

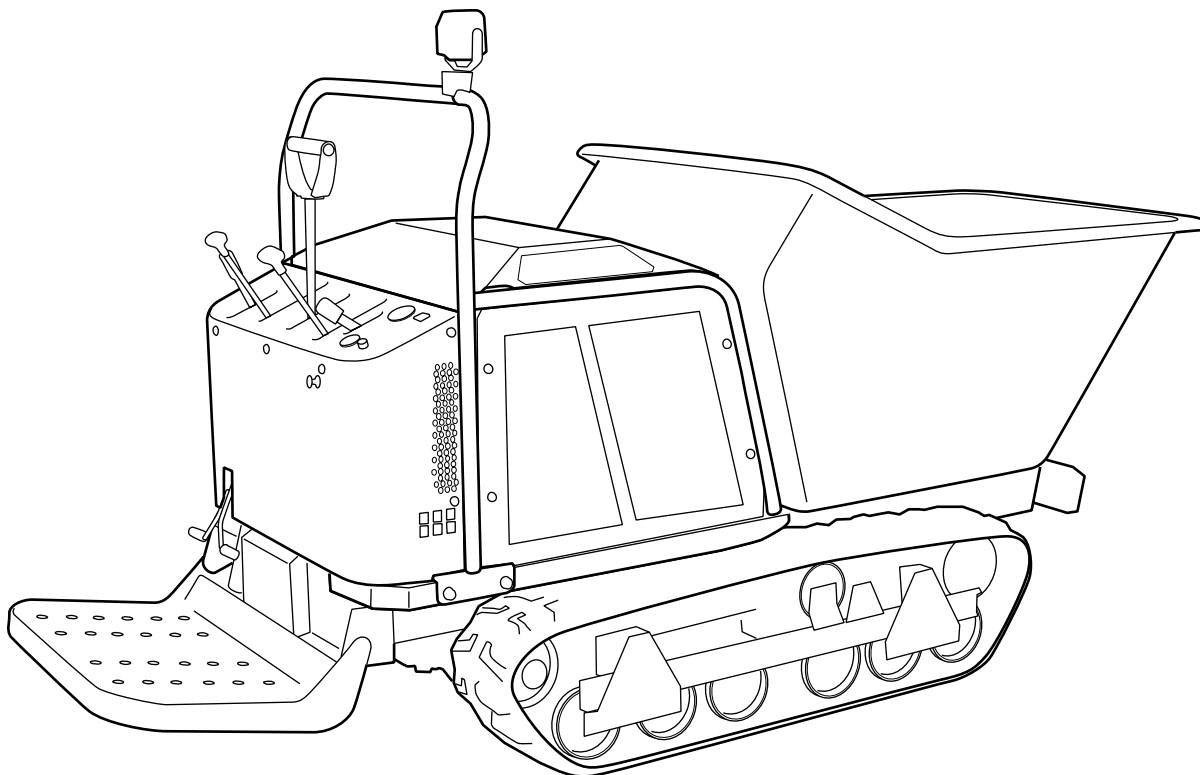
Off-road Rubber Track Dumper

# SC75

---

## Operator's Manual

---



### **⚠ WARNING!**

**Read this manual completely before operating or maintaining this machine. Failure to follow safety precautions could result in serious injury or death. Keep this manual for future reference by you and by all those who operate and maintain this machine.**

3570 5101 001

---

**CHIKUSUI CANYCOM, INC.**

90-1 Fukumasu, Yoshii-machi,

Ukiha-shi, Fukuoka, Japan 839-1396

Tel.+81-(0)943-75-2195 Fax.+81-(0)943-75-4396

---

# CHIKUSUI CANYCOM, INC.

<http://www.canycom.co.jp/>

---

- Sales Headquarters TEL +81-(0)943-75-2195 FAX +81-(0)943-75-4396
- Foreign Trade Center TEL +81-(0)3-3552-6277 FAX +81-(0)3-3552-6288

Authorized Dealer

---

## Notice to Users and Maintenance Personnel

Thank you for purchasing this machine.

This manual provides information needed for safe and effective use of this machine to those who operate or maintain the machine. Make sure to read and understand the manual thoroughly before operating the product. Also make sure to read the separate operator's manual for the engine.

### **⚠ WARNING!**

- **This machine can be very dangerous if the safety precautions in this manual and on the labels attached to this machine are not followed. Read and understand this manual and the safety labels on the machine thoroughly before using this machine. 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.**
- **This machine may not be operated on public road or what is considered to be public road. It is sole responsibility of the operator to consult the local regulations.**
- **Do not modify this machine, or do not operate this machine with the safety covers removed or open. A serious accident could result.**

### **⚠ CAUTION!**

- **Store this manual in a safe, accessible place for easy reference.**
-

---




## Notice to Owner

### CAUTION!

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

## Warning Terms Used in this Manual

In this manual, the following four warning terms are used to signal the four levels of hazard (or seriousness of possible accidents). Read and understand what they mean and always follow the instructions in this manual.

Warning Term	Definition
 <b>DANGER!</b>	Indicates an imminently hazardous situation which will result in death or serious injury if the user does not follow the procedures or the instructions.
 <b>WARNING!</b>	Indicates a potentially hazardous situation which could result in death or serious injury if the user does not follow the procedures or the instructions.
 <b>CAUTION!</b>	Indicates a potentially hazardous situation which could result in minor to moderate injury or damage to the machine if the user does not follow the procedures or the instructions.
<u>NOTE</u>	Indicates important information which needs particular attention.

---

# Warranty and After-Sales Service

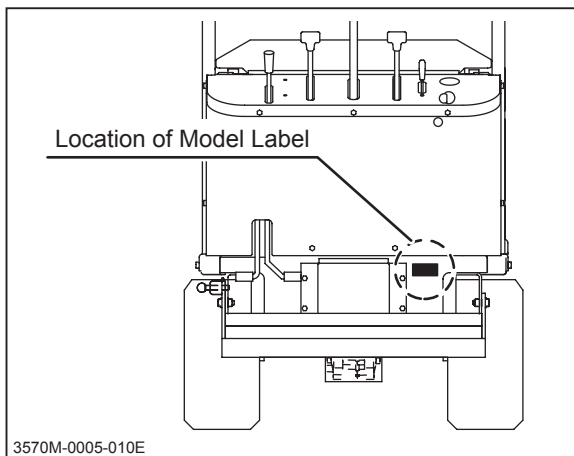
## Warranty

Chikusui Canycom, Inc. provides you a warranty through Canycom U.S.A. A copy of this warranty is reproduced in the back of the manual.

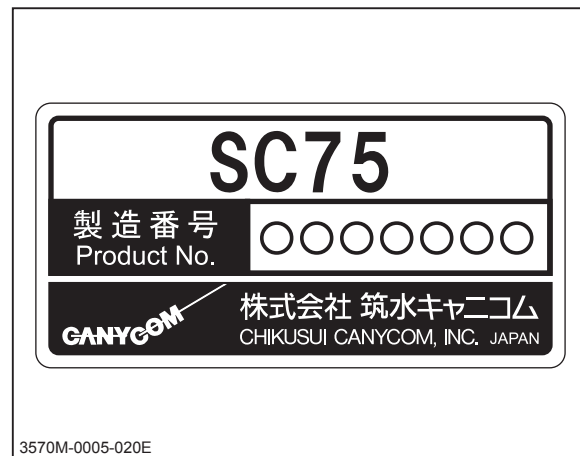
## After-Sales Service

Consult your local Canycom dealer or our company's sales department regarding service orders or any questions or problems that may arise when using this machine. Please make sure to have the product name, serial number, and the make and type of the engine handy at the time of contact. The model and serial number can be found on the model label as shown below, and the make and type of the engine can be found in Chapter5 "Specifications" of this manual (Page12).

### Location of Model Label



### Model Label



## Availability of Spare Parts

The replacement or repair parts for this product shall remain available for seven years after the production of this type of machine is discontinued.

---

---

# Contents

## **1. Safety 1**

**Safety Labels . . . . . 1**

**Safety Precautions . . . . . 3**

    Training . . . . . 3

    Preparation . . . . . 3

    Operation . . . . . 4

    Servicing . . . . . 8

## **2. Controls and Components 10**

**Name and Function of Controls . . . . . 10**

## **3. Specifications 12**

**Product Specifications . . . . . 12**

**Contents of the Tool Bag . . . . . 13**

## **4. Operation 14**

**Preparation . . . . . 14**

    Pre-start up Inspection . . . . . 14

    Checking and Filling Fuel . . . . . 14

**Driving . . . . . 16**

    Starting . . . . . 16

    Driving . . . . . 19

    Stopping . . . . . 22

    Parking . . . . . 22

---

---

<b>Working</b> .....	<b>24</b>
Dumping .....	24
Using Safety Prop. ....	26
Folding/Unfolding Step .....	27

## **5. Maintenance** **28**

<b>Maintenance Schedule</b> .....	<b>28</b>
<b>List of Fluids</b> .....	<b>33</b>
<b>Greasing and Lubricating Points</b> .....	<b>33</b>
<b>List of Consumables and Spares</b> .....	<b>34</b>
<b>Removing and Installing Body Panels</b> .....	<b>35</b>
Engine Compartment .....	35
<b>Engine</b> .....	<b>37</b>
Engine Oil .....	37
Oil Filter .....	39
Air Cleaner .....	39
Spark Plugs .....	40
<b>Drive Train</b> .....	<b>41</b>
Tracks .....	41
HST (HydroStatic Transmission) Fluid .....	42
Line Filter and Suction Filter .....	43
Transmission Oil .....	44
Drive Belts .....	46
Belt Stoppers .....	47
Parking Brake .....	47
Control Stick .....	49
Greasing and Lubricating .....	51

---

---

<b>Hydraulic System</b> .....	<b>52</b>
Hydraulics Belt .....	52
<b>Electrical System</b> .....	<b>53</b>
Battery .....	53
Fuses .....	55
<b>After Use Care</b> .....	<b>56</b>
After Normal Use .....	56
After Cold Weather Use .....	56
<b>Storage</b> .....	<b>57</b>

## **6. Troubleshooting** **58**

Troubleshooting .....	58
-----------------------	----

## **7. Transporting** **62**

<b>Hauling</b> .....	<b>62</b>
Loading and Unloading .....	63
<b>Hoisting</b> .....	<b>64</b>

---



---

## Warranty

Warranty Certificate is attached at the end of this manual.

- \* Have the warranty certificate signed and sealed after you have received and fully understood the instructions for handling this machine and received the receipt.

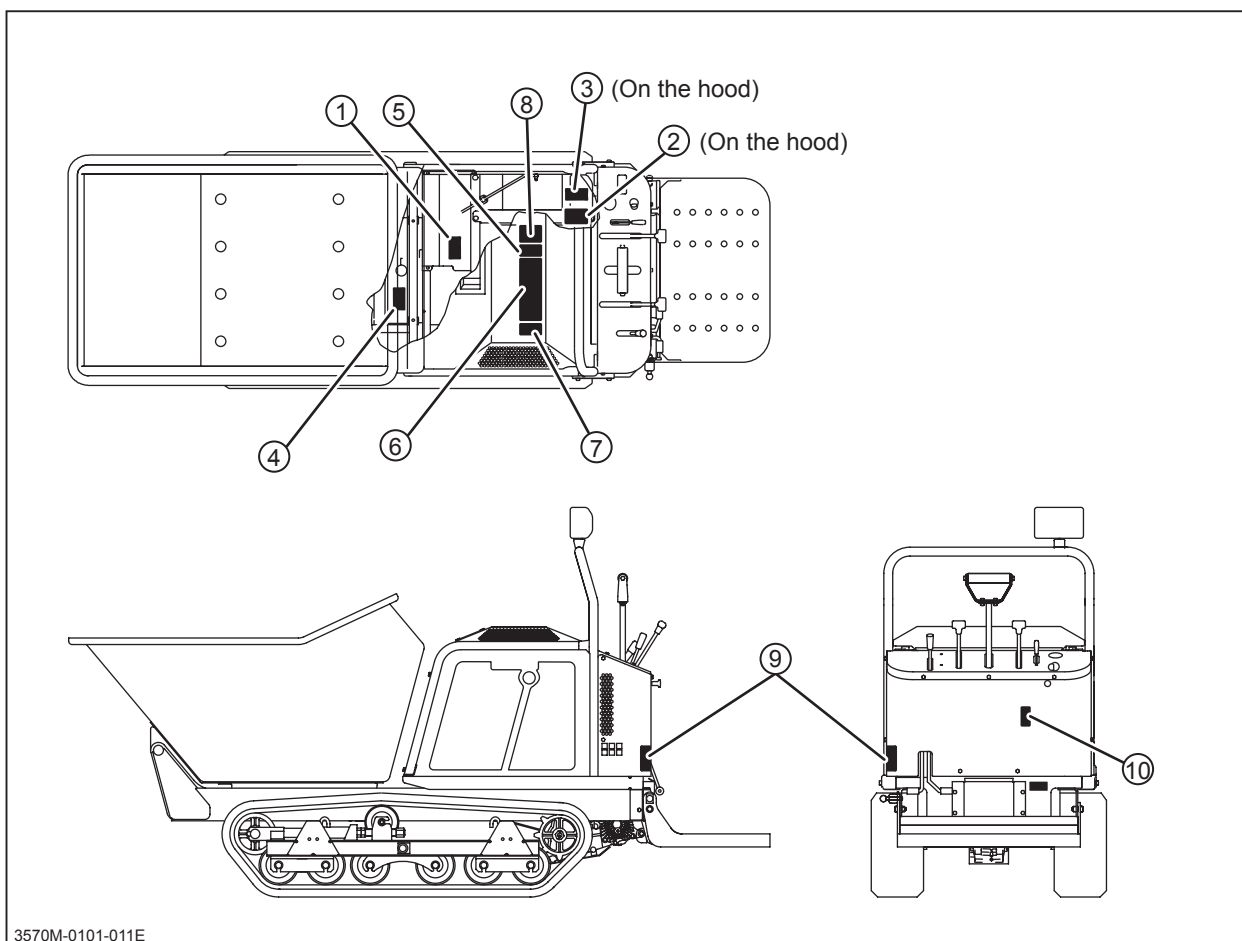
## Appendix

- Operator's Manual for the Engine
  - \* Be sure to read and understand it together with this manual .
-

## Safety Labels

The safety labels shown on the next page are attached to the machine. See the illustration below for the location and the illustration on the next page for the content of each label on the machine.

- **Locate all the warning labels attached to this machine. Read and follow the instructions and precautions in them. Failure to do so could result in serious injury or death to the operator or bystanders.**
- **Keep the labels clean and legible. Do not use solvents or gasoline to clean the labels.**
- **Replace these labels immediately if they have been removed, have fallen off or become illegible. Use the part number, on the label or shown in this manual, to order a replacement label from your CANYCOM representative.**



① 3677 5042 001

**▲ DANGER!**



Flammable liquid present. Keep away all ignition sources.

② 3570 5028 002

**▲ WARNING!**


Do not reverse the polarity. Reverse polarity may cause fire or explosion. Make sure the jumper cables are connected correctly.

Avoid short-circuit. Short-circuit may cause fire or explosion.

Do not touch the electrical terminals or wires. Shock or electrocution could occur if accidental contact is made.

③ 3677 5047 001

**▲ WARNING!**



Hazardous voltage. Use of unapproved test probes or conductive objects is strictly prohibited. See operation manual.

④ 3677 5046 001


**▲ DANGER!**



Crush hazard. To prevent death or serious injury, do NOT place any part of your body under the loading deck.






⑤ 3570 5037 001

**▲ WARNING!**



Crush hazard. Beware of obstacles when reversing or turning. Always operate slowly and keep two meter or more clearance.

⑥ 3570 5036 001

<b>▲ WARNING!</b>	<b>▲ WARNING!</b>	<b>▲ WARNING!</b>	<b>▲ WARNING!</b>	<b>▲ DANGER!</b>
				
Read and FULLY understand the operator's manual before use or maintenance.	Electric shock hazard. Keep away from electric power lines and utility poles.	Moving fan blades can sever hand and fingers. Keep hands away to avoid injury.	Moving belts can entangle hand and arm. Keep hands away to avoid injury.	Power sources. Hydraulic and electric power sources are present. Lockout ALL energy sources before servicing.

⑦ 3677 5043 001

**▲ WARNING!**



Hot surfaces. Do NOT touch.

⑧ 3570 5038 000

**▲ WARNING!**

Upset hazard.



- Accelerate or decelerate slowly. Sudden starts, stops, or turns can cause tip-over.
- Never operate on slope in excess of 25 degrees.
- Avoid running over obstacles.
- Hold onto guide rail at all times.
- Keep feet on foot platform (step) at all times.



⑨ 3570 5021 001

**▲ WARNING!**



Crush hazard. Hold the step firmly when raising or lowering. Dropping step could cause serious injury.

**STEP LOCK KNOB**  
Pull the knob to raise or lower the step.

⑩ 3570 5039 000

**▲ CAUTION!**



Noise Hazard. Wear approved ear protection during operation.

---

## Safety Precautions

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.

## 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. Local regulations may restrict the minimum age of the operator.**
- **The operator is responsible for the accidents or hazards caused to other people or their property.**
- **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.**
  - **incorrect distribution of load.**

## Preparation

- **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.**

## **⚠️ WARNING!**

- Fuel is highly flammable. See Checking and Filling Fuel, page 14, for important safety information on handling fuel.
- 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 (see Preparation, pages 14-15) before starting the machine. Repair or replace damaged parts before starting the machine.

## Operation

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, be sure all persons are a safe distance away from the machine. Sound the horn to warn bystanders.
- Always hold the guide rail with one hand to keep your posture when the machine is moving.
- 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!**

- 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.
- Drive straight up or down a slope. Avoid turning on a slope. If turning is unavoidable, make only a short, gradual and steady turn.
- 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.
- 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. If it is unavoidable, drive across a slope slowly and carefully.
- Without a load, drive the machine backwards up a slope (operator's step uphill) when climbing, and drive it forward when going down a slope.

- With a load, drive the machine forward up a slope (operator's step downhill) 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 control stick 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 1650lbs. (750 kg). 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 660lb (350 kg) when operating on a slope between 15 and 20 degrees. Keep in mind that liquid concrete will shift in the bucket and hence its center of gravity also shifts, affecting the stability of the machine.
- Load cargo in the bucket so the weight is evenly distributed. Keep in mind that liquid concrete will shift in the bucket and hence its center of gravity also shifts. When carrying a solid 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

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

- Always follow the proper procedures for dumping as described in this manual.
- Only operate the bucket with the engine running.
- 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.



- Make certain that all persons are at a safe distance away from the machine when raising or lowering 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. If parking on a slope is unavoidable, 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 step toward the uphill
  - With a load, park the machine with the operator's step toward the downhill
  - 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.
- Gasoline is extremely 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.

## Servicing

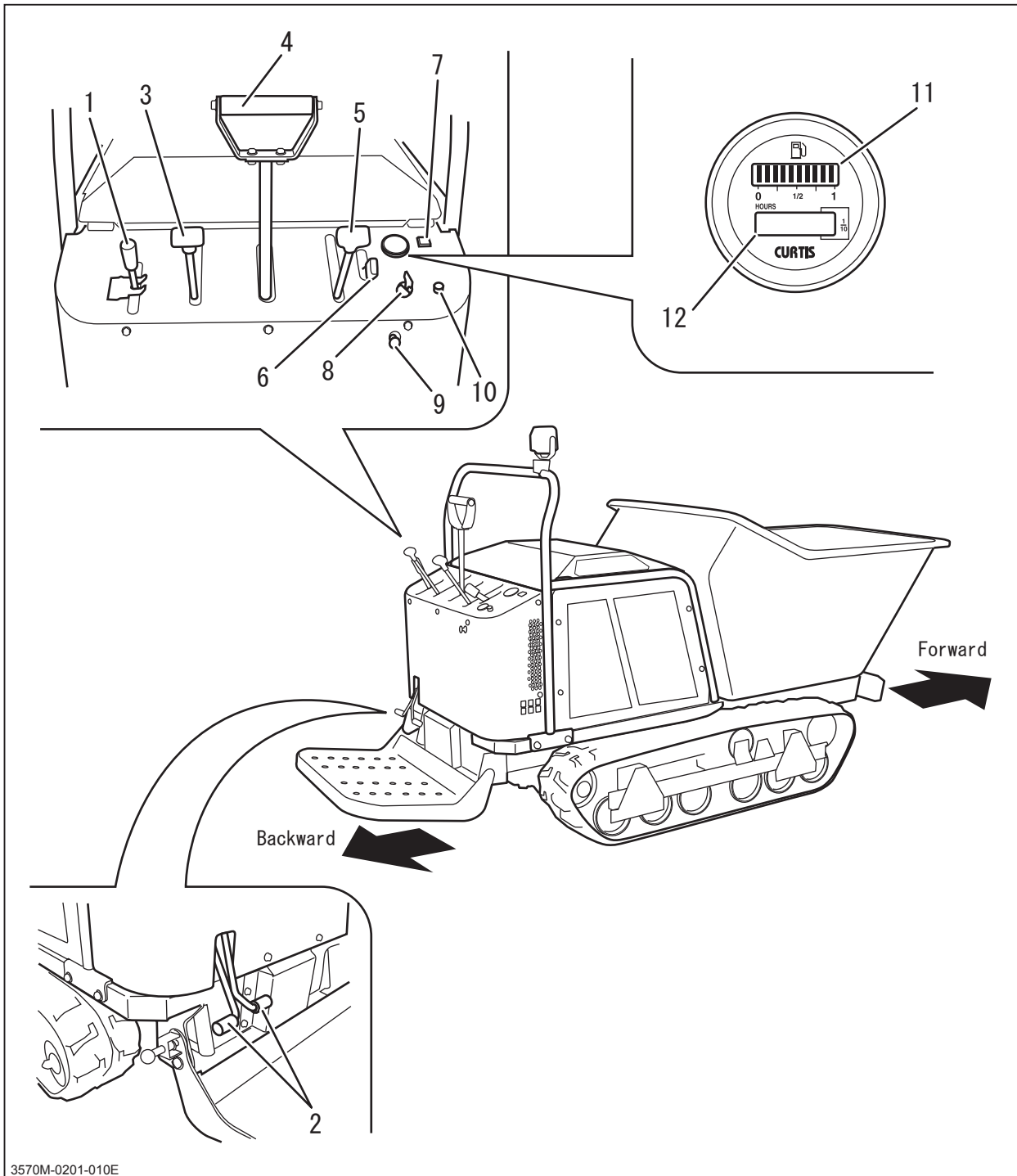
- Do not service the machine when the engine is running.
- Make certain that there is adequate ventilation when operating the engine indoors to prevent poisoning by exhaust gas.
- Make sure all hydraulic line connectors are tight and all hydraulic hoses and lines are in good condition before applying 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.**

# 2

# Controls and Components

## Name and Function of Controls



**1 Dump Lever** ..... Raises or lowers the bucket.

**2 Dump Pedals** ..... Coupled to the dump lever and raises or lowers the bucket.

- 3 **Clutch Lever** . . . . . Disengages the clutch to help start the engine in the cold.
- 4 **Control Stick**. . . . . Control stick is used to control the traveling direction (forward or backward, as well as left or right) and speed of the machine.
- 5 **Parking Brake Lever** . . . . . Parking brake lever is used to park the machine securely.
- 6 **Throttle Lever**. . . . . Throttle lever is used to control the engine speed.
- 7 **Engine Oil Warning Lamp** . Lights up when the Main Switch is turned to the [ | (run)] position. If there is no problem, it goes off when the engine is started. If a problem is detected when the engine is running, it lights up.
- 8 **Main Switch** . . . . . Main switch is used to start or stop the engine.
- 9 **Choke Knob** . . . . . Pulling the choke knob closes the choke valve to help start the engine in the cold weather. Push the knob back to open the valve once the engine starts.
- 10 **Horn Button** . . . . . Pressing this button sounds the horn. Use this for warning during traveling or signaling during operation.
- 11 **Fuel Gauge** . . . . . Displays the amount of fuel in the tank.
- 12 **Hour Meter** . . . . . Hour meter displays and records the total amount of time the machine has been in use, in the unit of 0.1 hour.

## Product Specifications

**⚠ CAUTION!**

· Use this product properly after understanding its specifications thoroughly.

Model and Type			SC75	
			One-Way Dump	
Machine Mass		kg(lbs)	640(1412.8)	
Maximum Payload		kN(lbs)	7.35(1653.5)	
Dimensions	Overall Length		mm(in.)	2695(106.1)
	Overall Width		mm(in.)	900(35.4)
	Overall Height		mm(in.)	1470(57.9)
	Track Contact Length		mm(in.)	965(38.0)
	Track Gauge		mm(in.)	700(27.6)
	Ground Clearance		mm(in.)	115(4.5)
	Loading Deck Height		mm(in.)	450(17.7)
Loading Deck	I n n e r Dimensions	Length	mm(in.)	1295(51.0)
		Width	mm(in.)	765(30.1)
		Height	mm(in.)	540(21.3)
	Volume	Struck	m <sup>3</sup> (cu. ft.)	0.41(14.5)
Engine	Model		Robin EH65DS	
	Type		Air-cooled 4-cycle V-twin Gasoline	
	Cylinder (Bore×Stroke)		mm(in.)	80X65(3.15×2.56)
	Displacement		cm <sup>3</sup> (cu. In.)	653(39.8)
	Maximum Output		kw(PS)/rpm	16.1(22)/3,600
	Maximum Torque		N•m(lbf•ft)/rpm	45.6(33.6)/2,500
	Starter System		Electric	
	Fuel		Automotive Unleaded Gasoline	
	Fuel Consumption		g/kW•h(oz/PS•h)	310(8.11)
	Fuel Tank Capacity		L(US gal.)	20(5.3)
	Oil Capacity		L(US qt.)	1.4(1.48)[1.55(1.64); including oil filter]
	Ignition		Electronic Ignition	
	Spark Plugg		NGK BP6ES	
Electrical	Battery Type		40B19R	
	Battery Capacity		V/AH	12/28
	Working Lamp		V/W	12/18.4

Model and Type			SC75
			One-Way Dump
Performance	Speed	km/h(mph)	0-8.0(0-5.0)
	Minimum Turning Radius	m(ft)	1.5(4.9)
	Gradability	Degrees	25(Empty)
HST Oil Capacity		L(US qt.)	23(24.3)
Drive Train	Main Transmission		Twin HST
	Steering		Twin HST, 1 Lever
	Brakes		Internally Expanding
	Track Size		200×42×72
	Transmission Oil Capacity		L(US qt.) style="text-align: center;">2.0(2.11)
Dumping System	Dumping System		Front Dump
	Hydraulic Pump	Type	Gear Pump
		Max. Speed	rpm style="text-align: center;">2,300
		Max. Discharge	L/min(US Gal./min) style="text-align: center;">17.6(4.65)
	Relief Pressure		MPa(psi) style="text-align: center;">9.8(1421)
	Cylinder(Bore X Stroke)		mm(in.) style="text-align: center;">60X400(2.36X15.75)
	Performance	Max. Angle	Degrees style="text-align: center;">90
		Lifting Time	Sec style="text-align: center;">4.0
		Lowering Time	Sec style="text-align: center;">3.4
Hydraulic Fluid Capacity		L style="text-align: center;">Shared with HST System	

\*These specifications are subject to change without notice.

## Contents of the Tool Bag

No.	C o n t e n t	Q u a n t i t y	N o t e
1	Operator's Manual	1	This Manual
2	Operator's Manual for the Engine	1	
3	Engine Service Tool	1	for Servicing the Engine

## Preparation

### Start up Inspection

Always perform an inspection before use.

Refer to the **Maintenance Schedule** (page 28) for the inspection schedule and procedure.

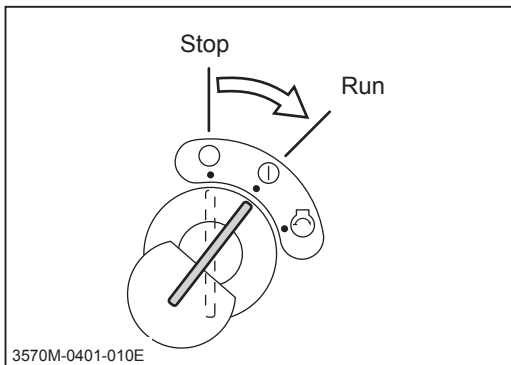
### Checking and Filling Fuel

#### ⚠ WARNING!

- Keep fire and spark away when handling fuel.
- Always stop the engine before refueling.
- Do not fill beyond the limit (bottom of the filler filter) so that fuel will not overflow. In case fuel is spilt, wipe out immediately.

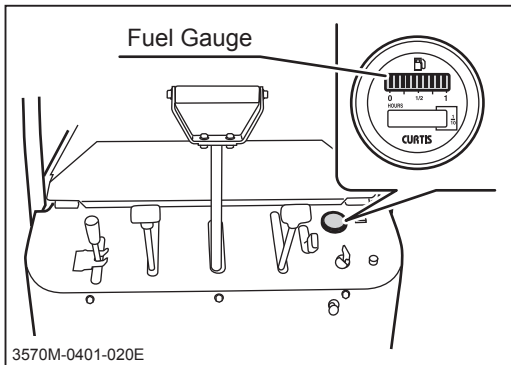
#### ⚠ CAUTION!

- Pinch point; watch your hands when shutting the engine hood.

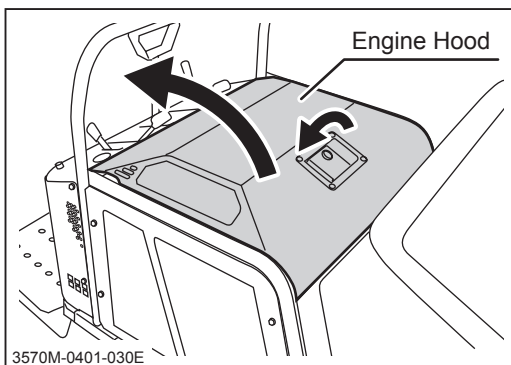


#### Checking Fuel

1. Insert the key into the main switch.
2. Turn the main switch to [ | (run)] position.

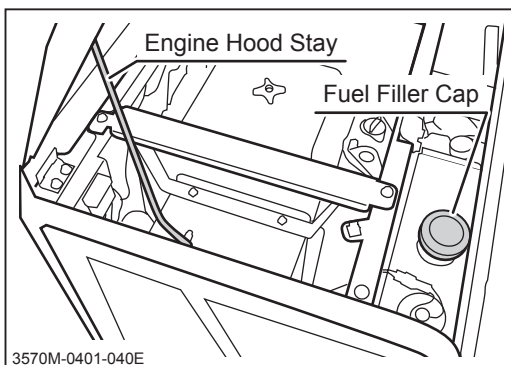


3. Check the fuel gauge.



## Filling Fuel

1. Open the engine hood.



2. Hold the engine hood open with the engine hood stay. Open the fuel filler cap and fill fuel. Put the fuel filler cap back in place and tighten it securely. Undo the engine hood stay and close the engine hood.

## NOTE

- Fuel : Automotive Unleaded Gasoline
- Fuel Tank Capacity : 20L(5.3US gal.)



## Driving

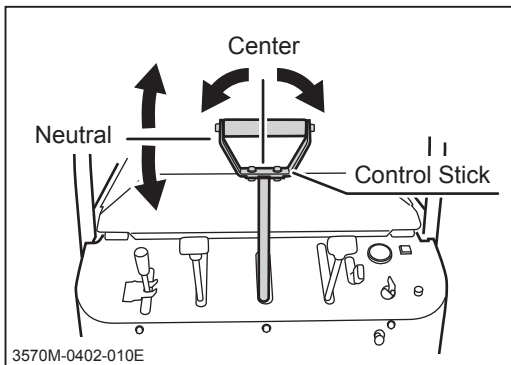
### Starting

#### ⚠ WARNING!

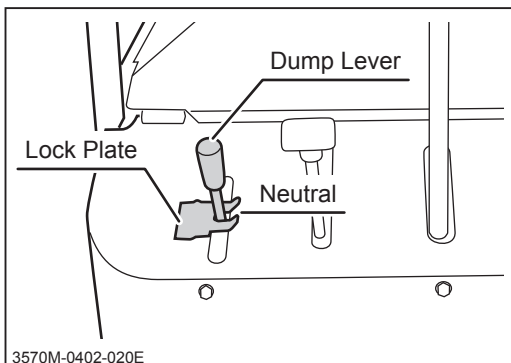
- Always start and run the engine in a well ventilated place.
- Always make certain of the safety of your surroundings when starting the engine.

#### ⚠ CAUTION!

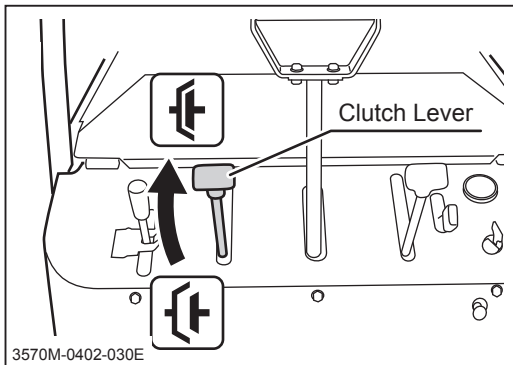
- Do not turn the starter when the engine is running. The starter motor and/or the engine may be damaged.
- Do not turn the starter for more than 15 seconds. If the engine does not start, wait for 30 seconds or more before attempting to start again.
- In the winter or cold climate, warm up the engine thoroughly before driving the machine. Driving with the cold engine may cause excessive wear.



1. Make sure the control stick is in the neutral position and on center (not twisted).

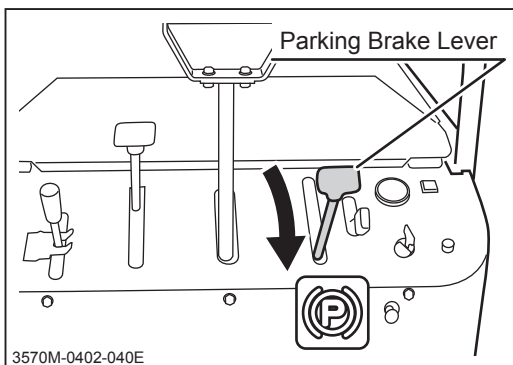


2. Make sure the dump lever is in the neutral position and the lock plate is in the locked position.



## Normal Starting

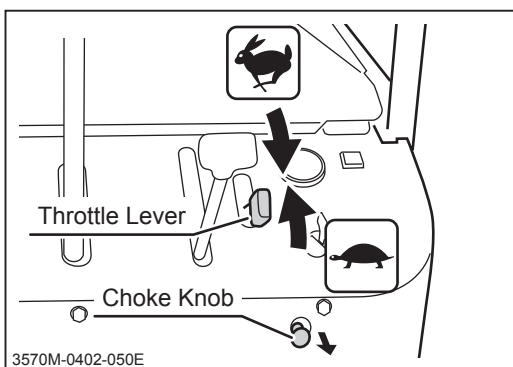
3. Move the clutch lever to [⚡ (engaged)] position.



4. Move the parking brake lever to [Ⓟ (engaged)] position.

## NOTE

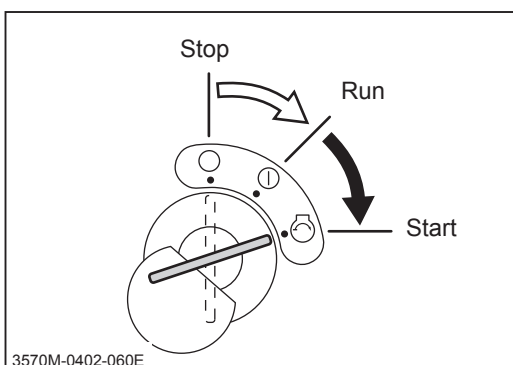
- The engine cannot be started unless the control stick is in neutral and centered, and the parking brake is in [Ⓟ (engaged)] position. This is due to the safety feature on this product.



5. Set the throttle lever in between [🐘 (fast)] and [🐢 (slow)] positions.
6. Pull the choke knob.

## NOTE

- When the engine is warm, it is not necessary to pull the choke knob.



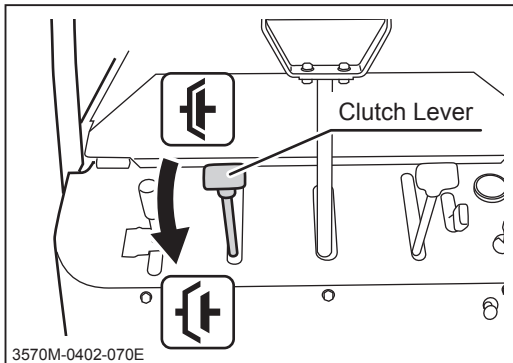
7. Insert the key into the main switch.
8. Turn the main switch to [🔑 (start)] position to start the engine. Once the engine starts, release the key immediately; the switch will automatically return to [ | (run)] position.

9. Move the throttle lever to [⬅️ (slow)] position.
10. Push the choke knob to the original position.
11. Allow the engine to warm up by running it for 3-5 minutes without any load. (It is not necessary when the engine is already warm.)

## NOTE

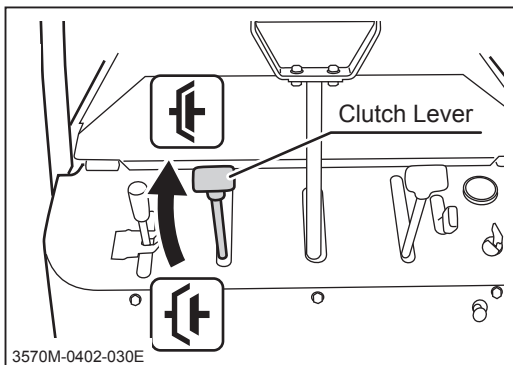
---

- Drive the machine gently in the first week or so, (40-50 hours) of use after purchase for breaking-in.



## Starting in Cold Weather

3. Move the clutch lever to [⬇️ (disengaged)] position.
4. Follow 4 to 10 in the normal starting procedure above.



5. Move the clutch lever to [⬆️ (engaged)] position.
6. Allow the engine to warm up by running it for 3-5 minutes without any load.

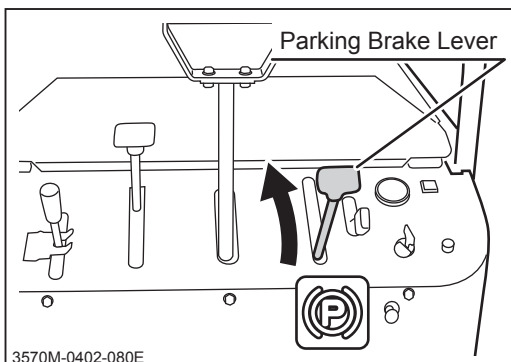
## Driving

### **⚠ WARNING!**

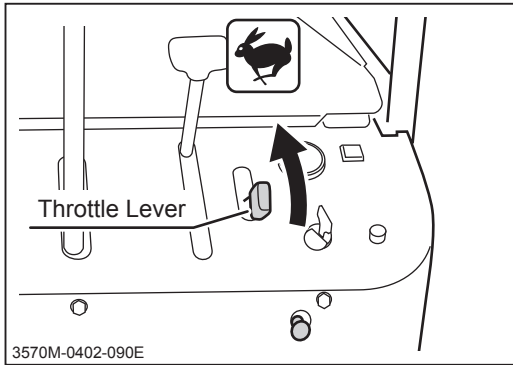
- Do not allow bystanders to come near the machine when driving.
- Always make certain of the safety of your surroundings before driving; start slow.
- Always make certain of the safety of your surroundings before turning
- Do not make sudden start, acceralation, change of speed, change of direction, or stop. Do not turn at speed. Avoid sudden maneuvers; this may cause the operator to fall or the machine to tip over.
- Do not turn the key to [ ○ (off) ] position while traveling. Machine can lose stability and tip over.
- Always move the control stick back to the neutral and centered position before releasing. Letting it go from other operationg positions may result in sudden deceleration and can cause the machine to tip or the operator to fall.


### **⚠ CAUTION!**

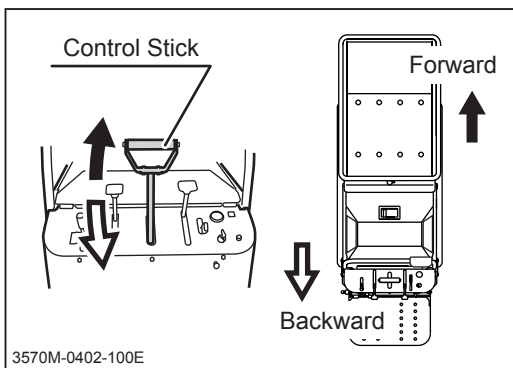
- Do not operate the control stick when the parking brake is in [ (P) (engaged) ] position. It can wear out the brake.



1. Make certain of the safety of your surroundings.
2. Move the parking brake lever away from [ (P) (engaged) ] position.



3. Move the throttle lever toward [  (fast)] position to increase the engine speed.



### Moving Forward

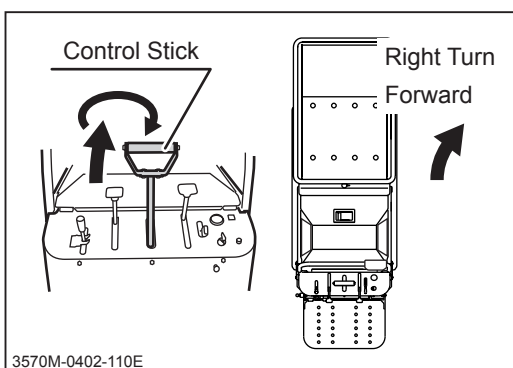
4. Move the control stick forward gradually to move the machine forward. The angle of the control stick controls the machine speed.

### Moving Backward

5. Move the control stick backward gradually to move the machine backward. The angle of the control stick controls the machine speed.

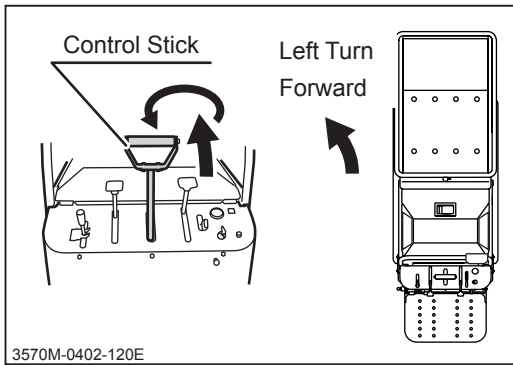
### NOTE

- See Specifications (page 13) for the speed range.

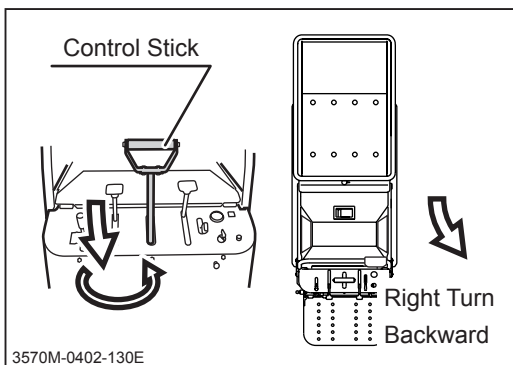


### Turning while Traveling Forward

6. Move the control stick gradually forward and twist it right (clockwise) to turn right.

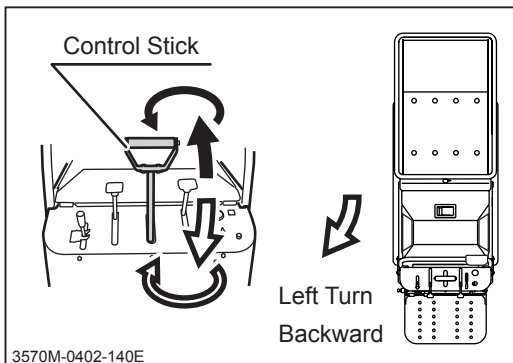


7. Move the control stick gradually forward and twist it left (counter-clockwise) to turn left.



### Turning while Traveling Backward

8. Move the control stick gradually backward and twist it left (counter-clockwise) to turn right.

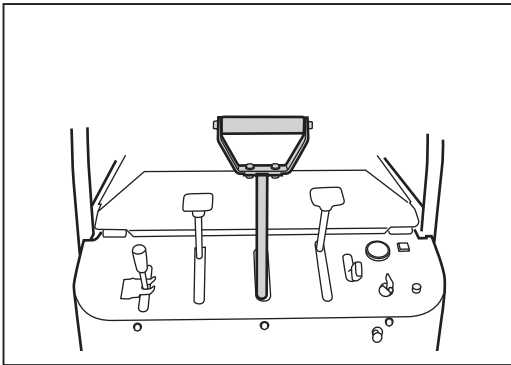


9. Move the control stick gradually backward and twist it right (clockwise) to turn left.

## Stopping

### ⚠ WARNING!

- Do not make a sudden stop. The machine may skid or tip over.
- Always park on a firm, level place. Never park on a potentially dangerous place.

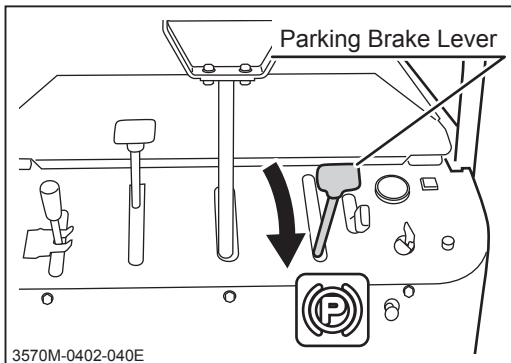


1. Move the control stick gradually to the neutral and centered (not twisted) position.

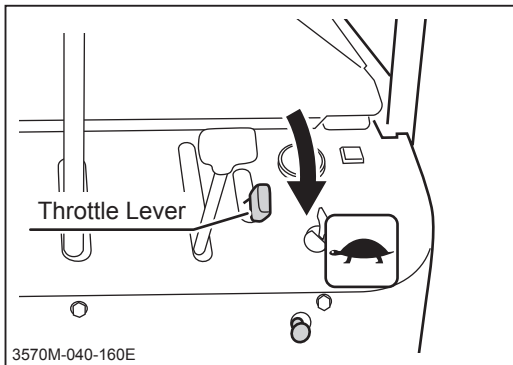
## Parking

### ⚠ WARNING!

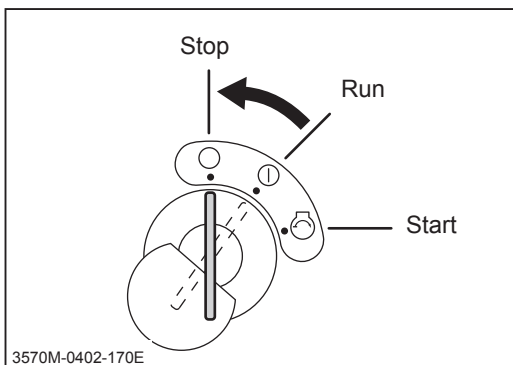
- Always park on a firm, level place. Never park on a potentially dangerous place.
- Do not park on a slope. If it is absolutely necessary to park the machine on a slope, make certain to apply parking brake firmly and block the tracks with chocks.



1. Stop the machine.
2. Move the parking brake lever to [(P) (engaged)] position.



3. Move the throttle lever toward [ 🐢 (slow) ] position to decrease the engine speed.



4. Turn the main switch to [ ○ (off) ] position. Remove the key from the main switch.

## NOTE

- Leaving the main switch in [ | (on) ] position drains the battery and cause it to discharge.



## Working

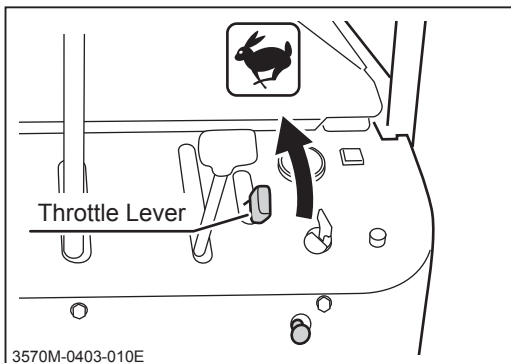
### Dumping

#### ⚠ WARNING!

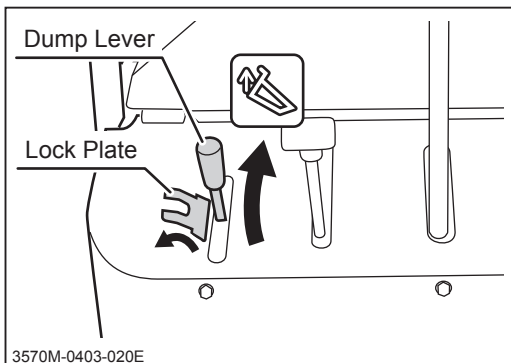
- Always make certain of the safety of your surroundings when dumping.
- Avoid dumping on a slope. If it is absolutely necessary to dump on a slope, arrange it so that the machine remains level, or the machine may tip over.

#### ⚠ CAUTION!

- Always run the engine when dumping.
- When lowering the loaded bucket, slow the engine speed and lower the bucket gently.

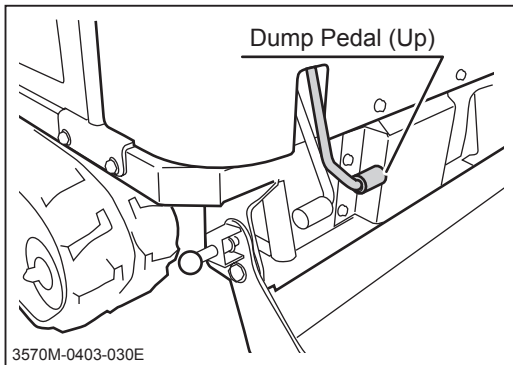


1. Move the throttle lever to [ 🐇 (fast)] position to increase the engine speed.



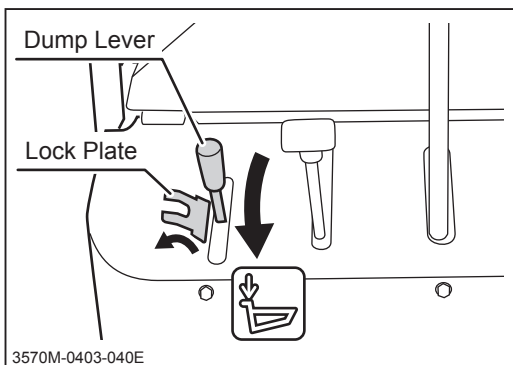
#### Raising the Bucket with Dump Lever

2. Turn the lock plate to the side so that the dump lever can be moved.
3. Move the dump lever gradually toward [ 🐇 (up)] to raise the bucket.
4. When the bucket reaches its upper limit, a hissing noise is heard; move the dump lever back to [ ● (neutral)] position.



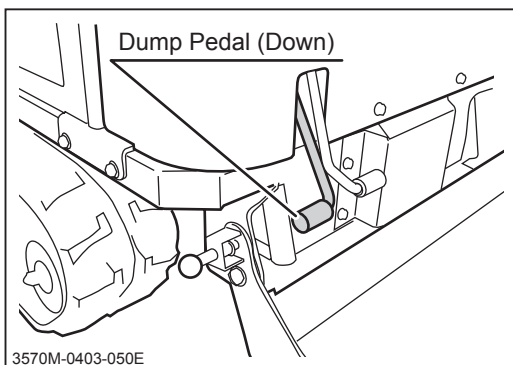
## Raising the Bucket with Dump Pedal

2. Turn the lock plate on the dump lever to the side so that the dump lever can be moved. Dump pedal is linked to the dump lever.
3. Step lightly on the dump pedal (up) to raise the bucket.
4. When the bucket reaches its upper limit, a hissing noise is heard; release the pedal.



## Lowering the Bucket with Dump Lever

5. Move the dump lever gradually toward [ ▽ (down)] to lower the bucket.
6. When the bucket reaches its lower limit, a hissing noise is heard; move the dump lever back to [ ● (neutral)] position.
7. Turn the lock plate back in place to lock the dump lever.



## Lowering the Bucket with Dump Pedal

5. Step lightly on the dump pedal (down) to lower the bucket.
6. When the bucket reaches its lower limit, a hissing noise is heard; release the pedal.
7. Turn the lock plate back in place to lock the dump lever.

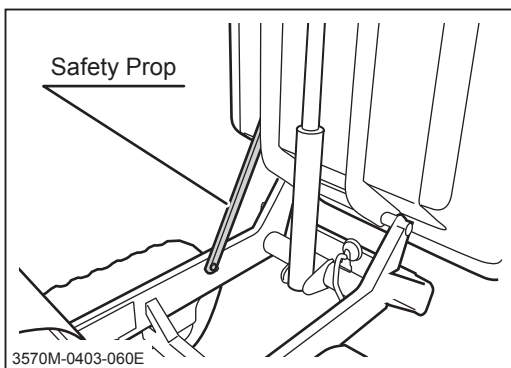
## Using Safety Prop

### **⚠ WARNING!**

- Place the safety prop under the bucket when inspecting or working under the bucket.

### **⚠ CAUTION!**

- Make certain to undo the safety prop before lowering the bucket.

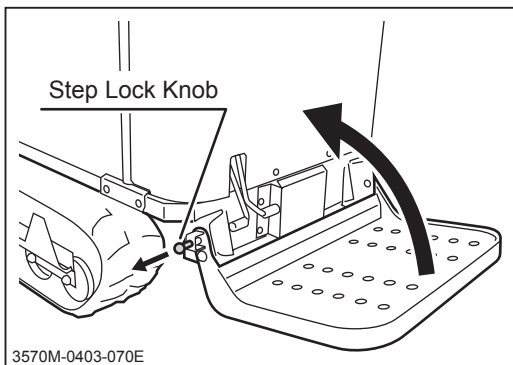


1. Raise the bucket.
2. Hold the bucket with the safety prop.

## Folding/Unfolding Step

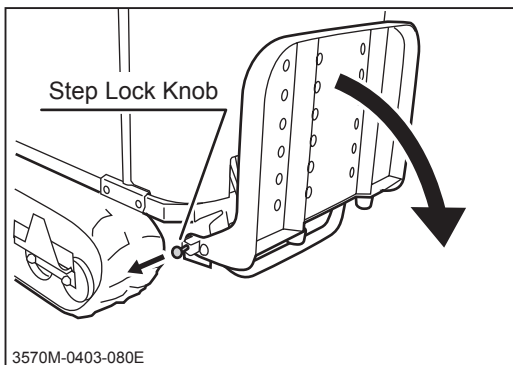
### **⚠ WARNING!**

- Hold the step firmly when folding or unfolding the step. Make certain that hands or fingers are not in the way to be caught by the step when folding or unfolding.
- Make certain that the step is securely locked with the step lock in either position.



### **Folding the Step**

1. Pull the step lock knob.
2. Fold the step. Once the step is fully folded, release the step lock knob so that the step locks in this position.



### **Unfolding the Step**

1. Hold the step firmly and pull the step lock knob.
2. Unfold the step. Once the step is fully unfolded, release the step lock knob so that the step locks in this position.

**Maintenance Schedule**

**⚠️ WARNING!**

- Follow the scheduled maintenance as described below. Failure to do so may result in mechanical or property damage, injury or death.

- Perform a pre-startup inspection (PSI) before each use, a monthly inspection once a month, and a yearly inspection once a year.
- Some maintenance procedures described below may require special knowledge or tools and instruments. Contact your Canycom representative to perform such procedures.

Item		Description	Schedule			Note	
			PSI	Mon	Year		
Engine	General	<b>Starting</b>	Engine shall start easily without making any irregular noise.	√	√	√	
		<b>Running</b>	Engine speed shall be set properly at idle and at full without loading. Engine shall stay running smoothly.		√	√	Contact your Canycom representative for inspection.
			When accelerating engine, throttle lever shall move smoothly, and engine shall accelerate smoothly without stopping or knocking.	√	√	√	
		<b>Exhaust</b>	Warm up engine thoroughly, and observe exhaust sound and gas from idle to fast speed; exhaust sound shall be normal and no smoke shall be observed.	√	√	√	
			There shall be no leak in exhaust system or muffler.		√	√	
		<b>A i r Cleaner</b>	Air cleaner case shall not be deformed or cracked. Case lid and connecting air hose shall be firmly in place.		√	√	
			Cleaner element shall be in good shape without damage or excessive dust.		√	√	Cleaning/Replacing: Page 39
		<b>Fasteners</b>	Bolts and nuts fastening cylinder head, intake and exhaust manifolds shall be tightly fastened. * this may be skipped if there is no gas or water leak found in these areas.			√	

Item		Description	Schedule			Note	
			PSI	Mon	Year		
Engine	General	<b>V a l v e Clearance</b>			√	Contact your Canycom representative for inspection.	
		<b>Compression</b>			√	Contact your Canycom representative for inspection.	
		<b>E n g i n e Mount</b>	Engine base shall be free of cracks or deformation.	√	√	√	
	Mounting bolts and nuts shall not be loose or missing.		√	√	√		
	<b>Lubrication System</b>	Oil shall be clean and at correct level.	√	√	√	Inspecting/Changing: Page 37	
		No noticable oil leak shall be found in head cover, oil pan, or pipes.	√	√	√		
	<b>Fuel System</b>	There shall not be any leak in fuel tank, hoses, or pipes.	√	√	√		
		Fuel hoses shall be free of damage or deterioration.	√	√	√		
		Fuel filter shall not be excessively dirty or clogged.		√	√		
		There shall not be sediments or water in the fuel tank.		√	√		
	<b>Electrical System</b>	<b>S p a r k Plugs</b>	Electrodes shall not be worn, and there shall not be excessive carbon deposit.			√	Cleaning/Replacing: Page 40
		<b>C h a r g e System</b>	Battery shall be charged.			√	Contact your Canycom representative for inspection.
		<b>Battery</b>	Battery electrolyte level shall be correct.		√	√	Inspecting/Filling: Page 53
			Terminals shall be free of marked corrosion and are tightly secured.		√	√	
		<b>Wiring</b>	Connections shall be securely connected.		√	√	
	Wiring shall be free of damages.			√	√		
	<b>Drivetrain</b>	<b>Clutch</b>	Clutch shall not make noise and shall disengage completely when operated at idle.		√	√	
			Clutch shall not slip and engage smoothly.		√	√	

Item	Description	Schedule			Note	
		PSI	Mon	Year		
Drive Train	Drive Belts	Belt tension shall be properly adjusted.		√	√	Inspecting/Adjusting: Page 46
		Belt shall be free of damages, excessive wear, or dirt; shall be free of oil or grease.		√	√	
	Transmission	Irregular noise or overheating shall not be observed.	√	√	√	
		Oil shall be clean and filled to a proper level.		√	√	Replacing: Page 44
		There shall not be oil leak in or around transmission.		√	√	
	HST Pump	Drive the machine forward and backward, turn left and right in both directions; machine shall move normally and free of irregular noise or overheating.	√	√	√	
		Hydraulic fluid shall be filled to a proper level.		√	√	Inspecting/Changing: Page 42
		Hydraulic fluid shall be clean and free of dirt or contamination.		√	√	Inspecting/Changing: Page 42
		There shall be no fluid leak in or around fluid tank.		√	√	
	Linkage	Rods, links, and wires in linkage shall be free of deformation or damage.		√	√	
		Connections shall be free of looseness, excessive play, or missing cotter pins.		√	√	
	Undercarriage	Wheels Sprockets Idlers	Shall be free of cracks, deformation, or excessive wear.	√	√	√
There shall not be excessive play in axle. Irregular noise or overheating shall not be observed when traveling.			√	√	√	
Mounting bolt or nut shall not be loose or missing.			√	√	√	
There shall be no oil leak in or around axle.				√	√	
Tracks		There shall not be marked cut, deterioration, or wear.	√	√	√	
		Track shall be properly tensioned; shall not be too loose or too tight.	√	√	√	Adjusting: Page 41
		Tension bolt shall be free of deformation or corrosion.	√	√	√	

Item	Description	Schedule			Note	
		PSI	Mon	Year		
<b>Brake System</b>	<b>Parking Brake</b>	Parking brake shall work properly.	√	√	√	Adjusting: Page 47
		Parking brake shall be able to hold the machine on a 20-degree slope.		√	√	
	<b>Linkage</b>	Rods, links, and wires in linkage shall be free of deformation or damage.		√	√	
		Connections shall be free of looseness, excessive play, or missing cotter pins.		√	√	
<b>Hydraulic System</b>	<b>Hydraulic Pump</b>	There shall be no leak in or around hydraulic pump.		√	√	
		Fastening bolts and nuts shall not be loose or missing.		√	√	
		No irregular vibration, noise, or heat shall be observed when hydraulic pump is in operation.		√	√	
		Amount and pressure of discharge under load shall be within the standard range specified by the manufacturer. *this may be skipped if irregular vibration, noise, or heat described above is not observed.			√	
	<b>Hydraulic Valve</b>	There shall be no leak in or around hydraulic valve.		√	√	
	<b>Hydraulics Belt</b>	Belt tension shall be properly adjusted.		√	√	Inspecting/Adjusting: Page 52
		Belt shall be free of damages, excessive wear, or dirt; shall be free of oil or grease.		√	√	
	<b>Plumbing</b>	Plumbing shall be free of cracks, damages, twists, or deterioration.		√	√	
		There shall be no leak in pipes, hoses, joints, or seals.		√	√	
		Plumbing shall be mounted properly, and fastening bolts and nuts shall not be loose or missing.		√	√	
Breather shall not be clogged.			√	√		



Item	Description	Schedule			Note	
		PSI	Mon	Year		
Hydraulic System			√	√		
		Shall work smoothly.		√	√	
	Hydraulic Cylinder	There shall be no leak when extending and contracting cylinder.		√	√	
		Extend cylinder fully under load and hold. Stroke shall be within the range specified by manufacturer.			√	
		Cylinder tube and rod shall be free of dents, cracks, bends, or scratches.		√	√	
Cylinder mounting pins shall be free of damages or excessive wear.			√	√		
Body, Chassis, Loading Deck	Chassis Frame	Shall be free of cracks, deformation, or corrosion.		√	√	
		Fastening bolts or nuts shall not be loose or missing.		√	√	
	Body Panels	Shall be free of cracks or deformation.		√	√	
		Doors shall open, close, and lock properly.	√	√	√	
		Fastening bolts or nuts shall not be loose or missing.		√	√	
	Loading Deck Bucket	Loading deck shall be raised and lowered smoothly.		√	√	
		Shall be free of cracks, deformation, or corrosion.		√	√	
		Fastening bolts or nuts shall not be loose or missing.		√	√	
	Safety Prop	Safety prop shall be free of any deformation.		√	√	
	Labels	Warning labels and instruction plates shall be clean, legible, and free of damages.	√	√	√	
Safety Devices	Work Lamp	Work lamp shall work.	√	√	√	
		Lamp lens shall be free of cracks or chipping and water shall not be in the lamp.		√	√	
	Horn	Horn shall work.	√	√	√	

## List of Fluids and Lubricants

Item	Schedule	Grade	Cap.	Ref.
Fuel	As needed.	Automotive Unleaded Gasoline	20 L (5.28 US Gal.)	Page 15
Engine Oil	Fill Inspect daily. Fill as needed. Change Initially - After 8 hours of use. Every 50 hours afterwards.	Engine Oil API rating: SE or better. SAE rating: 10W-30	1.4 [1.55]L (1.48 [1.64] US qt.)	Page 37
Transmission Oil	Change Initially - After 50 hours of use. Every 100 hours afterwards.	Gear Oil API rating: GL-4 or 5 SAE rating: 80	2.0L (2.11 US qt.)	Page 44
HST Fluid	Change Initially - After 50 hours. Every 500 hours afterwards.	High viscosity index hydraulic fluid, ISO VG46	23L (6.08US Gal.)	Page 42
Battery Electrolyte	Inspect daily.	Distilled Water	-	Page 53

\* Numbers in the square brackets [ ] indicate the capacity including the oil filter cartridge.

## Greasing and Lubrication Points

Point	Schedule	Grade	Cap.	Ref.
Greasing Points	6 months after the purchase. Every 6 months afterwards.	Chassis Grease	-	Page 51
Lubrication Points	6 months after the purchase. Every 6 months afterwards.	Gear Oil API rating: GL-4 or 5 SAE rating: 80	-	Page 51

## List of Consumables and Spares

Item	Part No.	Schedule	Qty.	Ref.
<b>Engine</b>				
Air Cleaner Element	-	Inspect every 50 hours. Replace if defective.	1	Page 39
Oil Filter	-	Initially: 50 hours. Every 150 hours afterwards.	1	Page 39
Spark Plug(NGK BP6ES)	-	Replace if defective.	2	Page 40
<b>Drive Train</b>				
Drive Belt (SB48)	08521500048	Replace if defective.	2	Page 46
Track	35702021000	Replace if defective.	2	Page 41
Brake Lining	73014007000	Replace if defective. (Replace in pairs)	2	Page 47
Suction Filter	36636029000	Every 500 hours.	1	Page 43
Line Filter	35706161000	Every 500 hours.	1	Page 43
Hydraulic Hose (HST)	-	Every 2 years or if defective.	1	
<b>Electrical System</b>				
Battery (40B19R)	37053901000	Replace if defective.	1	Page 53
Fuse 5A	-	Replace if defective.	3	Page 55
Fuse 30A	-	Replace if defective.	1	Page 55
<b>Hydraulic System</b>				
Hydraulics Belt (LA35)	08511600035	Replace if defective.	1	Page 52
Hydraulic Hose (Dump)	-	Every 2 years or if defective.	1	
Hydraulic Hose (Oil Cooler)	-	Every 2 years or if defective.	1	

### NOTE

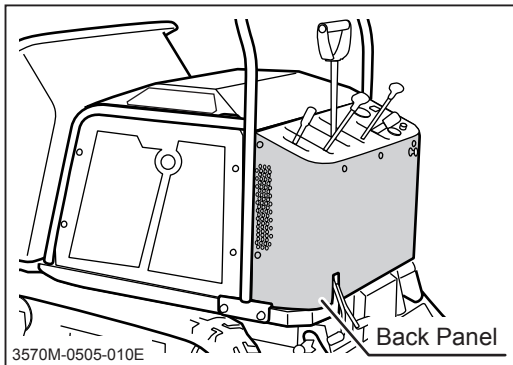
- Rubber products such as the hydraulic hose deteriorate over time. Replace them every 2 years.

## Removing and Installing Body Panels

### ⚠ CAUTION!

- Cut or pinch hazard exists when removing or installing body panels; beware of sharp edges and pinch points.
- Make certain to reinstall panels after removing for repairs or inspection.

### Engine Compartment

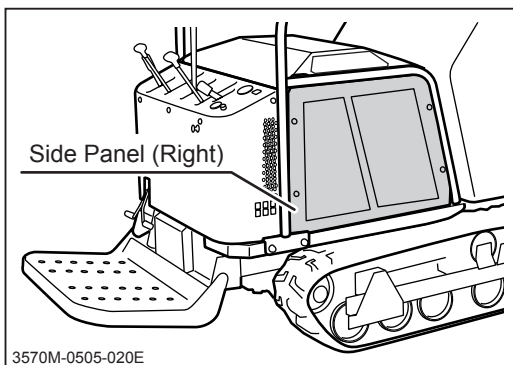


#### Removing the Back Panel

1. Unfasten (9) bolts to remove the back panel.

#### Installing the Back Panel

1. Hold the back panel in place and fasten bolts to install the back panel.

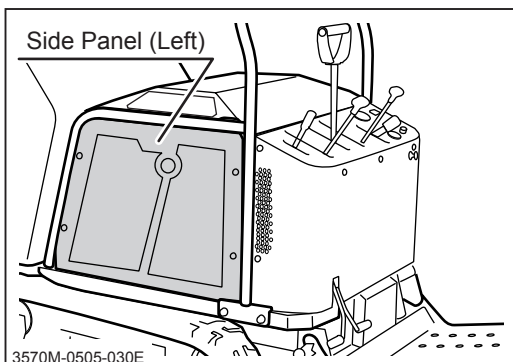


#### Removing the Side Panel (Right)

1. Unfasten (4) bolts to remove the right side panel.

#### Installing the Side Panel (Right)

1. Hold the right side panel in place and fasten bolts to install the right side panel.

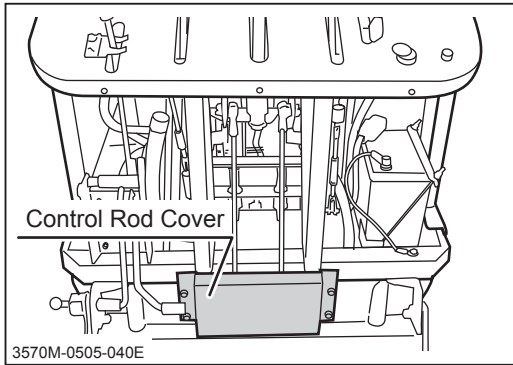


#### Removing the Side Panel (Left)

1. Unfasten (4) bolts to remove the left side panel.

#### Installing the Side Panel (Left)

1. Hold the left side panel in place and fasten bolts to install the left side panel.

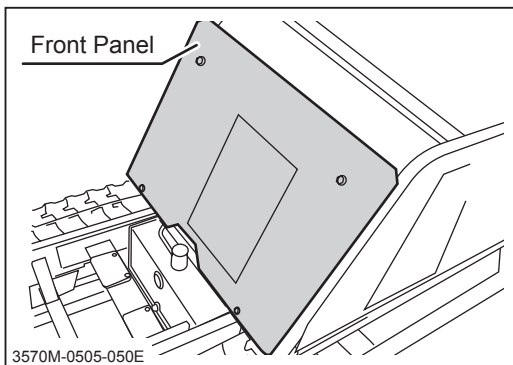


### Removing the Control Rod Cover

1. Remove the back panel. (Page 35)
2. Unfasten (4) bolts to remove the control rod cover.

### Installing the Control Rod Cover

1. Hold the control rod cover in place and fasten bolts to install the control rod cover.
2. Install the back panel. (Page 35)



### Removing the Front Panel

1. Raise the bucket.
2. Hold the bucket with the safety prop.
3. Unfasten (4) bolts to remove the front panel.

### Installing the Front Panel

1. Hold the front panel in place and fasten bolts to install the front panel.
2. Undo the safety prop and lower the bucket.

## Engine

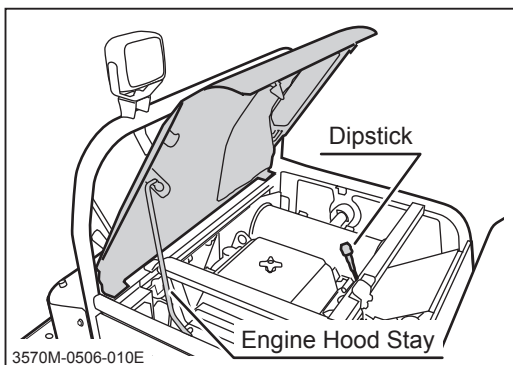
### **⚠ WARNING!**

- Always stop the engine before servicing.
- An engine that has been running is very hot. Allow the engine to cool before servicing, or severe burns may result.

## Engine Oil

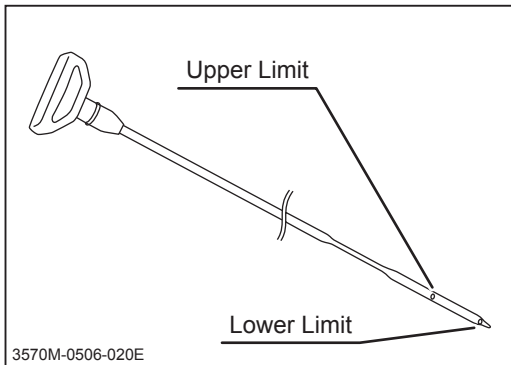
### **⚠ CAUTION!**

- Dispose of the drained oil properly.
- Make certain to fill the engine with correct grade of oil to the specified level. Insufficient amount or wrong grade of oil reduces performance and may cause permanent damage to the engine.



### **Inspecting**

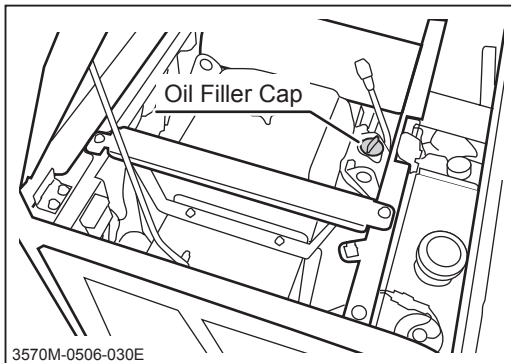
1. Park the machine on a level surface.
2. Open the engine hood and hold it in place with the engine hood stay.



3. Pull out the dip stick. Wipe oil off of the dipstick with clean cloth.
4. Insert the dipstick and pull it out again.
5. Check oil level. Oil level should be between the two dimples indicating the upper and lower limits. If the level is low, fill oil.
6. Visually inspect oil. If oil is dirty or its viscosity is not normal, change it.

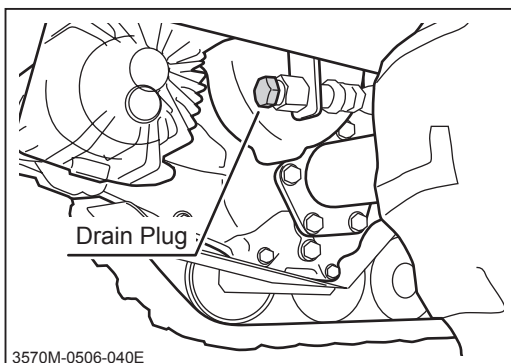
#### NOTE

- To obtain correct reading, check oil level before starting, or wait about 10 minutes after stopping the engine to allow oil to drain back to the oil pan.
- Always check oil level on a level surface.



#### Filling

1. Remove the oil filler cap.
2. Follow the instructions in the **Operator's Manual for the engine** to fill oil.
3. Check oil level.
4. Put the oil filler cap back in place and tighten it securely.



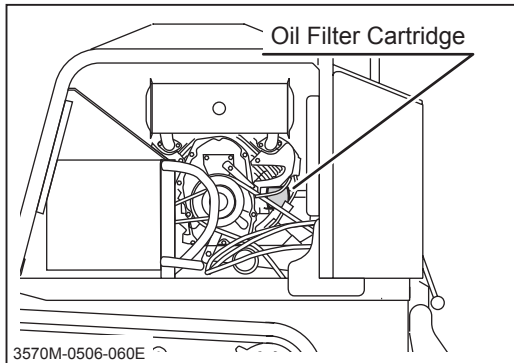
#### Changing

1. Have an appropriate oil drain pan.
2. Remove the drain plug to drain oil.
3. Put the drain plug back in place and tighten it securely.
4. Fill oil.

#### NOTE

- **Oil Capacity: 1.4L(1.48US qts.) [1.55L (1.64 US qts.) when changing the oil filter cartridge.**
- **Removing the oil filler cap helps drain oil faster.**

## Oil Filter

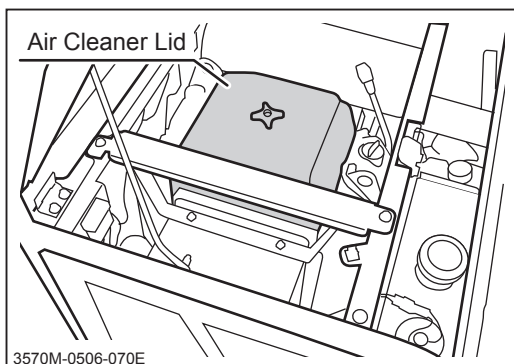


1. Remove the left side panel and back panel. (Page 35)
2. Drain oil. (Page 37)
3. Follow the instructions in the **Operator's Manual for the engine** to change the oil filter cartridge.
4. Fill oil. (Page 37)
5. Run the engine and make sure that there is no leak at the filter mount.
6. Install panels back in place.

## Air Cleaner

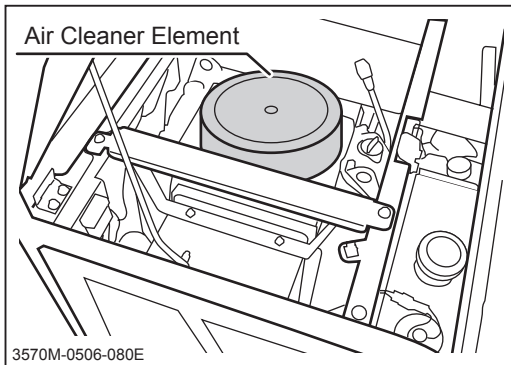
### **⚠ CAUTION!**

- Clean air cleaner element regularly. Dirty cleaner element reduces engine performance and life.
- Replace the cleaner element if damaged.



1. Open the engine hood and hold it in place with the engine hood stay.
2. Remove the air cleaner lid.



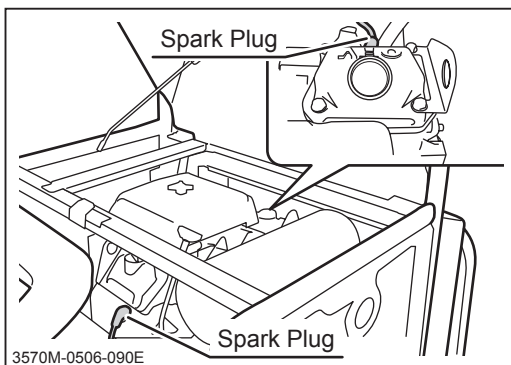


3. Remove the air cleaner element.
4. Follow the instructions in the **Operator's Manual for the engine** to clean or change the air cleaner element.
5. Put the air cleaner element and air cleaner lid back in place.
6. Undo the engine hood stay and close the engine hood.

## Spark Plugs

### ⚠ CAUTION!

- Never pull ignition cable when removing a spark plug cap. Conductor in the cable may be severed or damaged.
- If a spark plug is damaged, replace it with a new one.



1. Open the engine hood and hold it in place with the engine hood stay.
2. Remove the spark plug caps and the spark plugs. Spark plugs are located in the front and rear of the engine.
3. Follow the instructions in the **Operator's Manual for the engine** to inspect, clean, or change the spark plugs.
4. Install the spark plugs and the spark plug caps. Undo the engine hood stay and close the engine hood.

## Drive Train

### ⚠ WARNING!

- Stop the engine when servicing the drive train.
- Allow the machine to cool off before servicing. The engine is very hot after operation and may pose a burn hazard.

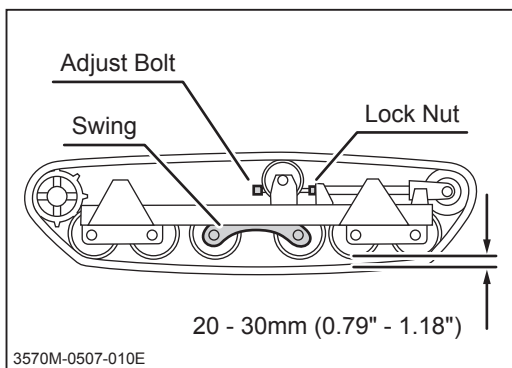
## Tracks

### ⚠ WARNING!

- Support the machine securely on a firm, level surface with jack stands when servicing.
- Make certain to adjust the track tension properly. Improperly tensioned tracks may wear or come off, resulting in property damage, serious injury or death.

### NOTE

- The track stretches during its use-life. Inspect and adjust regularly.



### Inspecting

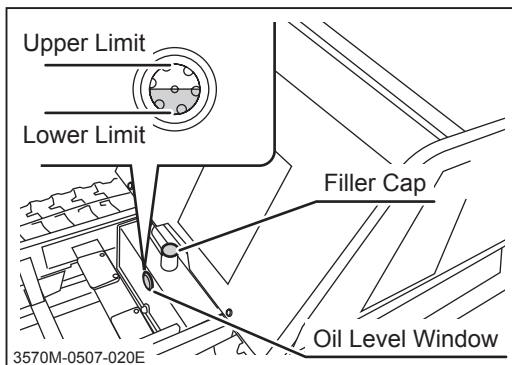
1. Hoist one side of the machine so that the machine is laterally parallel to the ground. (Page 63)
2. Inspect the clearance between the track and the second wheel to be between 20 and 30mm (0.79" - 1.18"). Adjust the tracks if the clearance is not within this range.
3. Lower the machine.

**Adjusting**

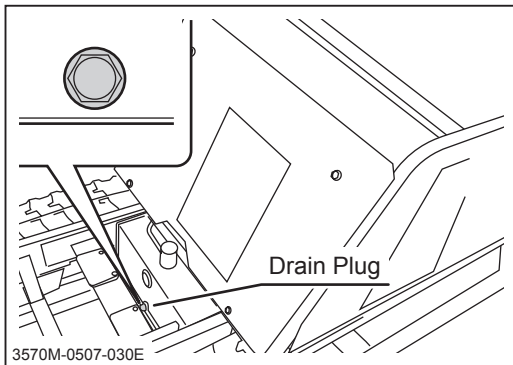
1. Jack up and support the machine parallel to the ground.
2. Loosen the lock nut.
3. Adjust the track with adjust bolt so that the clearance between the track and the wheels at the furthest are between 20 and 30mm (0.79" - 1.18").
4. Tighten the lock nut
5. Lower the machine.

**HST (HydroStatic Transmission) Fluid****⚠ CAUTION!**

- Dispose of the drained fluid properly, according to the national and local regulations.

**Inspecting/Filling**

1. Park the machine on a level ground.
2. Lift the bucket and hold the bucket with the safety prop. (Page 26) Lock the dump lever with lock plate.
3. Visually inspect the oil level window.
4. If the level is low, open the filler cap and fill fluid. Put the filler cap back in place.
5. Undo the safety prop. Lower the bucket.



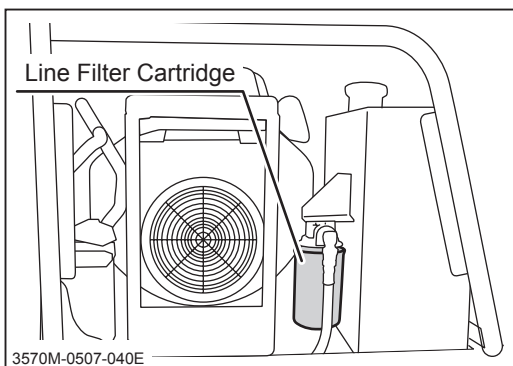
## Changing

1. Have an appropriate oil drain pan.
2. Lift the bucket and hold the bucket with the safety prop. (Page 26) Lock the dump lever with lock plate.
3. Remove the drain plug to drain fluid.
4. Wipe the drain plug and drain hole clean. Put the drain plug back in place. Tighten it securely.
5. Open the filler cap to fill fluid. Put the filler cap back in place.
6. Undo the safety prop and lower the bucket.
7. Start the engine and engage the clutch to circulate the fluid.
8. Inspect the fluid level.

## Line Filter and Suction Filter

### **⚠ CAUTION!**

- **Burn hazard; pay special attention when handling the hydraulic fluid. Hot fluid may cause burns.**

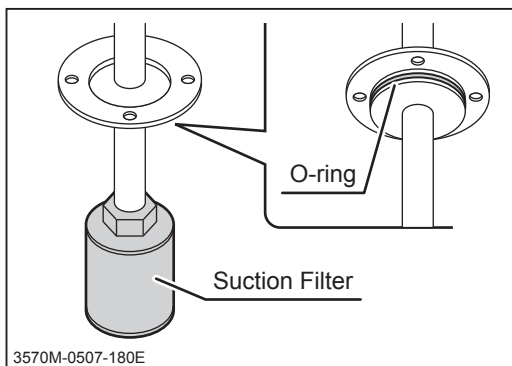
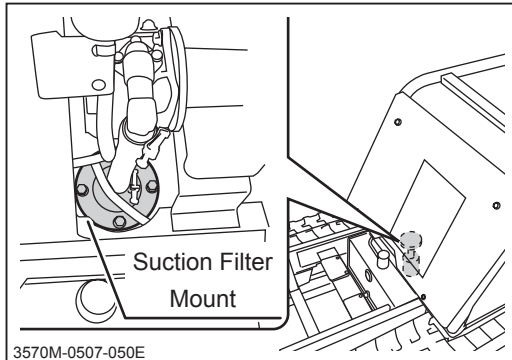


## Changing Line Filter

1. Remove the right side panel (Page 35).
2. Drain HST fluid. (Above, "Changing")
3. Remove the line filter cartridge with an oil filter wrench.
4. Have a new line filter cartridge. Apply clean hydraulic fluid (oil) on the cartridge oil seal evenly.
5. Screw in the new line filter cartridge. Tighten it by hand until the cartridge is firmly in place.
6. Fill HST fluid.
7. Start the engine and engage the clutch to circulate the fluid. Watch for a leak.
8. Install the right side panel. (Page 35)

**NOTE**

- Replace both the line filter cartridge and the suction filter element when hydraulic fluid is changed.
- Do not use the filter wrench when tightening the filter cartridge. Tighten it by hand.

**Changing Suction Filter**

1. Park the machine on a level ground.
2. Lift the bucket and hold the bucket with the safety prop. (Page 26) Lock the dump lever with lock plate.
3. Remove the front panel. (Page 36)
4. Undo the bolts and remove the suction filter mount.
5. Unfasten the suction filter with a wrench and install a new filter. Tighten it securely.
6. Coat the O-ring with hydraulic fluid evenly and insert the suction filter mount in the tank. Make sure to insert it straight so that the O-ring does not get out of the groove. Fasten the suction filter mount with bolts.
7. Install the front panel. (Page 36)
8. Undo the safety prop. Lower the bucket.

**NOTE**

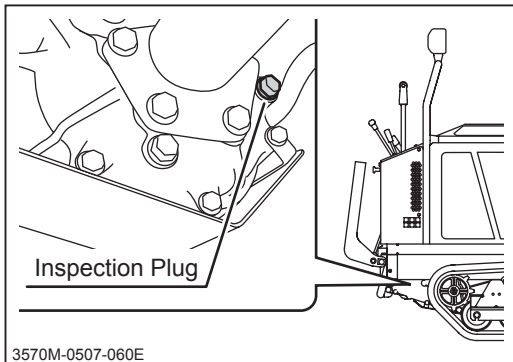
- Replace both the line filter cartridge and the suction filter element when hydraulic fluid is changed.

**Transmission Oil****⚠ WARNING!**

- Always park the machine on a level surface and block the tracks with chocks when working under the machine.

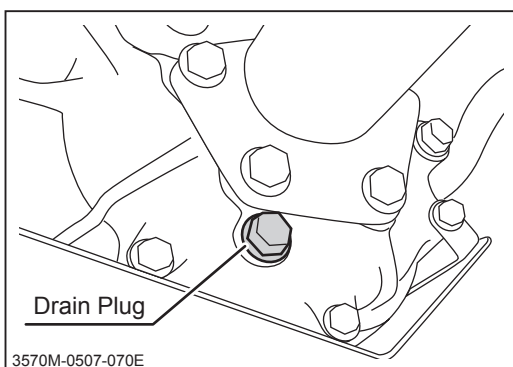
## ⚠ CAUTION!

- Dispose of the drained oil properly, according to the national and local regulations.



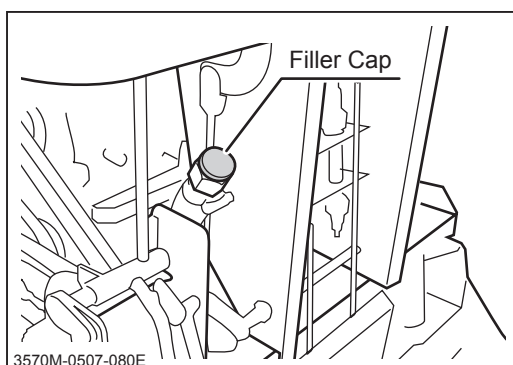
### Inspecting

1. Park the machine on a level ground.
2. Remove the inspection plug and inspect if the oil level is at the inspection hole. Fill oil if the level is low.
3. Visually inspect the condition of the oil. If dirty, change it.
4. Visually inspect the seal washer on the inspection plug.
5. Clean the inspection plug and seal washer. Put the inspection plug back in the inspection hole and tighten it securely.



### Draining

1. Have an appropriate oil drain pan.
2. Remove the back panel. (Page 35)
3. Remove the drain plug to drain the oil.
4. Put the drain plug back in place and tighten it securely.



### Filling

1. Remove the back panel. (Page 35)
2. Remove the filler cap and fill a sufficient amount of oil.
3. Inspect the oil level.
4. Put the filler cap back in place.
5. Install the back panel. (Page 35)

### NOTE


- Oil Capacity: 2.0L (2.11 US qts.)

## Drive Belts

### ⚠ CAUTION!

- Adjust belt tension properly. Improperly tensioned belts may reduce performance and its service life.


#### Inspecting

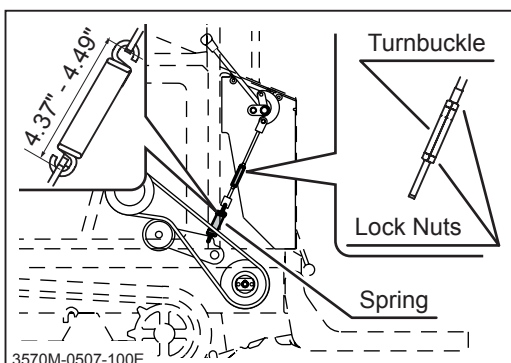
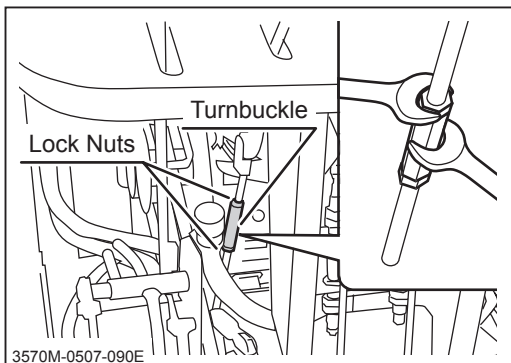
1. Remove the left side panel (Page 35)
2. Move the clutch lever to [  (disengaged)] position.
3. Visually inspect the belts. Replace the belt if damaged.
4. Install the left side panel back in place. (Page 35)

#### NOTE

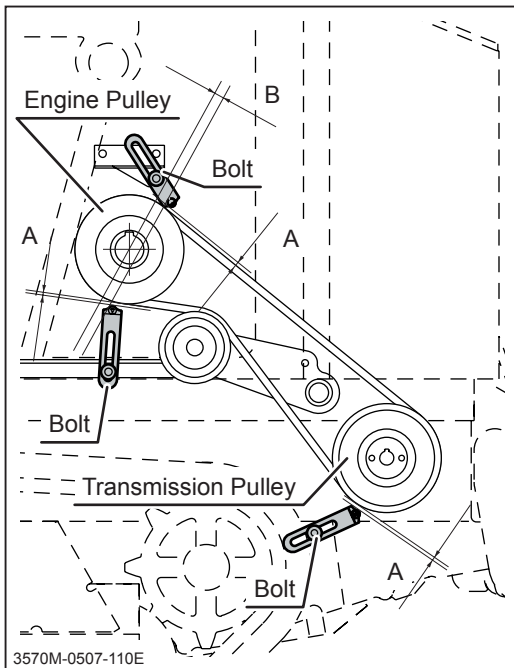
- Contact your CANYCOM representative when the belt needs to be replaced.

#### Adjusting


1. Remove the back and the left side panels. (Page 35)
2. With two wrenches, loosen the lock nuts that lock the turnbuckle on the clutch linkage.
3. Move the clutch lever to [  (engaged)] position.
4. Adjust the turnbuckle so that the inside dimension between the spring hooks is between 111 and 114 mm (4.37" and 4.49").
5. Tighten the lock nuts with two wrenches.
6. Install the back and the left side panels back in place. (Page 35)



## Belt Stoppers



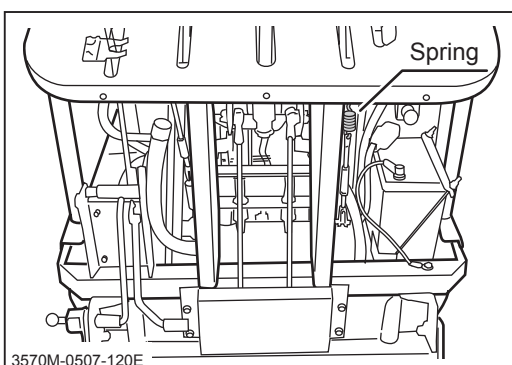
### Adjusting

1. Remove the left side panel. (Page 35)
2. Move the clutch lever to [  (engaged)] position.
3. Loosen the bolts that fasten the belt stoppers. Adjust the belt stoppers so that the gap A, the distance between the belt stopper pins and the belt, is 5-6mm (0.20"-0.24"), and the gap B, the distance between the center of the engine pulley and the line connecting the belt stopper pins by the engine pulley, is 10-20mm (0.39"-0.79"). Tighten the bolts securely.
4. Start the engine and observe if the belt runs smoothly without rubbing the pins. Stop the engine.
5. Install the left side panel in place. (Page 35)


## Parking Brake

### **⚠ WARNING!**

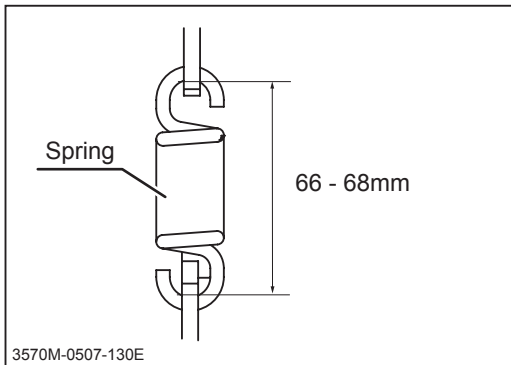
- Always keep brake adjusted for maximum performance. Improperly adjusted brake may result in property damage, serious injury, or death.



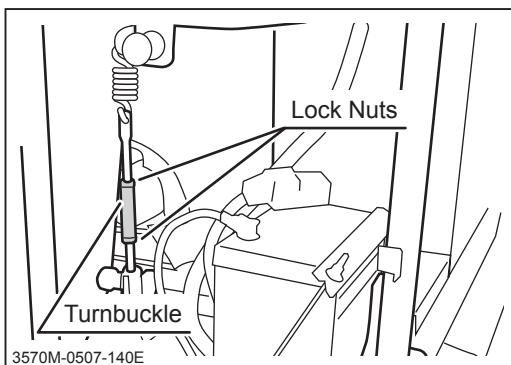
### Inspecting

1. Make certain the control stick is in the neutral and centered position.
2. Move the brake lever to [  (engaged)] position.
3. Remove the back panel. (Page 35)





3. Locate the spring on the brake linkage. Measure the distance between the spring hooks; the distance shall be between 66 and 68mm (2.60" and 2.68" respectively).
4. Install the back panel back in place. (Page35)



### Adjusting


1. Make certain the control stick is in the neutral and centered position.
2. Move the brake lever to [ (P) (engaged) ] position.
3. Remove the back panel. (Page 35)
4. Loosen the lock nuts.
5. Adjust the turnbuckle so that the distance between the spring hooks shall be between 66 and 68mm (2.60" and 2.68" respectively)
6. Tighten the lock nuts securely.
7. Install the back panel back in place. (Page 35)

## Control Stick

### NOTE

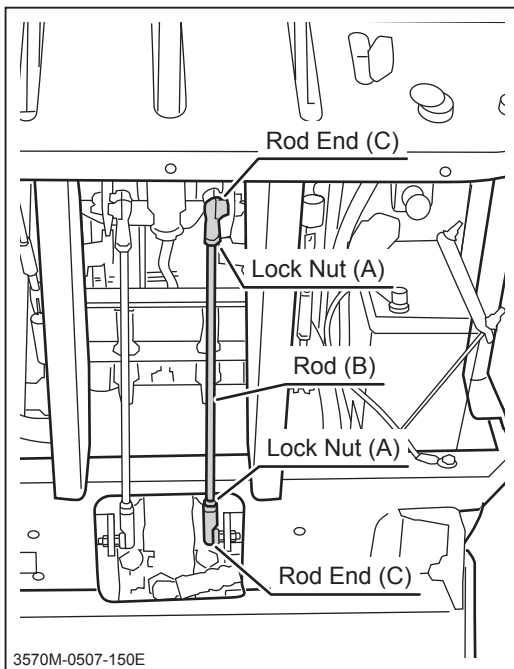
- Control stick is properly adjusted at the time of shipment. Adjustment is needed only when the transmission, the control stick itself, or its linkage is replaced or dismantled.

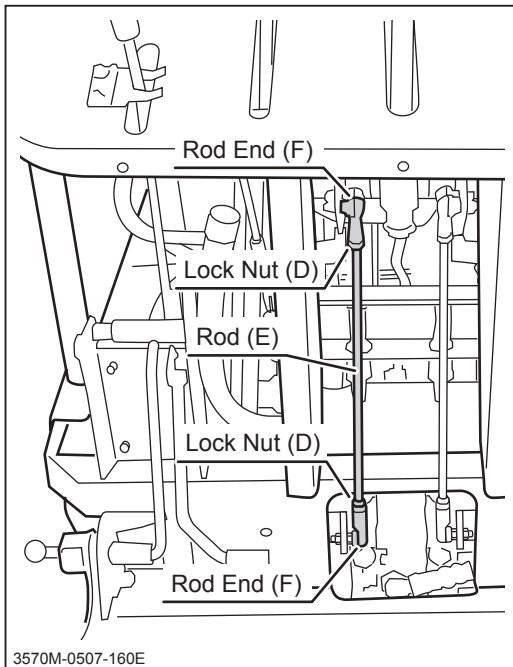
### Inspecting

1. Start the engine and increase the engine speed by moving the throttle lever to [  (fast)] position.
2. Operate the machine on a level surface and release the control stick; if the track moves forward or backward, the control stick needs to be adjusted.

### Adjusting - When the Right Track Moves

3. Remove the back panel and the control rod cover. (Page 35, 36)
4. Loosen the lock nuts (A).
5. Rotate the rod (B) until the right track does not move.
  - When the track moves forward, turn the rod so that the distance between the rod ends (C) becomes longer.
  - When the track moves backward, turn the rod so that the distance between the rod ends (C) becomes shorter.
6. Tighten the lock nuts (A) securely.





### Adjusting - When the Left Track Moves

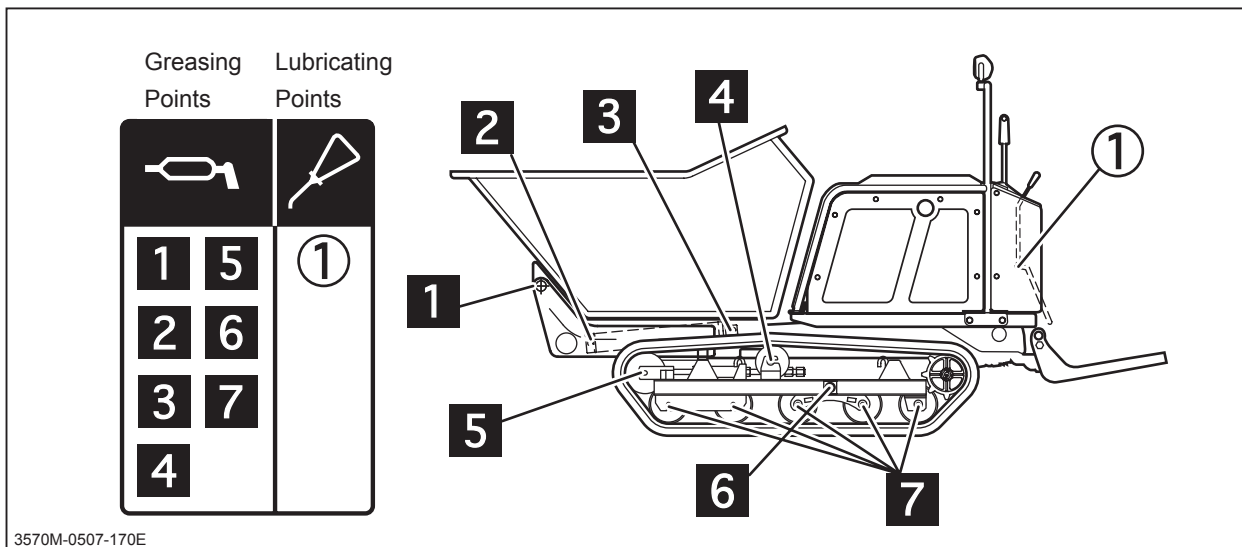
7. Loosen the lock nuts (D).
8. Rotate the rod (E) until the left track does not move.
  - When the track moves forward, turn the rod so that the distance between the rod ends (F) becomes longer.
  - When the track moves backward, turn the rod so that the distance between the rod ends (F) becomes shorter.
9. Tighten the lock nuts (D) securely.
10. Install control rod cover and back panel.  
(Page 36, 35)

## Greasing and Lubricating

### ⚠ CAUTION!

- Follow the maintenance schedule to grease and lubricate the machine. Lack of grease or lubrication may result in rust, excessive wear or seizure.

1. Grease and lubricate the greasing and lubricating points.



### NOTE

- Grease and lubricant to use: Page 33
- When using a manual grease gun, pump 5-6 times. When the handle of the gun becomes heavy, stop pumping immediately.
- When using a pneumatic grease gun, pump it for a few seconds.

## Hydraulic System

### Hydraulics Belt

#### ⚠ CAUTION!

- Adjust belt tension properly. Inproperly tensioned belts may reduce performance and its service life.

#### Inspecting

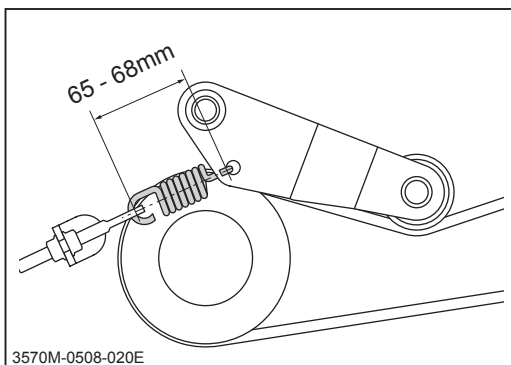
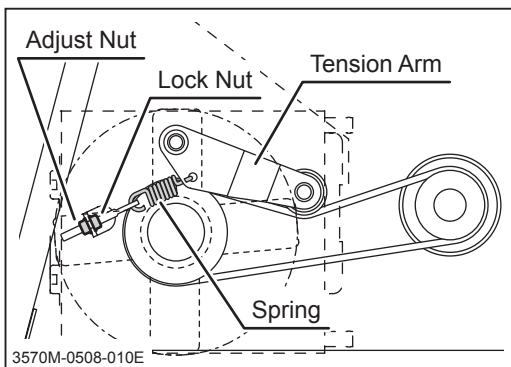
1. Remove the left side panel. (Page 35)
2. Visually inspect the belt. Replace the belt if damaged.
3. Install the left side panel back in place. (Page 35)

#### NOTE

- Contact your CANYCOM representative when the belt needs to be replaced.

#### Adjusting

1. Locate the tension arm spring. Loosen the lock nut.
2. Adjust the adjust nut so that the inside dimension between the spring hooks is between 65 and 68 mm (2.56" and 2.68").
3. Tighten the lock nut.
4. Install the left side panels back in place. (Page 35)



## Electrical System

### **⚠ WARNING!**

- Always stop the engine and turn the ignition switch to [○ (OFF)] position, and disconnect the negative (-) terminal of the battery when servicing the electrical system.

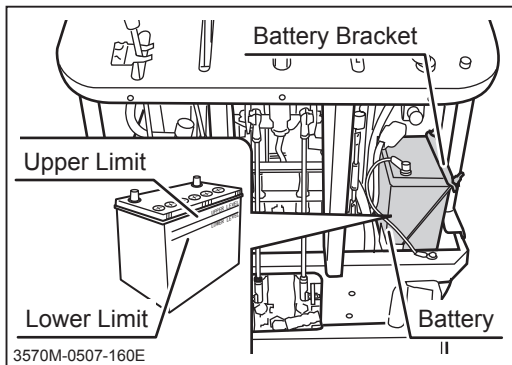
## Battery

### **⚠ WARNING!**

- Explosion hazard. Keep open flame or spark away from battery. Hydrogen gas generated during charging is extremely explosive.
- Battery fluid (diluted sulfuric acid) is corrosive and causes severe burns. Be extremely cautious when handling battery fluid. If battery fluid is spilled on clothes, immediately rinse with plenty of water. If spilled on skin or in an eye, immediately rinse with plenty of water and promptly consult a physician.
- Never charge battery when the fluid level is below the lower limit. Charging battery with insufficient fluid may shorten battery life or cause explosion.
- Never fill battery fluid beyond the upper limit. Battery fluid may spill and cause damage to the machine or personal injury.
- Always disconnect the (-) terminal first, and connect the (+) terminal first. Disconnecting or connecting in the opposite order may cause a short circuit.
- When installing the battery, make certain to connect the (+) and (-) terminals to their original positions. Avoid contact between terminals and other surrounding parts.

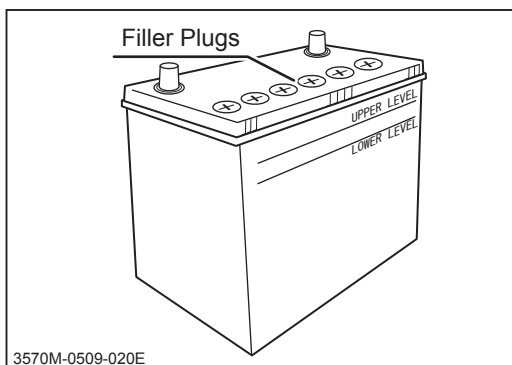
## ⚠ CAUTION!

- Always remove the battery from the machine before charging. Failure to do so causes damage to the electrical components and wiring.
- Follow the battery charger user's manual when charging.



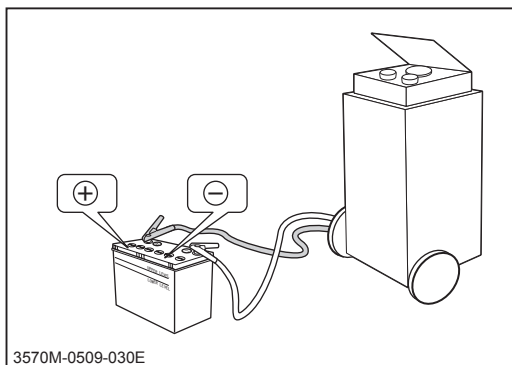
### Inspecting

1. Park the machine on a level ground.
2. Remove the right side and back panels. (Page 35)
3. Visually inspect that the battery fluid level is between the "Upper Level" and "Lower Level" lines. If the fluid level is below the "lower Level," fill.



### Filling

4. Remove the battery bracket and the battery from the machine.
5. Open the filler plugs and fill distilled water in the battery evenly until the fluid level is between the "Upper Level" and "Lower Level" lines.
6. Put the filler plugs back in place.
7. Install the battery.
8. Install the right side and back panels. (Page 35)



### Charging

1. Remove the right side and back panels. (Page 35)
2. Disconnect the (-) cable from the terminal.
3. Disconnect the (+) cable from the terminal.
4. Remove the battery off the machine.
5. Remove all the filler plugs.
6. Follow the instructions in the battery charger user's manual to charge the battery.

7. When the battery is fully charged, put the filler plugs back in place and install the battery.
8. Connect the (+) cable from the terminal.
9. Connect the (-) cable from the terminal.
10. Install the right side and back panels. back in place.

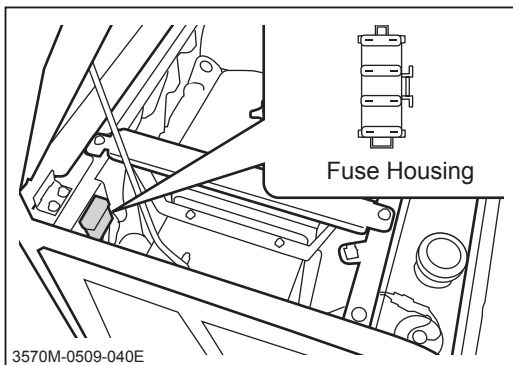
## NOTE

- Consider rapid charging as an emergency measure. This method uses a large amount of current to compensate the lost charge in a short time. However, the battery needs to be fully charged in the ordinary method for a longer service life.

## Fuses

### ⚠ CAUTION!

- If a fuse blows, investigate the cause before replacing. Always replace a fuse with the one of the correct rating.



1. Open the engine hood and hold it in place with the engine hood stay.
2. Take the lid off the fuse housing.
3. Locate the blown fuse and replace it with a new one of the correct rating.
4. Put the lid back in place.
5. Undo the engine hood stay and close the engine cover.

	5A	Work Lights
	5A	Hour Meter Oil Pressure Lamp
	5A	Fuel Cutoff Solenoid Relay Coils
	30A	Main

3570M-0509-050E



## After Use Care

### **⚠ CAUTION!**

- Do not wash the engine, control panel, electrical parts, or tank caps with air breather with running water; water may enter inside and cause rust or damage.
- Clean the machine after use; leaving dirt or foreign objects may cause damage.
- Do not attempt to move the machine when it becomes inoperable due to freezing.

## After Normal Use

1. Clean the machine; take off of dirt, mud, and othe foreign matters after use.
2. If the machine is to be left outside, cover the machine with protective, water-proof covering after the machine is cooled off.

## After Cold Weather Use

1. Clean the machine; remove dirt, mud, and othe foreign matters after use.
2. Park the machine on a paved or firm, dry surface.
3. If the machine is to be left outside, cover the machine with protective, water-proof covering after it is cooled off.

## Storage

### **⚠ WARNING!**

- Fire hazard; do not store the machine where there is a possibility of ignition.

### **⚠ CAUTION!**

- Do not wash the engine or control panel with running water; water may enter inside and cause rust or damage.
- Clean the machine before storage; leaving dirt or foreign objects may cause damage.
- Do not store the machine in a humid, dusty, or hot place.

1. Follow the instruction in **Parking** (page 22) to park the machine.
2. Clean dirt off of the machine.
3. Change engine oil (page 37).
4. Clean the air cleaner (page 37).
5. Drain the fuel tank.
6. Drain the carburator.
7. Remove the battery from the machine. Service the battery (page 53).
8. Cover the machine with protective, water-proof covering after the machine is cooled off.

### **NOTE**

- Battery discharges even when it is not in use. A battery may hold charge for a few months, but it is a good practice to charge the battery before it goes flat; it will extend the battery life.
- Refer to the Operation Manual for the engine, for detailed instructions on preparing the engine for storage.

## Troubleshooting

- If any malfunction or abnormal condition is found, immediately stop using the machine and take an appropriate measure according to the Troubleshooting chart below. If the malfunction or abnormal condition is not listed in the chart, or the suggested measure does not solve the problem, consult with your CANYCOM representative.
- Some corrective measures listed below require special knowledge and/or equipment. Please contact your CANYCOM representative in such a case.

Area	Malfunction	Possible Cause	Corrective Measure	Ref.
E n g i n e	Engine does not start, or is difficult to start	Parking brake lever is engaged (in the (P) position - safety mechanism is working).	→Disengage the parking brake.	
		Battery is discharged.	→Add battery fluid. →Charge the battery. →Replace the battery.	Page 53
		Battery cable is disconnected.	→Connect the battery cable.	
		Blown fuse.	→Replace the fuse.	Page 55
		Bad connection or breakage in the wiring.	→Please contact your CANYCOM representative.	
		Out of fuel.	→Fill fuel.	Page 14
		Air is in fuel.	→Please contact your CANYCOM representative.	
		Engine fouled.	→Wait a while and try starting again.	
		Insufficient or wrong oil.	→Fill or change oil.	Page 37
		Dirty or damaged spark plug.	→Clean or replace the spark plug.	Page 40
		Contamination in fuel system.	→Please contact your CANYCOM representative.	
		Other (other than the above).	→Please contact your CANYCOM representative.	

Area	Malfunction	Possible Cause	Corrective Measure	Ref.
E n g i n e	Engine stalls.	Out of fuel.	→Fill fuel.	Page 14
		Cold engine.	→Warm up the engine.	
		Other (other than the above).	→Please contact your CANYCOM representative.	
	Engine stops abruptly.	Out of fuel	→Fill fuel.	Page 14
		Piston seizure due to insufficient or bad oil.	→Please contact your CANYCOM representative.	
		Other (other than the above).	→Please contact your CANYCOM representative.	
	Engine does not stop	Electrical malfunction	→Please contact your CANYCOM representative.	
		Other (other than the above).	→Please contact your CANYCOM representative.	
	Idling is not stable.	Insufficient intake air (clogged air cleaner).	→Clean or replace the air cleaner.	Page 39
		Other (other than the above).	→Please contact your CANYCOM representative.	
	Poor power or acceleration	Bad fuel	→Change fuel.	
		Wrong oil (improper viscosity)	→Change to suitable oil.	Page 37
		Accelerator (throttle) is not properly adjusted.	→Please contact your CANYCOM representative.	
		Insufficient intake air (clogged air cleaner).	→Clean or replace the air cleaner.	Page 39
		Excessive load	→Reduce load.	
Loose drive belt.		→Adjust	Page 46	
Other (other than the above).		→Please contact your CANYCOM representative.		
Irregular noise or vibration from or around the engine		→Please contact your CANYCOM representative.		

Area	Malfunction	Possible Cause	Corrective Measure	Ref.	
	Excessive oil consumption		→Please contact your CANYCOM representative.		
	Engine overheats	Insufficient amount of engine oil.	→Fill oil.	Page 37	
		Cooling fan is clogged or blocked.	→Clean.		
		Other (other than the above).	→Please contact your CANYCOM representative.		
	Excessive fuel consumption	Clogged air cleaner.	→Clean or replace the air cleaner.	Page 39	
		Other (other than the above).	→Please contact your CANYCOM representative.		
	Black smoke comes out of exhaust	Bad fuel.	→Change fuel.		
		Clogged air cleaner.	→Clean or replace the air cleaner.	Page 39	
		Choke is not fully open.	→Open the choke fully.		
		Other (other than the above).	→Please contact your CANYCOM representative.		
	White or blue smoke comes out of exhaust	Engine oil level is too high.	→Adjust the oil level.		
		Other (other than the above).	→Please contact your CANYCOM representative.		
	Drive Train	Machine does not move (forward, backward, turning) when the control stick is in the corresponding position.	Clutch is not engaged	→Engage the clutch.	
			Parking brake is applied	→Release the parking brake.	Page 19
Excessive load			→Reduce load.		
Insufficient or deteriorated HST fluid.			→Add or change fluid.	Page 42	
Other (other than the above).			→Please contact your CANYCOM representative.		
Irregular noise or heat is observed at or around the track.			→Please contact your CANYCOM representative.		

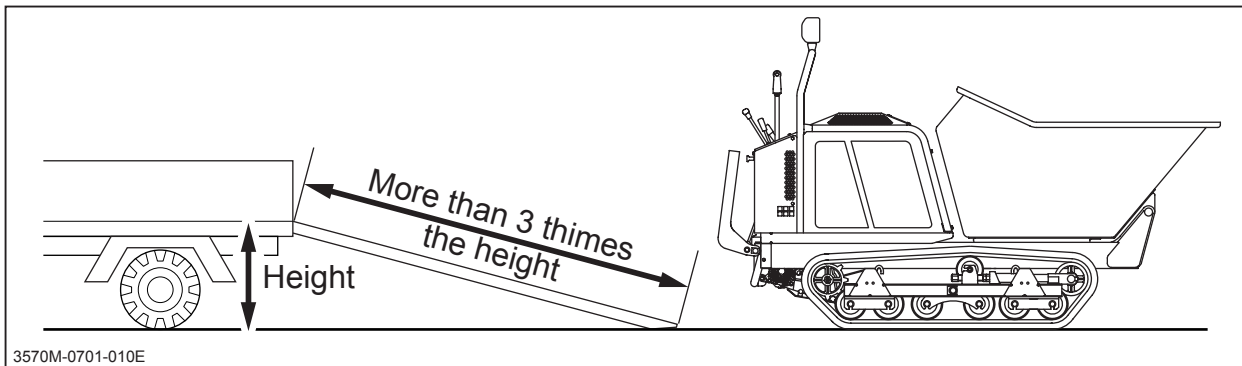
Area	Malfunction	Possible Cause	Corrective Measure	Ref.
B r a k e	Brake does not work well.	Not properly adjusted.	→Adjust.	Page 47
		Brake is wet with water.	→Apply brake a few times to dry.	
		Other (other than the above).	→Please contact your CANYCOM representative.	
T r a c k	Track does not move smoothly.	Not properly adjusted.	→Adjust.	Page 41
		Other (other than the above).	→Please contact your CANYCOM representative.	
S a f e t y D e v i c e s	Lamp does not light.	Blown bulb.	→Replace.	
		Blown fuse.	→Replace.	Page 55
		Other (other than the above).	→Please contact your CANYCOM representative.	
	Horn does not work.	Blown fuse.	→Replace.	Page 55
		Other (other than the above).	→Please contact your CANYCOM representative.	
H y d r a u l i c ( D u m p ) s y s t e m	Dump does not work.	Insufficient or deteriorated hydraulic fluid.	→Add or change fluid.	Page 42
		Loose hydraulics belt.	→Adjust.	Page 52
		Other (other than the above).	→Please contact your CANYCOM representative.	

## Hauling

### **⚠️ WARNING!**

- Park the transporter (truck) on a level ground. Always use chocks to secure the wheels.
- Do not allow bystanders to come close to the machine or the transporter when loading or unloading the machine.
- Use only the loading ramps with sufficient strength (to withstand the combined weight of the machine and the operator), width (more than 1.2 times the width of the track), and length (more than 3 times the height of the loading deck of the transporter), and have anti-slip ramp surfaces.
- Secure the hooks of the loading ramps firmly and flush with the loading deck.
- Never ride the machine when loading to or unloading from the transporter. Fold the step and drive in the walk-behind mode.
- Move slowly forward when loading onto, and move slowly backward when unloading off of the transporter. Pay special care when going over the joint between the loading deck and the ramps; the machine may tip.
- Do not turn on the loading ramps. The machine may fall.
- Tie down the machine securely. Make sure the machine does not move around.

## Loading and Unloading



### Loading to the Transporter

1. Park the transporter. Secure the wheels with chocks.
2. Place the loading ramps. Secure the hooks of the ramps firmly and flush with the loading deck.
3. Fold the step. (Page 27)
4. In the walk-behind mode, drive the machine slowly backward onto the loading deck.
5. Park the machine according to the instructions in **"Parking"** (Page 22).
6. Secure the machine onto the loading deck with rope or tie-down belts.

### Unloading from the Transporter

1. Park the transporter. Secure the wheels with chocks.
2. Undo rope or tie-downs that secure the machine.
3. Place the loading ramps. Secure the hooks of the ramps firmly and flush with the loading deck.
4. In the walk-behind mode, drive the machine slowly forward from the loading deck to the ground.



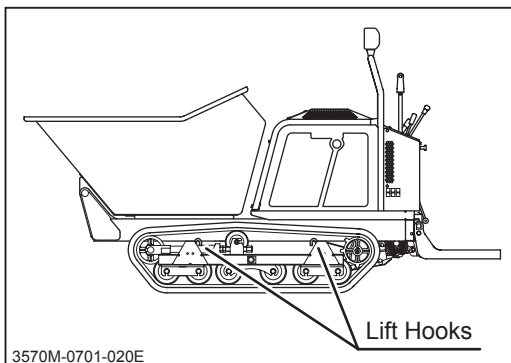
## Hoisting

### **⚠ WARNING!**

- Use hoisting (slinging) attachments (wire ropes, chains, etc.) of sufficient strength. Always use the ones of the same length when more than one is used.

### **⚠ CAUTION!**

- Always unload the machine before hoisting.



1. Attach hoisting wire ropes to the 4 lift hooks located on the corners of the machine. Hoist the center of the ropes.