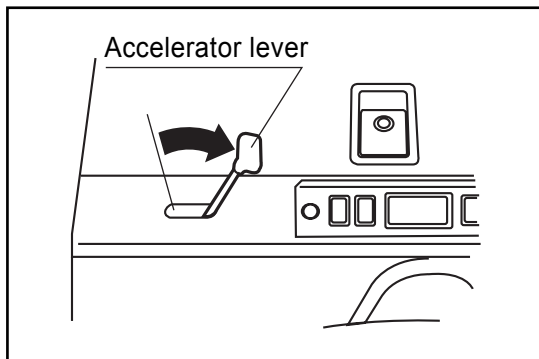
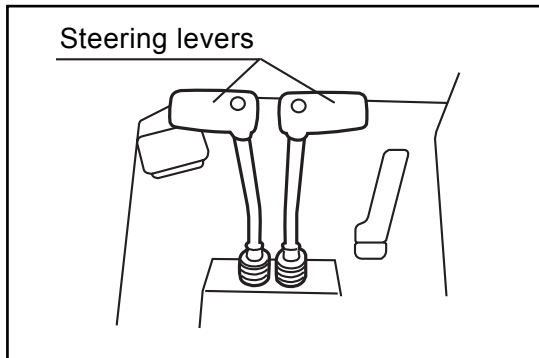
9. When turning sharply to the left, push the right steering lever to the front, and pull the left steering lever back.

⚠ DANGER

Do not make sudden turns when driving the machine. The operator may be thrown from the machine; the machine may also turn over resulting in serious injury or death of the operator or bystanders.

NOTICE

- If the parking brake switch is at the [P (parking)] position, the machine will not move when the steering lever is operated.
- Always release the steering lever when it is at the neutral position. Do not continue to hold it.
- When traveling, do not press the parking brake switch [P (parking)] position or turn the key in the engine starting switch to the [O (OFF)] position. The machine may lose its balance or dip to the front.

**6.4 Stopping****Normal Stopping**

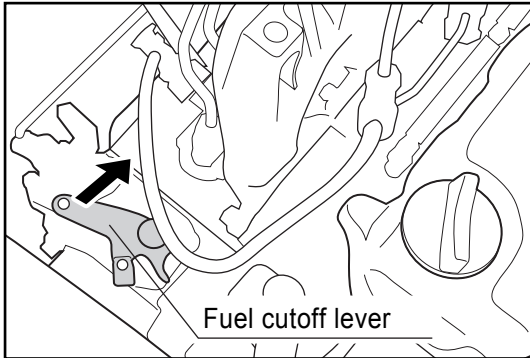
1. Return both steering levers to the [N] position and stop the machine.

⚠ DANGER

Stopping suddenly on a down slope with a load on the load deck may make the back of the machine rise off the ground. The operator may be thrown from the machine; the machine may also turn over.

Any of these circumstances may result in serious injury or death of the operator bystanders, or may damage the machine.

2. Set the accelerator lever to the [↙(LO)] position and reduce the engine speed.
3. Operate the parking brake switch to the [P (parking)] position.
4. Turn the key in the engine starting switch to the [O (OFF)] position, then remove the key.



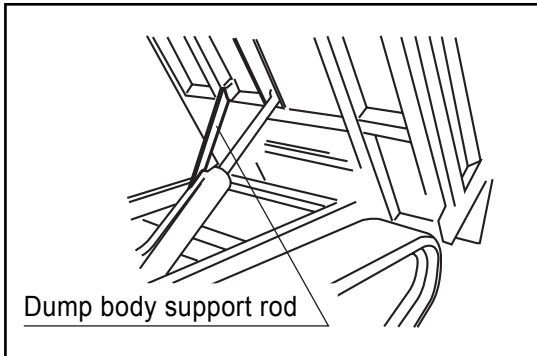
Stopping with Fuel Cutoff Lever

1. Open engine cover.
2. Move fuel cutoff lever to stop the engine.

⚠ WARNING

Do not open engine cover while engine is running. If it is absolutely necessary to open engine cover while engine is running, pay attention to moving or hot parts.

6.5 Operating Dump

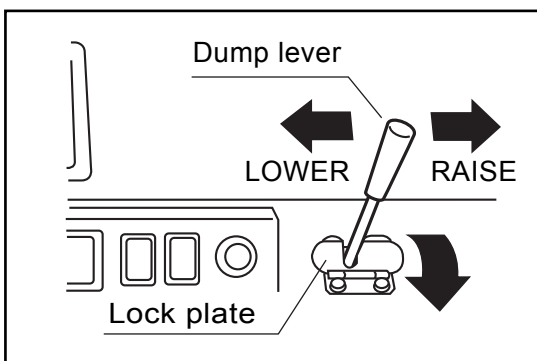


⚠ WARNING

If any part of your body is under the load deck while it is raised and the load deck falls, you could be seriously injured or killed. If you must place any part of your body under the load deck when the deck is raised, engage the load deck drop prevention safety prop before doing anything else under the raised load deck. Bystanders may be injured or killed if struck by the loading deck when it is being raised or lowered or by a load being dumped from the load deck. Be certain that no one is in the immediate vicinity of the machine when raising or lowering the load deck or when dumping a load from the load deck.

⚠ WARNING

Raising or lowering the load deck on a steep slope can make the machine unstable, causing it to shift suddenly or to turn over. If the machine shifts suddenly or turns over, you or bystanders could be seriously injured or killed, or the machine could be damaged. Avoid performing dump operations on a steep slope. If performing a dump operation on a slope is unavoidable, bring the machine to as level position as possible by driving the treads over a fallen tree or some other large, immobile object.



When Raising Dump Body

1. Start the engine, move the accelerator lever to the [👉 (HI)] position, and raise the engine speed.
2. Remove the lock plate from the dump lever.
3. Move the dump lever gradually to the [👈 (RAISE)] position.
4. When the dump body is raised to the upper limit, a relief sound (hiss) is heard, so return the dump lever quickly to the [HOLD] position.

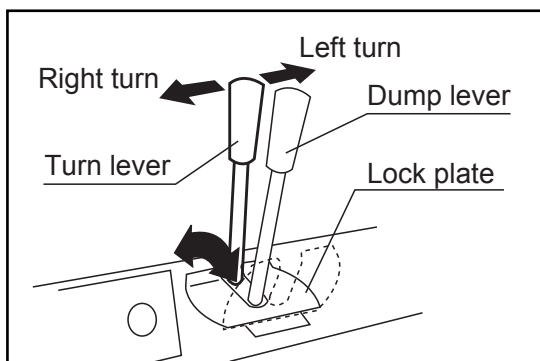
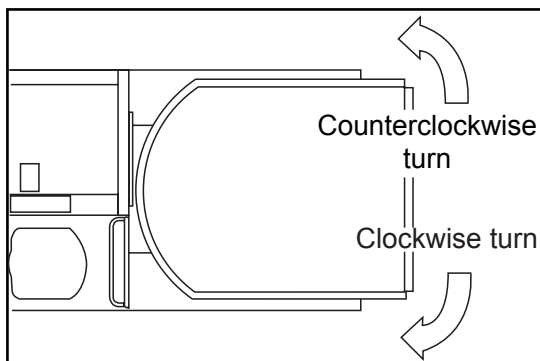
When Lowering Dump Body

5. Move the dump lever gradually to the [ (LOWER)] position.
6. When the dump body is lowered to the lower limit, a relief sound (hiss) is heard, so return the dump lever quickly to the [HOLD] position.

CAUTION

Lowering the load deck suddenly with a load can damage the machine chassis because the full weight of the load can land on the chassis with a forceful impact. When it contains a load, lower the load deck slowly to prevent damage to the machine chassis.

6.6 Turn Operation (Turn & Dump model)



When turning the load deck body counterclockwise

1. Unlock the lock plate.
2. Tilt the turn lever in the direction of left turn. Maximum angle of rotation: 90°
3. When the load deck body is turned to the maximum angle of rotation, relief actuation noise (whizzing noise) is made. Therefore, return the turn lever quickly to the “● (Neutral)” position.
4. After the turn operation is completed, lock the lever with the lock plate.

When turning the load deck body clockwise

1. Unlock the lock plate.
2. Tilt the turn lever in the direction of right turn.
3. Maximum angle of rotation: 90°
4. When the load deck body is turned to the maximum angle of rotation, relief actuation noise (whizzing noise) is made. Therefore, return the turn lever quickly to the “● (Neutral)” position.
5. After the turn operation is completed, lock the lever with the lock plate.

7. Maintenance

7.1 Periodic Inspection Table

Failure to carry out inspection and maintenance properly will cause failure. To maintain the normal functions of the machine and to enable operations to be carried out safely, refer to the table below when carrying out inspection.

Carry out annual inspections once a year, monthly inspections once a month, and checks before starting every day before starting works.

NOTICE

Some of the inspection and maintenance procedures in the charts below require technical knowledge or specific tools and measuring instruments. If you have difficulty performing these procedures or do not have the correct tools or instruments, contact your CANYCOM representative.

Item			Content of inspection		Inspection interval			Remarks
					Checks before starting	Monthly	Annually	
Engine	Ease of starting		• Investigate starting condition of engine and check for abnormal noise	Check that engine starts smoothly and makes no abnormal noises.	☐	☐	☐	
			• Check if glow plug works properly	Must work properly	☐	☐	☐	
	Condition of rotation		• Check speed at low idling and at high idling Check that rotation is smooth	Must be specified speed Must rotate smoothly		☐	☐	Please contact your CANYCOM representative for inspection
			• Check for catching of accelerator lever when accelerating engine, engine stall, or knocking	There must be no catching, stalling of engine, or knocking	☐	☐	☐	
	Exhaust gas condition		• Warm up engine thoroughly, then check for abnormality in exhaust gas color or exhaust sound from low idling to high idling	Exhaust gas color and exhaust sound must be normal	☐	☐	☐	
			• Check for gas leakage from exhaust pipe or muffler	There must be no gas leakage		☐	☐	
	Air cleaner		• Check for cracks, deformation of case, looseness of cover or connecting piping	There must be no cracks, deformation of case, looseness of cover or connecting piping		☐	☐	
			• Check for dirty or damaged element	There must be no noticeable dirt or damage		☐	☐	Clean/replace: See page 45
	Tightening		• Check for looseness of nuts and bolts at tightening portion of cylinder head and manifold	If gas or water leaks have been found, check cylinder head and manifold retaining nuts and bolts for looseness.			☐	
			*If no leakage of gas or water is found from these portions, this check can be omitted.					

Item			Content of inspection		Inspection interval			Remarks
					Checks before starting	Monthly	Annually	
Engine	Engine proper	Engine compression	If the engine is operating abnormally, or if the exhaust condition at idle or at high RPM is abnormal, check the engine compression.	If you hear valve noise or the engine is not running smoothly, check valve clearance.			○	Please contact your CANYCOM representative for inspection
		Engine mount	Check engine base for cracks or deformities.	No cracks or deformities.		○	○	
			Check for loose or missing mounting bolts or nuts.	There must be no loose or missing mounting bolts or nuts.	○	○	○	
	Lubrication system		Check oil level and dirt in oil	Oil level must be correct. There must be no marked dirt.	○	○	○	Inspection/repilacement: See page 37
			Check for oil leakage from head cover, oil pan, pipes, etc.	There must be no marked oil leakage.	○	○	○	
			Check for dirty or damaged filter	There must be no dirt or damage.			○	Replacement: See page 45
	Fuel system		Check for fuel leakage from fuel tank, injection pump, hoses, pipes.	There must be no fuel leakage.	○	○	○	
			Check for damaged or deteriorated fuel hoses.	There must be no damage or deterioration.	○	○	○	
			Check for dirty or clogged fuel filter cartridge.	There must be no dirt or clogging.		○	○	Replacement: See page 46
			- Check for any abnormality in injection pressure or spray condition of injection nozzle *If there is no abnormality in the exhaust or rotation condition when idling or accelerating, this inspection can be omitted.	Must be specified injection pressure, spray must be normal.			○	Please contact your CANYCOM representative for inspection
			Check for water or sediment inside fuel tank	There must be no water or sediment.		○	○	Drain: See page 46
	Cooling system		Check cooling water level, dirty water	Water level must be correct, there must be no marked dirt]	○	○	○	Inspection/adding: See page 42
			Check for any water leakage from radiator, engine, water pump, hoses, check for clogged radiator fins	There must be no water leakage or clogging.	○	○	○	
			Check for damaged or deteriorated hoses	There must be no damage or deterioration.	○	○	○	
			Check that radiator cap valve functions properly	Must function properly.			○	
			Check for damaged valve seat surface of radiator cap	There must be no damage.			○	
			Check fan belt tension	Must be within standard range.			○	Inspection/adjustment: See page 48
			Check for worn or damaged belt	There must be no marked water or damage.			○	

Item			Content of inspection		Inspection interval			Remarks
					Checks before starting	Monthly	Annually	
Engine	Cooling system		▪ Check for cracks, damage, or deformation of cooling fan, cover, duct.	There must be no cracks, damage, or deformation.			○	
			▪ Check for loose mounting bolts or nuts of cooling fan, cover.	There must be no loose mounting bolts or nuts.			○	
	Electrical system	Charging system	▪ Use AMmeter to check for any abnormality in function.	Must work properly.			○	Please contact your CANYCOM representative for inspection
		Battery	▪ Check that electrolyte level is within specified range.	Must be within specified range.		○	○	Inspection/adding: See page 43
			▪ Check for loose or corroded terminals.	There must be no looseness or marked corrosion.		○	○	
		Wiring	▪ Check for loose connections.	There must be no loose connections.		○	○	
			▪ Check for damaged wiring.	There must be no damage.		○	○	
Power train	HST pump	▪ Drive machine and operate travel lever to FORWARD, REVERSE, and left and right turns, check actuation, check for abnormal noise or abnormal generation of heat.	Must work normally, there must be no abnormal noise or abnormal generation of heat.	○	○	○		
		▪ Check oil level inside hydraulic tank.	Oil level must be correct.		○	○	Inspection/change: See page 39	
		▪ Check for dirty oil.	There must be no marked dirt.		○	○	Inspection/change: See page 39	
		▪ Check for oil leakage from around hydraulic tank.	There must be no oil leakage .		○	○		
Travel system	Sprocket idler, roller upper roller	▪ Check for cracks, deformities, wear.	No cracks, deformities, or noticeable wear.	○	○	○		
		▪ Drive machine and check for abnormal noise or abnormal generation of heat from shaft area.	No abnormal noise or heat.	○	○	○		
		▪ Check for loose or missing mounting bolts and nuts.	There must no loose or missing mounting bolts and nuts.	○	○	○		
		▪ Check for oil leakage from around axle.	There must be no oil leakage.	○	○	○		
		▪ Drive machine and check that roller bracket moves smoothly in accordance with ups and downs in ground surface.	Must move smoothly.		○	○		
	Track	▪ Check for cuts or damage in steel cord	There must be no cuts or marked damage	○	○	○		
		▪ Check for cut, deteriorated, or worn rubber	There must be no marked cutting, deterioration, or wear	○	○	○		
		▪ Check for missing or broken core	There must be no missing core	○	○	○		
		▪ Check track tension	Tension must not be too loose or too tight	○	○	○	Adjustment: See page 50	
	Track tensioner	▪ Fill inside of track tensioner cylinder with grease and check operation of system	Must work properly		○	○		

Item		Content of inspection		Inspection interval			Remarks
				Checks before starting	Monthly	Annually	
Travel system	Trunk frame	Check for cracks, deformities, damage, or wear of the sliding portion. If there is suspicion that there are cracks, use a flaw detector to check.	There must be no cracks, deformities, damage, or noticeable wear		○	○	
		Check for missing or loose bolts and nuts.	No missing or loose bolts and nut.	○	○	○	
Brake system	Parking brake	Operate the parking brake switch to the [P] position, and check that the machine is held when it is stopped unloaded on a 1/5 grade.	There must be proper braking effect.	○	○	○	
Hydraulic system	Hydraulic pump	Check for fluid leaks from seals and connections of pipes and house.	There must be no fluid leaks.	○	○	○	
		Operates hydraulic pump and check for abnormal heat, noise, or vibration when pump is under load and under no load.	No abnormal heat, noise, or vibration.		○	○	
		Apply load to hydraulic pump and check discharge amount and discharge pressure when there is load. However, if there is no abnormality when checking for abnormal generation of heat, abnormal noise, or abnormal vibration in the item above, this inspection can be omitted.	Must be within standard value specified by maker.			○	
	Piping (house, high-pressure pipe)	Check for cracks, damage, deterioration, or twisting of piping	No cracks, damage, deterioration, or twisting.	○	○	○	
		Check for fluid leaks from piping connections.	There must be no fluid leaks.	○	○	○	
		Check that pipings are properly fitted, check for missing or loose nuts or bolts.	Installation condition must be correct, there must be no missing or loose nuts or bolts.	○	○	○	
	Hydraulic cylinder	Check condition of actuation	Must move smoothly	○	○	○	
		Extend and retract cylinder several times, then check for oil leakage from, seal	There must be no fluid leaks.		○	○	
		Apply load to cylinder, hold in position, and check amount of movement of cylinder	Movement of cylinder must be within, standard value set by maker			○	
		Check for dents, cracks curvature, or friction damage of cylinder tube or rod	There must be no dents, cracks, curvature, or damage from rubbing		○	○	
		Check for wear or damage of cylinder mounting pin	There must be no excessive wear or damage	○	○	○	
	Control valve	Operate spool and check that it moves smoothly	Must move smoothly	○	○	○	
		Check that mounting condition is correct	Mounting condition must be correct		○	○	
		Operate hydraulic cylinder to apply load and check that movement is correct	Hydraulic cylinder must move correctly and must stop properly	○	○	○	
		Check for fluid leaks from control valve, piping, or connections	There must be no fluid leaks.	○	○	○	

Item		Content of inspection		Inspection interval			Remarks
				Checks before starting	Monthly	Annually	
Loading system	Dump body (including tail gate and side gate)	▪ Check that dump body can be raised and lowered smoothly and that tail gate can be opened and closed smoothly.	Must work smoothly.	☐	☐	☐	
		▪ Check that tail gate is automatically released when dumping and locked when lowering.	Must open smoothly and be locked securely .	☐	☐	☐	
		▪ Check for cracks, deformities, or wear of all parts.	No cracks, deformities, or wear of any part.	☐	☐	☐	
		▪ Check for loose or missing mounting bolts.	No missing or loose bolts.	☐	☐	☐	
		▪ Raise and lower dump body and check for play at dump cylinder mounting pin or pin mounting frame and dump body.	There must be no noticeable play at any pin.		☐	☐	
Machine safety system	Machine frame and body	▪ Check for cracks, deformaties, or corrosion.	No cracks, noticeable deformities, or corrosion.		☐	☐	
		▪ Check for missing or loose bolts or nuts.	There must be no loose or missing mounting bolts or nuts	☐	☐	☐	
	Cover	▪ Check for cracks, deformities, or corrosion	There must be no cracks, marked deformation, or corrosion		☐	☐	
		▪ Check for abnormality in lock or opening or closing condition of covers	There must be no abnormality in lock or opening or closing		☐	☐	
	Seat	▪ Check that seat adjustment and operation or lock device is correct	Check that movement is correct		☐	☐	
		▪ Check for missing or loose bolts or nuts.	No missing or loose bolts or nuts	☐	☐	☐	
	Display plate (mark)	▪ Check that display plates specified for structural regulations and other precaution or instruction plates are installed without damage	Must be installed without damage		☐	☐	
	Lamps, horn, turn signal	▪ Operate each switch and check that it works properly	Must work crrectly	☐	☐	☐	
		▪ Check for damage to lamp lens or entry of water	There must be no damage or entry of water	☐	☐	☐	
	Gauges	▪ Start engine and check operation of gauges	Must work crrectly	☐	☐	☐	
	Lubrication	▪ Check lubrication condition at all parts	Must be properly lubricated		☐	☐	Lubrication: See page 40
	Dump body support rod	▪ Raise dump body and check condition of rod when installed	Must be installed securely	☐	☐	☐	
		▪ Check for curvature or deformities.	No noticeable curvature or deformities.	☐	☐	☐	
		▪ Check for cracks or damage in mount of dump body support rod, stopper. If there is suspicion that there are cracks, use a flaw detector to check	There must be no cracks or damage		☐	☐	
Overall test		▪ Operate travel and loading system and check function	All system must work correctly, there must be no abnormal noise, abnormal vibration, or abnormal generation of heat			☐	

7.2 Fuel, Lubricant, and Coolant Chart

Item	Interval	Recommended product	Capacity	Page
Fuel	Whenever needed	Diesel Fuel	45 L (11.89US gal)	See page 19
Engine oil	Filling : check every day,add when level is low Change : 1st time : 50 hours 2nd time on : every 200 hours	API category : CD class or above SAE category : 10W-30	9.7 L (10.25US qt)	See page 37
HST fluid (used also for hydraulic fluid)	Change : 1st time : 500 hours 2nd time on : every 1000 hours	High viscosity index hydraulic fluid VG46 or engine oil API category : CD class or above SAE category : 10W-30 * When using in cold areas(below -15°C), use wear resistant hydraulic fluid VG32.	36 L (9.51US gal)	See page 39
Travel motor lubricating fluid	Change : 1st time : 200 hours 2nd time on : every 1000 hours	Gear oil APE category : GL4 SAE category : #90	0.6 L (0.63US qt)	See page 40
Cylinder pin, roller support shaft	Every 100 hours	Lithium all-round grease (NLG No.2 or equivalent)	—	See page 40
Engine cooling water	Adding : check every day,add when level is low Change : Every 300 hours	Long-life Coolant (LLC) and pure water mixture.	7.2 L (1.90US qt)	See page 42
Battery electrolyte	Check every 50 hours,add if level is low	Distilled water	—	See page 43

7.3 Consumable (Replacement Parts) Chart

Item			Part number	Replacement interval	Q'ty	Page
Air cleaner element (outer)			R1401-4227-0	Every 1000 hours	1	See page 45
Air cleaner element (inner)			R2401-4228-0	Every 1000 hours	1	See page 45
Fuel filter element			36640221500	Every 450 hours	1	See page 46
Engine oil filter cartridge			36610001300	Every 200 hours (first time: 50 hours)	1	See page 45
HST filter element			36616036300	Every 500 hours	1	See page 46
Suction filter element			36636029000	Every 1000 hours	1	See page 47
Battery			36610502000	Replace if there is any problem	1	See page 43
Track			36632111999		2	See page 50
Push-pull wire (for engine control)			37073321000		1	
Wire (for engine control)			36550105100		1	
Sprocket 15T			366321060X0		2	
Track roller A assembly			52322201000		8	
Track roller B assembly			52322211000		4	
Carrier roller assembly			364022180X0		2	
Idler assembly			364023310X0		2	
Hydraulic hose	Piping connection port			Replace every 2 years (or replace if there is any problem)		Please contact your CANYCOM representative for replacement.
	HST pump front right A1	HST motor top left P1	52296101000		1	
	HST pump front left B1	HST motor bottom left P2	52296102000		1	
	HST pump front left B2	HST motor bottom right P2	36646101200		1	
	HST pump front right A2	HST motor top right P1	52296104000		1	
	HST motor left drain bottom T1	Oil tank	52296111000		1	
	HST motor right drain bottom T1	Oil tank	52296112000		1	
	Pump top front drain	Oil cooler top	52296115000		1	

Item			Part number	Replacement interval	Q'ty	Page
Hydraulic hose	Piping connection port			Replace every 2 years (or replace if there is any problem)		Please contact your CANYCOM representative for replacement.
	Oil cooler bottom	Oil tank (pipe)	52296116000		1	
	Solenoid valve A2	T-junction (PS)	52296117000		1	
	T-junction (solenoid valve A1)	T-junction (P3)	52296118000		1	
	T-junction (solenoid valve A1)	T-junction (servo)	52296119000		1	
	T-junction (motor right PS)	Motor left PS	52296121000		1	
	T-junction (motor right P3)	Motor left P3	52296122000		1	
	T-junction(motor left PS)	Motor right PS	52296123000		1	
	T-junction(motor left PS)	Motor right P3	52296124000		1	
	Solenoid valve T	Oil tank	52296125000		1	
	Gear pump discharge top rear	Control valve P	36646128000		1	
	Gear pump suction bottom rear	Oil tank (flange)	52296126000		1	
	Solenoid valve P	T-junction (line filter OUT)	52296131000		1	
	Control valve T	Line filter IN	52296132000		1	
	HST charge	T-junction (line filter OUT)	52296133000		1	
	HST servo front	T-junction (servo)	36646141000		1	
	HST servo rear	T-junction (servo)	52296119000		1	
	Control valve A	Cylinder bottom	36616163000		1	
	Control valve B	Cylinder top	52296142000		1	
Parts which may need to be replaced following inspection apart from parts above			Please contact your CANYCOM representative		—	—

7.4 Adding Oil

NOTICE

If the oil level is not maintained or improper oil is used, rotation will not be carried out smoothly, and this will lead to failures and reduction in the service of the machine. Always use the specified good quality oil and make sure that the oil level is not too high or too low.

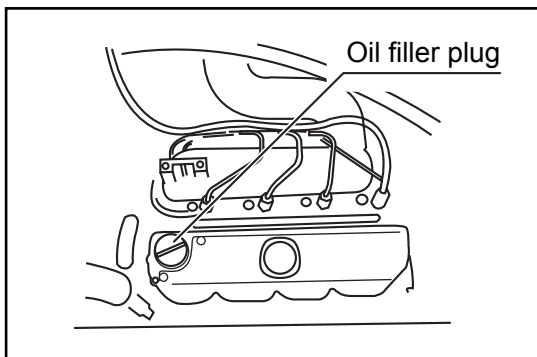
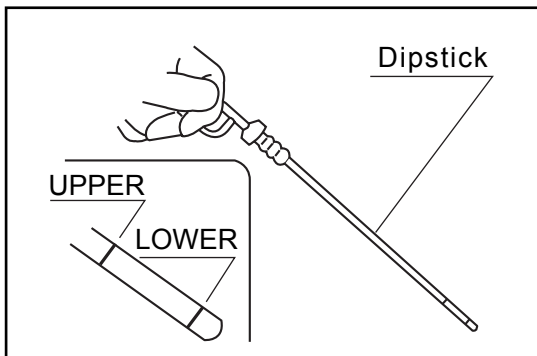
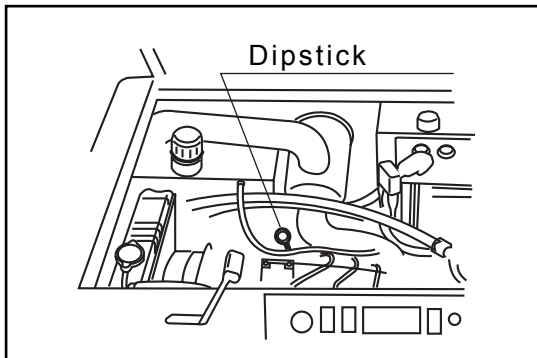
7.4.1 Engine Oil

Inspection

1. Open the engine cover. (See page 19)
2. Pull out the dipstick.
3. Visually check the engine oil level, condition of dirt in the oil and the viscosity. If the level is not as shown below, add engine oil. If the oil is extremely dirty or the viscosity is not correct, change the oil.

Engine oil level:

Between [UPPER] and [LOWER] lines



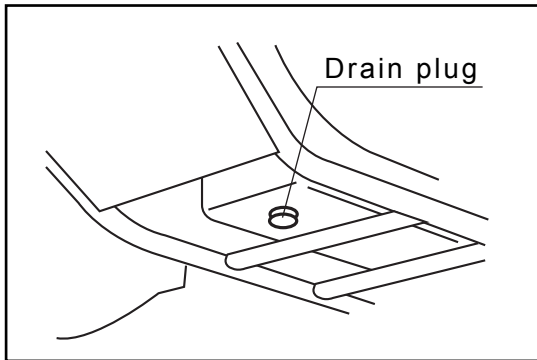
Adding Oil

1. Remove the oil filler plug.

CAUTION

When the engine is at high temperature, there is danger of burns, so wait for the engine to cool down before removing the oil filler plug.

2. Add the specified oil through the oil filler port.
Oil to use: See page 34

**Changing (Engine Oil)**

1. Prepare a suitable container to catch the drained oil.
2. Carry out the warming-up operation to warm up the oil.
3. top the engine.
4. Remove the oil level plug at the bottom of the engine and drain the oil from the crankcase.

CAUTION

When the oil is at high temperature, there is danger of burns.

NOTICE

Dispose of the drained oil properly.

5. Install the oil drain plug.
6. Open the oil filler plug and pour in the specified oil.(see "Adding oil" above)

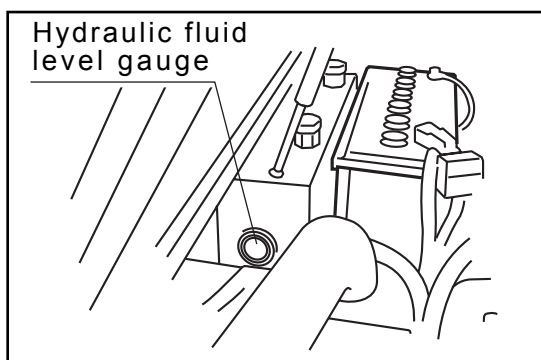
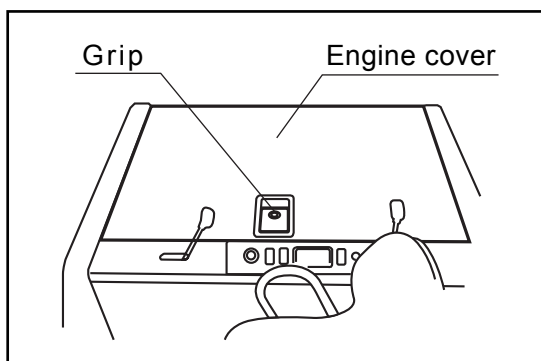
7.4.2 HST Fluid (Hydraulic Fluid)

NOTICE

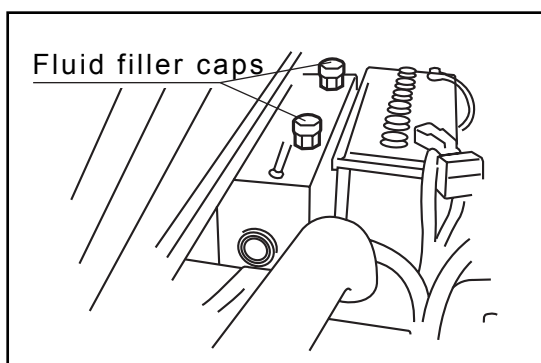
- If the fluid level goes down, air will enter the hoses and cylinder and this will make the movement of the hydraulic equipment poor. To prevent this, check the fluid level periodically and add fluid if the level is low.
- The HST fluid is also used as the hydraulic fluid. Add the fluid to the hydraulic tank.

Inspection

1. Open the engine cover.



2. Check the hydraulic fluid level gauge visually to check the level. If the fluid level is low, add oil.



Adding Fluid

1. Remove the cap from the hydraulic tank fluid filler.
2. Add the specified fluid through the fluid filler.
Fluid to use: See page 34
3. Install the filler cap.
4. Start the engine and circulate the fluid.
5. Use the hydraulic fluid level gauge to check that the oil is at the specified level.

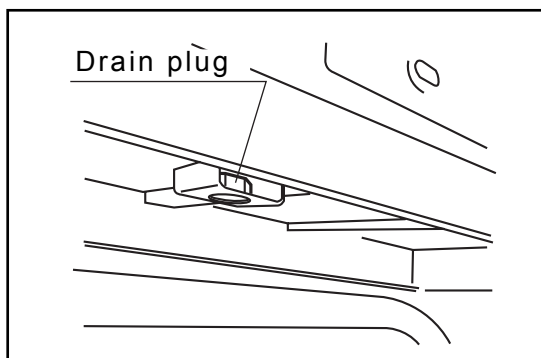
Changing

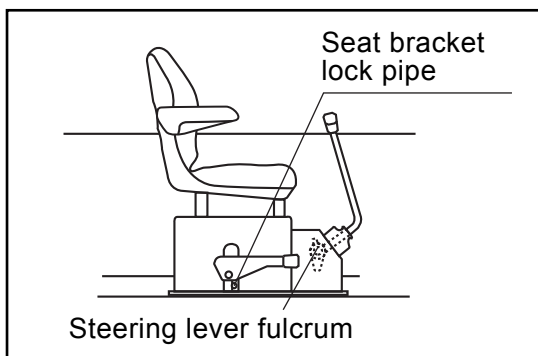
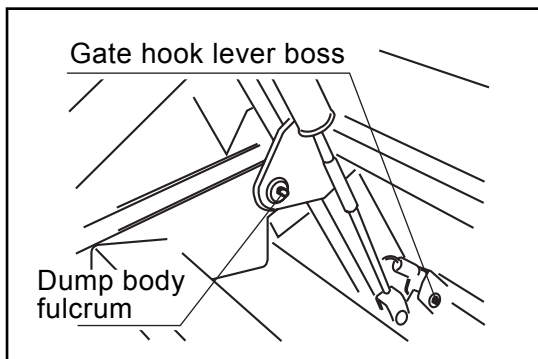
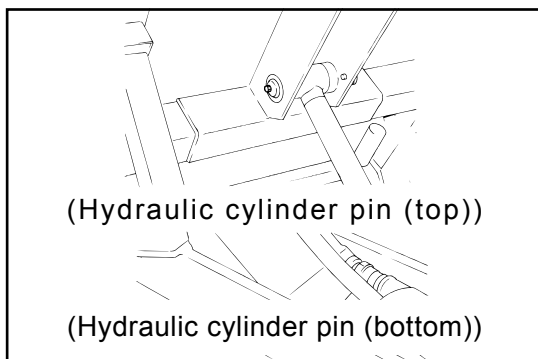
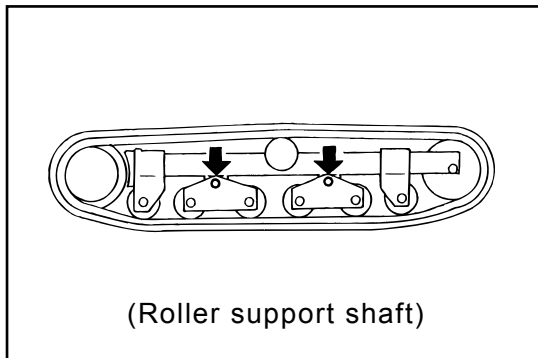
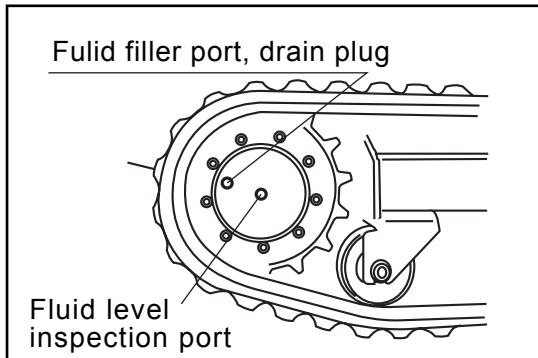
1. Prepare a suitable container to catch the drained fluid.
2. Remove the drain plug at the bottom of the hydraulic tank.

NOTICE

Dispose of the drained fluid properly.

3. Install the drain plug.
4. Open the oil filler cap and pour in the fluid.
(see "Adding fluid" above)





7.4.3 Travel Motor Lubricating Fluid (for Reduction Gear)

Changing

1. Rotate so that the drain plug of the travel motor is at the bottom.
2. Remove the drain plug, drain the fluid, then tighten the plug again.
3. Rotate so that the fluid inspection port of the travel motor is horizontal with the center of the travel motor and the oil filler port is at the top.
4. Add oil through the filler port until fluid flows out from the level inspection port.

7.5. Lubricating

NOTICE

If the fluid level is not maintained or improper fluid is used, it will cause seizure or rust, and the rotation operation will not be carried out smoothly. Always carry out lubrication periodically (every 100 hours).

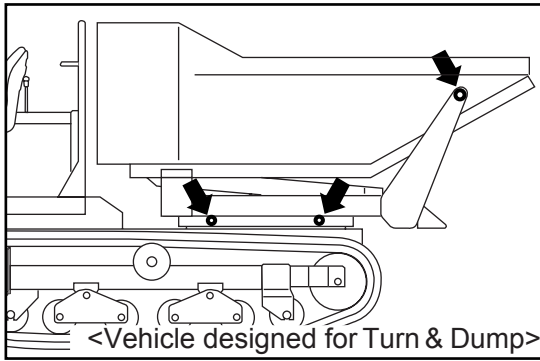
1. Use a commercially available manual grease pump or air type grease pump to grease the following points.

Grease to use: See page 34

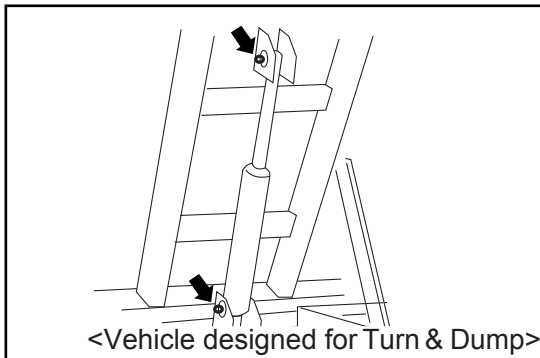
Reference:

When using a manual grease pump, pump it 5 to 6 times. When the pump handle becomes stiff, stop greasing immediately. When using the air type grease pump, 2 to 3 seconds is enough.

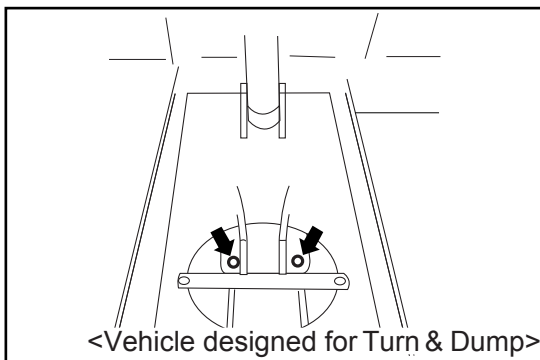
- (1) Roller support shaft (4 places)
- (2) Hydraulic cylinder pin (top, bottom)
- (3) Dump body fulcrum (2 places)
- (4) Gate hook lever boss (2 places)
- (5) Seat bracket lock pipe (1 place)
- (6) Steering lever fulcrum (2 places)



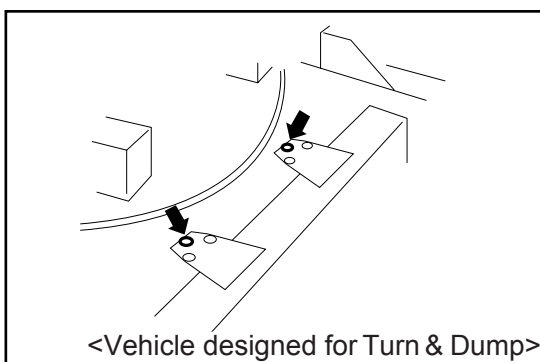
Turntable slewing ring (4 places)



Hydraulic cylinder pin (Upper and lower)



Hydraulic cylinder pin under the turntable



7.6 Adding Water

7.6.1 Engine Cooling Water

NOTICE

If the cooling water temperature lamp is lighted up, it means that the engine cooling water level is low and that the engine is not being properly cooled, so carry out inspection immediately.

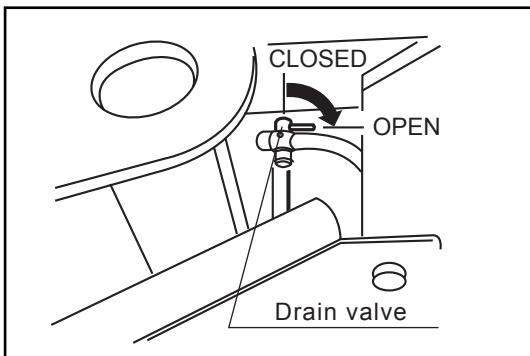
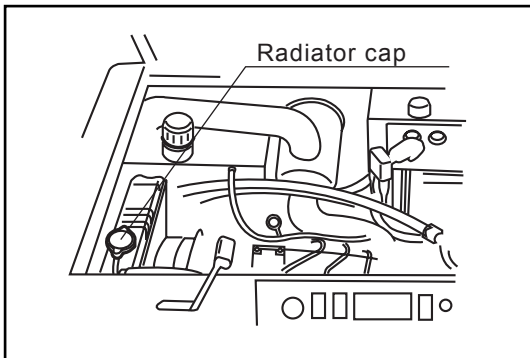
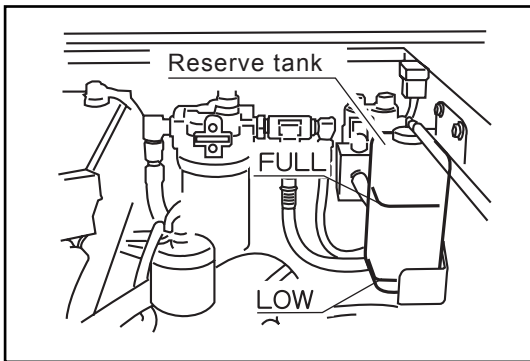
CAUTION

If the radiator cap is opened during operation or immediately after stopping, boiling water may spurt out and cause burns, so wait for the cooling water to cool down before opening the cap (approx. 30 minutes after stopping the engine).

Inspection/adding water

1. Open the engine cover. (See page 19)
2. Inspect the engine cooling water level visually to check that it is between the [FULL] and [LOW] marks. If the level is low, add water./

Cooling water amount: 7.2 liter



Antifreeze Mixture (Reference)

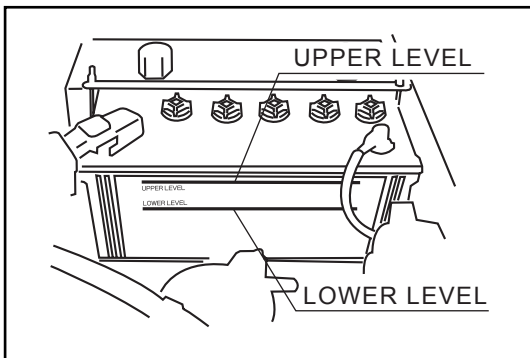
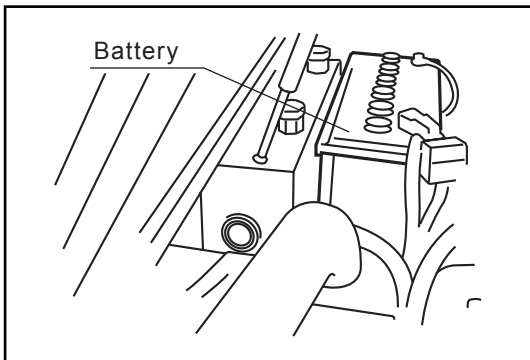
When this machine is shipped from the factory, it is filled with a mixture of 50% antifreeze long-life coolant (LLC) and 50% water. To prevent the cooling water from freezing, use a mixture of water and antifreeze determined from the table below to match the minimum temperature in the area.

Ambient temperature	Proportion of antifreeze	Ambient temperature	Proportion of antifreeze
-10°C	30%	-30°C	50%
-15°C	35%	-35°C	55%
-20°C	40%	-40°C	60%
-25°C	45%		

The value for the ambient temperature is 5°C lower than the actual minimum temperature.

Changing Water

1. Prepare a suitable container to catch the drained oil.
2. Open the drain valve at the bottom of the radiator.
3. Drain the cooling water, then clean the inside of the radiator.
4. Close the drain valve, then fill with cooling water.
5. Remove the radiator cap and add cooling water.



7.6.2 Battery Electrolyte

Inspection/Adding Electrolyte

1. Open the engine cover. (See page 19)
2. Use a wet cloth to clean the area around the electrolyte level line, then check that the electrolyte level is between the UPPER LEVEL and LOWER LEVEL lines.

⚠ DANGER

If a dry cloth is used to clean the battery, static electricity may cause the electrolyte to ignite and explode.

3. If the electrolyte level is below the halfway point/ between the UPPER LEVEL and LOWER LEVEL lines, add distilled water immediately to the UPPER LEVEL line.
4. After adding distilled water, tighten the electrolyte filler plug securely.

Battery electrolyte: Distilled water

⚠ DANGER

- The gas generated by the battery is easily ignited, so never bring any flame (lighted cigarette, etc.) close to the battery.
- Do not use the battery with the electrolyte level below the LOWER LEVEL line. This will promote deterioration of parts inside the battery, reduce the battery life, and will also cause explosions.

⚠ WARNING

- Do not add distilled water to the battery to above the UPPER LEVEL line. The electrolyte will leak and damage the paint surface and will also cause corrosion of other parts.

⚠ CAUTION

- Be careful not to get battery electrolyte on your body or clothes. If the battery electrolyte (sulphuric acid) is left as it is, it may cause burns.
- When inspecting or removing the battery, stop the engine and turn the engine starting switch to the [O (OFF)] position.

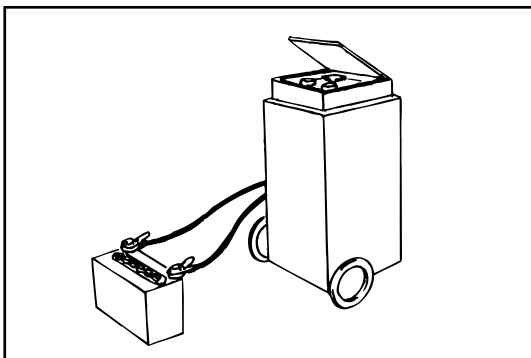
Charging

⚠ CAUTION

- Always remove the battery from the machine before charging it. Failure to do this will cause damage to electrical components and to the wiring.
- When connecting cables to the battery, be careful not to mistake the (+) and (-) terminals. If the connections are mistaken, the fuse will blow and it will become impossible to charge the battery.
- When disconnecting the cables from the battery, disconnect the (-) terminal first, and when connecting the cables, connect the (+) terminal first. If they are disconnected or connected in the opposite order and come into contact with a tool, it will cause a short circuit.
- When installing the battery again after removing it, connect the (+) and (-) to their original positions, and be careful not to let them contact any surrounding part when tightening them.

NOTICE

The rapid charging method is a method of charging with a large current in a short time to compensate partially for battery discharge. This method is used in emergencies, after completing operations, carry out compensation charging quickly and correctly. If compensation charging is not carried out, the battery life will be greatly reduced.



1. Remove the battery.
2. Connect the (+) terminal of the battery to the (+) terminal of the charger and the (-) terminal of the battery to the (-) terminal of the charger. (Follow the instructions given in the operation manual for the charger.)

7.7 Cleaning and Replacement

7.7.1 Air Cleaner Element

NOTICE

If the air cleaner element is extremely dirty, it will cause defective starting of the engine, lack of output, and reduce the life of the engine, so always remember to clean the element periodically.

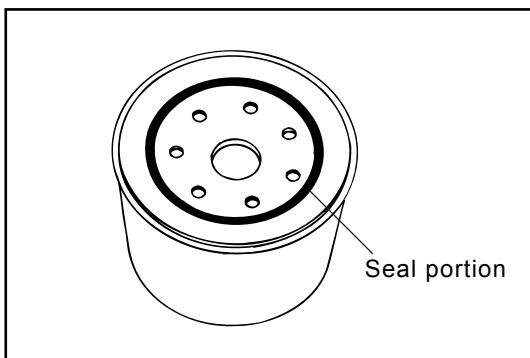
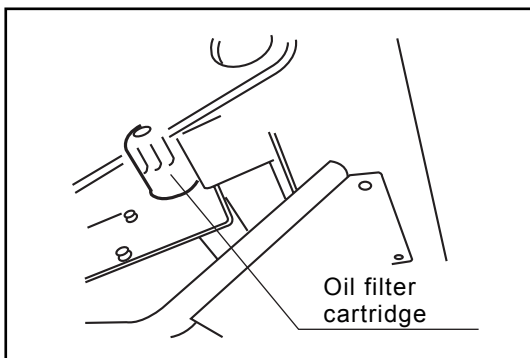
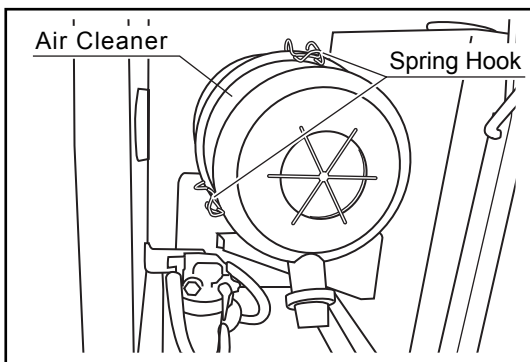
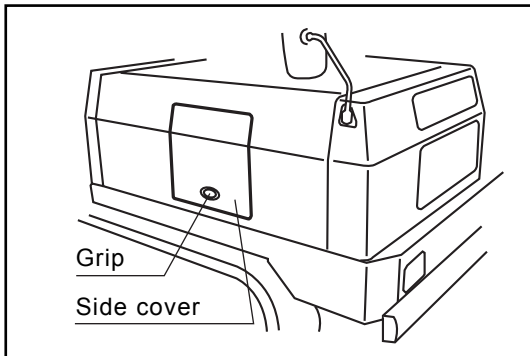
Cleaning/Replacing

1. Open the side cover.
2. Undo the spring hooks to remove the air cleaner lid.
3. Remove the air cleaner element.
4. Hit the air cleaner element lightly to remove the dust. Rotate the element and blow with compressed air.

NOTICE

- The air cleaner is a dry type, so do not use oil. Replace the element with a new element every 1000 hours.
- if there is a hole in the element, replace it immediately with a new element.

5. Install the air cleaner element.



7.7.2 Engine Oil Filter Cartridge

1. Using an oil filter wrench, turn the oil filter cartridge to the left and remove it.
2. Clean the filter housing base on the engine side.

3. Coat the seal portion of the new oil filter thinly with engine oil.
4. Install the new oil filter and tighten it fully by hand.
5. After starting the engine, check that there is no leakage of oil from the mount.

7.7.3 Fuel Filter Cartridge

NOTICE

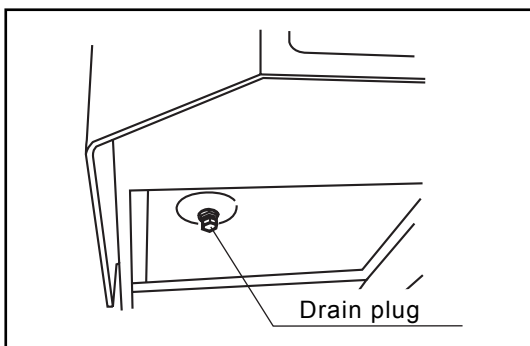
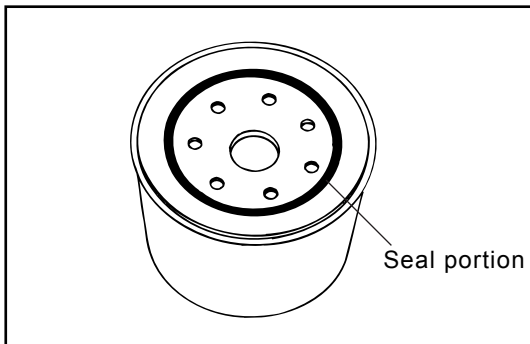
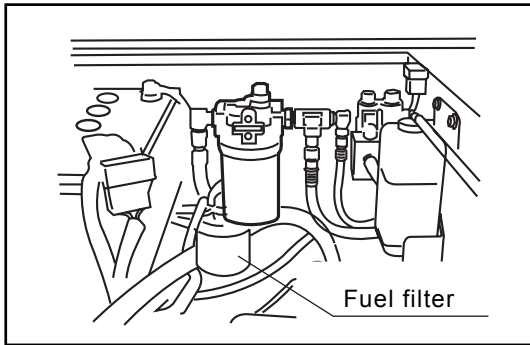
Replace every 450 hours.

1. Using an oil filter wrench, turn the fuel filter cartridge to the left and remove it.
2. Install the new fuel filter cartridge.

NOTICE

When installing, coat the O-ring thinly with fuel and tighten it fully by hand without using a filter wrench.

3. After installing, bleed the air. (See page 49)



7.7.4 Draining Water from Fuel Tank

NOTICE

Drain the water from the fuel tank every 50 hours.

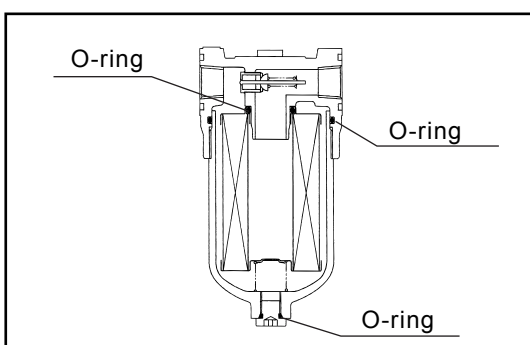
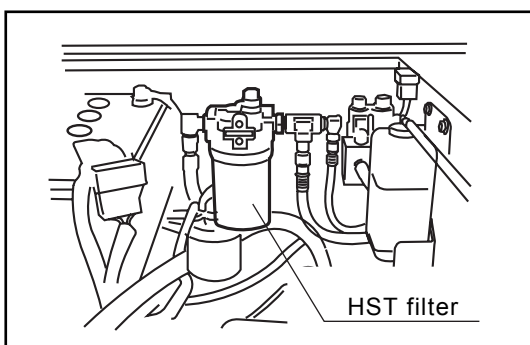
1. Loosen the drain plug under the fuel tank and drain the water and sediment.

7.7.5 HST Filter Element

NOTICE

If the HST filter indicator gives a red display, it shows that it is time to replace the filter element, so replace the filter element.

1. Open the engine cover. (See page 19)
2. Remove the bottom of the filter.



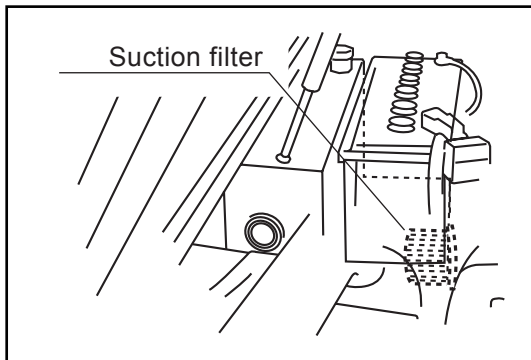
CAUTION

There is danger of burns when the oil is at high temperature.

3. Remove the element and replace it with a new element.
4. After replacing the filter element, check the oil level in the hydraulic tank, and add oil if it is low. (See page 39)

NOTICE

If the O-ring is damaged, always replace it with a new part.



7.7.6 Suction Filter Element

NOTICE

If the hydraulic oil has been changed, replace the suction filter element at the same time.

1. Open the engine cover. (See page 19)
2. Remove the flange cover, then remove the suction filter.

CAUTION

There is danger of burns when the oil is at high temperature.

3. Remove the element and replace it with a new element.

NOTICE

If the O-ring is damaged, replace it with a new Oring.

7.7.7 Prohibition of Rotation of Rollers

NOTICE

The bearing and other parts for the fixed roller are different from those for the movable roller, so do not interchange them.

To prevent mistakes in assembling, marks the parts before disassembling them.

7.8 Adjustments

7.8.1 Cooling Fan Belt Tension

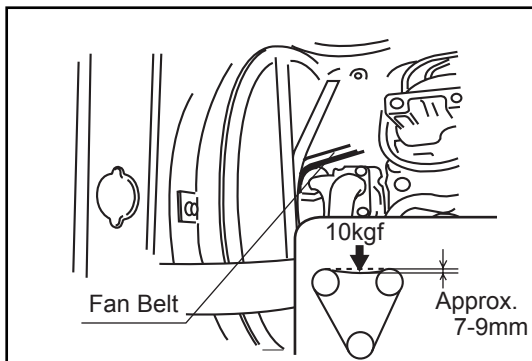
NOTICE

If the belt tension is loose, the belt will slip, and this will reduce the cooling force and shorten the life of the engine.

Inspection/Adjustment

CAUTION

Carry out inspection with the engine stopped.



1. Open the engine cover. (See page 19)
2. Press the middle of the fan belt with your finger and check the tension of the cooling fan belt.

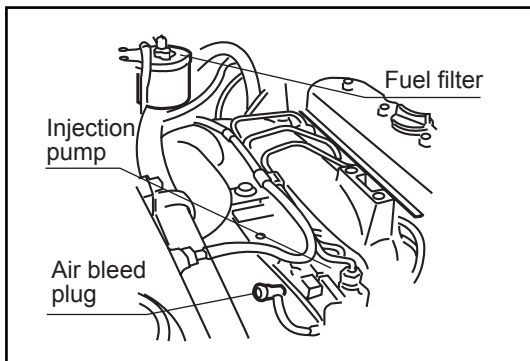
Deflection: Approx. 7-9 mm at approx. 10 kgf

3. If the deflection is not within the specified value, loosen the mounting bolt and move the alternator to adjust the belt tension.

7.8.2 Bleeding Air from Fuel System

NOTICE

If you continue to operate the machine until the fuel inside the fuel tank is completely used, next time you add the fuel, air will get into the injection pump and there will be no injection of fuel, so the engine will not start. To prevent this, bleed the air as follows. When the fuel filter or fuel pipes have been replaced, bleed the air in the same way.



1. Add the fuel tank with fuel.
2. Open the side cover. (See page 45)
3. Loosen the air bleed plug.
4. Turn the starting switch to the [I (ON)]position and actuate the fuel pump for approx. 5 seconds.
5. When fuel comes out from the plug, tighten the plug.

7.8.3 Track Tension

⚠ WARNING

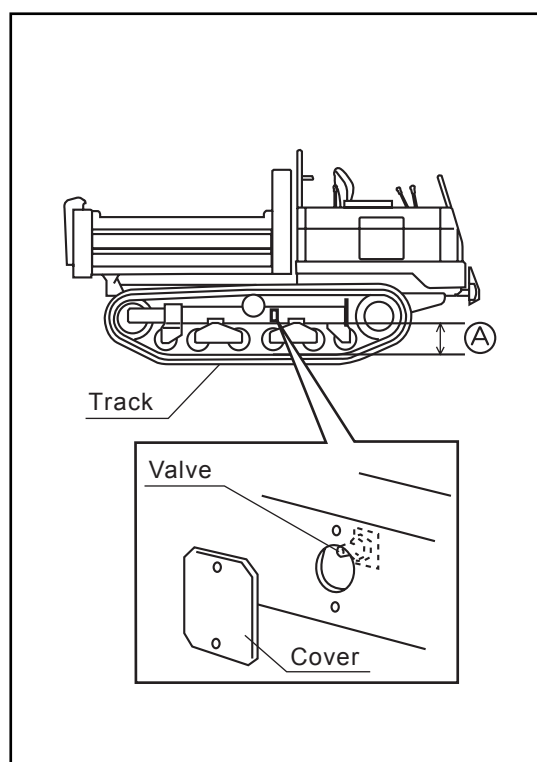
Loose track tension can cause the tracks to come off of the machine, resulting in serious injury or death to the operator or bystanders, or damage to the machine. During the first 100 hours of use, the tracks elongate and the track tension loosens. Check track tension during pre-operation inspection and as part of monthly inspection, as specified in the Regular Inspection Chart.

Adjusting

1. Stop the machine on the horizontal ground.
2. Jack up the front and rear of the chassis to raise the track on one side and make it parallel to the ground surface.

⚠ CAUTION

Park the machine on a stable, level, flat surface and engage the parking brake. Turn the engine off. Using a commercial-grade jack capable of supporting the machine's weight, raise one side of the machine according to the jack manufacturer's instructions for safe use, until the track on the raised side of the machine is several centimeters off the ground.



3. Remove the cover.
4. Use a grease pump to pump the grease through the valve. Measure the gap between the track frame and the track to determine if it is equivalent of 224-225mm as indicated by Ⓐ in the left Figure.
If the gap is not within the specified range, loosen the locknut for the track tension. Turn the track tension bolt in or out to adjust the gap between the track frame and the track to 224-225mm as indicated by Ⓐ in the left Figure.
5. Install the cover.

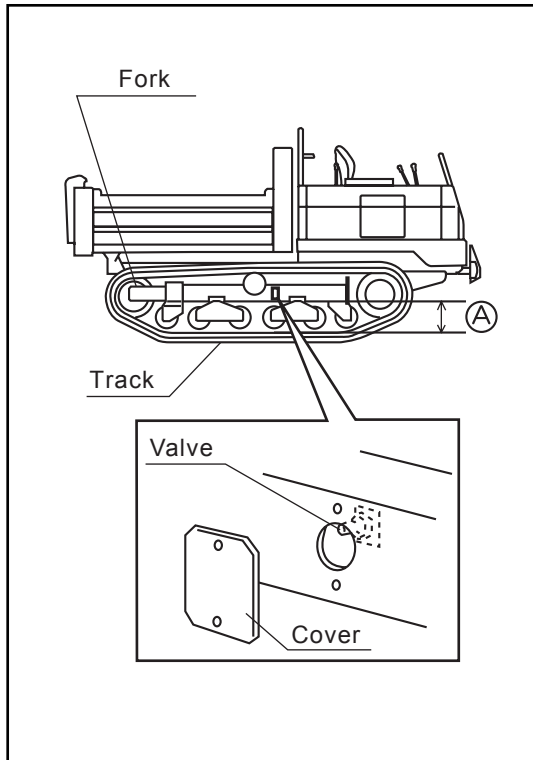
Installation/Adjustment

If the track comes off, install and adjust as follows.

1. Stop the machine on level ground.
2. Jack up the front and rear of the chassis to raise the track on one side and make it parallel to the ground surface.
3. Remove the cover.

CAUTION

Put stands under the chassis to hold the chassis securely in position.

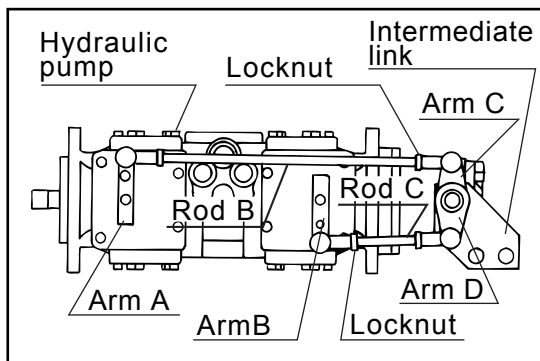
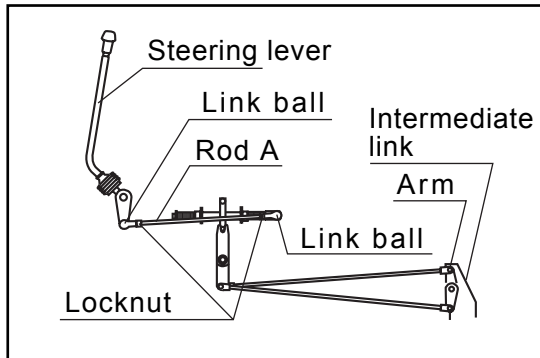


4. Loosen the valve and reduce the pressure inside the cylinder.
5. Remove the valve.
6. Push the fork in towards the front of the machine.
7. Fit the track to the sprocket first, then fit it to the idler.

NOTICE

- The track is heavy, so be extremely careful when handling it.
- Lever the track with a steel pipe when fitting the track.

8. Tighten the valve securely. Be careful not to let the valve O-ring get caught.
9. Use a grease pump to pump the grease through the valve, and adjust so that the clearance between the track frame and the track (A in the diagram) is approx. 224-225 mm (when the rollers are horizontal).
10. Check that the track is fitted securely to the sprocket and rollers, then lower the machine to the ground.
11. Install the cover.



7.8.4. Steering Lever

NOTICE

The steering lever is adjusted to the suitable value when the machine is shipped from the factory, so normally there is no need to adjust it. If the steering lever and links have been replaced, the steering lever must be adjusted.

1. Turn rod A and adjust so that the link portion of the steering lever is perpendicular.
 - (1) Loosen locknut.
 - (2) Turn rod A to adjust.
 - (3) After adjusting, tighten the locknut securely.
2. Adjust with the bearing so that hydraulic pump arm A, arm B, intermediate link arm C, and arm D are perpendicular.
 - (1) Loosen locknut.
 - (2) Turn rods B and C to adjust.
 - (3) After adjusting, tighten the locknut securely.
3. In the condition in Step 2, operate the steering lever fully to the front and rear, and check that arm A and arm B both move the same angle to the front and rear. If the angle is different, turn rod B or C to adjust.
4. After carrying out of the adjustments in Steps 1 to 3, set the steering lever to the [N] position, push the parking brake switch to the [(parking)], and start the engine.

Operate the parking brake switch to the [TRAVEL] position, and if the machine does not move, the setting of the [N] position is correct. If the machine moves, turn rod B and rod C again to carry out fine adjustment of arm A and arm B and set securely to the neutral position.
5. After completing the setting of the neutral position in Step 4, operate the steering lever fully to the front and rear and check that the machine travels in a straight line.
6. Coat the sliding surface of arm A and arm B with grease.

7.9 Electrical System

7.9.1 Fuses

Inspection

NOTICE

A fuse is provided in the wiring circuit to prevent failure if any abnormality should occur in the circuit.

If any abnormality is found in the electrical system during operation, check the condition of the fuse.

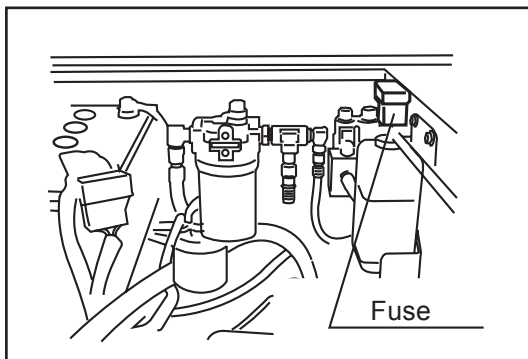
1. See the list below and check that no fuse is blown.

- Fuel Pump, Indicators (5A)
- Lights, Horns (10A)
- Auxiliary Power (10A)
- Spare (5A)
- Spare (10A)

Fuses/Fusibles/Sicherungen/Fusibili			
Space/Libre/Frei/Libero		Spare/ Rechange/ Ersatz/Ricambio	
Space/Libre/Frei/Libero			
Space/Libre/Frei/Libero		5A	
Fuel Pump, Indicators/ Pompe d'essence, Indicateurs/ Anzeige, Kraftstoffpumpe/ Pompa carburante, Spia di controllo	5A	Spare/ Rechange/Ersatz/ Fusibili di Ricambio	
Lights, Horns/ Phares, Klaxon/ Licht, Hupe/ Fari, Clacson	10A		
Auxiliary Power/ Alimentation Additionale/Ersatz/ Alimentazione Ausiliaria	10A	10A	

CAUTION

If a fuse is blown, investigate and repair the cause, then replace the fuse with the one of the same rating. If a fuse is replaced with one of a wrong rating, electrical components can fail; this is not covered by the terms of warranty.



Replacing

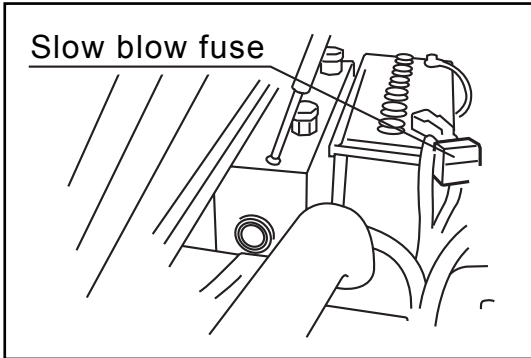
1. Open the engine cover and replace the fuse.

7.9.2 Slow Blow Fuse

NOTICE

The slow blow fuse acts to protect the wiring. If the slow blow fuse blows, check the cause and replace it with a genuine part.

- Main glow (50A)
- Alternator (30A)



7.10 Maintenance After Use

(Maintenance After Use in Normal Conditions)

- After using the machine, remove any mud, water, or other foreign matter stuck to the machine. Do not wash the engine or control panel with water. This will cause entry of water and lead to rust.
- When leaving the machine outdoors, it is effective to cover it with a waterproof cover.

(Maintenance After Use in Cold Weather)

- After using the machine, remove any mud, water, or other foreign matter stuck to the machine. Then park the machine on concrete or firm dry ground, or set it on blocks. If water or mud stuck to the machine freezes, it will cause failure. (In extremely cold areas, put wooden blocks under the tracks at right angles to the machine.)

NOTICE

If the machine freezes and it is impossible to operate it, do not try to move it by force. Use warm or hot water to melt the frozen parts or wait for the ice to melt. Be particularly careful when moving the machine. If the machine is moved by force, CHIKUSUI CANYCOM, INC. cannot take any responsibility for any failure.

- When leaving the machine outdoors, it is effective to cover it with a waterproof cover.

8. Storage (Long-term Storage)

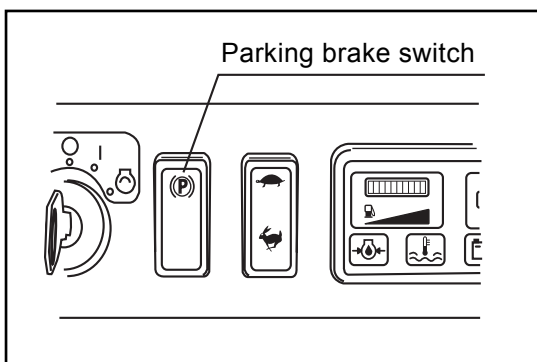
When storing for a long time, it is necessary to take suitable action to prepare for the next time that the machine is used. When preparing for long-term storage, carry out "Maintenance after use" (see page 54), then do as follows.

⚠ DANGER

Do not store this machine, the battery, or fuel in a place where there is a flame or where the temperature is high. There is danger of fire.

NOTICE

Avoid storing the machine in a place where there is high humidity or excessive dust. When storing, wait for the engine to cool down, then cover the machine with a waterproof sheet.



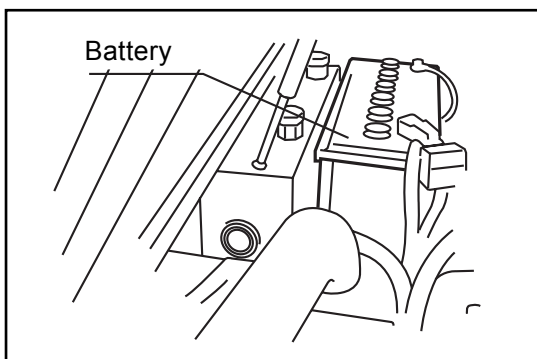
8.1 Machine

1. Clean the outside surface with an oily cloth, then lubricate the grease points. (See page 40)
2. Set the accelerator lever to the [LO] position and operate the parking brake switch to the [P] (parking) position.
3. Remove the engine starting key.

8.2 Battery

⚠ CAUTION

When disconnecting the cables from the battery, disconnect the (-) terminal first, and then the (+) terminal; when connecting the cables, connect the (+) terminal first, and then the (-) terminal



1. Open the side cover and remove the battery from the machine.
2. Check the battery electrolyte level and add water if necessary. (See page 43)
3. Store the battery in a cool, dry place.

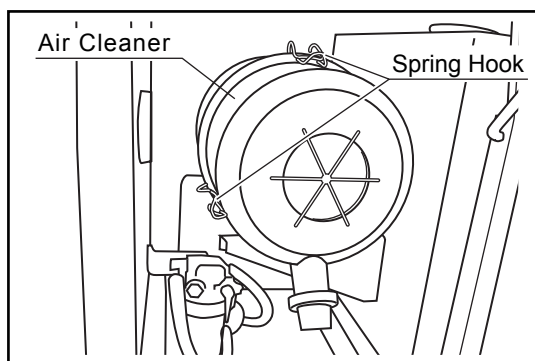
Reference:

When the battery is not being used, it will remain charged for approx. 6 months, but if it is recharged before it has been discharged, it is possible to extend the life of the battery.

8.3 Engine

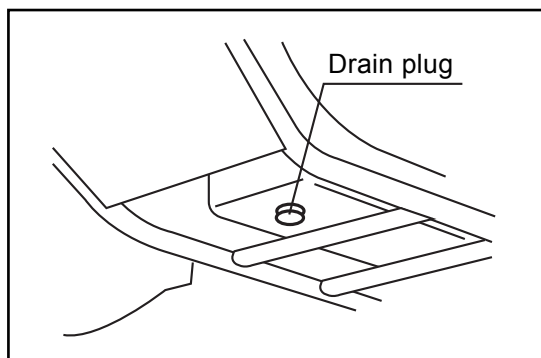
NOTICE

- Drain the fuel from the fuel tank. As far as possible, do not use fuel that has been stored for a long time.



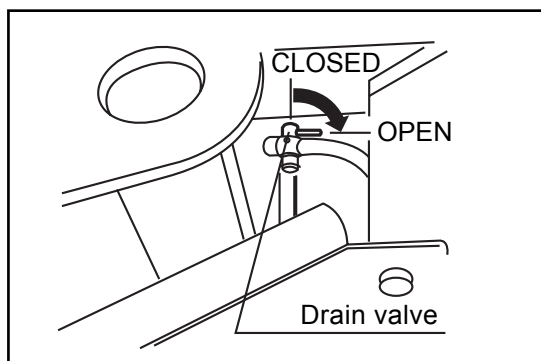
8.3.1 Cleaning Air Cleaner Element

1. Open the engine cover. (See page 19)
2. Undo the spring hooks to remove the air cleaner lid.
3. Remove the air cleaner element and clean it. (See page 45)



8.3.2 Changing Engine Oil

1. Drain the engine oil, then fill with fresh engine oil. (See page 38)



8.3.2 Draining Engine Cooling Water

1. Drain all the engine cooling water. (See page 42)

9. Troubleshooting

Some repairs require specialized service knowledge or equipment, where indicated in the Troubleshooting Chart, contact your dealer for repair, adjustment, or part replacement.

WARNING

If machine malfunctions or has abnormal operation, stop using the machine immediately.

Using the machine when it is malfunctioning or operating abnormally could injure or kill the operator or bystanders, or damage the machine. If you can not resolve the problem or do not have the correct tools or knowledge, take the machine to your CANYCOM representative for repair, adjustment, or part replacement.

Use the information in the Troubleshooting Chart to fix the problem. When troubleshooting procedures involve fuel, oil or other mechanical fluids, or the battery, take all appropriate safety precautions. Follow all safety precautions for using and inspecting the machine, as appropriate for a given troubleshooting procedure.

9.1 Troubleshooting Chart

Location	Problem	Main causes	Remedy
Engine related	Engine does not start or is difficult to start	• No fuel • Air leak in fuel system • Water in fuel • Low battery capacity (defective starting of starting motor) • Defective contact or disconnection in electric wiring • Defective quality or engine oil is low • Defective operation of starting switch, motor, relay • Other (other than above)	→ Add fuel(See page 19) → Bleed air(See page 49) → Drain water(See page 46) → Add battery electrolyte (See page 43) → Charge battery (See page 44) → Replace battery → Repair (please contact your CANYCOM representative.) → Add or change oil(See page 37) → Please contact your CANYCOM representative. → Follow procedure in 6.2 Starting (page 22) and try to start again. If the engine still cannot be started, please contact your CANYCOM representative.
	Engine stops immediately	• No fuel • Air in fuel hose • Insufficient warming up	→ Add fuel(See page 19) → Bleed air(See page 49) → Warm up thoroughly
	Engine suddenly stopped	• Out of fuel • Seizure caused by lack of engine oil or by deterioration of oil	→ Add fuel(See page 19) → Inspect and add oil(See page 37)

Location	Problem	Main causes	Remedy
Engine related	Defective idling (variation in engine speed)	• Defective function of injection pump • Improper injection timing • Insufficient compression pressure • Insufficient air sucked in (clogged air cleaner)	→ Please contact your CANYCOM representative. → Please contact your CANYCOM representative. → Please contact your CANYCOM representative. → Clean or replace(See oage 45)
	Lack of output or acceleration	• Improper fuel • Improper viscosity of engine oil • Defective adjustment of accelerator • Insufficient air sucked in (clogged air cleaner) • Overload • Defective function of injection pump • Improper injection timing • Insufficient compression pressure	→ Change fuel → Change to suitable oil → Please contact your CANYCOM representative. → Clean or replace(See page 45) → Reduce load → Please contact your CANYCOM representative. → Please contact your CANYCOM representative. → Please contact your CANYCOM representative.
	Abnormal noise or vibration from engine or around engine	• Loose engine mounting bolt • Other	→ Tighten → Please contact your CANYCOM representative.
	Excessive consumption of engine oil	• Leakage of engine oil • Wear of cylinder, piston ring	→ Check and repair → Check and repair (please contact your CANYCOM representative)
	Engine overheats	• Lack of engine oil • Lack of engine cooling water	→ Add oil (See page 37) → Add water (See page 42)

Location	Problem	Main causes	Remedy
Engine related	Excessive consumption of fuel.	• Leakage of fuel from fuel system. • Clogged air cleaner. • Defective function of injection pump. • Improper injection timing. • Insufficient engine compression.	→ Check and repair(please contact your CANYCOM representative.) → Clean or replace(See page 45). → Please contact your CANYCOM representative. → Please contact your CANYCOM representative. → Please contact your CANYCOM representative.
	Large amounts of black smoke are emitted (defective exhaust condition).	• Defective compression. • Improper fuel. • Clogged air cleaner.	→ Check and repair(please contact your CANYCOM representative.) → Change fuel. → Clean or replace(See page 45).
	White smoke or blue smoke is emitted (defective exhaust condition).	• Engine oil level is too high. • Viscosity of oil is too low. • Worn cylinder, pistonring.	→ After inspecting, adjust oil level (See page 37). → Change to suitable oil. → Check and repair(please contact your CANYCOM representative.)
	Accelerator lever is catching.	• Deformed, rusty accelerator rod and wire.	→ Replace (please contact your CANYCOM representative).
Power train related	Machine does not move even when steering levers are placed at FORWARD or REVERSE position.	• Parking brake is applied. • Problem in hydraulic system. • Failure inside HST. • Overloaded.	→ Release parking brake. → See Hydraulic related (See page 60). → Please contact your CANYCOM representative. → Reduce load.
	Defective turning.	• Problem in hydraulic system. • Failure inside HST. • Overloaded.	→ See Hydraulic related(See page 60). → Please contact your CANYCOM representative. → Reduce load.

Location	Problem	Main causes	Remedy
Braking system related	Parking brake does not work.	• Problem in hydraulic system. • Worn brake disc inside the travel motor.	→ See hydraulic related (See below) → Please contact your CANYCOM representative.
Hydraulic related	Hydraulic component (hydraulic motor, hydraulic cylinder) does not work or actuation is defective.	• Insufficient or deteriorated hydraulic fluid. • Entry of dirt into hydraulic circuit. • Clogged filter element. • Fluid leaks from hydraulic system. • Insufficient discharge from hydraulic pump. • Other.	→ Add or change fluid (See page 39). → Remove dirt. → Replace (See page 46). → Check and repair. → Please contact your CANYCOM representative. → Please contact your CANYCOM representative.
Chassis related	Abnormal vibration or chassis or poor balance.	• Detracking. • Loose mounting bolt of roller, upper roller, idler, sprocket. • Broken bearing.	→ Install and adjust (See page 50). → Check and tighten. → Replace (please contact your CANYCOM representative).
	Straight travel ability of machine is poor.	• Broken roller, upper roller, idler, sprocket.	→ Check and repair.
Dump body related	Defective opening and closing of tail gate.	• Defective adjustment. • Dirt stuck to rotating part.	→ Adjust. → Remove dirt.

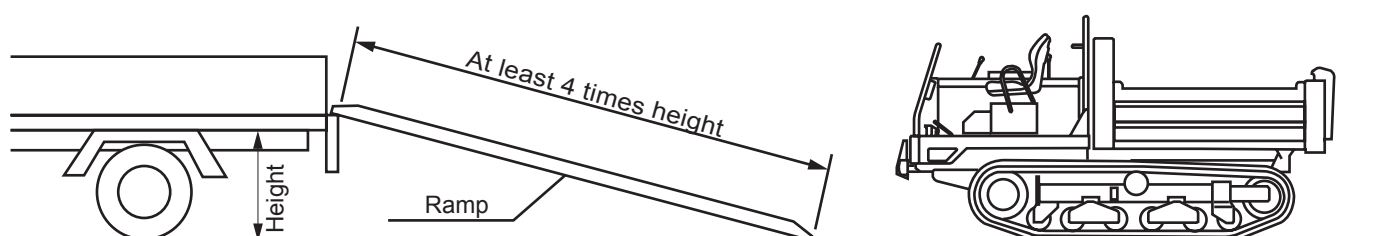
Location	Problem	Main causes	Remedy
Safety device related	Defective lighting up of lamp	• Defective wiring • Blown bulb • Blown fuse	→ Connect → Replace → Replace(See page 53)
	Warning lamp lights up after engine is started (1) Charge lamp (2) Oil lamp	• Disconnected coupler,wiring - Lack of engine oil or abnormality in lubricating system	→ Connect → Add oil(See page 37)
Safety device	Horn does not sound	• Disconnected terminal for horn wiring, broken wiring • Blown fuse	→ Connect or repair → Replace(See page 53)

10. Transporting Machine

10.1 Truck Loading and Unloading

When loading or unloading this machine onto a truck, use the following procedure and be sure to follow the precautions.

1. Stop the truck on firm level ground and always put blocks under the wheels.
2. Use ramps that have ample strength (that are easily able to withstand the total of the weight of the machine and the weight of the operator), width (at least 1.2 times the width of the track), and length (at least 4 times the height of the bed of the truck), and are fitted with non-slip pads. Choose a place where the ramps will not bend under the weight of the machine. Keep the slope of the ramps within 20°.



3. Fit the hooks of the ramps to the bed of the truck so that they do not slip and so that there is no height difference from the bed of the truck.
4. Set the HL speed selector switch to the [ (LO)] and travel forward slowly to load the machine on the truck.

DANGER

- When loading the machine, do not allow anyone to come near the machine or the ramps.
- Do not change direction on the ramps. There is danger that the machine will fall off.

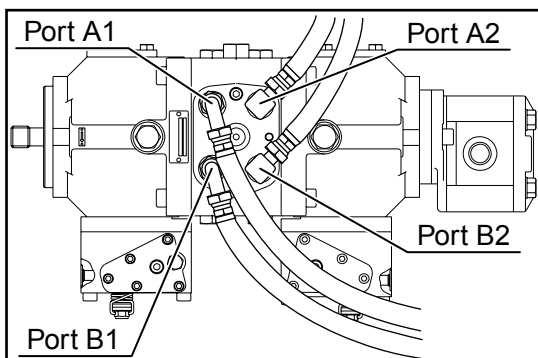
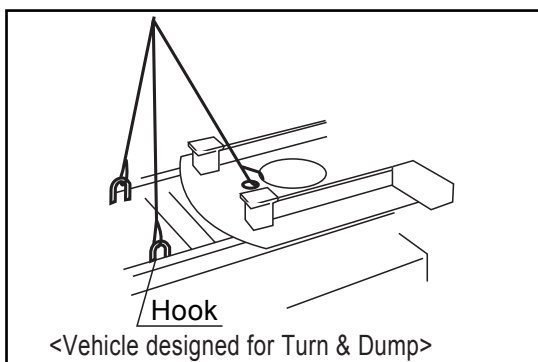
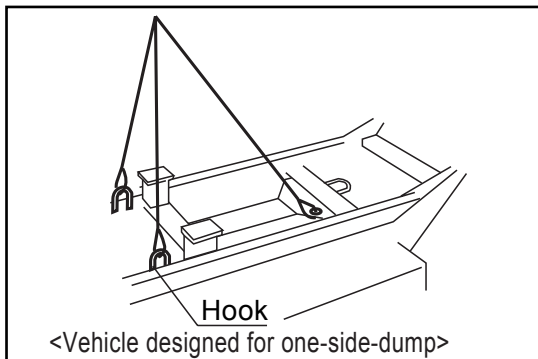
CAUTION

After loading the machine, operate the parking brake switch to the [P (parking)] position to apply the parking brake securely. Then use ropes or wires to tie the machine down securely. In addition, put blocks under the tracks.

10.2 Lifting by Crane

⚠ WARNING

Always unload the machine before lifting.



1. Dump the load deck body and lock it with the load deck body drop prevention safety prop. (Page 27)
2. Hitch the wire rope to the lifting hooks (3 places) attached to the frame and lift the machine. At this time, adjust the wire rope length so that the machine will be horizontal.
3. Slings work implements (wire rope, chain, etc.) to be used should have sufficient strength.

NOTICE

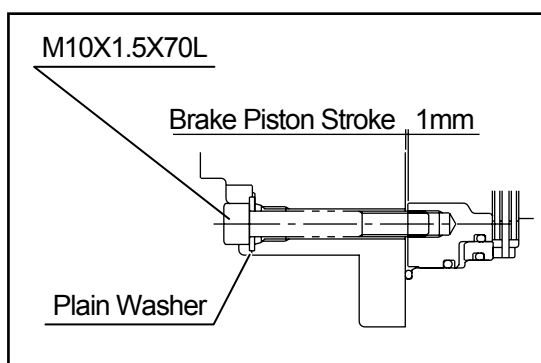
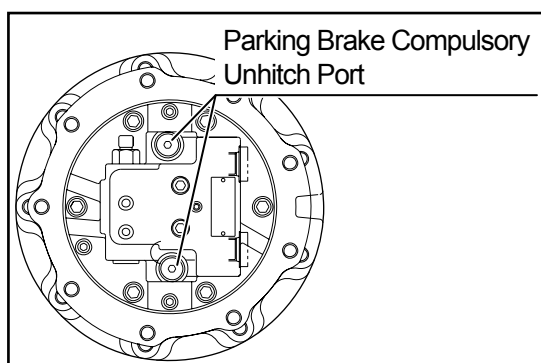
**Crane operation and slinging work require qualifications.
Anyone without the qualifications should not carry out the work.**

10.3 Towing

⚠ WARNING

Always unload the machine before towing.

1. Disconnect the hoses from the ports A1 and B1 on the HST pump, and bypass them with a hose with appropriate fittings.
2. Disconnect the hoses from the ports A2 and B2 on the HST pump, and bypass them with a hose with appropriate fittings.
3. Cap the ports with plugs.



4. Remove the cover on the back of the HST motor on both sides.
5. Remove PF1/4 plugs from the parking brake compulsory unhitch ports.
6. Screw in an M10X1.5X70L bolt with a nominal 10mm plain washer into each of those ports and tighten it until the brake becomes free.
7. Hitch the wire rope to the towing hook on the back end of the machine. Tow slowly.

NOTICE

Towing capacity of the towing hook is 2500kg.

NOISE LEVEL

Dumper	Engine		Lpa		Lwa
Type	Type	Speed rpm	Left	Right	
S25A	V2203	2800 rpm	80.1 dB (A)	79.2 dB (A)	100 dB (A)

NOISE LEVEL evaluated based on factory standard.

VIBRATION

Model	Engine Rated revolution	Vibration	
		Steering lever	Seat
S25A	2800 rpm	3.0 m/s ²	3.0 m/s ²

VIBRATION evaluated based on factory standard.