

Ride-on Brushcutter

**CMX2302 / CMX2106 / CMX1808**

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# Operator's Manual

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MASAO



## **⚠ 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.



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## 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 this machine. Make sure to read and understand the manual thoroughly before operating this machine. Also make sure to read the separate engine manual.

### **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 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: cutting grass and bushes. 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 the 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.**
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## 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.

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# Warranty and After-Sales Service

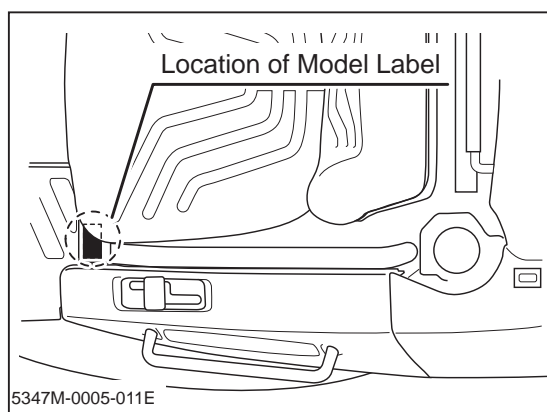
## Warranty

CHIKUSUI CANYCOM, INC. guarantees this product, based on the terms of warranty.

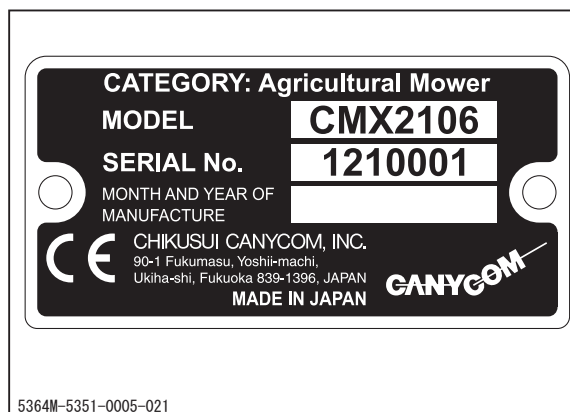
## After-Sales Service

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 numbers can be found on the model label as shown below, and the make and type of the engine can be found in Chapter 3 "**Specifications**" of this manual (Page15).

### Location of Model Label



### Model Label



## Availability of Spare Parts

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

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## **Appendix**

- Engine Manual

\* Be sure to read and understand it together with this manual .

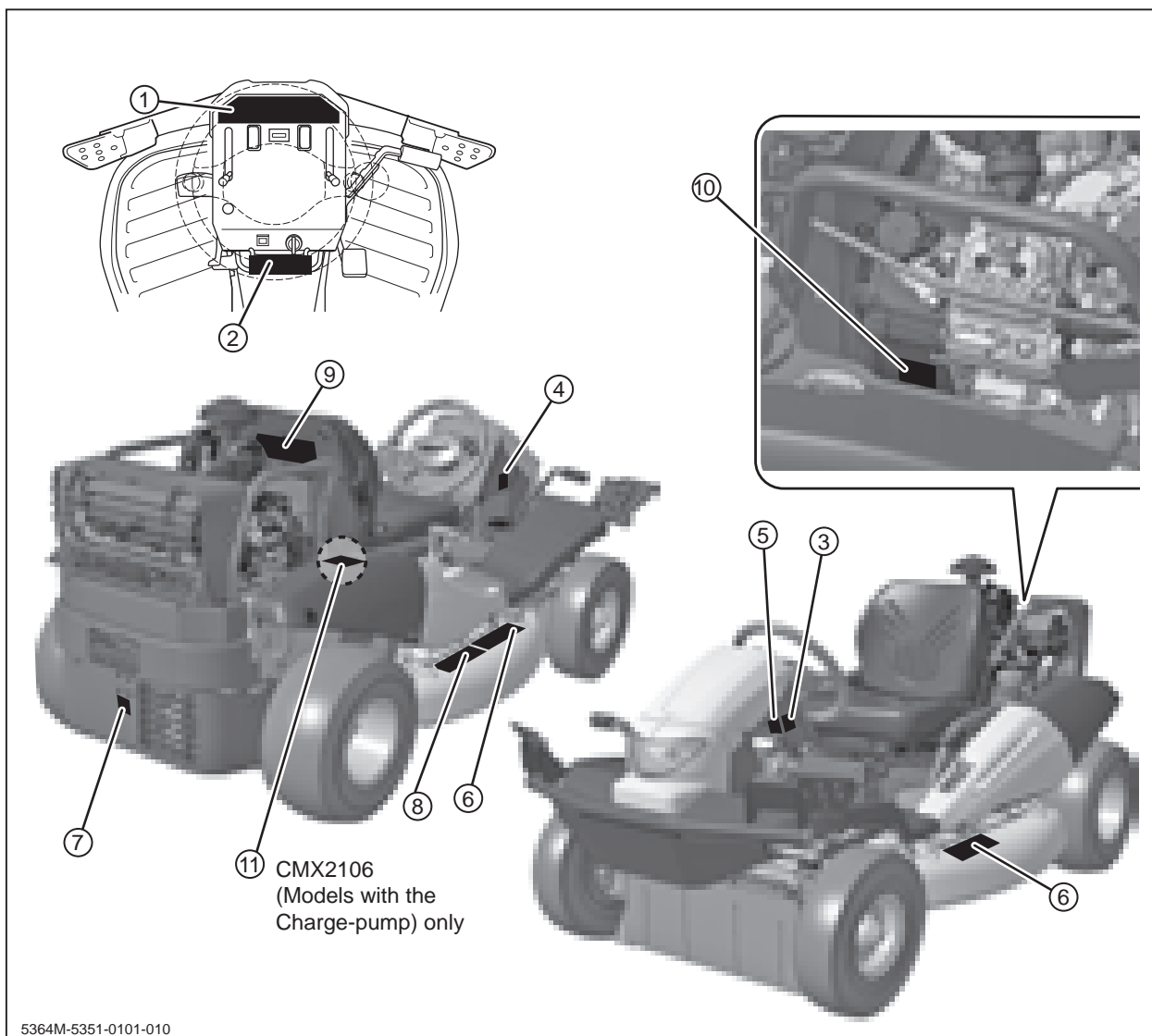
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## Safety Labels

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.

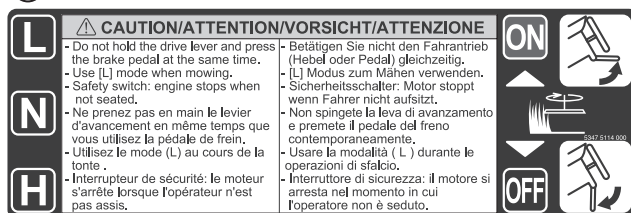
- Locate all the warning labels attached to this machine. Read and follow the instructions and precautions in them. Failure to do so could result in serious injury or death to the operator or bystanders.
- Keep the labels clean and legible. Do not use solvents or gasoline to clean the labels.
- Replace 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 5347 5109 000



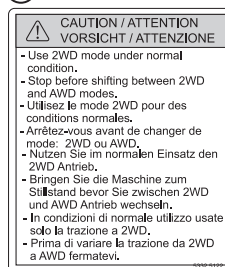
② 5347 5114 000



③ 5332 5121 000



④ 5332 5122 000



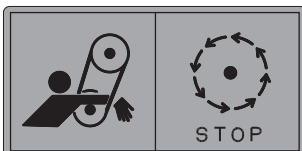
⑤ 5332 5128 000



⑥ 5321 5116 000



⑦ 5305 5326 000



⑧ 5332 5127 000



⑨ 5347 5125 000



⑩ 278911



⑪ 3667 5063 000



## Safety Mechanisms

This product is equipped with the following safety mechanisms.

### Start Interlock Mechanism

The engine can be started only when the parking brake is in [ **(P)** ] (engaged) position and the mower clutch in [OFF] position. This is to prevent unintended movement of the machine or the cutting blade when starting the engine.

### Automatic Blade Stopping Mechanism

The engine stops if the operator is not seated while the mower is running. This is to reduce the possibility of accident related to moving the blade when the machine is turned over.

## 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 the 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. 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.
- Observe the weight limit of this machine: 120kg.
- Always keep in mind that care and concentration is required when working with ride-on machines.
- Loss of control on the slope cannot be regained by an application of the brake. The main reasons for loss of control are:
  - insufficient grip of tires.
  - excessive speed.
  - misjudging of the ground conditions, especially gradient.

## Preparation

### **WARNING!**

- **Fuel is highly flammable. See Checking and Filling Fuel, page 17 for important safety information on handling fuel.**

- Always wear the 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 the 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 (see Preparation, pages 17) before starting the machine. Repair or replace damaged parts before starting the machine.

## Operation

This machine is intended for cutting grass and bushes. Any other use may pose hazard or cause damage to the machine.

The stability of the machine is affected by the speed, rate of steering, terrain and the operator's weight. 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. Do not operate the machine when you are tired, ill, or not feeling well.
- Always check for obstacles before operating on new terrain. This includes overhead obstacles such as the branches of a tree.
- 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.
- 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 tipping 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 page 8.
- Never attempt to drive over a large obstacle such as rock or fallen tree.



- Always travel slowly and use extra caution when operating on an unfamiliar terrain. Be alert when traveling on a changing terrain.
- Never operate on a terrain that you are not comfortable with. Avoid the 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 landslide area. Pay special attention after heavy rain or earthquake.
- 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.
- Pay attention to hole, groove and obstacles. Before operation, confirm hole, groove or obstacles without fail and operate with enough care. Remove flying off material such as stone or empty can and dumped material, wires which may be convoluted in machine and start work. If you involute illegally disposed aerosol can for flammable there is a danger of bursting into flames.

## Driving on a Slope

### **⚠️ WARNING!**

- **Never use on the slope steeper than 25 degrees for the CMX2106 and CMX1808.**
- **Driving on the 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 the slope as described in this manual.
- Driving on the 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 the 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, the drive lever, the drive pedal or the steering wheel 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 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 the slope.
- Before driving down a slope, stop and shift auxiliary transmission to [L] (low speed) position. Drive slowly. Use the engine speed to help keep the machine speed low.

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## Cutting

When conducting cutting operation, take the following precautions.

- Always follow the proper procedures for cutting as described in this manual.
- Shut off the work site. Post signs to inform of the cutting operation. Close off the site with rope if necessary to keep people, especially children, off the work site.
- Pay attention to the surrounding area. Rotating cutting blade throws stones, rocks and debris. This may cause property damage, injury, or death.
- Drive forward when cutting. This best prevents the cutting blades from throwing stones, rocks, or debris.
- Pay attention to obstacles. This includes overhead obstacles such as the branches of a tree.

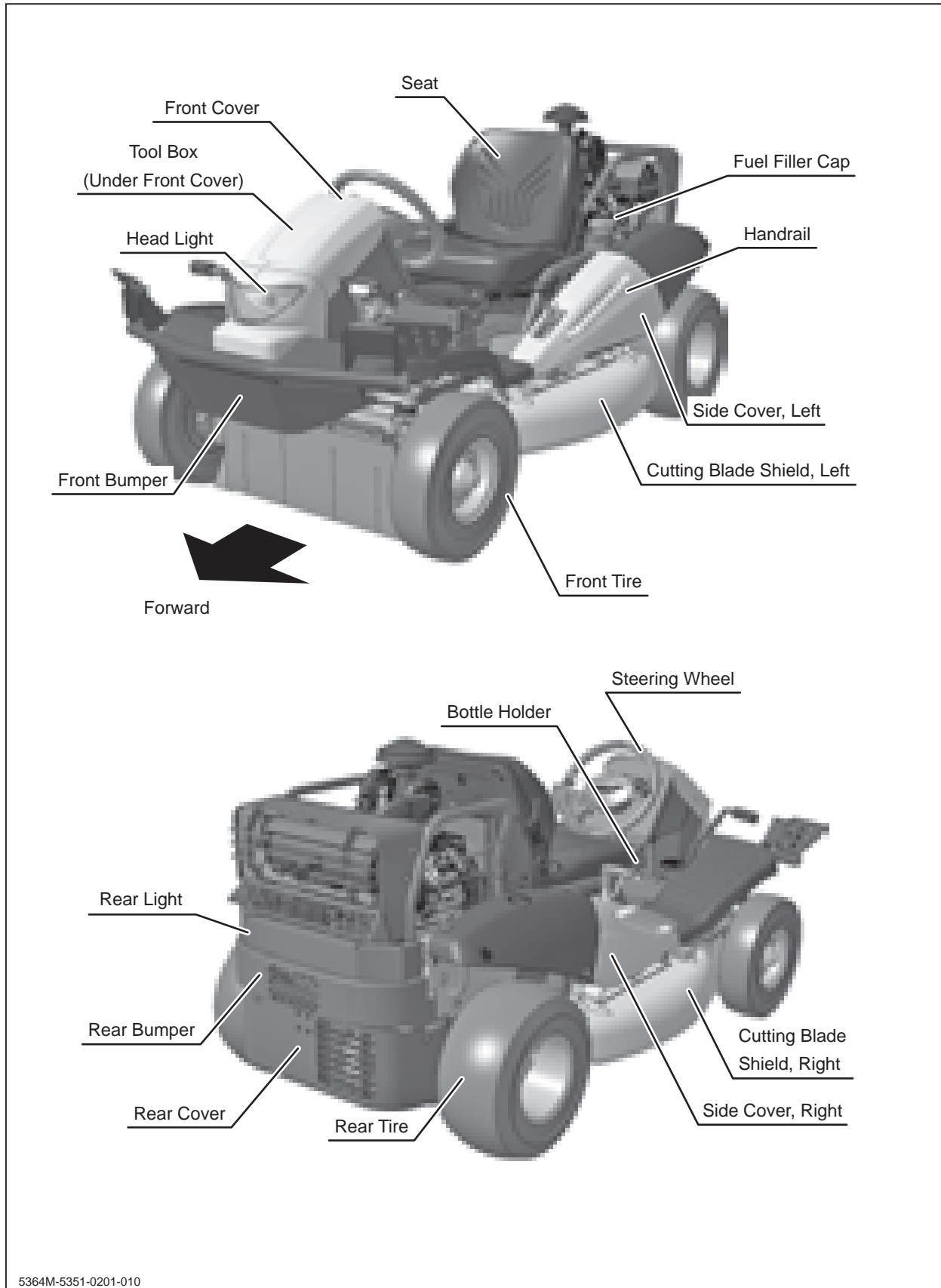
## Parking

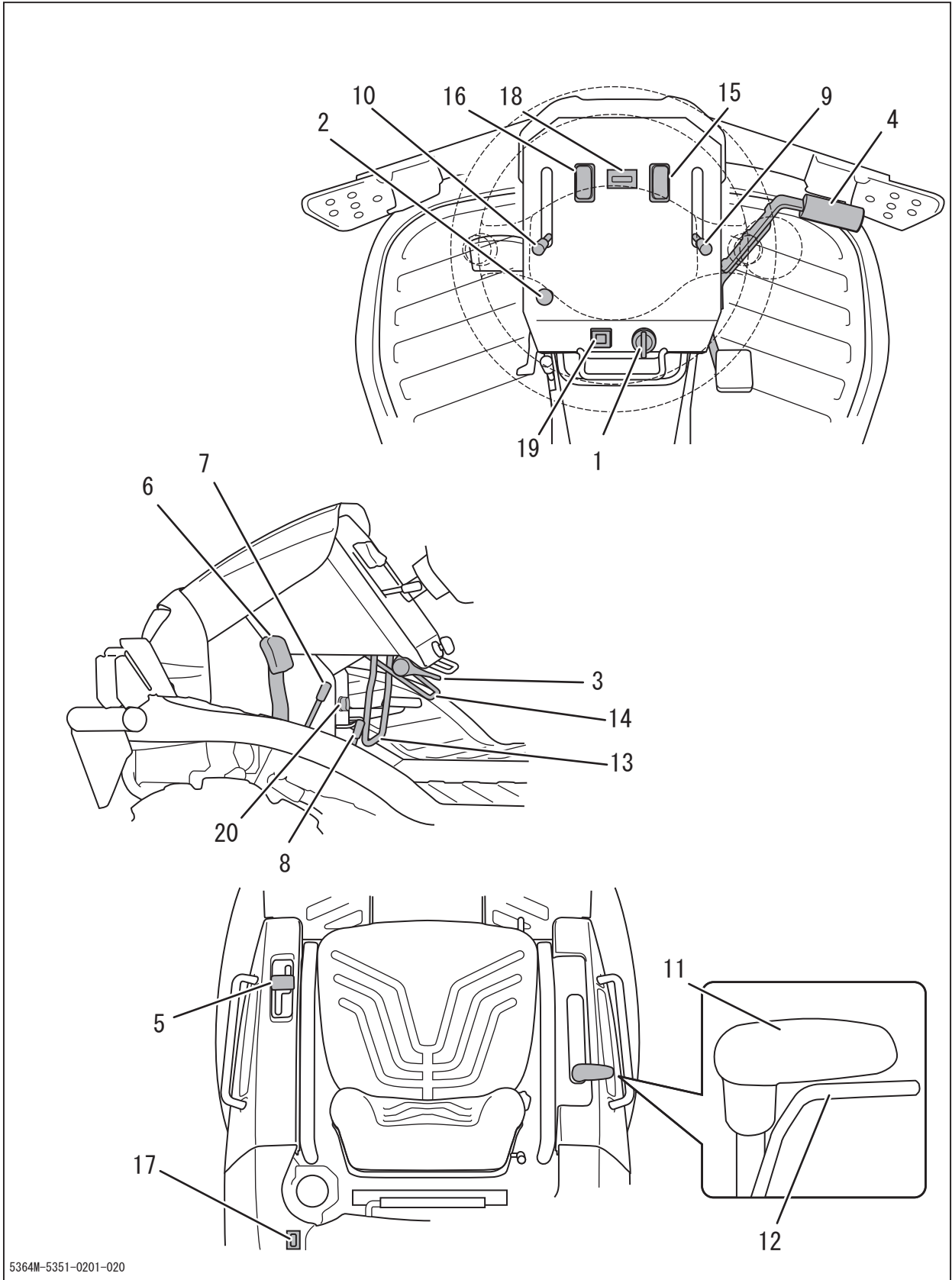
- Park the machine on a flat, level and stable surface. Never park on a slope steeper than 10 degrees. Avoid parking on a slope less than 10 degrees. If parking on a slope less than 10 degrees is absolutely unavoidable, apply the parking brake and block the wheels at the lower end of the machine.
  - Park the machine facing uphill
  - Do not park sideways on the slope.
- Never park on the instable surface. Do not park near the edge of a cliff.
- Observe all the previous precautions for driving, driving on a slope.
- 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. 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.
- 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 back 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.

## Name and Function of Controls





- 
- 1 **Main Switch** ..... Main switch is used to start or stop the engine.
  - 2 **Choke Knob** ..... Choke Knob is used to help start the engine by closing the choke valve.
  - 3 **Throttle Lever** ..... Throttle lever is used to control the engine speed.
  - 4 **Drive Pedal** ..... Drive pedal is used to control the traveling direction and speed of the machine. The machine moves forward when the front of the drive pedal is depressed and backward when the rear of the drive pedal is depressed. The angle of the drive pedal determines the speed.
  - 5 **Drive Lever** ..... Drive lever is used to control the traveling direction and speed of the machine. The machine moves forward when the lever is tilted forward and backward when the lever is tilted backward. The angle of the drive lever determines the speed.
  - 6 **Parking Brake Pedal** ..... Parking Brake pedal is used to keep the machine from moving. When the parking brake pedal is depressed, the drive lever returns to the neutral position and the parking brake is engaged.
  - 7 **Parking Brake Lock Lever** ..... Parking brake lock lever is used when parking the machine securely. Pulling the parking brake lock lever while the parking brake pedal is depressed locks the parking brake pedal in the engaged position.
  - 8 **Auxiliary Transmission Shift Lever** .... Auxiliary transmission shift lever is used to shift the auxiliary transmission to change the speed of the machine.
  - 9 **2WD/AWD Shift Lever** ..... 2WD/AWD shift lever is used to switch between the 2WD (rear-wheel drive) and AWD (all-wheel drive) modes.
  - 10 **Differential Lock Lever** .... Differential lock lever is used to lock the differential when the rear tires slip. Tilting the differential lock lever to [ON] position locks the differential.

- 11 Cutting Height Adjust Lever** . . . . . Cutting height adjust lever is used to adjust the cutting height. Grab and hold the cutting height adjust lock and move the cutting height adjust lever back or forth to adjust the cutting height.
- 12 Cutting Height Adjust Lock** . . . . .
- 13 Mower Clutch Lever** . . . . . Mower clutch lever is used to start or stop running the mower.
- 14 Tilt Lever** . . . . . Tilt lever is used to adjust the angle of the steering wheel.
- 15 Head Light Switch** . . . . . Head light switch is used to turn on or off the head light. When the main switch is on, the head light switch illuminates.
- 16 Rear Light Switch** . . . . . Rear light switch is used to turn on or off the rear light. When the main switch is on, the rear light switch illuminates.
- 17 Fuel Gauge** . . . . . Fuel gauge indicates the amount of fuel in the fuel tank.
- 18 Hour Meter** . . . . . Hour meter indicates the cumulative total operating time of the machine in 0.1 hour increments.
- 19 Oil Pressure Warning Light** . . . . . Under normal condition, the oil pressure warning light goes off once the engine starts. It is illuminated when a problem with engine oil pressure is detected while the engine is running.
- 20 Battery Off Switch** . . . . . Minus circuit connection of the battery can be switched on or off. Used for vehicle maintenance and long-term storage.

## **⚠ CAUTION!**

- Please lubricate the oil as soon as the oil pressure warning light turns on. When the warning light turns on, the operation of the hour meter is stopped. If the hydraulic warning light does not light up before starting the engine, the hour meter does not operate. Please change the bulb. In case of bulb burn out, the hour meter does not operate.



## Product Specifications

⚠ CAUTION!
· Use this product properly after understanding its specifications thoroughly.

Model and Type		CMX2302	CMX2106	CMX1808	
Machine Mass	kg	360		350	
Mowing Rate	m <sup>2</sup> /h	7300*1			
Dimensions	Overall Length	mm	1998		
	Overall Width	mm	1085		
	Overall Height	mm	1000	960	
	Wheelbase	mm	1300		
	Tread	Front	mm	860	
		Rear	mm	800	
	Ground Clearance	mm	125		
Engine	Model		B&S 3864	B&S 3854	B&S 3564
	Type		Air-cooled 4-cycle V-twin Gasoline		
	Cylinder (Bore×Stroke)	mm	75.5X70		72.0X70
	Displacement	cm <sup>3</sup>	627		570
	Maximum Output (Gross)	kW(PS)/rpm	17.1(23.2)/3600	15.7(21.3)/3600	13.5(18.4)/3600
	Maximum Torque	N•m(kgf•m)	43(4.38)	41.5(4.28)	35.5(3.62)
	Set Engine Speed	rpm	3300		
	Starter System		Electric		
	Fuel		Automotive Unleaded Gasoline		
	Fuel Consumption	g/kW•h(g/PS•h)	321(238)		335(248)
	Fuel Tank Capacity	L	20		
	Ignition		Contactless Magneto		
	Spark Plug		CHAMPION XC92YC		
Electrical	Battery Type		40B19R		
	Battery Capacity	V/Ah	12/28		

\*1 Estimated at the maximum speed with the auxiliary transmission in Low position.

Model and Type				CMX2302	CMX2106	CMX1808
Performance	Speed	High		0 to 13.8		
		Low		0 to 7.7		
	Minimum Turning Radius		m	1.8		
	Gradeability		Degrees	25		
	Maximum Stability Angle	Without Operator	Right and Left	Degrees	30 <sup>*2</sup>	
With Operator		25 <sup>*3</sup>				
Drive Train	Main Transmission			HST (Continuously Variable)		
	Auxiliary Transmission			Constant Mesh		
	Tires	Front		4.00-7 (4PR) AGR 4.00-7 (2PR)		
		Rear		17x 8.00-8 (4PR)		
	Steering		mm	Rack and Pinion Round Steering Wheel		
Brakes			Internally Expanding			
Cutting System	Cutting Width		mm	975		
	Cutting Height		mm	0~150 (21 Steps)		
	Blade Type			Free Knife & Stepped Stay		
	Number of Blades			2		
	Blade Drive Train			Shaft Drive		

\*2 When machine is in still condition.

\*3 Max. angle may vary by operator's seat positioning.

\*These specifications are subject to change without notice.

## Contents of Tool Bag

No.	Content	Quantity	Note
1	Operator's Manual	1	This Manual
2	Engine Manual	1	
3	Engine Service Tool	1	for Servicing Engine

## Preparation

### Pre-start up Inspection

#### **⚠ WARNING!**

- Always perform an inspection before every use. If a problem is found, solve or repair it before use.
- Clean mowing dust and cut grass before use to avoid fire.
- Make sure the cooling air intake is not blocked or clogged. If it is blocked, the engine overheats, resulting in damages to the machine or causing fire.

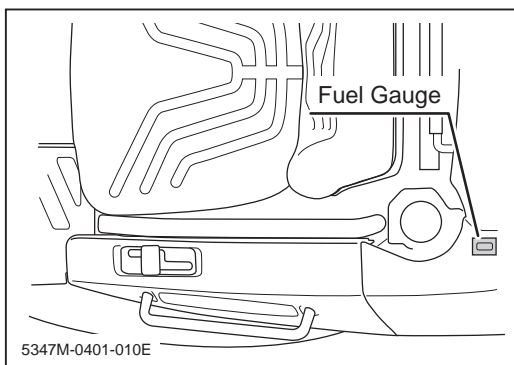
Always perform an inspection before use.

Refer to the **Maintenance Schedule** (page 42) for the inspection schedule and procedure.

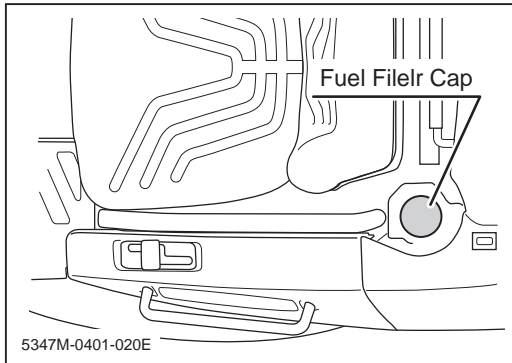
### Checking and Filling Fuel

#### **⚠ 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.



1. Check the fuel gauge. If the fuel level is low, fill fuel.



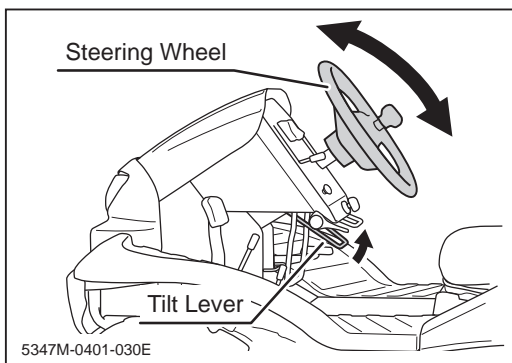
2. Open the fuel filler cap and fill fuel.
3. Put the fuel filler cap back in place and close it securely.

**NOTE**

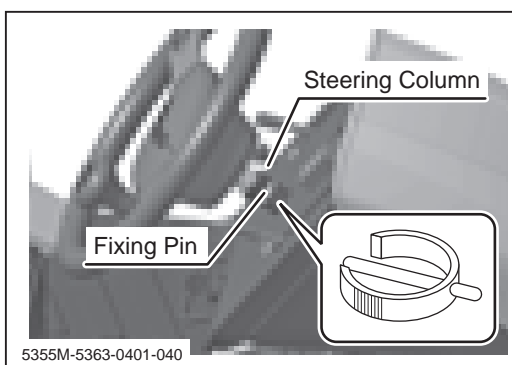
- Fuel : Automotive Unleaded Gasoline
- Fuel Tank Capacity : 20L

**Adjusting Steering Wheel****⚠ CAUTION!**

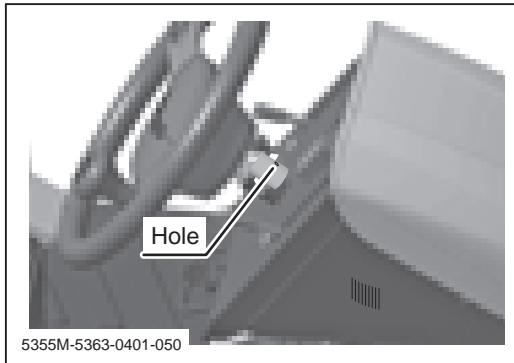
- After adjusting the steering wheel, try moving the steering wheel back and forth and up and down to make sure it is securely locked in its position.

**Adjusting Angle (Tilting)**

1. Pull up the tilt lever to adjust the steering wheel angle.
2. There are five positions for the steering wheel angle.
3. After adjusting steering angle, return the tilt lever to lock the steering wheel securely.

**Adjusting Height**

1. Remove fixing pin from the steering column.



## NOTE

- If fixing pin is in the difficult direction to remove, steer the steering wheel to change direction of the pin so that the pin can be easily removed.

2. Adjust steering wheel height in proffered position. Line up holes on steering shafts and insert pin.

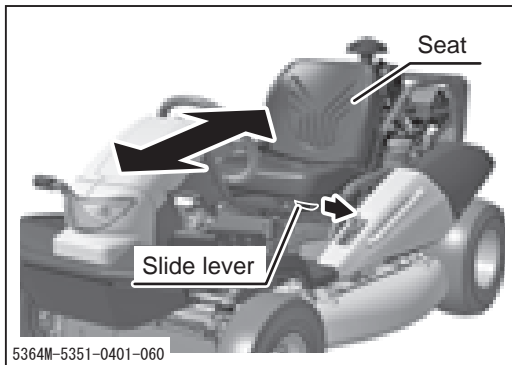
## NOTE

- Move steering wheel up and down to check if the steering wheel is fixed securely.

## Adjusting Seating Position - Normal Seat

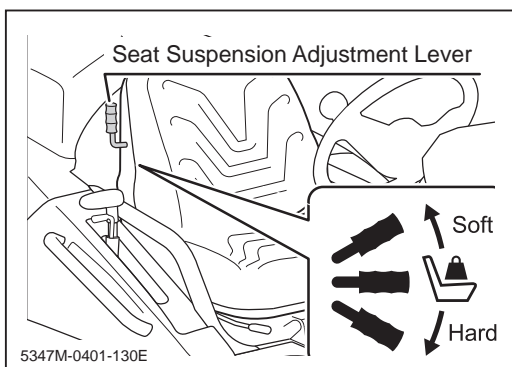
### **⚠ CAUTION!**

- Beware of the pinch points when adjusting the seating position.
- After adjusting the seat, try moving the seat back and forth and up and down to make sure it is securely locked in its position.
- When raising the seat, always slide the seat to the rearmost position. If the seat is not in the rearmost position, the slide lever may interfere with the step, preventing the seat from being raised to the holding position.
- When raising the seat, make sure to hold the seat in position with safety lock.



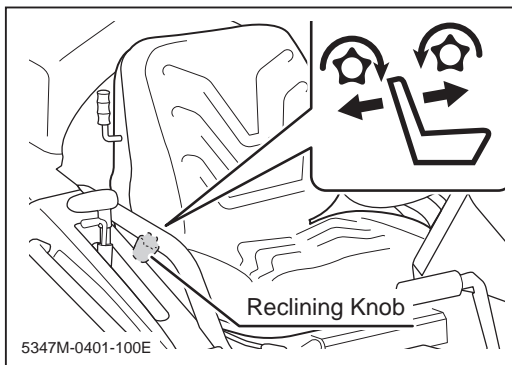
### Sliding seat

1. Pull the slide lever to the right to slide the seat forward or backward.
2. When the seat is in a desired position, release the slide lever and lock the seat securely.



### Adjusting Stiffness

1. Move the seat suspension adjustment lever to adjust to a desired seat stiffness.

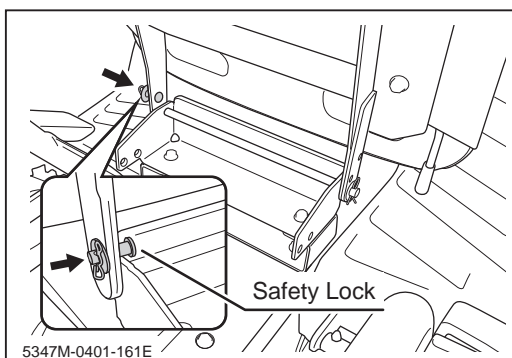


### Adjusting Reclining Angle

1. Rotate the reclining knob on the right of the seat to adjust the reclining angle of the seat.

### NOTE

- Do not adjust the seat to the rearmost position and recline seat. The seat may contact with the engine hood. This may activate the seat safety switch and stop the engine. Adjust the seat within the range of not contacting with the engine hood.



### Raising Seat

1. Slide the seat to the rear most position.
2. Raise the seat and push the safety lock inward to hold the seat in position.

### NOTE

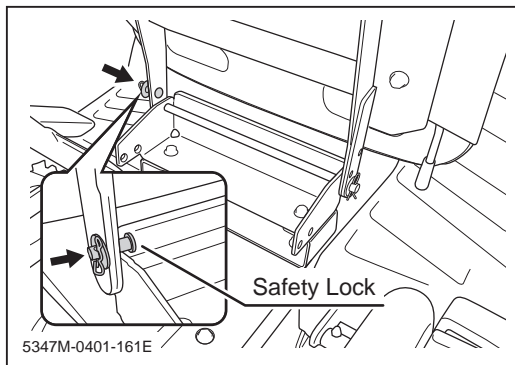
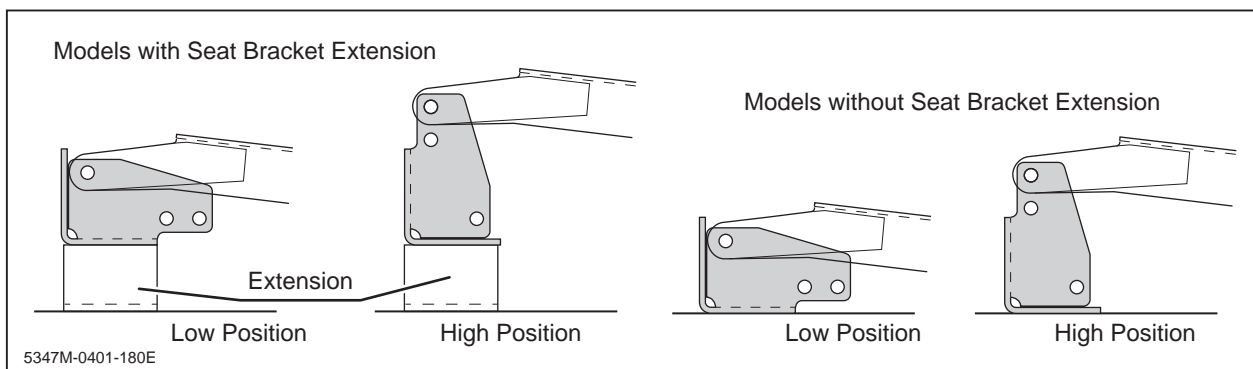
- Move the seat and see if the seat is held in place firmly.

## Adjusting Seat Height (Front Part)

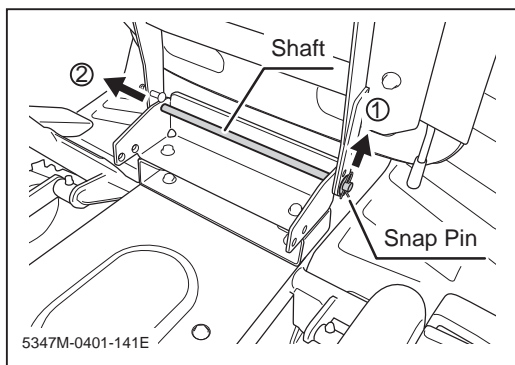
Height of seat at front can be set in one of two positions.

### NOTE

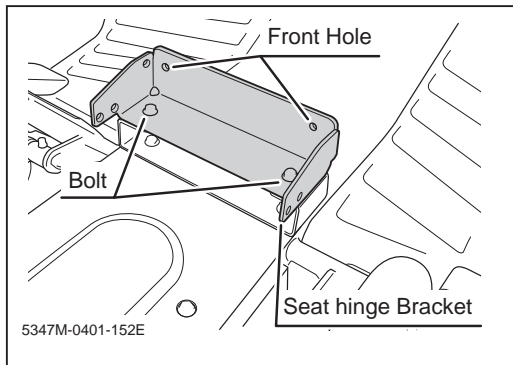
- The seat safety switch bracket at the rear needs to be in the highest position when setting the front of the seat in the high position.
- The front seat bracket and the set height at the front and the rear varies, depending on the model, year and version. However, the adjusting procedure is the same.



1. Raise the seat and push safety lock inward to hold the seat in position.



2. Remove the snap pin ①. Hold the seat and pull out the shaft ② that holds the seat. Remove the seat.



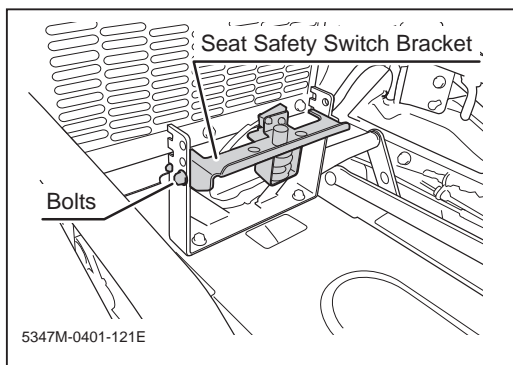
3. Remove the 2 bolts to remove the seat hinge bracket.
4. Turn around the seat hinge bracket and mount it to floor with the bolts through the front holes.
5. Hold the seat in place and install the shaft and hold it with the snap pin, in the reverse order of 2.
6. Pull back the seat safety pin and lower the seat.

### Adjusting Seat Height (Rear Part)

1. Slide seat to the rear-most position.
2. Pull up seat and push safety pin toward inside to hold seat lifted.

### NOTE

- Move the seat and see if the seat is locked securely.
- The height at the rear can be adjusted in 4 levels (2 for the Oceania version.)



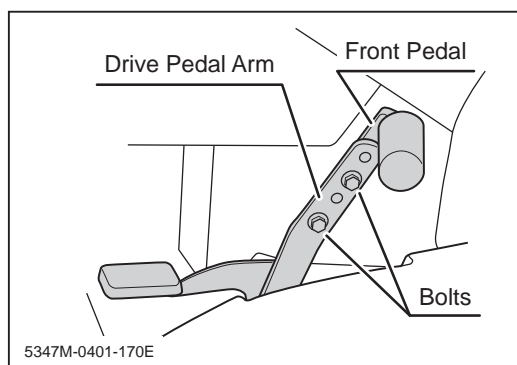
3. Remove the 2 bolts fixing seat safety switch bracket.
4. Move the seat switch safety bracket to a desired position and fix it with the bolts firmly.
5. Pull the safety lock back and lower the seat.



## Adjusting Drive Pedal

### **⚠ CAUTION!**

- Always check if the drive pedal is fixed firmly after adjusting.



1. Remove the two bolts fixing the front pedal with drive pedal arm.
2. Adjust the front pedal into a desired position and fix it with the bolts.

### **NOTE**

- The front pedal can be adjusted in 3 positions and its angle can be adjusted also.




## Driving

### Starting

#### **⚠ WARNING!**

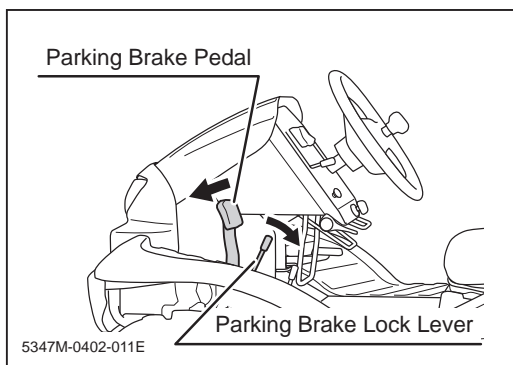
- Always start and run the engine in a well ventilated place.
- Always stay on the seat when starting the engine. Never attempt to start the engine away from the machine. Run over accident may result.

#### **⚠ CAUTION!**

- Do not turn the main switch to [  ] (start) position when the engine is running. The starter motor and/or the engine may be damaged.
- Position the throttle lever to [  ] (slow) when starting.
- Do not turn the starter for more than 5 seconds. If the engine does not start, turn the main switch back to [  ] (off) position and wait for 10 seconds or more before attempting to start again.
- If the engine does not start after starting procedure is performed several times, turn off the main switch and wait for 5 to 10 minutes and try again.
- If the oil pressure warning light stays on after the engine starts, there can be a problem in the oil system. Stop the engine immediately. Engine failure may result.
- Do not use this machine in the temperatures above 40°C or below -15°C. This machine cannot perform adequately in these temperature ranges. Using this machine under such conditions may result in an accident or cause damage to the machine.
- In the winter or cold climate, warm up the engine thoroughly before driving the machine. A cold engine delivers poor performance, which may result in an accident. It also causes excessive wear.

## ⚠ CAUTION!

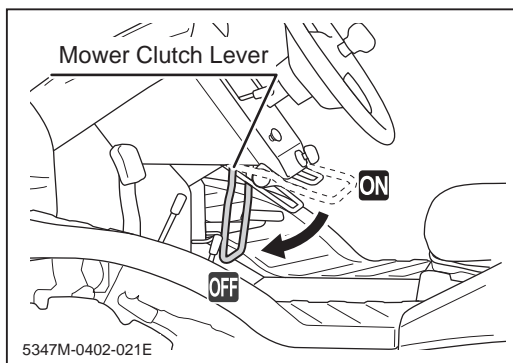
- Do not use this machine in dusty places such as desert. Dust may clog the air filter or enter the engine, which may result in loss of performance and an accident. It also causes excessive wear.
- Do not use this machine in the altitude above 1500m (4920ft.) in its original configuration. This machine cannot perform adequately above that altitude. Using this machine under such conditions may result in an accident or cause damage to machine. If you need to use this machine above that altitude, contact your CANYCOM representative.



1. Make certain the parking brake pedal is depressed and locked. If it is not, depress the parking brake pedal and pull the parking brake lock lever to lock it.

### NOTE

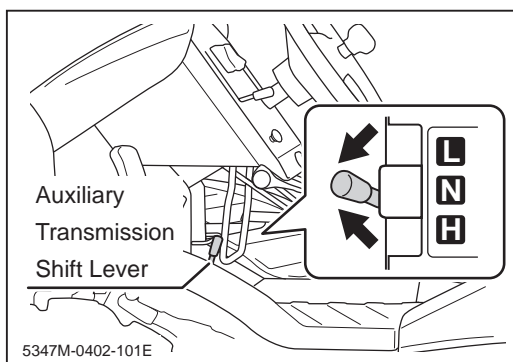
- Safety feature: the engine cannot be started unless the parking brake pedal is depressed.



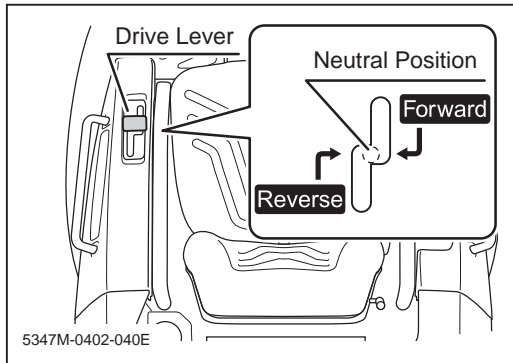
2. Make sure the mower clutch lever is in [OFF] position.

### NOTE

- Safety feature: the engine cannot be started unless the mower clutch lever is in [OFF] position.



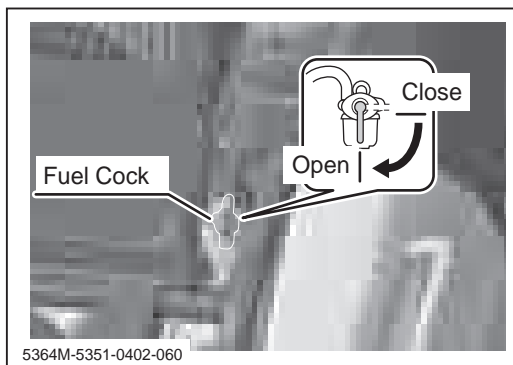
3. Make certain the auxiliary transmission shift lever is in [N] (neutral) position.



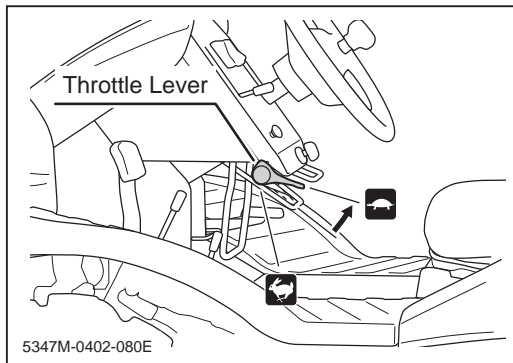
4. Make certain the drive lever is in the neutral position.


**NOTE**

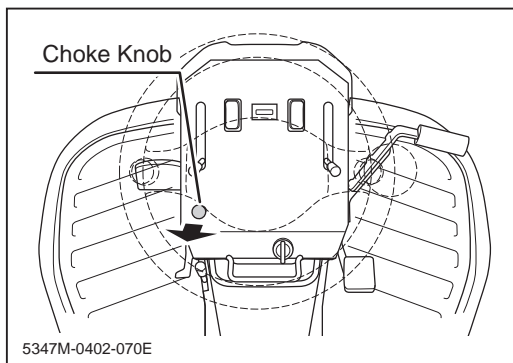
- The drive lever returns to the neutral position when the parking brake pedal is fully depressed.



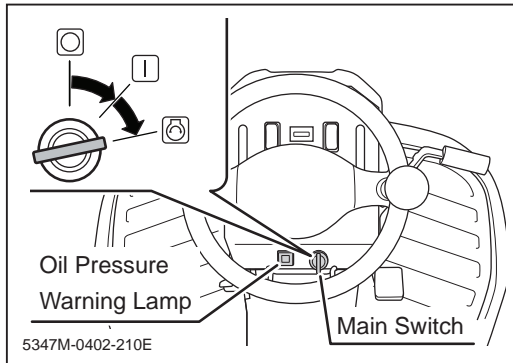
5. Open the fuel cock.



6. Make sure the throttle lever is in the [  ] (slow) position.



7. Pull the choke knob to close the choke valve and insert the ignition key into the main switch.



8. Turn the main switch to [ | ] (ON) position and make sure the oil pressure warning light turns on.
9. Turn the main switch to [ Ⓞ ] (start) position to start the engine. Release the key immediately after the engine starts. The key automatically returns to [ | ] (ON) position. Once the engine starts, make sure the oil pressure warning light goes off.
10. Push back the choke knob to open the choke valve.
11. Run the engine without load for about 5 minutes to warm up.

## NOTE

- When the main switch is turned to [ | ] (ON) position while the engine is not running, the oil pressure warning light goes on. If it does not, the light bulb may be blown. Check the light bulb.
- Once the engine starts, the oil pressure warning light goes off. If it does not, there may be a problem in the oil system. Stop the engine immediately and check the engine.
- Avoid frequent restarting. Once the engine starts, run it for a while to charge the battery.
- Drive the machine gently in the first week (40 to 50 hours) of operation after purchase for breaking-in.

## Driving

### **⚠ WARNING!**

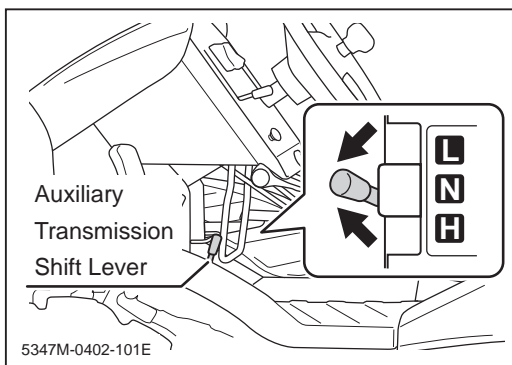
- Always wear the protective footwear, long trousers, hard hat, safety glasses and ear protection when operating or servicing the machine. Proper clothing will minimize the chance of injury. Do not operate the equipment if you have long hair, loose clothing, or jewelry; all of which may get tangled in the moving parts. Do not operate the machine barefoot or with the open sandals.
- Do not allow bystanders to come near the machine when driving.

**⚠ WARNING!**

- 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 starts, acceleration, change of speed, change of direction, or stop. Do not turn at speed. Avoid sudden maneuvers; this may cause the operator to fall or to be thrown, or the machine to tip over.
- Use [L] (low speed) mode and drive slow on an incline to avoid the operator to fall or to be thrown, or the machine to tip over.
- Do not operate the drive pedal and the drive lever simultaneously.
- Do not turn the key to [○] (off) position while traveling.

**⚠ CAUTION!**

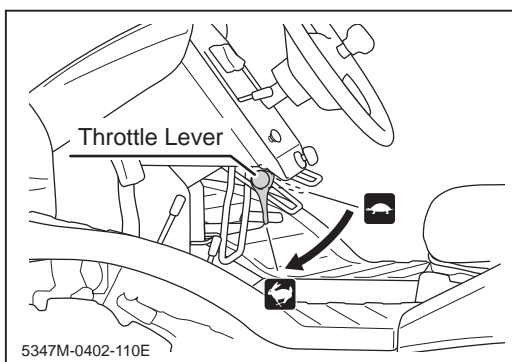
- Do not operate the drive pedal or the drive lever when the parking brake pedal is locked with the parking brake lock lever. It can wear out the parking brake.



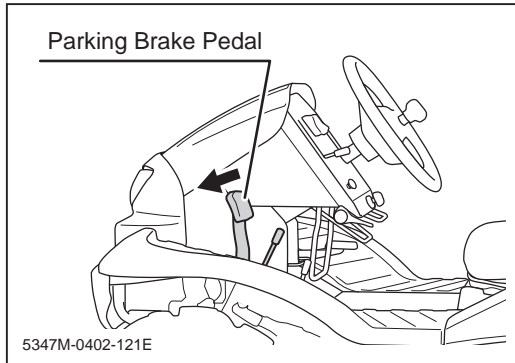
1. Make certain of the safety of your surroundings.
2. Move the auxiliary transmission shift lever to either [H] (high speed) or [L] (low speed) position.

**NOTE**

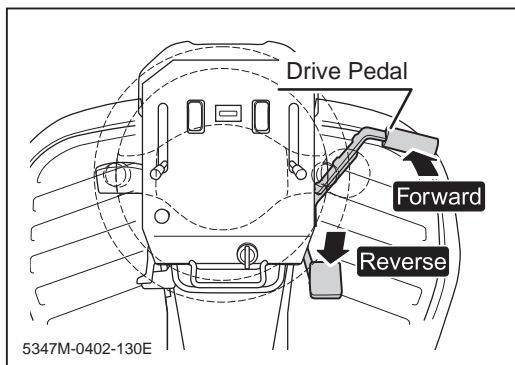
- See Specifications (page 15) for the speed range in either gear position.



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



4. Depress the parking brake pedal to release the parking brake lock lever.

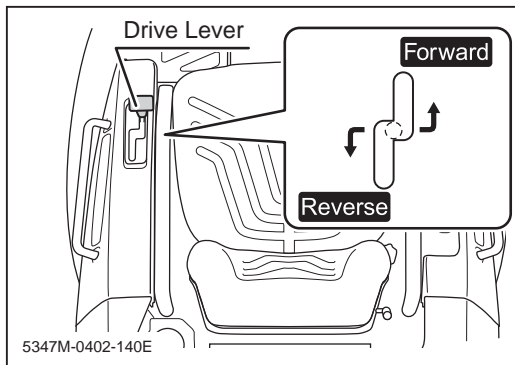


### Driving with Drive Pedal

5. Depress gradually the forward or reverse side of the drive pedal to move in the corresponding direction.

### NOTE

- The speed can be adjusted continuously by the position of the drive pedal.

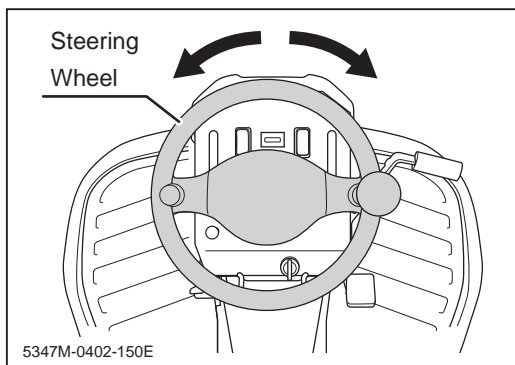


### Driving with Drive Lever

5. Move the drive lever gradually forward or backward to move in the corresponding direction.

### NOTE

- The speed can be adjusted continuously by the position of the drive lever.



6. Turn the steering wheel to turn.

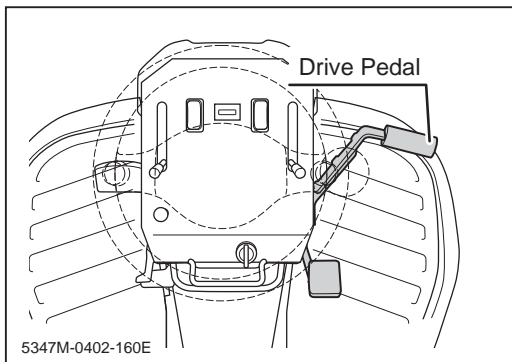
## Stopping

### ⚠ WARNING!

- Do not make a sudden stop. Operator may be thrown off, or the machine may skid or tip over.
- Always park on a firm, level place. Never park on a potentially dangerous place.
- Do not park near combustibles.

### ⚠ CAUTION!

- Do not hold the drive lever and depress the parking brake pedal at the same time. Or, do not depress the drive and parking brake pedals at the same time. The HST may be damaged.

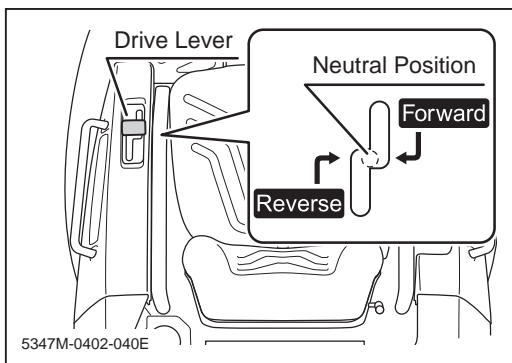


#### When Driving with Drive Pedal

1. Gradually return the drive pedal to slow down.
2. Take the foot off the drive pedal.

#### NOTE

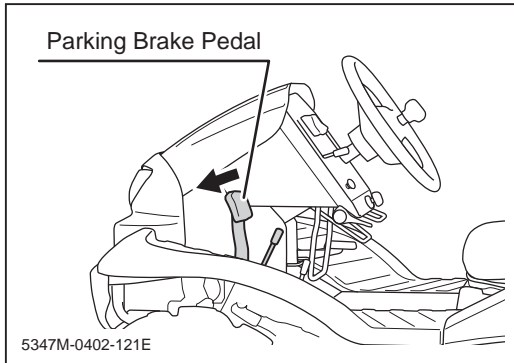
- The drive pedal returns automatically to the neutral when released.



#### When Driving with Drive Lever

1. Gradually return the drive lever to the neutral position to slow down.
2. Release the hand off the drive lever.





3. Depress the parking brake pedal to stop the machine completely.

## NOTE

- When the parking brake pedal is depressed, the drive lever returns to the neutral position.

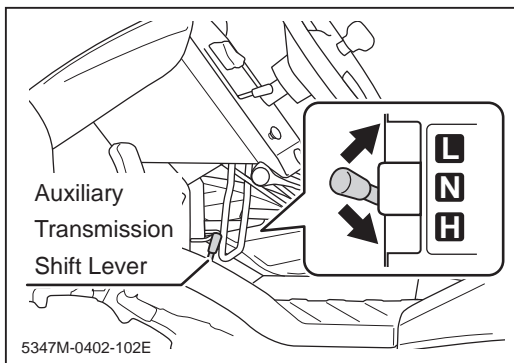
## Shifting

### ⚠ WARNING!

- Always shift gears firmly. When the transmission is not firmly shifted, it may jump out of the gear, resulting in loss of control of the machine.

### ⚠ CAUTION!

- Always stop the machine to shift gears. Shifting gears while the machine is in motion can damage the transmission.
- Use [L] (low speed) mode when cutting (mowing). Cutting in [H] (high speed) mode can put excessive strain and damage the cutting mechanism.



1. Stop the machine.
2. Move the auxiliary transmission shift lever to [H] (high speed) or [L] (low speed) position firmly.

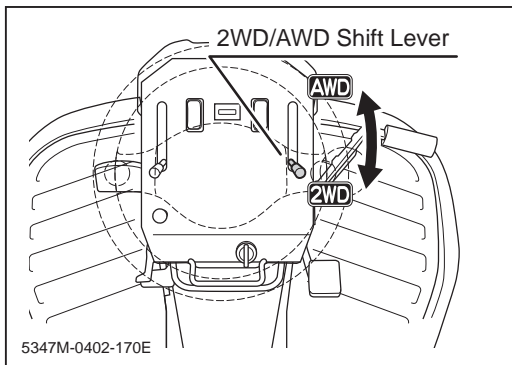
## NOTE

- See Specifications (page 15) for the speed range in either gear position.

## Shifting Between 2WD and AWD

### ⚠ CAUTION!

- Always stop the machine to shift between 2WD or AWD (all-wheel-drive) modes. Shifting gears while the machine is in motion can damage the transmission.
- Use the 2WD mode under the normal condition.
- Pay attention to the minimum turning radius in the AWD mode. In the AWD mode, minimum turning radius is greater than that in the 2WD mode.



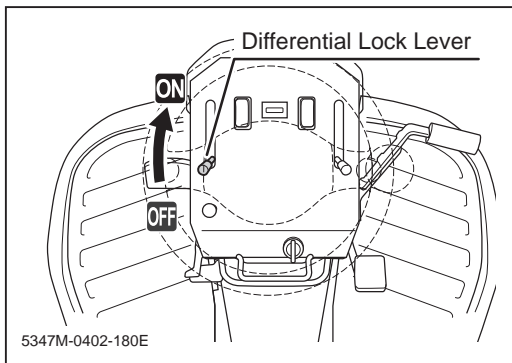
1. Stop the machine.
2. Move the 2WD/AWD shift lever to [2WD] or [AWD] position firmly.

## Locking Differential

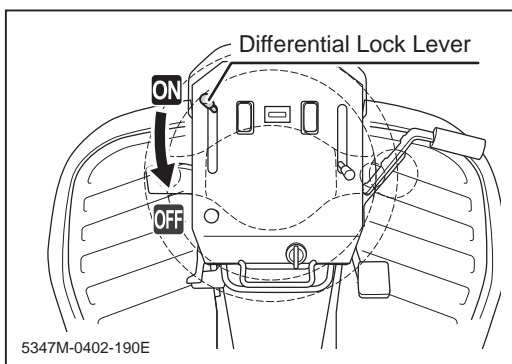
The differential can be locked to minimize slipping on the slippery surface.

### **⚠ CAUTION!**

- Always stop the machine to operate the differential lock lever. Operating the differential lock lever while the machine is in motion can damage the differential.
- Keep the differential lock lever in [OFF] position under the normal running condition. The differential may be damaged.
- Do not turn the machine when the differential lock lever is in [ON] position.



1. Move the differential lock lever to [ON] position.
2. Move the auxiliary transmission shift lever to [L] (low speed) position.
3. Drive slowly out of the slippery area.

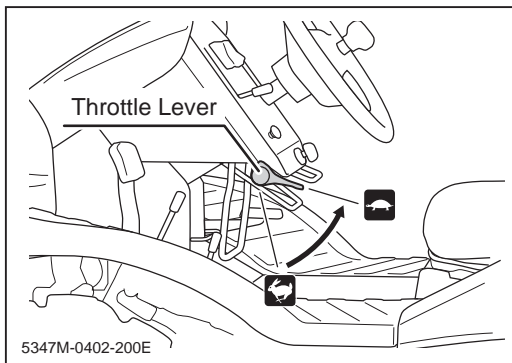



4. Once the machine is out of the slippery area, stop and move the differential lock lever to [OFF] position.

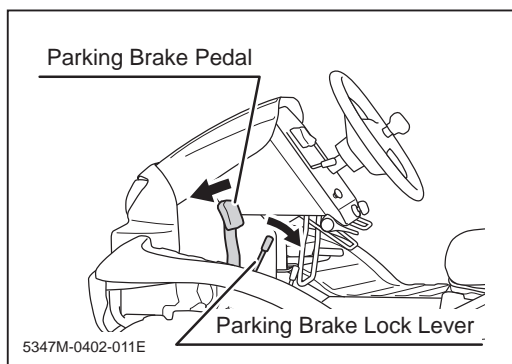
## Parking

### **⚠ WARNING!**

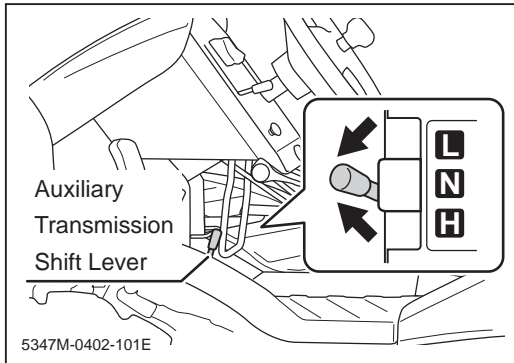
- Always park on a firm, level place. Never park on a potentially dangerous place.
- Avoid parking on a slope. Never park on a slope with an incline of 10 degrees or steeper. If it is absolutely necessary to park the machine on a slope less than 10 degrees, make certain to apply parking brake firmly and block the wheels with chocks.
- Apply parking brake and remove the key when parking.
- Do not park near combustibles.



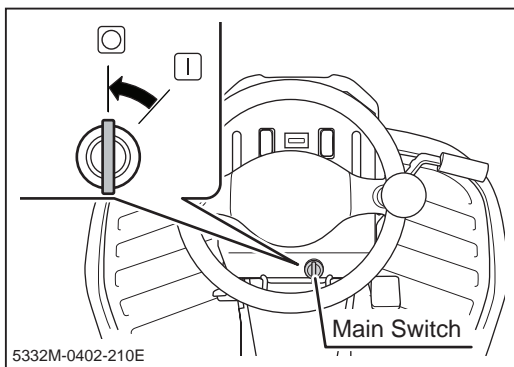
1. Stop the machine.
2. Move the throttle lever toward [  ] (slow) to slow the engine speed.



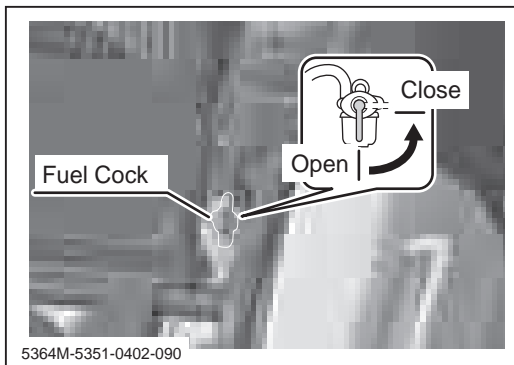
3. Depress the parking brake pedal and pull the parking brake lock lever to lock the parking brake pedal in depressed position.



4. Move the auxiliary transmission shift lever to [N] (neutral) position.



5. Turn the main switch to [ O ] (off) to stop the engine. Remove the ignition key.



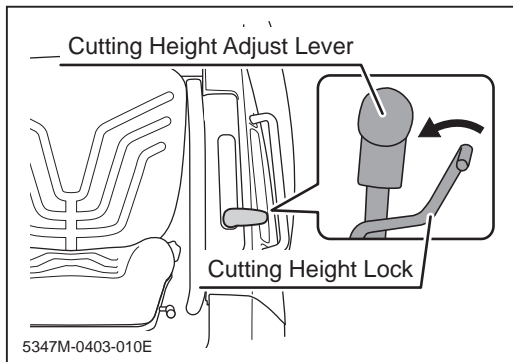
6. Close the fuel cock.

## Working

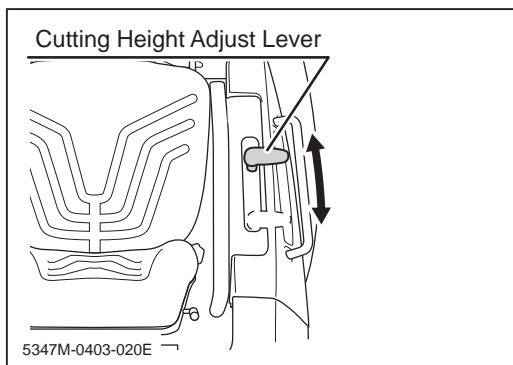
### Inspecting Cutting Blade

Inspect the cutting blades before work. Refer to **Cutting Blades** (page 68) for the inspection procedure.

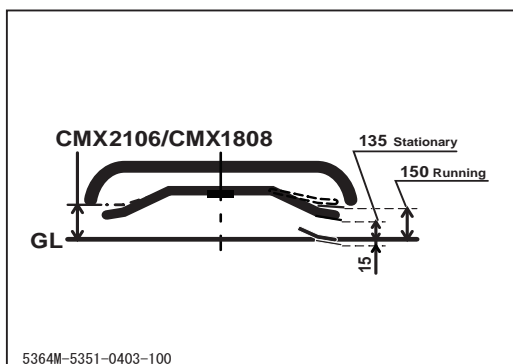
### Adjusting Cutting Height



1. Grab the cutting height lock to unlock the cutting height adjust lever.



2. With the cutting height lock pulled up, move the cutting height adjust lever to a desired position.
3. Release cutting height lock to lock the cutting height adjust lever.



#### NOTE

- Cutting Height Range:  
0mm - 150mm  
(CMX2106 · CMX1808)
- The cutting Height indicated on the side of the cutting height adjust lever is for reference purpose only; actual cutting height may vary due to the condition of the ground or brush and other factors.

## Cutting

### **DANGER!**

- Never place any part of the body under the cutting blade shield.

### **WARNING!**

- Always wear the 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 the open sandals.
- Do not allow bystanders to come near the machine when cutting (mowing).
- The rotating cutting blades can throw stones or debris and cause injuries and damages to nearby people, animals, crops, buildings, automobiles, etc. Pay attention to the safety of surroundings and plan ahead when cutting.
- Never attempt to cut with the cutting blade shield open.
- When cutting, drive forward. The machine is intended to cut brush while moving forward, and this best prevents stones and debris from being thrown.
- Turn the mower clutch to [ON] only when cutting. Keep it in [OFF] position all the other times.
- Never attempt to cut brush on the edge of a ditch or bank. Shoulder of the ditch or bank may collapse. Pay special attention after heavy rain or earthquake.
- Inspect the work site beforehand; inspect terrain and locate holes, drops, or obstacles. Also inspect overhead obstacles such as the branches of a tree. Pay special attention when working near these areas.
- Do not use this machine on an incline steeper than 25 degrees.

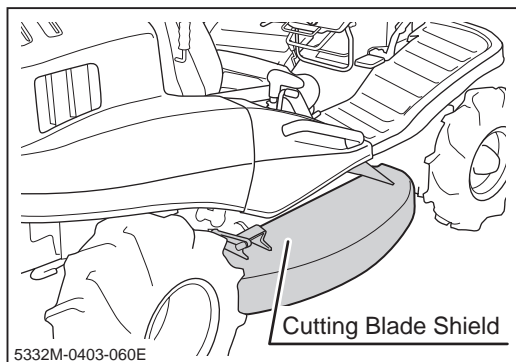
**⚠ WARNING!**

- Always stay on the machine when cutting.
- Make sure the air intake for cooling is not clogged or blocked. If it is clogged or blocked, it causes overheating, resulting in damages to the machine.

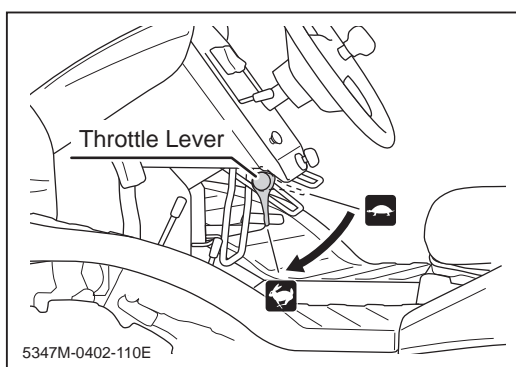
**⚠ CAUTION!**


- When working in a dusty area, clean the air filter element twice a day. The dirty air filter element results in poor starting, poor performance, or short service life.
- When a cutting blade is broken, replace it and the other blade with a new pair. A broken blade causes excessive vibration, which damages the machine.
- When something is tangled to the mower, stop the engine immediately and remove the tangled object. Such object causes excessive vibration, which damages the machine.
- Always clean the cutting blades and the cutting blade stay after every use (see page 79). Foreign object on those parts may become solidified or corrode those parts and make the cutting blades hard to remove.
- In case cut grass, dust, or foreign object enters between the cutting blade pin and slot, making it difficult to remove the cutting blade, use a flathead screw driver or similar tool to remove such material or object first.
- Use [L] (low speed) mode when cutting. Cutting in [H] (high speed) mode puts excessive strain on the cutting mechanism and may damage it.

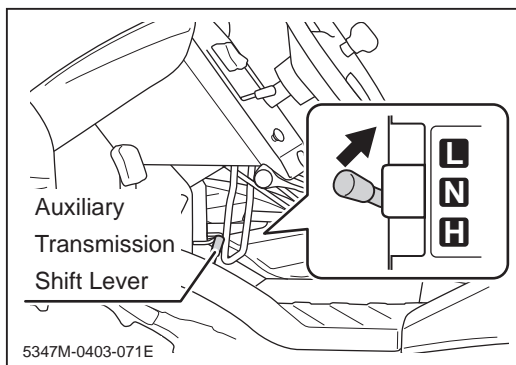




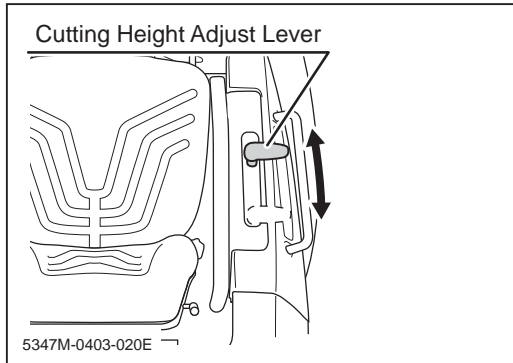
1. Make sure the cutting blade shield is closed.



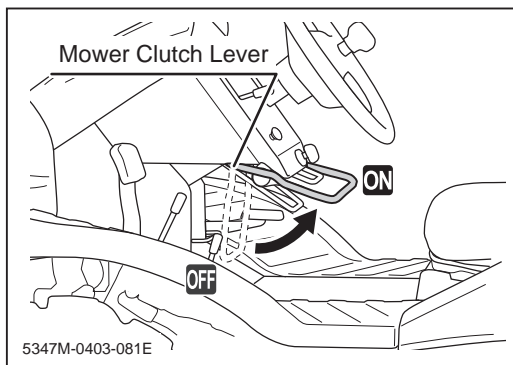
2. Turn the throttle lever to [  ] (fast) position to raise the engine speed.



3. Move the auxiliary transmission shift lever to [L] (low speed).



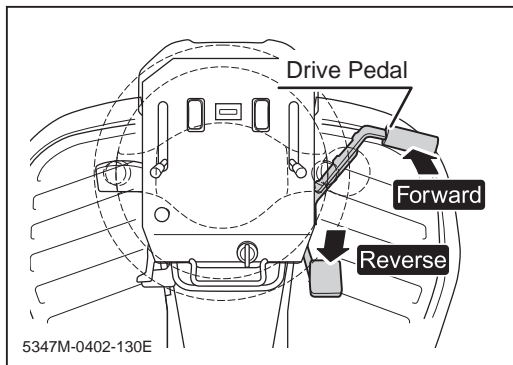
4. Move the cutting height adjust lever to a desired height.



5. Move the mower clutch lever to [ON] to start mower.

#### NOTE

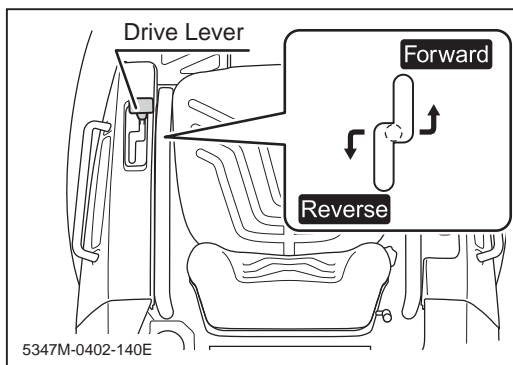
- **Safety feature: the engine stops automatically if the operator leaves the seat while the mower is running.**

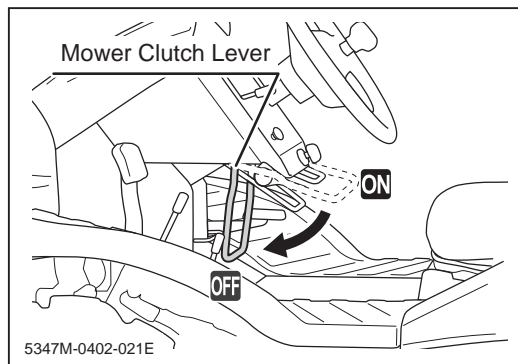


6. Drive the machine forward to cut.

#### NOTE

- **When cutting with this machine for the first time, start on a flat surface. Drive slowly and in an overlapping pattern.**
- **If the load to the mower is high, drive slowly, or cut in two steps.**

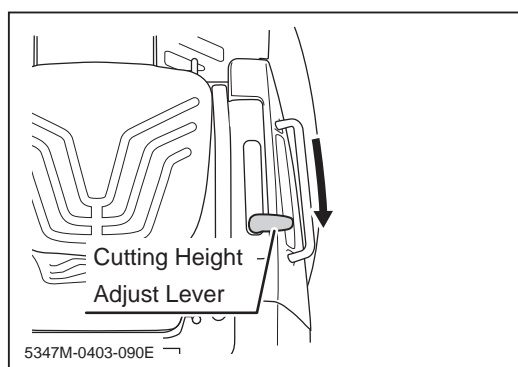




7. Move the mower clutch lever to [OFF] to stop the mower.

## NOTE

- Moving the mower clutch lever to [OFF] applies the mower brake on the mower to stop.



8. Move the cutting height adjust lever to the highest 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.

## Engine

### Daily Inspection

- Engine Oil - to be clean and at the correct level.
- Air Filter Element - to be clean and free of damage.
- Leaks - No fuel or oil leaks to be found.
- Bolts, Nuts, Fasteners - not to be loose or missing.
- Sound, Vibration - No abnormal noise or excessive vibration.

### Scheduled Maintenance

Items	Frequency
Clean and check fastens	Every 8 hours (daily) (clean more frequently in dusty place)
Check and fill engine oil	Every 8 hours (daily) (clean more frequently in dusty place)
Clean air filter element	Every 8 hours (daily) (clean more frequently in dusty place)
Change engine oil	First time:20 hours. Every 50 hours afterward
Clean spark plugs	Every 50 hours
Replace fuel strainer	Every 200 hours
Replace air filter element	Every 200 hours (contact Canycom representative for placement)
Check and adjust spark plug gap	Every 200 hours (contact Canycom representative for placement)
Replace oil filter	First time:50 hours. Every 200 afterward (contact Canycom representative for placement)
Check and adjust tappets	Every 300 hours (do more frequently in dusty place)
Remove carbon deposit from cylinder head	Every 500 hours (do more frequently in dusty place)
Clean engine base (oil pan)	Every 500 hours (clean more frequently in dusty place)
Clean carburetor	Every 500 hours (clean more frequently in dusty place)
Perform valve lapping	Every 500 hours (clean more frequently in dusty place)
Replace fuel hose	Every two years
Overhaul	1000 hours (contact Canycom representative for overhaul)

## Chassis

- 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		
Drive Train	Tires	Tires shall be inflated to the specified pressure.	√	√	√	Page 60
		Tires and wheels shall be free of crack, damage, or uneven wear.		√	√	
		Wheel bolts shall not be loose or missing.	√	√	√	
		Wheel bearings do not exhibit excessive play, and no irregular noise or overheating shall be observed.		√	√	
	Transmission	Irregular noise or overheating shall not be observed when moving forward or backward.		√	√	
		There shall not be oil leaks in or around transmission.		√	√	
	Auxiliary Transmission	Transmission can be shifted to either position positively and performs normally.		√	√	
		Lever shall not be loose or have excessive play.		√	√	
	Front Axle	Irregular noise or overheating shall not be observed when traveling.		√	√	
		There shall not be oil leaks in or around front differential case or knuckles.		√	√	
	HST	HST shall perform normally.	√	√	√	
		HST oil (hydraulic fluid) shall be filled to a proper level and shall be clean and free of dirt or contamination.		√	√	Page 62
Lever or pedal shall not be loose or have excessive play.			√	√		

Item	Description	Schedule			Note	
		PSI	Mon	Year		
Drive Train	V-belt	Belt tension shall be properly adjusted.		√	√	
		Belt shall be free of damage or excessive wear.		√	√	
	Parking Brake	Brake shall work properly.	√	√	√	Page 67
		Parking brake shall be able to hold the machine on the 20-degree slope.		√	√	
	Steering	Turn steering wheel right and left; front wheels shall turn accordingly.		√	√	
		Steering can be adjusted in 5 positions and locked securely.		√	√	
	Rods, Links, and Wires	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.		√	√	
Body, Chassis, Safety Devices	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, deformation, or corrosion.		√	√	
		Doors and lids shall open, close, and lock properly.		√	√	
		Fastening bolts or nuts shall not be loose or missing.	√	√	√	
	Labels	Warning labels and instruction plates shall be clean, legible, and free of damage.	√	√	√	
Cutting System	Cutting System	Blades shall be free of cracks or damage.	√	√	√	Page 68
		Blade pins and wave washers shall be free of cracks or damage.	√	√	√	Page 68
		Cutting blade shield shall be free of cracks or damage.	√	√	√	
		Skirts on cutting blade shield shall be free of cracks or damage, and shall not be missing.	√	√	√	
		Belt tension shall be properly adjusted.	√	√	√	Page 71
		Belt shall be free of damage or excessive wear.	√	√	√	Page 71
		When activated, mower brake shall stop mower.	√	√	√	Page 72
		Greasing points shall be properly greased.		√	√	Page 47, 48

Item	Description	Schedule			Note	
		PSI	Mon	Year		
Electrical System	Charging System			√		
	Battery	Battery fluid (electrolyte) shall be at the proper level.		√	√	Page 75
		Terminals shall be free of looseness or excessive corrosion.		√	√	
	Head Light Rear Light *1	Head and rear lights shall work.	√	√	√	
		Light lens shall be free of cracks or chipping and water shall not be in the light unit.		√	√	
	Wiring	Connections shall not be loose.		√	√	
		Wiring shall be free of damages.		√	√	

\*1 AWD models only.

# 5

# Maintenance

## List of Fluids and Lubricants

Item	Schedule	Grade	Cap.
Fuel	As needed.	Automotive Unleaded Gasoline	20 L
Engine Oil	Fill Inspect daily. Fill as needed. Change Initially - After 20 hours of use. Every 50 hours afterwards.	Gasoline Engine Oil API rating: SE or better. SAE rating: 10W-30	1.4L
Transmission Oil	Change Initially - After 50 hours of use. Every 500 hours afterwards.	Gear Oil API rating: GL-4 or 5 SAE rating: 80	0.9L
Front Axle Oil*1	Change Initially - After 50 hours of use. Every 500 hours afterwards.	Gear Oil API rating: GL-4 or 5 SAE rating: 80	0.7L
HST Oil	Change Once a year or every 500 hours (whichever comes first).*2 Every 300 hours.*3	Gasoline Engine Oil API rating: SE or better. SAE rating: 20W-50	4.0L*2 1.1L*3
Mower Gearbox Oil	Change Initially - After 50 hours of use. Every 500 hours afterwards.	Gear Oil API rating: GL-4 or 5 SAE rating: 80	0.15L
Battery Electrolyte	Fill Inspect every 50 hours and fill when necessary.	Distilled Water	-

\*1 AWD models only, \*2 Models with Charge-Pump, \*3 Models without Charge-Pump



## Greasing Points

### ⚠ CAUTION!

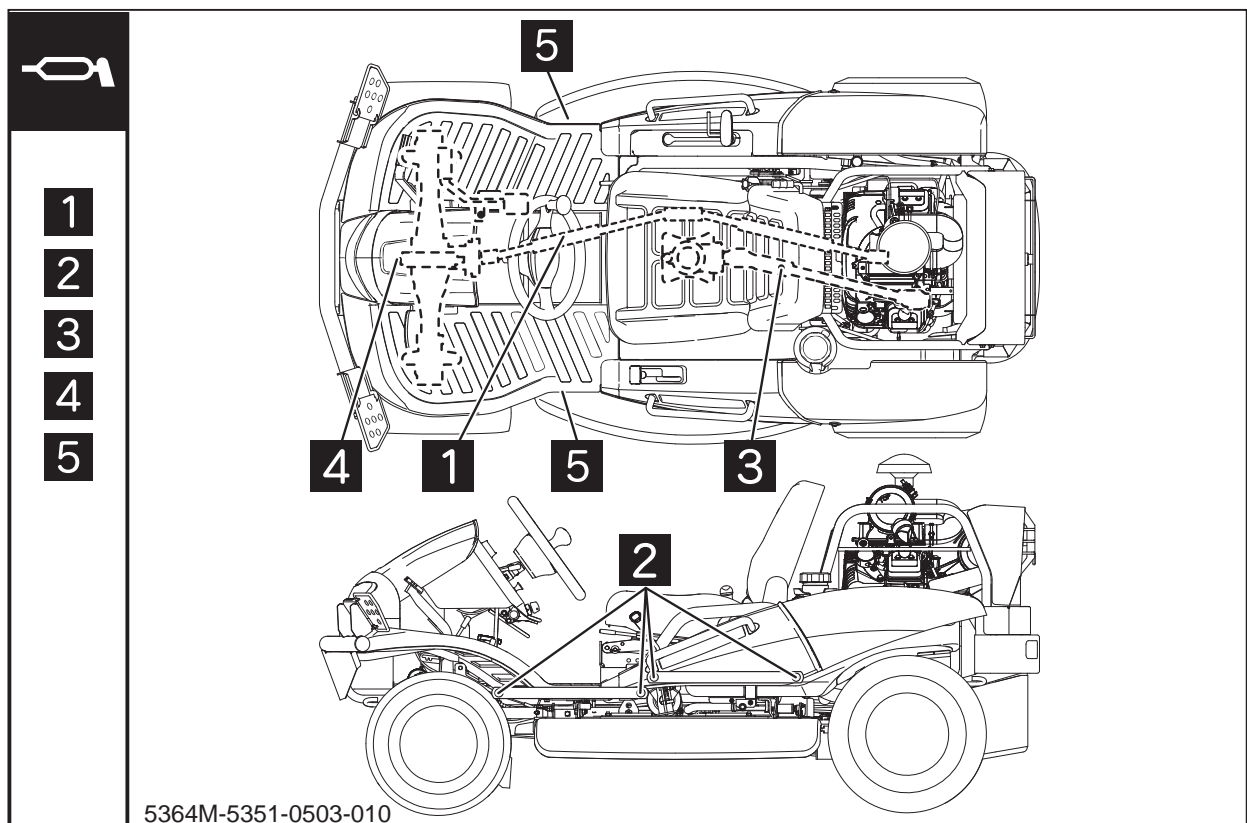
- Grease regularly. Insufficient greasing may result in seizure or rusting, affecting smooth operation of the machine.

### NOTE

- When using a manual grease pump, push handle five to six times. When handle becomes heavy, stop pushing.
- When using a pneumatic grease pump, charge for two to three seconds.
- Set the cutting height to the lowest to grease the link pivots.

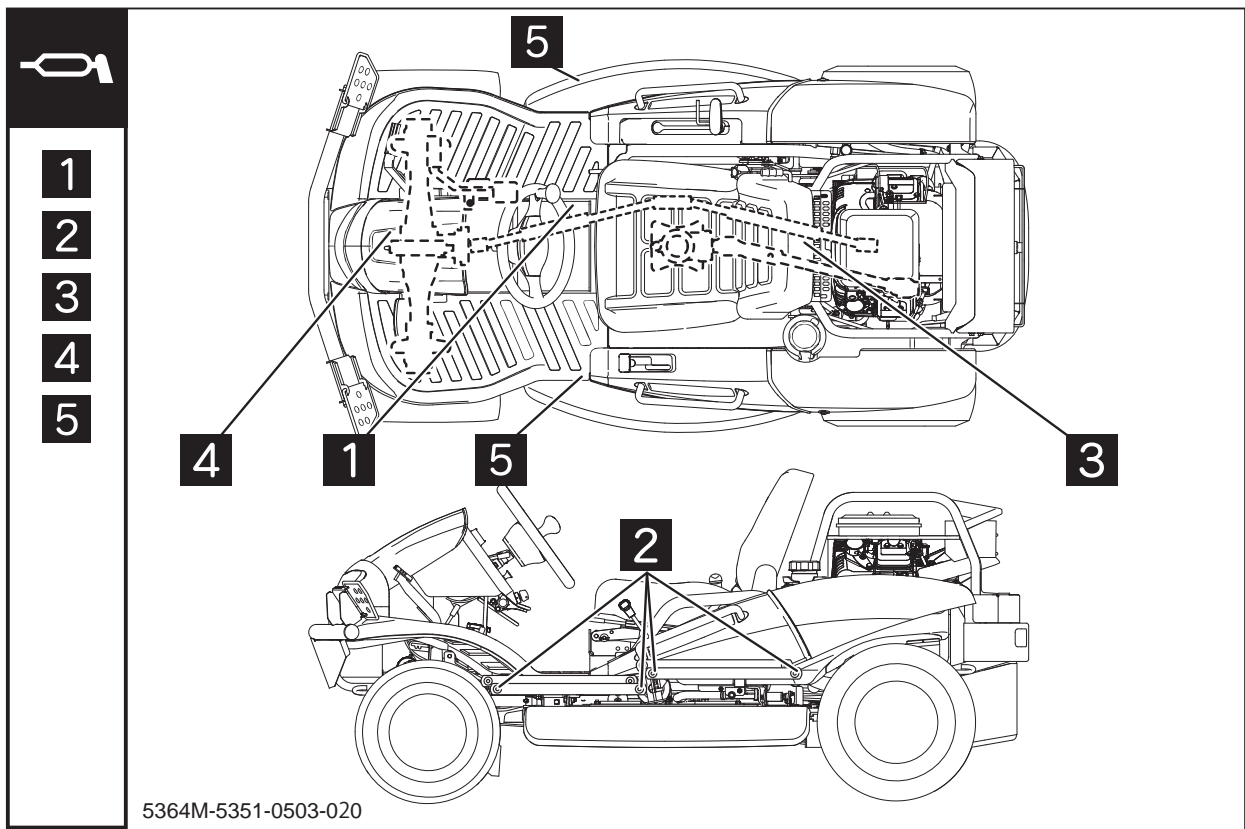
## Greasing Points (CMX2302/CMX 2106 )

Location	Schedule	Grade
1 Propeller shaft	Every 6 Months	Chassis Grease
2 Mower deck link pivots	Every 6 Months	Chassis Grease
3 Mower drive shaft	Every 6 Months	Chassis Grease
4 Front axle center pivot	Every 6 Months	Chassis Grease
5 Side shield	Every 6 Months	Chassis Grease



Greasing Points (CMX 1808 )

Location	Schedule	Grade
1 Propeller shaft	Every 6 Months	Chassis Grease
2 Mower deck link pivots	Every 6 Months	Chassis Grease
3 Mower drive shaft	Every 6 Months	Chassis Grease
4 Front axle center pivot	Every 6 Months	Chassis Grease
5 Side shield	Every 6 Months	Chassis Grease



\* Numbers in the above illustration to match the numbers in the sticker on the machine.

## List of Consumables and Spares

<b>⚠ CAUTION!</b>
<ul style="list-style-type: none"> <li>• When replacing a consumable or spare, always use the CANYCOM genuine part. Using a non-CANYCOM part may reduce the machine's performance or its service life. Note that it may also void the warranty and certification for the relevant standards.</li> </ul>

Item	Part No.	Schedule	Qty.
<b>Engine</b>			
Oil Filter Cartridge	842921	Initially 50 hrs. After - Every 200 hrs. Replace if defective.	1
Air Filter Element	820263	Every 200 hrs or seasonally.	1
Spark Plug (XC92YC)	792015	Clean: every 50 hrs. Replace if defective.	2
Wire (Throttle)	53640102000	Replace if defective.	1
Wire (Choke)	53640103000	Replace if defective.	1
<b>Fuel System</b>			
Hose (Carburetor - Fuel Pump)	791801	Every 2 years.	1
Hose (Fuel Pump - Fuel Filter)	791766	Every 2 years.	1
Hose (Fuel Filter - Fuel Cock)	53640316000	Every 2 years.	1
Hose(Fuel Cock - Fuel Tank)	53640315000	Every 2 years.	1
<b>Drive Train</b>			
V-belt (HST)	08521300036	Replace if defective.	1
Tire (Front)* <sup>2</sup>	53472202000	Replace if defective or reaches the wear limit.	2
Tire (Front)* <sup>1</sup>	53322202000	Replace if defective or reaches the wear limit.	2
Tire (Rear)* <sup>2</sup>	53472302000	Replace if defective or reaches the wear limit.	2
Tire (Rear)* <sup>1</sup>	53322302000	Replace if defective or reaches the wear limit.	2
Valve	53472304000	Replace if defective.	4
Tire Tube (Front)	53322203000	Replace if defective.	2
Tire Tube (Rear)	53322303000	Replace if defective.	2
Brake Lining (Rear)	73019901000	Replace if defective (Replace in pairs).	2
Brake Lining (Front)	73069901000	Replace if defective (Replace in pairs).	2
Wire (Rear Brake)	53323305500	Replace if defective.	1

\*1 Standard

\*2 Option

Item	Part No.	Schedule	Qty.
<b>Drive Train</b>			
Wire (Front Brake)	53323306500	Replace if defective.	1
Wire (Drive Lever)	53473307000	Replace if defective.	1
Wire (Differential Lock)	53323402500	Replace if defective.	1
Wire (AWD)	53323452500	Replace if defective.	1
Cooling Fan	53352023000	Replace if defective.	1
HST Oil Filter	53472071200	When HST oil is changed (once a year or every 500 hours).	1
<b>Cutting System</b>			
Blade Set (Iai)	53324202000	Replace if defective.	1
Rubber Plate (Front Skirt, Center)	53322114000	Replace if defective.	1
Rubber Plate (Front Skirt, Sides)	53322113000	Replace if defective.	2
Rubber Plate (Front Diff.-Blade Shield)	53352111000	Replace if defective.	1
Rubber Plate (Front Axle, Rear Right)	53212118000	Replace if defective.	1
Rubber Plate (Front Wheel, Inside)	53322116000	Replace if defective.	2
Rubber Plate (Blade Shield, Rear)	53324113000	Replace if defective.	1
Rubber Plate (Blade Shield, Rear Left)	53214124000	Replace if defective.	1
Brake Lining (Mower)	53104301001	Replace if defective.	1
Wire (Mower Clutch)	53472404500	Replace if defective.	1
Gas Spring (Cutting Height Adjuster)	53474054000	Replace if defective.	1
Cutting Blade Stay	53474201000	Replace if defective.	1
<b>Electrical System</b>			
Battery	37053901000	Replace if defective.	1
Fuse, 30A (Green, Main)	09801003002	Replace if defective.	1
Fuse 10A (Red, Lights)	09801001002	Replace if defective.	1
Light Bulb (Head Light)	53320203100	Replace if defective.	1
Light Bulb (Rear Light)	09808121502	Replace if defective.	1

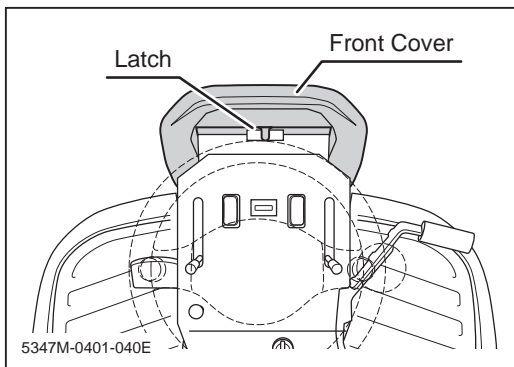
\*These specifications are subject to change without notice.

## Removing and Installing Body Panels

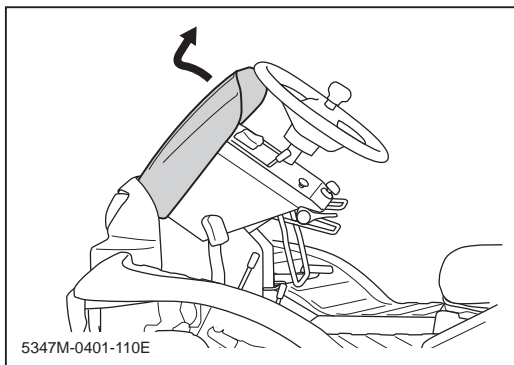
### ⚠ CAUTION!

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

### Front Cover



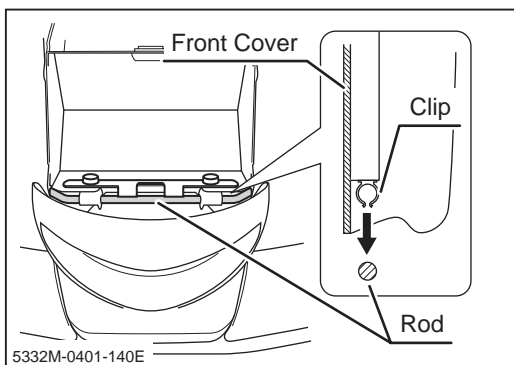
1. Pull the top side of the front cover to unlock the latch.



2. Pull up the front cover.

#### NOTE

- A tool box is provided under the front cover. Use this tool box to store tools or replacement cutting blades.

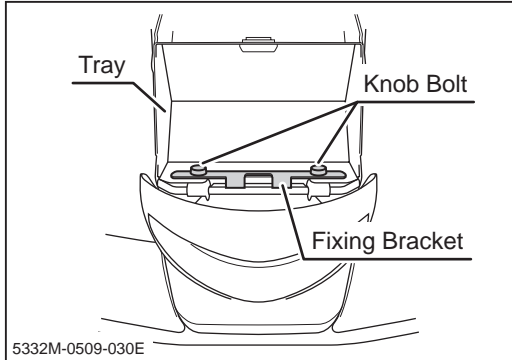


3. Raise the steering wheel to the maximum angle and fit the clip on the back of the front cover to the rod.
4. Fit the upper part of the front cover.

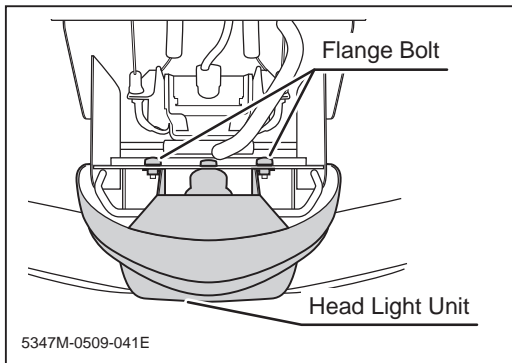
#### NOTE

- Make sure not to catch the front cover with the plate on both sides when installing the front cover. If caught, it breaks the front cover.

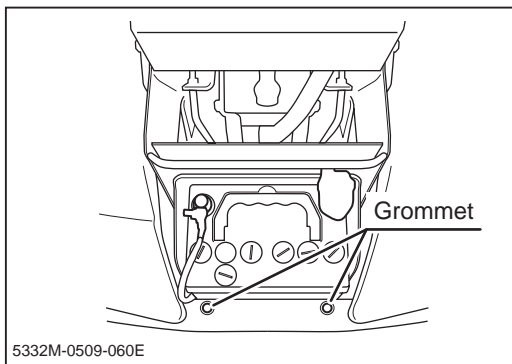
## Head Light



1. Remove the front cover.
2. Remove the 2 knob bolts fixing the tray.
3. Remove the fixing bracket and lift the tray.

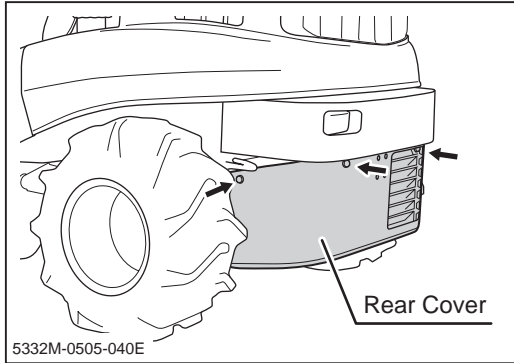


4. Remove the 2 flange bolts fixing the head light unit to remove the head light unit.



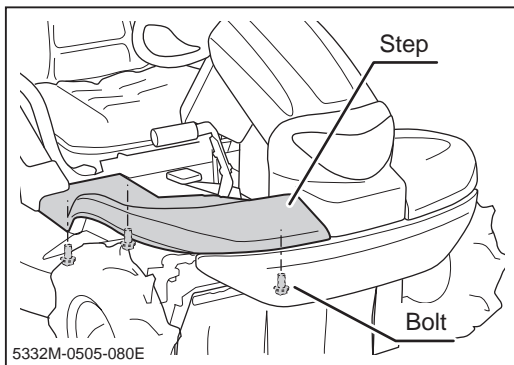
5. Insert the projections at the bottom of the head light unit into the holes of the grommet on the bumper. Install the other parts in the reverse order.

## Rear Cover



1. Remove the 4 bolts.
2. Remove the rear cover.

## Step



1. Remove the 3 bolts fixing the step.
2. Remove the step.
3. Remove the step on the other side in the same way.

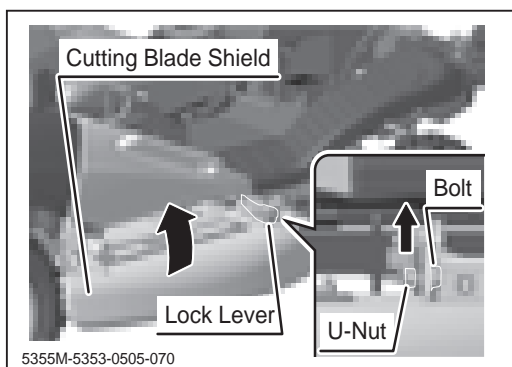
## Cutting Blade Shield

### **⚠ DANGER!**

- Stop the engine before opening the cutting blade shield. Opening the cutting blade shield when the mower is running may result in injury or death.

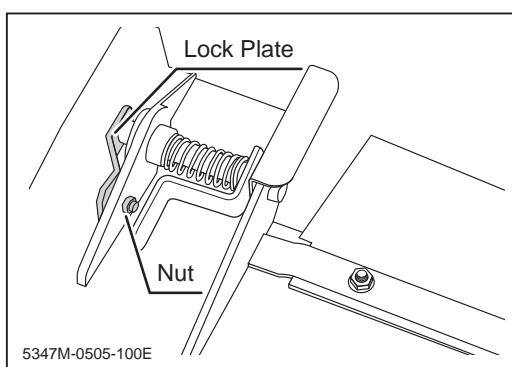
### **⚠ WARNING!**

- Make sure the cutting blade shield is securely locked in the lowest position and does not open to the side. Loose shield may allow objects to be thrown, resulting in injury to the operator or by-standers or in property damage.



#### Flipping up shield

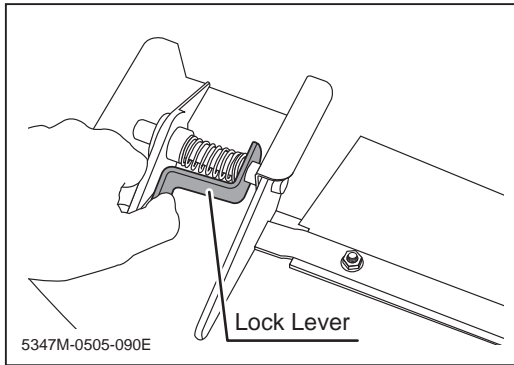
1. Remove bolt and U nut.
2. Raise lock lever.
3. Hold lock lever and raise blade shield .
4. Release lock lever to lock shield in the raised position.



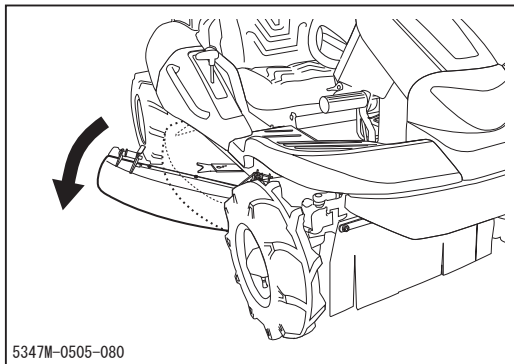
#### Opening shield to the side

1. Undo the nut to remove the lock plate.





2. Squeeze the lock lever to open the cutting blade shield to the side.



## Engine

### ⚠ WARNING!

- Always stop the engine and remove the ignition key before servicing.
- An engine that has been running is very hot. Allow the engine to cool before servicing, or severe burns may result.
- Keep fire and spark away when servicing.

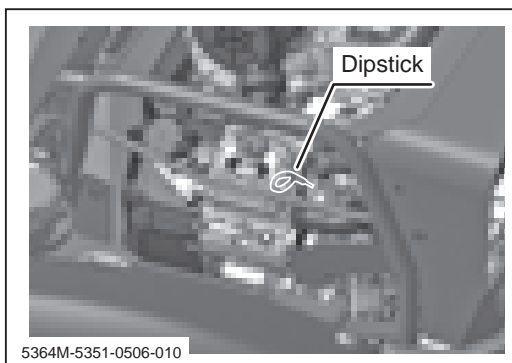
## Engine Oil

### ⚠ CAUTION!

- 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.
- Dispose of the drained oil properly.

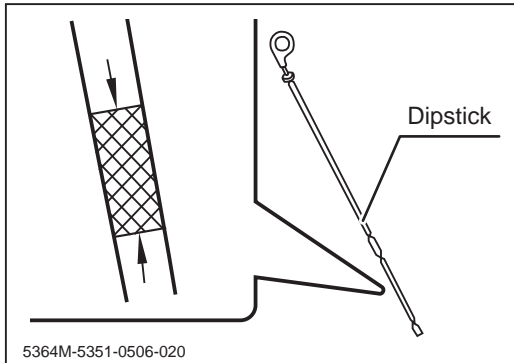
### NOTE

- To obtain a correct reading, check the 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 the oil level on a level surface.
- Oil to use and capacity: Page 46.

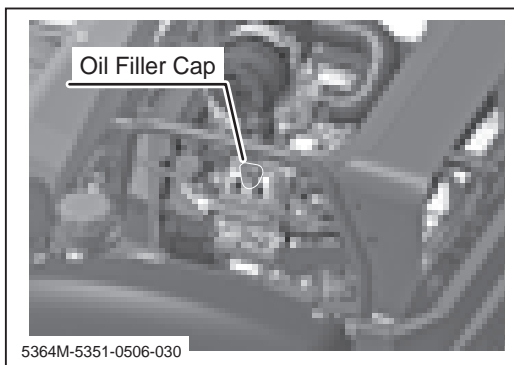


### Inspecting

1. Park the machine on a level surface.
2. Pull out the dipstick and wipe it clean.
3. Insert the dipstick fully and pull it out.

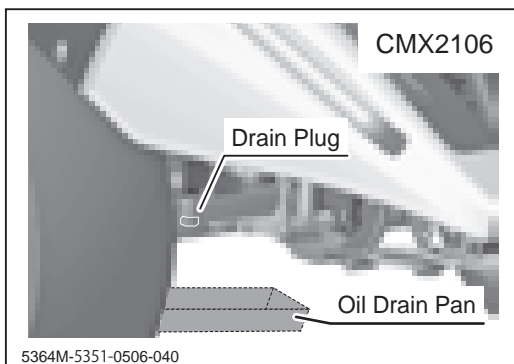


4. Visually inspect the oil level. Make sure the oil level is between the upper and lower limits. If it is below the lower limit, add oil.
5. Visually inspect the condition of oil. If it is too dirty or viscosity is not normal, change oil.
6. Put the dipstick back in place.



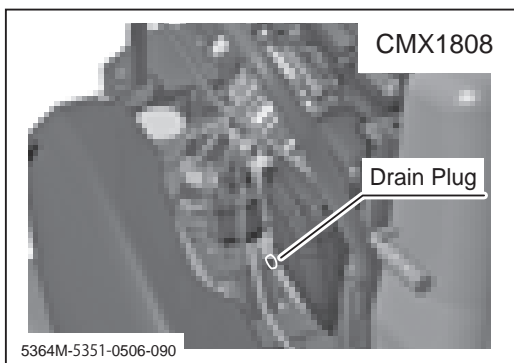
## Filling

1. Remove the oil filler cap.
2. Fill specified amount of correct oil into the filler.
3. Check the oil level. Make sure the oil level is between the upper and lower limits.
4. Put the oil filler cap back in place.

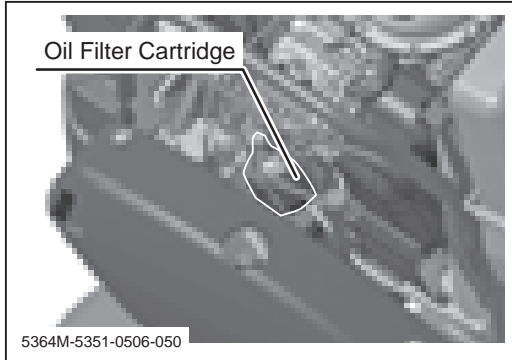


## Changing

1. Have an appropriate oil drain pan.
2. Remove the oil filler cap.
3. Remove the drain plug to drain oil.
4. Put the drain plug back in place.
5. Fill oil.
6. Check the oil level and make sure the oil level is appropriate.
7. Put the oil filler cap back in place.



## Oil Filter Cartridge

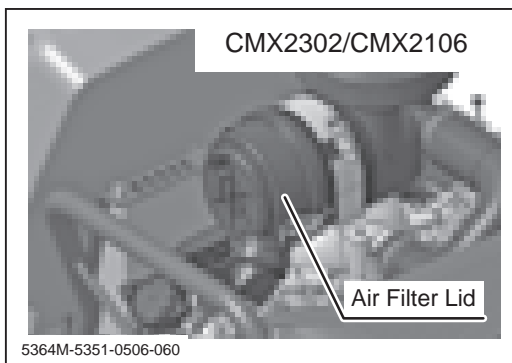


1. Follow the instructions in **Engine Manual** to change the oil filter cartridge.

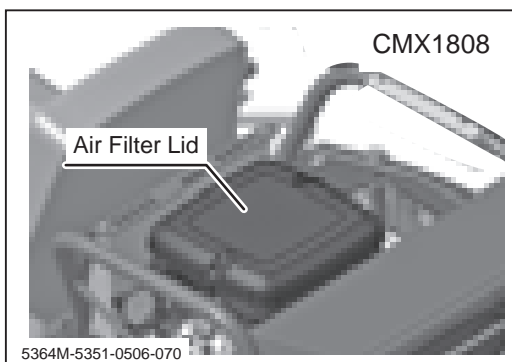
## Air Filter

### ⚠ CAUTION!

- Clean the air filter element daily. The dirty air filter element causes poor starting, reduces engine performance and shortens engine life.
- Replace the air filter element if damaged.



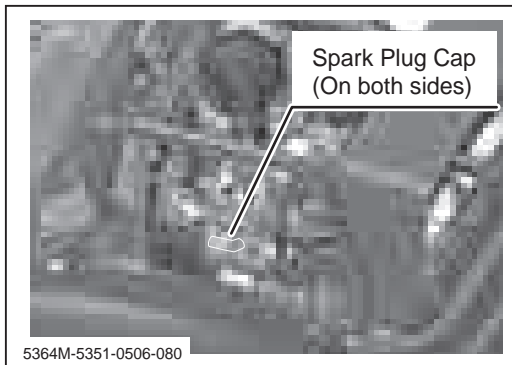
1. Follow the instructions in **Engine Manual** to inspect, clean or change the air filter element.



## Spark Plugs

### ⚠ CAUTION!

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



1. Follow the instructions in **Engine Manual** to inspect, clean, or change the spark plugs.

## Drive Train

### ⚠ WARNING!

- Stop the engine and remove the ignition key when servicing the drive train.
- Allow the machine to cool off before servicing. An engine and its ancillaries are very hot after operation and may pose a burn hazard.

### ⚠ CAUTION!

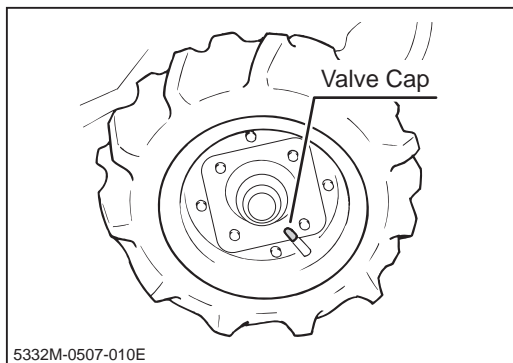
- Dispose of drained oil properly.

## Tires

### ⚠ CAUTION!

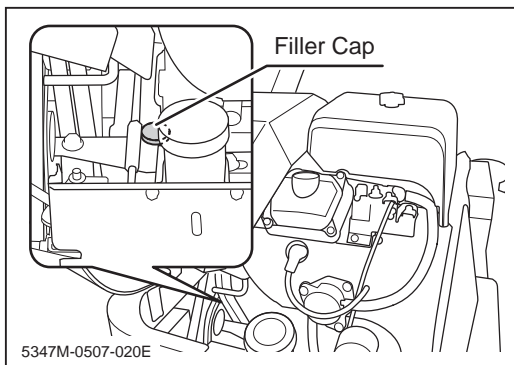
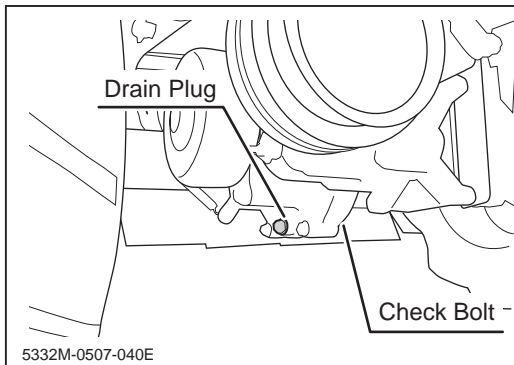
- Inflate the tires to the specified pressure. Under- or over- inflation causes uneven wear or other damages to the tires.

	Tire Size	Pressure KPa(kgf/cm <sup>2</sup> )
Front Wheel	AGR 4.00-7 (2PR)	120(1.2)
Rear Wheel	17x8.00-8 (4PR)	240 (2.4)



1. Park the machine on a level ground.
2. Remove the valve cap.
3. Check the tire air pressure. If it is different from the specified values, adjust the pressure.
4. Put the valve cap back in place.

## Transmission Oil



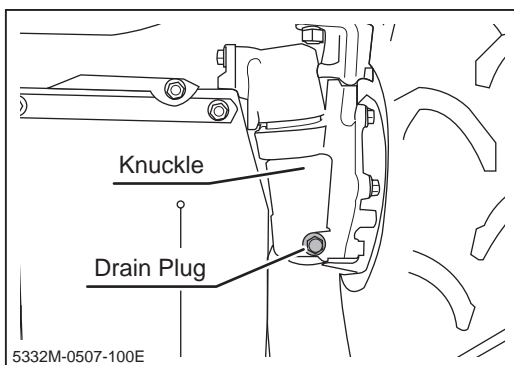
### NOTE

• Oil to use and capacity: Page 46.

1. Park the machine on a level ground.
2. Have an appropriate oil drain pan.
3. Remove the transmission oil drain plug to drain oil.
4. Install the drain plug back in place.

5. Remove the transmission oil filler cap.
6. Remove the check bolt.
7. Fill the specified amount of correct oil into the filler, up to the check bolt hole.
8. Put the check bolt back in place.
9. Put the filler plug back in place.

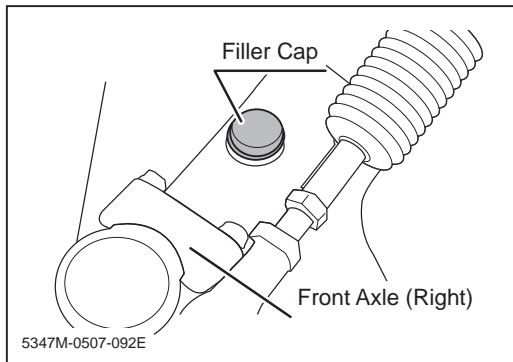
## Front Axle Oil



### NOTE

• Oil to use and capacity: Page 46.

1. Park the machine on a level ground.
2. Have an appropriate oil drain pan.
3. Remove the drain plug on the left front knuckle to drain oil.
4. Remove the drain plug on the right front knuckle to drain oil as well.

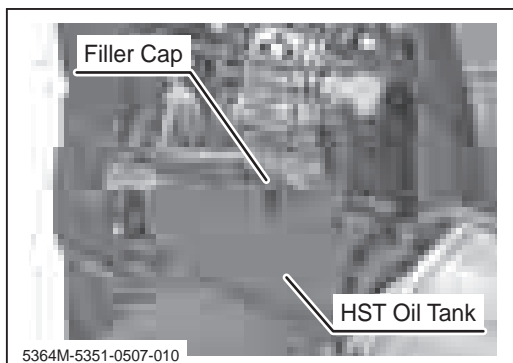
**NOTE**

- The drain plug for the right front knuckle is on the back side of the front axle.

5. Install both the drain plugs back in place.
6. Remove the right front step.
7. Remove the oil filler cap.
8. Fill the specified amount of oil into the filler.
9. Install the filler cap back in place.
10. Install the right front step.

**HST (Hydrostatic Transmission) Oil****⚠ CAUTION!**

- An HST is a very delicate mechanism, and contamination of ten-micron-order particles can damage it. When it is necessary to work on an HST, work in a clean and dust-free environment, and make sure dust or dirt do not enter its circuit.

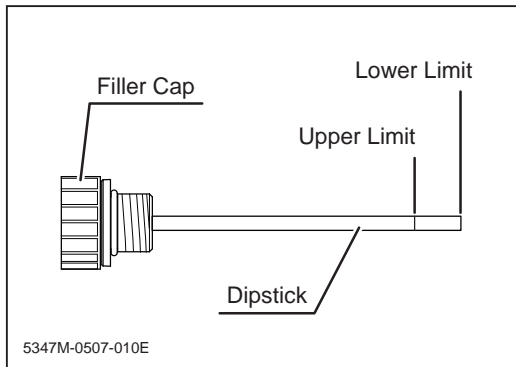
**NOTE**

- To obtain a correct reading, check the HST oil level before starting, or wait until the HST oil cools off sufficiently. Hot HST oil expands in volume and does not provide a correct reading.
- When oil is sufficiently cooled and is at the [MIN] level, its amount is sufficient.
- Do not exceed beyond [MAX] level. HST oil may expand and overflow.
- Change the HST oil once a year or every 500 hours, whichever comes first.
- Oil to use and capacity: Page 46.

**Inspecting - Models with charge-pump**

1. Park the machine on a level ground.
2. Unscrew and remove the filler cap.
3. Wipe the dipstick with clean cloth. Reinstall

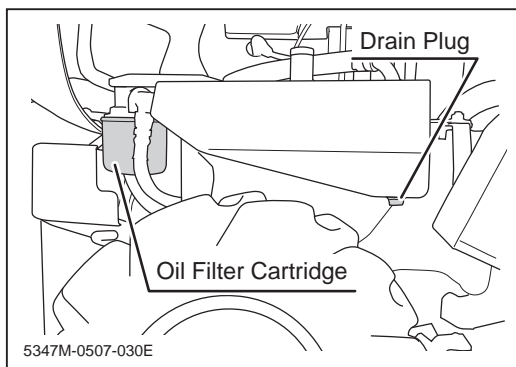




- the filler cap and screw it fully.
4. Unscrew and remove the filler cap again. Visually inspect that the oil level is between the upper and lower limits on the dipstick. If it is below the lower limit, fill oil.
  5. Reinstall the filler cap and screw it fully.

### Filling - Models with charge-pump

1. Remove the filler cap.
2. Fill the specified HST oil into the filler so that the oil level is between the upper and lower limits on the dipstick.
3. Reinstall the filler cap back in place and screw it securely.



### Changing - Models with charge-pump

1. Have an appropriate oil drain pan.
2. Remove the filler cap.
3. Remove the drain plug to drain the oil tank.

### NOTE

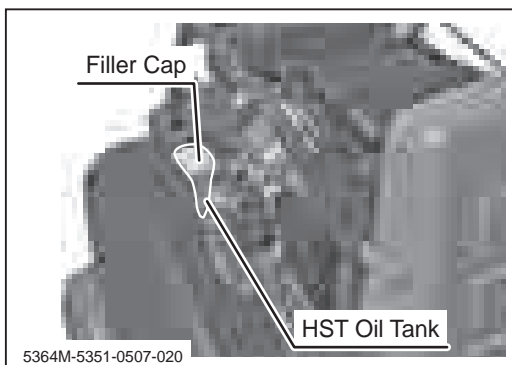
- The HST system cannot be fully drained due to its design.
- Do not operate the drive pedal or drive lever with the HST oil drained. Doing so lets air into the circuit, necessitating to bleed the circuit.

4. Remove the oil filter cartridge.
5. Have a new oil filter cartridge. Apply a thin coat of oil onto its oil seal and install it.

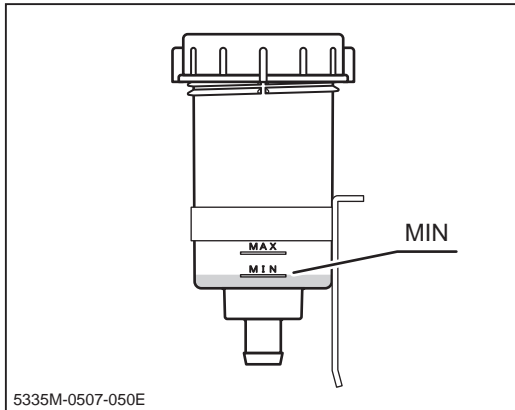
**NOTE**

- The HST system cannot be fully drained due to its design.
- Do not operate the drive pedal or drive lever with the HST oil drained. Doing so lets air into the circuit, necessitating to bleed the circuit.

6. Reinstall the drain plug.
7. Fill fresh oil to the level.
8. Reinstall the filler cap.
9. Start the engine and run it for a while. Stop it and check the HST oil level.
10. Restart the engine and drive the machine back-and-forth from standstill several times.
11. Check the oil level. If it is low, fill.
12. Perform 10-12 until the oil level stabilizes.
13. Check if there is no oil leak.
14. After changing the HST oil, check the oil level every 10-30 minutes of use for a while and fill as necessary.

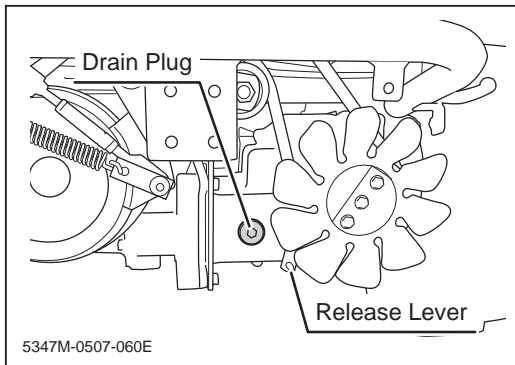
**Inspecting - Models without charge-pump**

1. Park the machine on a level ground.
2. Visually inspect that the oil level is between [MIN] and [MAX] lines on the oil reservoir. If it is below [MIN], fill oil.



## Filling - Models without charge-pump

1. Remove the cap on the HST oil reservoir.
2. Fill the specified HST oil into the reservoir so that the oil level is above [MIN] line on the reservoir.
3. Reinstall the cap back in place and screw it securely.



## Changing - Models without charge-pump

1. Remove the rear cover.
2. Have an appropriate oil drain pan.
3. Remove the filler cap.
4. Remove the drain plug to drain HST oil.

## NOTE

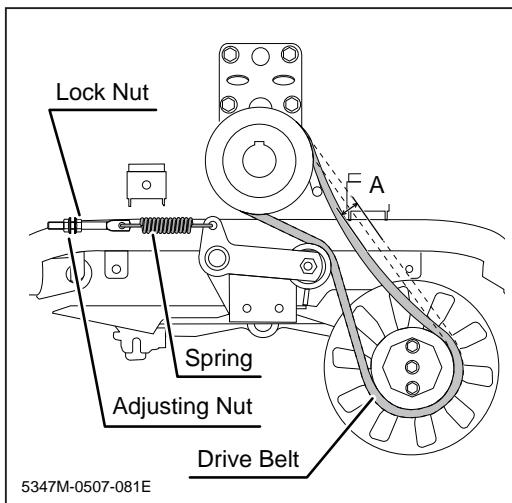
- The HST system cannot be fully drained due to its design.
- Do not operate the drive pedal or drive lever with the HST oil drained. Doing so lets air into the circuit, necessitating to bleed the circuit.

5. Reinstall the drain plug.
6. Fill fresh oil to the level.
7. Reinstall the filler cap.
8. Reinstall the rear cover and close the engine hood.
9. Start the engine and run it for a while. Stop it and check the HST oil level.
10. Restart the engine and drive the machine back-and-forth from standstill several times.
11. Check the oil level. If it is low, fill.
12. Perform 10-12 until the oil level stabilizes.
13. Check if there is no oil leak.
14. After changing the HST oil, check the oil level every 10-30 minutes of use for a while and fill as necessary.

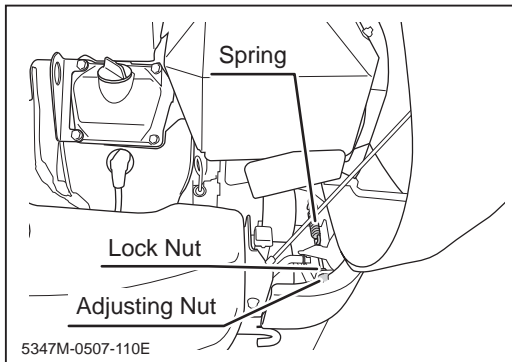
## Drive Belt

**⚠ CAUTION!**

- Adjust belt tension properly. The improperly tensioned belt may reduce performance and its service life.



1. Check the V-belt tension. Push the V-belt by a finger and check that the deflection at center point A is in the range of 10 to 20 mm. If it is out of this range, adjust with the adjusting nut.
2. Visually inspect the V-belt. Replace the V-belt if it is damaged. For a replacement, contact your CANYCOM representative.

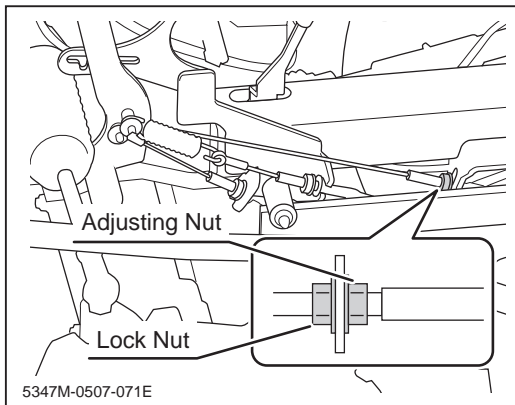


## Parking Brake

### **⚠ WARNING!**

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

1. Park machine on level ground.
2. Remove left step.

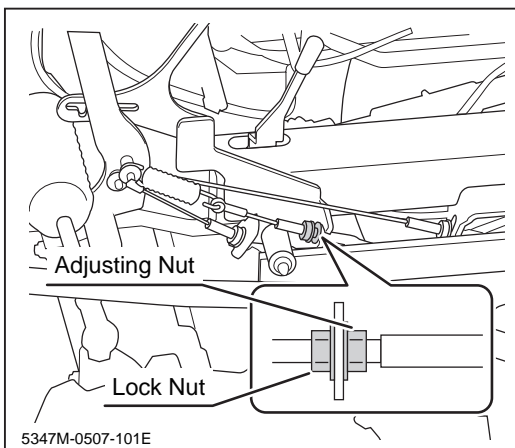


### Rear Brake

3. Loosen the lock nut
4. Adjust the brake with the adjusting nut so that the brake does not drag when the parking brake pedal is free.
5. Adjust the brake so that the brake works and the parking brake pedal locks securely when the parking brake lock lever is applied
6. Tighten the lock nut.

### NOTE

- If the brake does not work even the parking brake pedal is locked, the brake shoe is worn out. Please contact your CANYCOM representative for replacement.



### Front Brake

7. Lock the parking brake pedal and inspect that the stretch of the spring is between 5mm and 8mm. If it is not within this range, adjust it with the adjusting nut.
8. Tighten the lock nut after adjustment
9. Install the left step back in place.

## Cutting System

### **⚠ WARNING!**

- Stop the engine and remove the ignition key when servicing.
- Allow the machine to cool off before servicing. An engine and its ancillaries are very hot after operation and may pose a burn hazard.

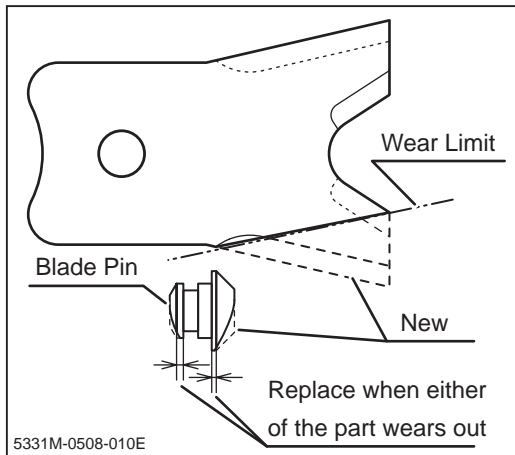
## Cutting Blades

### **⚠ WARNING!**

- When a blade is damaged, replace it and the other blade immediately. Always replace blades in pair. Damage due to vibration may occur.
- When replacing blades, always replace both blades. Replace blade pins and wave washers also.
- When a foreign object is tangled with the blade, immediately stop the engine and remove the foreign object. Damage due to vibration may occur.
- When replacing the blades, inspect the cutting blade stay. If the stay is worn beyond the wear limit, damaged or deformed, replace it immediately. Contact your CANYCOM representative for replacement.

### **⚠ CAUTION!**

- Blades and cutting blade stay can become sharp due to wear. When handling a blade or cutting blade stay, always wear thick gloves and handle carefully. Injury may occur.
- When replacing a blade, do not force it to remove. A blade can move suddenly, causing injury. When it is difficult to remove it, clean the blade and remove foreign object. Turn the blade back and forth to remove.



## Inspecting

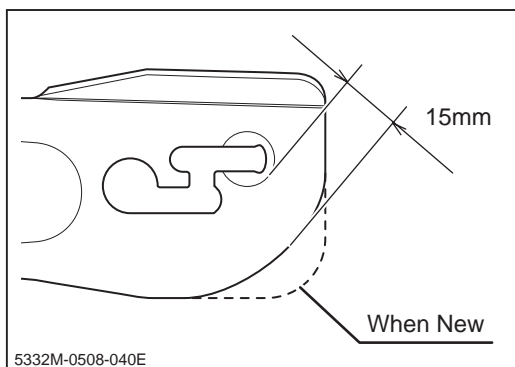
1. Open the cutting blade shield.
2. Visually inspect the blades and blade pins for wear and damage. If the blades are worn normally, turn them over and use. Replace if both of the edges are worn. If the blades or blade pins are worn excessively, deformed, damaged, or missing, replace them with new ones.

## NOTE

### • Wear Limit

**Blade:** Up to the line connecting the outer edge and the inner edge.

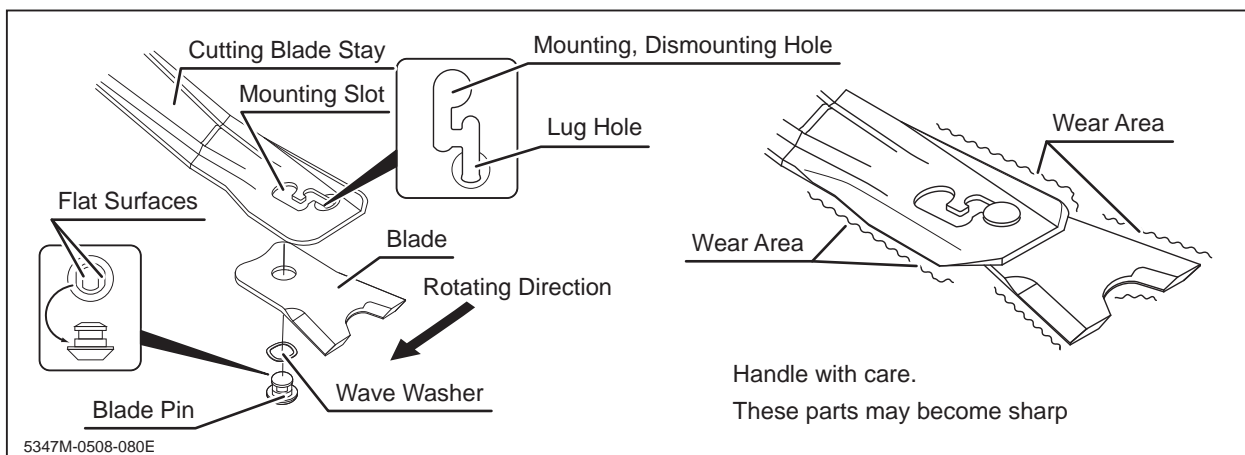
**Blade Pin:** Up to either of the shoulder.

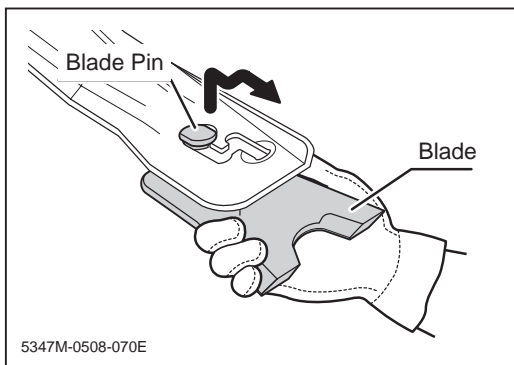
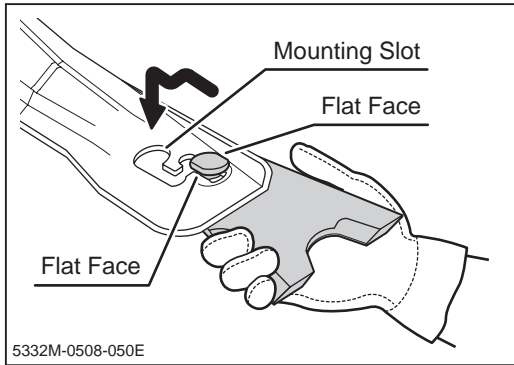


3. Inspect the cutting blade stay. If the stay is worn excessively, deformed or damaged, contact your CANYCOM representative and have it replaced with a new one.
4. Close the cutting blade shield.

## NOTE

**• Wear Limit:** Up to the solid line in the left figure (should have more than 15mm clearance between the edge of the cutting blade stay and mounting slot.)



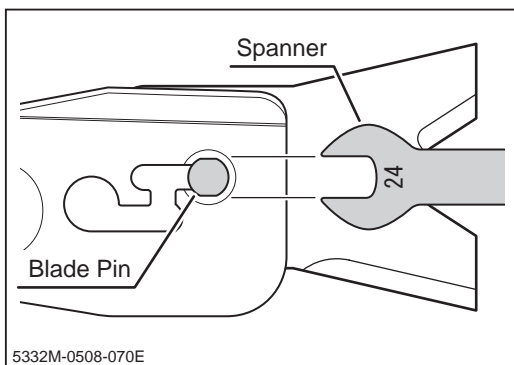


### Replacing

1. Open the cutting blade shield.
2. Noting the direction of the flat faces on the blade pin, shift the blade along the mounting slot to remove.
3. Install a new blade pin and a wave washer to the blade and shift blade along the mounting slot, noting the direction of the flat faces.

### NOTE

- Always put thick gloves on and be cautious when handling the blade because both edges of the cutting blade stay can get sharp by wear.
- Wear Limit: See page 69
- If dirt or grass enters into the mounting slot, making removal of the blade difficult, remove dirt or grass with a flathead screw driver before removing the blade.
- If it is difficult to remove the blade, use a 24mm spanner to remove





## Mower Drive Belt

### **DANGER!**

- Never place any part of the body under the cutting blade shield when the mower is running.

### **WARNING!**

- Do not allow bystanders to come near the machine when inspecting the mower drive belt.

### **CAUTION!**

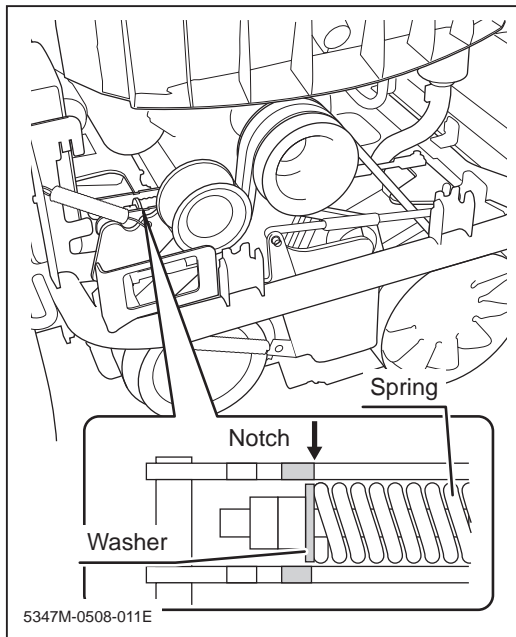
- Adjust belt tension properly. The improperly tensioned belt may reduce performance and its service life.

#### **NOTE**

- The V-belt stretches (breaks in) when it is new. Inspect and adjust the V-belt after the first day's (4 hours') use.
- For a longer service life, inspect and adjust (as necessary) the V-belt as the daily pre-start up checks.

#### **Inspecting and Adjusting**

1. Remove the engine hood, rear cover and rear bumper.
2. Turn the mower clutch lever to [ON].
3. Inspect the condition of the V-belt to be free of damages or wear. Replace if damaged or worn. Contact your CANYCOM representative for replacement.



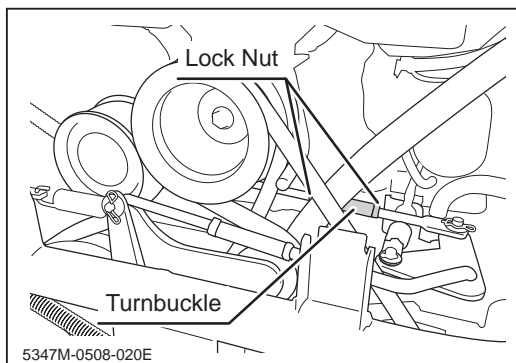
4. Visually inspect if the washer that holds the spring is aligned with the right side of the notches on the plates as shown.

**NOTE**

- There are two sets of notches. Refer to the illustration on the left.
5. If the washer is not aligned with the notches, loosen the lock nut and adjust the turnbuckle.
  6. Tighten the lock nut.

**NOTE**

- If the washer cannot be aligned to the notches by adjusting the turnbuckle (V-belt tension cannot be set within the specified range), the V-belt needs to be replaced. Contact your CANYCOM representative for replacement.
7. Reinstall the rear cover, engine hood, and rear bumper.



## Mower Brake

### ⚠ DANGER!

- Never place any part of body under cutting blade shield when mower is running.


### ⚠ WARNING!

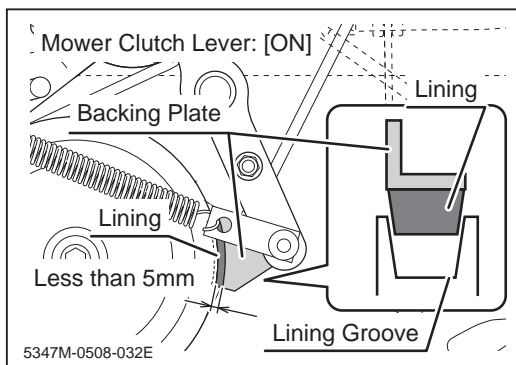
- Do not allow bystanders to come near machine when inspecting mower brake. Ride on machine when testing mower brake.

## ⚠ WARNING!

- Never attempt to check the performance of the mower brake with the cutting blade shield open. Stones or rocks can be thrown and cause damage to surrounding properties or persons.
- Inspect the mower brake whenever the performance of it seems inadequate.
- Stop the engine when adjusting the mower brake.

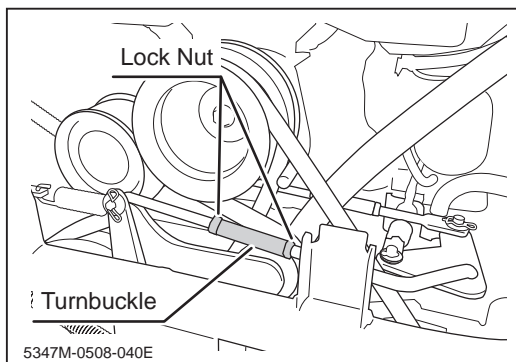
### Inspecting

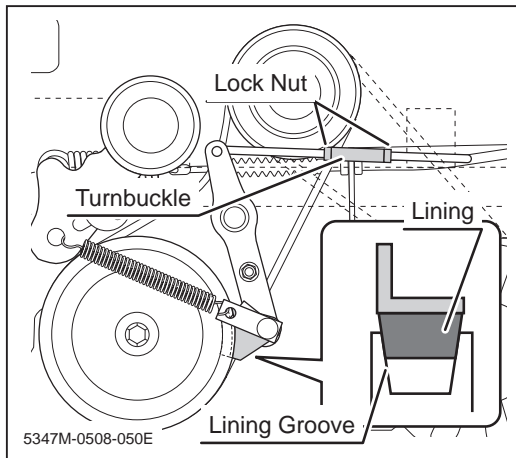
1. Start the engine.
2. Turn the throttle lever to [  ] (fast) to raise the engine speed.
3. Move the cutting height adjust lever to [150] for CMX 2106 and CMX1808.
4. Move the mower clutch lever to [ON] to run the mower.
5. Move the mower clutch lever to [OFF] to observe if the mower stops. If it does not stop (if it keeps turning by inertia), adjust the mower brake. To see if the mower is running or not, observe the rotating sound of the mower, or open the engine hood to observe the rotation of the mower V-belt. Avoid observing inside the cutting blade shield directly.



### Adjusting

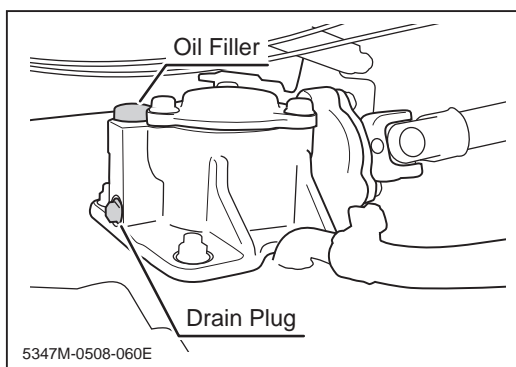
1. Remove the engine hood, rear cover, and bumper.
2. Move the mower clutch lever to [ON].
3. Visually inspect if the brake lining is not in contact with the lining groove on the pulley. Also inspect if the gap between the backing plate and the pulley is 5mm or less.
4. If the lining is in contact with the lining groove, or the gap between the backing plate and the pulley is greater than 5mm, adjust the turnbuckle.





5. Move the mower clutch lever to [OFF].
6. Visually inspect if the lining is firmly in contact with the lining groove on the pulley.
7. Shake the turnbuckle to see if there is some play.
8. If the lining is not firmly in contact with the groove, or the turnbuckle is too tight, readjust the turnbuckle.
9. Move the mower clutch lever [ON] and [OFF] several times, then perform checks 4 through 7. Adjust as necessary.
10. Reinstall the rear cover, engine hood, and bumper.

## Mower Gearbox Oil



### NOTE

- Oil to use and capacity: Page 46.

1. Park the machine on a horizontal ground.
2. Move the cutting height adjust lever to the lowest position.
3. Have an appropriate oil drain pan.
4. Remove the drain plug to drain gearbox oil.

### NOTE

- Removing the oil filler cap helps drain oil.

5. Install the drain plug back in place.
6. Remove the filler cap and fill the specified amount of correct oil into the filler.

### NOTE

- If it is difficult to reach to the filler, use an oil jug or remove the seat and the plate under the seat.
7. Install the filler cap back in place and move the cutting height adjust lever to the highest position.

## Electrical System

### **⚠️ WARNING!**

- Always stop the engine and remove the ignition key when servicing the electrical system.
- Shock hazard. Do not handle the electrical components with wet hands.

## Battery

### **⚠️ WARNING!**

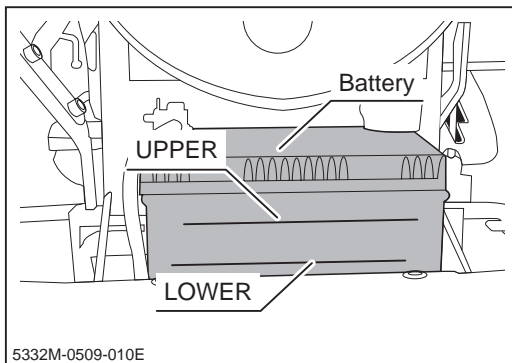
- Never charge a battery when the fluid level is below the "lower level" line. Charging a battery with insufficient fluid may shorten the battery life or cause an explosion.
- Battery fluid (diluted sulfuric acid) is corrosive and causes severe burns. Be extremely cautious when handling battery fluid.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

**⚠ WARNING!**

- Shock hazard: Do not touch the terminals.

**⚠ CAUTION!**

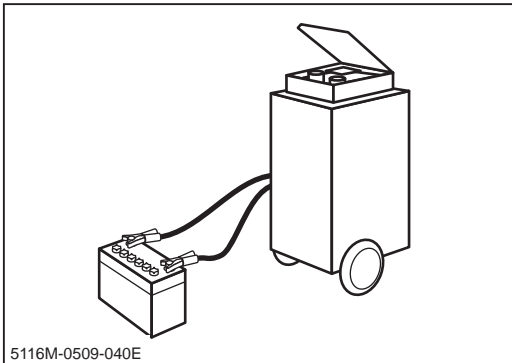
- Always remove the battery from the machine before charging. Failure to do so causes damage to electrical the components and wiring.
- Follow the battery charger user's manual when charging.
- When filling battery fluid, do not fill above [Upper Limit] line. Battery fluid can spill over and damage painted surfaces or corrode metal parts.

**Inspecting**

1. Park the machine on a level ground.
2. Remove the front cover, tray, and head light unit.
3. Visually inspect that the battery fluid level is between the "UPPER" and "LOWER" level lines.
4. If the fluid level is near or below "LOWER" level line, fill.
5. Install the head light unit, tray, and front cover back in place.

**NOTE**

- The instruction for removing the head light and battery is indicated on the back of the front cover.



## Charging

1. Remove front cover.
2. Remove battery from machine.
3. Follow instructions in battery charger user's manual to charge battery.
4. When battery is fully charged, install battery back in place.
5. Install front cover back in place.

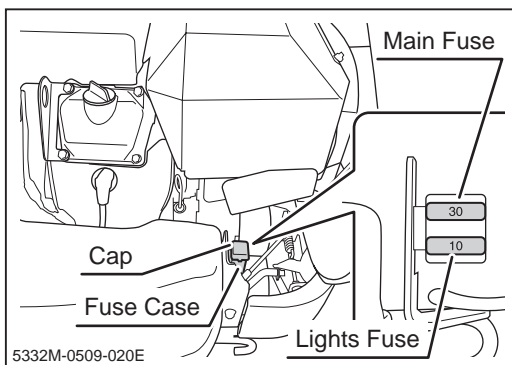
## Fuses

### ⚠ CAUTION!

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

### NOTE

- Main Fuse: 30A. Lights Fuse: 10A
- Replacement Fuse: Page 50.



1. Open engine hood.
2. Open fuse case cap. Remove fuse and visually inspect it. If it is blown, replace it with new one of the same rating.
3. Install fuse.
4. Install fuse case cap.
5. Close engine hood.

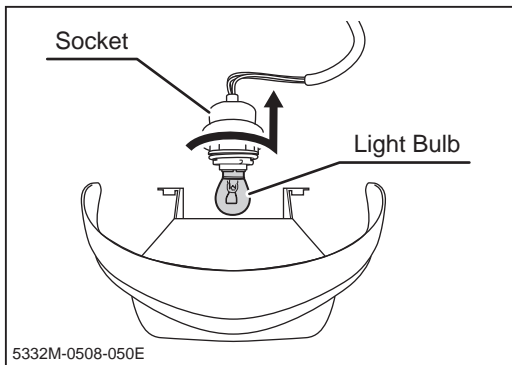
## Light Bulbs

### **⚠ CAUTION!**

- When a light bulb is burnt out, replace it with a new bulb.
- When replacing, always use a bulb of the correct rating. A wrong bulb may cause malfunction or damage to the electrical system.
- Do not touch the bulb when it is hot. It may cause burns.
- Do not touch the glass part of the light bulb directly with fingers. It may reduce service life.

### **NOTE**

- Light Bulbs to use: Page 50.



### **Head Light**

1. Remove the front cover and head light unit.
2. Turn the socket to remove.
3. Replace with a new light bulb.
4. Install the socket.
5. Install the head light and front cover.



## After Use Care

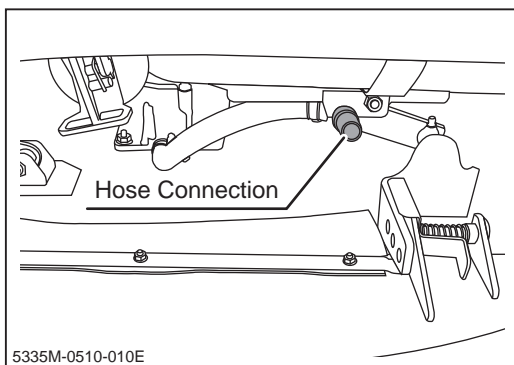
### Cutting System

#### **⚠ DANGER!**


- Never place any part of the body under the cutting blade shield when mower is running.

#### **⚠ WARNING!**

- Do not allow bystanders to come near the machine when the mower is running.
- Always stay on the machine when performing this operation
- Never attempt to clean the cutting system with the cutting blade shield open. Stones or rocks can be thrown and cause damage to surrounding properties or persons.
- Turn the mower clutch to [ON] only when cleaning. Keep it in [OFF] position all the other times.



1. Park the machine.
2. Set the cutting height to about 50mm.
3. Connect a hose to the hose connection. Run water through the hose.
4. Start the engine.
5. Turn the throttle lever to [🐦] (fast) to raise the engine speed.
6. Move the mower clutch lever to [ON] to run the mower to clean.

7. When cleaning is done, move the mower clutch lever to [OFF] to stop the mower.
8. Move the cutting height adjust lever to [150] for CMX2106 and CMX1808.
9. Turn the throttle lever to [  ] (slow) to lower the engine speed.
10. Stop the machine and remove the hose.

**NOTE** 

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- Do not set the cutting height too low. The cutting blades can hit the ground.

## After Normal Use

** WARNING!**

- Fire hazard; clean the machine of cut grass and similar material after use. Cut grass that is accumulated on the machine can catch fire.
- Clean the cooling air intake in front of the engine. If the cooling air intake is clogged or blocked, it causes overheating, resulting in damages to the machine.

** CAUTION!**

- Do not wash the engine or control panel with running water; water may enter inside and cause rust or damage.
- Always clean the cutting blades and the blade pins after use. Dirt or foreign matters may solidify or corrode the blades and make it difficult to remove them.

1. Clean the machine; wash off dirt, mud, and remove grass and other foreign materials after use.
2. Clean the cutting system. (See page 79)
3. Check if the cutting blades can be rotated after removing foreign objects such as mud.
4. If the machine is to be left outside, cover the machine with a protective, water-proof covering after it is cooled off.

## After Cold Weather Use

### **⚠️ WARNING!**

- Fire hazard; clean the machine of cut grass and similar material after use. Cut grass that is accumulated on the machine can catch fire.

### **⚠️ CAUTION!**

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

1. Clean the machine; wash off dirt, mud, and remove grass and other foreign materials after use.
2. Park the machine on a paved or firm, dry surface, or on a bed of lumber.
3. If the machine is to be left outside, cover the machine with a 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; dirt or foreign objects may freeze and cause damage.
- Do not store the machine in a humid, dusty, or hot place.

1. Park the machine.
2. Clean the machine; wash off dirt, mud, and remove grass and other foreign materials after use.
3. Check the machine according to **Maintenance Schedule** (Page 42). If a problem is found, repair.
4. Wipe clean the steel parts with oiled cloth and grease the specified greasing points.
5. Change engine oil.
6. Clean the air filter element.
7. Drain fuel from the carburetor and fuel tank.
8. Turn off (○) the battery off switch. Inspect and fill battery oil.
9. Inflate the tires to a pressure slightly higher than the specified value. Chock front and back of the front wheels.
10. Remove the battery from the machine. Inspect, fill, and charge the battery.
11. Cover the machine with a protective, water-proof covering after the machine is cooled off.

### **NOTE**

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- The 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 battery life.
- Refer to Engine Manual 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.
Engine	Engine does not start, or is difficult to start	Out of fuel.	→Fill fuel.	Page 17
		Excessive fuel in the engine.	→Wait a while and try starting again.	
		Battery capacity is insufficient.	→Add battery fluid. →Charge battery. →Replace battery.	Page 75 Page 75
		Battery cable is disconnected.	→Connect battery cable.	
		Insufficient or wrong oil.	→Fill or change oil.	Page 56
		Dirty or damaged spark plug.	→Clean or replace spark plug.	Page 59
		Other (other than the above).	→Follow the instructions in " <b>Starting</b> " to restart. If problem persists, please contact your CANYCOM representative.	Page 24
	Oil pressure warning light stays on	Insufficient amount of oil.	→Fill oil.	Page 56
		Other (other than the above).	→Please contact your CANYCOM representative.	
	Engine stalls.	Out of fuel.	→Fill fuel.	Page 17
		Choke valve closed.	→Open choke valve.	
		Other (other than the above).	→Please contact your CANYCOM representative.	

Area	Malfunction	Possible Cause	Corrective Measure	Ref.
Engine	Engine stops abruptly.	Out of fuel	→Fill fuel.	Page 17
		Other (other than the above).	→Please contact your CANYCOM representative.	
	Idling is not stable.	Insufficient intake air (clogged air filter).	→Clean or replace air filter element.	Page 58
		Other (other than the above).	→Please contact your CANYCOM representative.	
	Poor power or acceleration	Bad fuel	→Change fuel.	
		Insufficient intake air (clogged air filter).	→Clean or replace air filter element.	Page 58
		Loose drive belt.	→Adjust	Page 66
		Excessive load	→Reduce load.	
		Other (other than the above).	→Please contact your CANYCOM representative.	
	Irregular noise or vibration from or around the engine		→Please contact your CANYCOM representative.	
	Excessive oil consumption		→Please contact your CANYCOM representative.	
	Engine overheats	Insufficient amount of engine oil.	→Fill oil.	Page 56
		Rotating screen or cooling fins clogged or blocked.	→Clean.	
	Excessive fuel consumption	Clogged air filter.	→Clean or replace air filter element.	Page 58
		Other (other than the above).	→Please contact your CANYCOM representative.	
	Black smoke comes out of exhaust	Choke valve closed.	→Open hoke valve.	
		Clogged air filter.	→Clean or replace air filter element.	Page 58
		Other (other than the above).	→Please contact your CANYCOM representative.	

Area	Malfunction	Possible Cause	Corrective Measure	Ref.
Engine	White or blue smoke comes out of exhaust	Bad fuel.	→Change fuel.	
		Engine oil level is too high.	→Adjust oil level.	Page 56
		Wrong engine oil.	→Change oil.	Page 56
		Other (other than the above).	→Please contact your CANYCOM representative.	
Drive Train	Machine does not move when drive lever or pedal is operated.	Insufficient or deteriorated HST oil.	→Add or change oil.	Page 62
		Parking brake is applied	→Release parking brake.	
		V-belt is loose.	→Adjust V-belt.	Page 66
		Other (other than the above).	→Please contact your CANYCOM representative.	
	Machine moves when drive lever or pedal is in neutral position.	HST is out of neutral.	→Please contact your CANYCOM representative.	
	Transmission jumps out of gear.	Transmission is not positively shifted.	→Shift firmly.	
		Other (other than the above).	→Please contact your CANYCOM representative.	
	Machine does not turn smoothly.	Tires are not properly inflated.	→Adjust tire pressure.	Page 60
		Differential lock engaged.	→Disengage differential lock	
		Other (other than the above).	→Please contact your CANYCOM representative.	
	Machine does not run straight.	Tie-rod is not properly adjusted.	→Please contact your CANYCOM representative.	
		Other (other than the above).	→Please contact your CANYCOM representative.	

Area	Malfunction	Possible Cause	Corrective Measure	Ref.
Brake	Parking brake does not work well, or machine pulls to one side when braked.	Brake is not properly adjusted.	→Adjust.	Page 67
		Brake is wet with water.	→Apply brake a few times to dry.	
		Other (other than the above).	→Please contact your CANYCOM representative.	
Chassis	Machine vibrates abnormally.	Improperly inflated tires.	→Adjust tire pressure.	Page 60
		Other (other than the above).	→Please contact your CANYCOM representative.	
Electrical System	Head light does not illuminate properly.	Blown bulb.	→Replace bulb.	Page 78
		Blown fuse.	→Replace fuse.	Page 77
		Other (other than the above).	→Please contact your CANYCOM representative.	
Cutting System	Mower does not run	Mower drive belt is severed.	→Replace.	
	Mower does not stop	Mower brake lining is worn.	→Replace.	
	Mower drive belt slips.	Belt is loose.	→Adjust belt tension.	Page 71
		Belt is worn.	→Replace.	Page 71
		Cut grass or vines accumulate in the mower.	→Clean.	Page 79
	Abnormal vibration occurs when cutting blade is rotated..	Cutting blade is damaged or lost.	→Replace cutting blades.	Page 68
		Foreign object is caught by cutting blade.	→Remove or clean foreign object.	
		Other (other than the above).	→Please contact your CANYCOM representative.	
	Cut grass is not discharged properly.	Grass is wet.	→Cut when grass is dry.	
		Grass is too long.	→Cut in several steps at different heights.	
		Cutting height is too low.	→Raise cutting height.	
		Engine speed is too low.	→Raise engine speed.	
Driving speed is too high.		→Drive slow.		



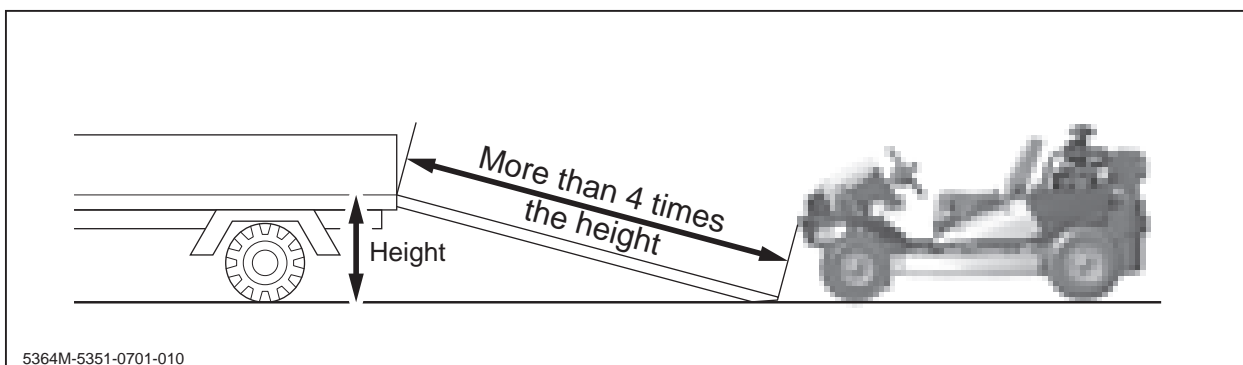
Area	Malfunction	Possible Cause	Corrective Measure	Ref.
Cutting System	Some grass is left uncut.	Grass is too long.	→Cut in several steps at different heights.	
		Engine speed is too low.	→Raise engine speed.	
		Driving speed is too high.	→Drive slow.	
		Cutting blade is damaged or worn.	→Replace.	
		Cut grass or vines accumulate in the mower.	→Clean.	Page 79
	Cutting blade cuts into ground.	Cutting height is too low.	→Raise cutting height.	
		Machine turns too fast.	→Turn slowly.	
		Work site has undulations.	→Raise cutting height.	
	Cutter load is too high.	Cutting blade or stay is bent.	→Replace.	
		Engine speed is too low.	→Raise engine speed.	
		Driving speed is too high.	→Drive slow.	
		Cut grass or vines are tangled to cutting blade axle.	→Untangle.	

## Hauling

### Loading and Unloading

#### **⚠️ WARNING!**

- Park the transporter (truck, trailer) on a level ground. Always apply parking brake and 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 twice the width of the tire.), and length (more than 4 times the height of the bed of the transporter), and have anti-slip ramp surfaces.
- Secure the hooks of the loading ramps firmly and flush with the bed.
- 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 bed 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.



1. Park the transporter on a level ground. Apply parking brake of the transporter and secure the wheels with chocks.
2. Place loading ramps. Secure hooks of ramps firmly and flush with the bed of the transporter.

3. Set cutting height adjust lever to [150] for CMX106 and CMX1808. Shift auxiliary transmission shift lever to [L] (low speed) and drive machine slowly forward onto the bed. Pay attention not to hit the loading lamp or the bed when loading on a transporter.
4. Park machine according to the instructions in "**Parking**" (Page 34). Tie the machine with rope or tie-down belts and secure it onto the bed of the transporter securely.

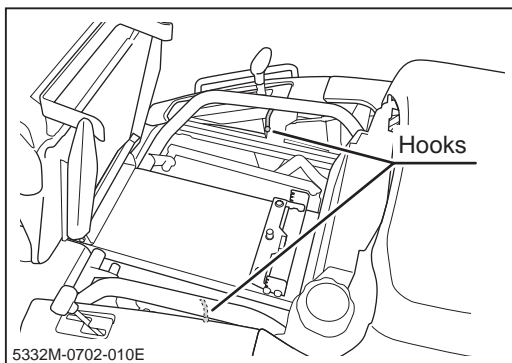
## Hoisting

### **⚠ DANGER!**

- When hoisting the machine, never go under the machine. The machine can fall, resulting in death or injury.

### **⚠ WARNING!**

- License or certification is required to operate a crane. Check your local regulations.
- Use hoisting sling of sufficient strength. Always use the slings of the same length when more than one is used.
- Pay special attention to the center of gravity and the balance of the machine when hoisting.
- Always stop the engine before hoisting. Never start the engine when hoisted.



5332M-0702-010E

1. Raise the seat.
2. Attach hoisting slings to the 2 lift hooks and hoist the machine.





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