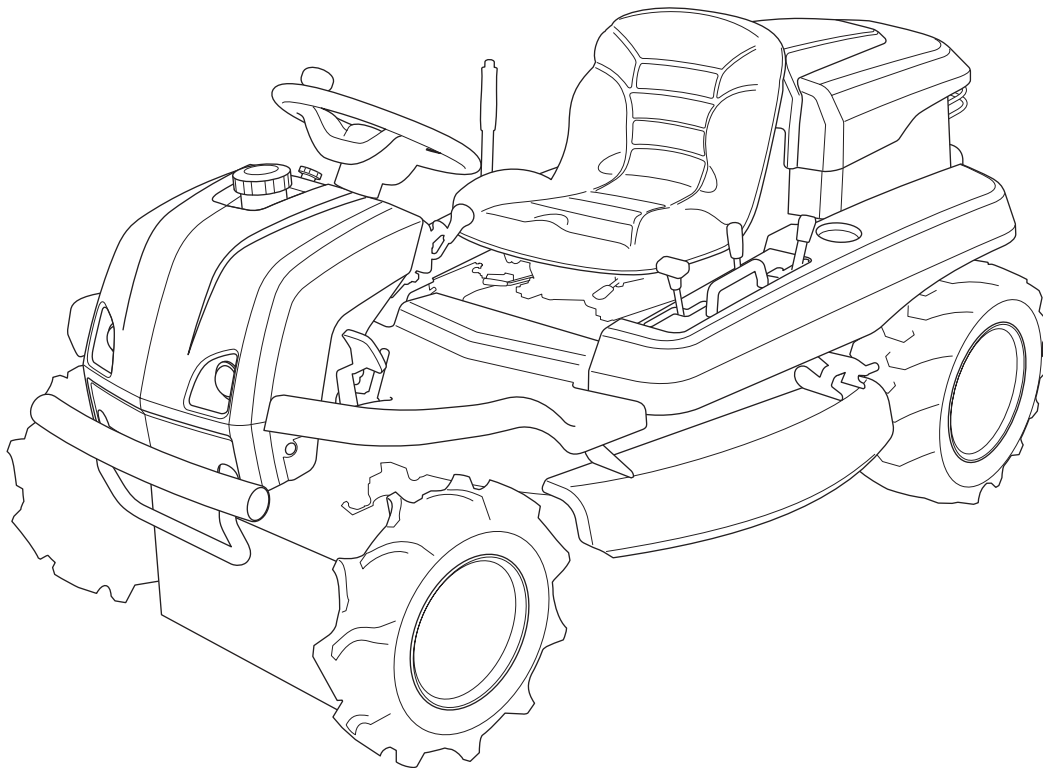


Ride-on Brushcutter

CMX222/CM223

Operator's Manual



⚠ WARNING!

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

5323 5321 004

Original Instructions
(in English)

CHIKUSUI CANYCOM, INC.
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Authorized Dealer

Notice to Users and Maintenance Personnel

Thank you for purchasing this machine.

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

WARNING!

- This machine can be very dangerous if the safety precautions in this manual and on the labels attached to this machine are not followed. Read and understand this manual and safety labels on 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.
-

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

Warranty and After-Sales Service

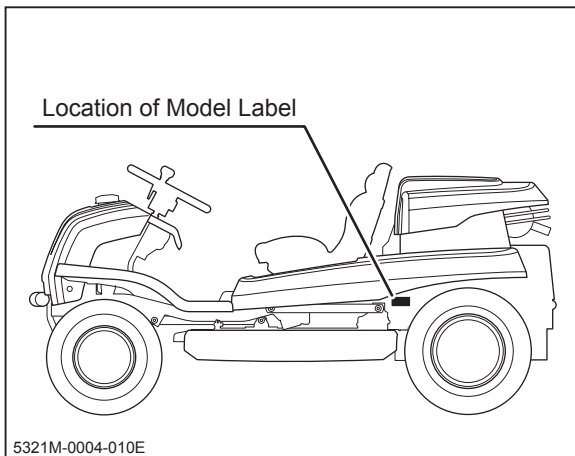
Warranty

CHIKUSUI CANYCOM, INC. guarantees this product, based on the terms of warranty. A copy of this warranty is reproduced in the back of this manual.

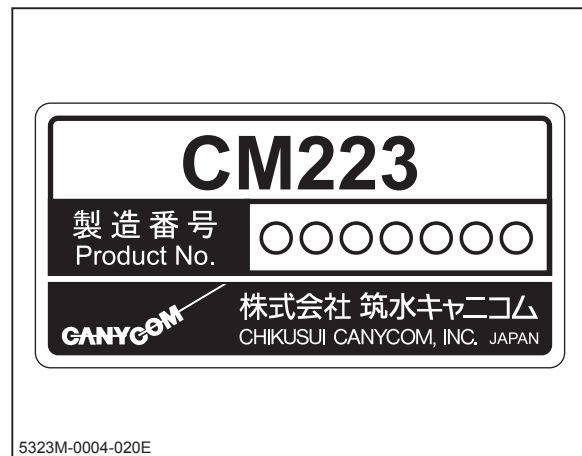
After-Sales Service

Consult your local CANYCOM dealer or our company's sales department regarding service orders or any questions or problems that may arise when using this machine. Please make sure to have the product name, serial number, and the make and type of engine handy at the time of contact. The model and serial number can be found on the model label as shown below, and the make and type of the engine can be found in 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 seven years after the production of this type of machine is discontinued.

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Warranty

Warranty Certificate is attached at the end of this manual.

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

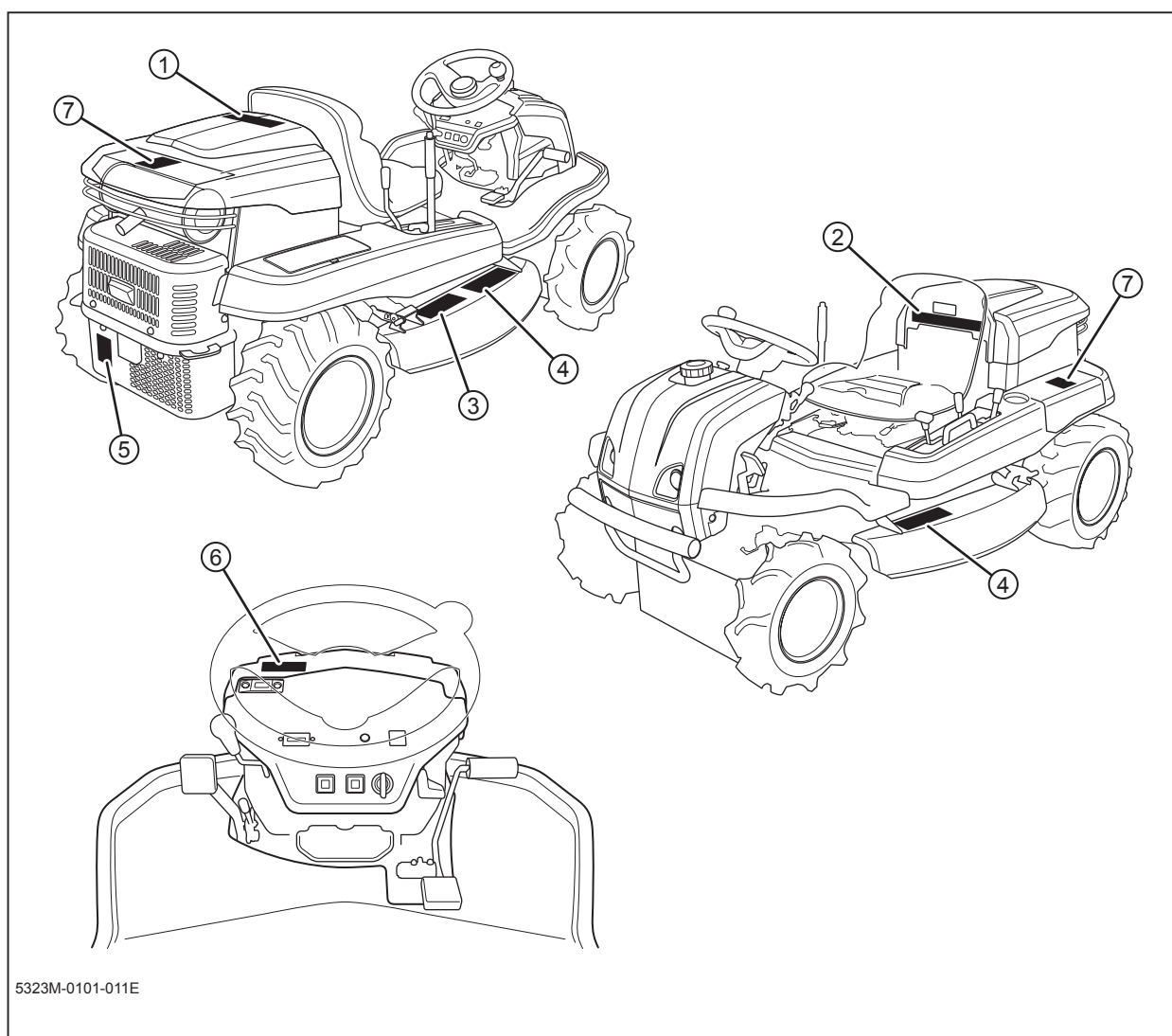
Appendix

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

Safety Labels

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

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



① 5321 5113 000



② 5321 5115 000

 WARNING! AVERTISSEMENT! WARNUNG! AVVERTENZA!	 CAUTION! ATTENTION! ACHTUNG! ATTENZIONE!
Scan your surroundings when driving. Avoid making sudden maneuvers. Quand on conduit la machine contrôler l'ambiance. Éviter manœuvres soudaines. Beobachten Sie Ihre Umgebung bevor Sie losfahren um Unfälle zu vermeiden. Controllare l'ambiente mentre si conduce la macchina. Evitare manovre improvvise.	Do not turn the starter motor when the engine is running. Starter motor or engine may be damaged. Ne tourner la clé de démarrage quand le moteur est allumé. On pourrait causer dommages au démarrage du moteur. Die Zündung darf nicht betätigt werden, solange der Motor läuft. Dies kann zu Schäden am Motor oder am Anlasser führen. Non girare la chiave di avviamento a motore acceso. Ne potrebbero derivare danni all'avviamento o al motore.
Inspect your work site and be aware of potential hazard before working. Watch for holes or obstacles. Contrôler l'ambiance et évaluer les risques potentiels avant d'utiliser la machine. Attention aux trous et obstacles. Inspektion Sie das zu bearbeitende Gelände gründlich auf Gefahren bevor Sie mit den Arbeiten beginnen. Achten Sie auf Löcher oder Hindernisse. Controllare l'ambiente e valutare i potenziali rischi prima di utilizzare la macchina. Attenzione a buche ed ostacoli.	When working in dusty area, clean the air filter element twice a day. Quand on travaille dans des ambiances poussiéreuses nettoyer l'élément filtrant 2 fois par jour. Nach jedem Einsatz der Maschine ist der Luftfilter zu prüfen und von Verunreinigungen zu säubern. Quando si opera su aree polverose, pulire l'elemento filtrante 2 volte al giorno.

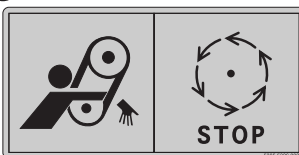
③ 5321 5118 000

 CAUTION! ATTENTION! ACHTUNG! ATTENZIONE!		
When a blade is damaged, replace it immediately. Always replace blades in pair. Damage due to vibration may occur.	When a foreign object is tangled with the blade, immediately stop the engine and remove the foreign object. Damage due to vibration may occur.	Blades have sharp edges. When replacing blades, use special tool, wear thick gloves, or wrap the blade with thick cloth and handle carefully.
Quand une lame est endommagée, remplacez-la tout de suite. Remplacez toujours toutes les lames. Les vibrations endommagent la machine.	Quand des objets étrangers s'enroulent autour de la lame éteignez tout de suite le moteur et retirez l'objet étranger. Les vibrations endommagent la machine.	Les lames sont affilées. Pour remplacer les lames, utilisez outillage convenable, mettez gants propres ou enveloppez la lame avec du tissu épais et manipulez-la avec soin.
Wenn ein Messer beschädigt wurde, müssen sofort beide Messer ausgetauscht werden. Es kann eine Beschädigung an der Maschine auftreten.	Wenn ein Fremdkörper in das Mähwerk gerät, muss das Mähwerk sofort angehalten werden und das Objekt entfernt werden. Es kann eine Beschädigung an der Maschine auftreten.	Messer haben scharfe Kanten. Wenn Sie die Messer austauschen benutzen Sie bitte geeignetes Werkzeug. Tragen Sie Arbeitshandschuhe und berühren Sie die Messer nur mit diesen. Bitte Vorsichtig vorgehen um Verletzungen zu vermeiden.
Quando una lama è danneggiata, sostituirla subito. Sostituire sempre entrambe le lame. Le vibrazioni danneggiano la macchina.	Quando oggetti estranei si aggrovigliano sulla lama, spegnere subito il motore e togliere l'oggetto estraneo. Le vibrazioni danneggiano la macchina.	Le lame sono affilate. Per sostituire le lame, utilizzare attrezzi adatti, indossare guanti idonei o avvolgere la lama con dei teli e maneggiarla con attenzione.

④ 5321 5116 000



⑤ 5305 5326 000



⑥ 5321 5114 000



⑦ 3667 5063 000



Safety Mechanisms

This product is equipped with the following safety mechanisms.

Start Interlock Mechanism

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

Automatic Blade Stopping Mechanism

Engine stops if operator is not seated while cutting blade is rotating. This is to reduce the possibility of accident related to moving blade when machine is turned over.

Automatic Vehicle Stopping Mechanism

When machine is operated by drive lever and seat is tilted backwards, drive lever returns to [● (neutral)] position and machine stops. This is to reduce the possibility where operator is caught by branches when he or she is cutting under the tree. Drive pedal is not linked to this mechanism because it automatically returns to neutral when released.

Safety Precautions

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

Training

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

- **It is essential to familiarize yourself with the controls, safety labels and the proper use of the machine.**
- **Never allow people unfamiliar with these instructions to operate or service the machine. 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 a slope cannot be regained by the application of the brake. The main reasons for loss of control are:**
 - **insufficient grip of tires.**
 - **excessive speed.**
 - **misjudging of the ground conditions, especially slopes.**

Preparation

WARNING!

- Fuel is highly flammable. See Checking and Filling Fuel, page 17, for important safety information on handling fuel.
- Always wear protective footwear, long trousers, hardhat, safety glasses and ear protection when operating or servicing the machine. Proper clothing will minimize the chance of injury. Do not operate the equipment if you have long hair, loose clothing, or jewelry; all of which may get tangled in moving parts. Do not operate the machine barefoot or with open sandals.
- Prepare beforehand the working rules and procedures such as signaling and traffic control for the work place. Following such rules will reduce the risk of accidents.
- Never handle fuel or grease, service the engine, or recharge the battery in the presence of fire or spark.
- Perform the daily pre-startup inspection (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 become 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 tip over, pay special attention when encountering an obstacle or a slope, or when braking on a slope or during a turn. See Driving on a Slope on 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 unfamiliar terrain. Be alert when traveling on changing terrain.**
- **Never operate on terrain that you are not comfortable with. Avoid terrain that is so rough, slippery or loose that you feel like you could tip over.**
- **Do not operate the machine near the edge of a cliff, an overhang or a slide area. 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.**

Driving on a Slope

WARNING!

- Never use on a slope steeper than 25 degrees for CMX222 or 15 degrees for CM223.
 - Driving on a slope can be dangerous. It can result in a tip over and cause serious injury or death. Take the following precautions.
- Always follow proper procedures for driving on a slope as described in this manual.
 - Driving on a slope in a wrong manner can cause a loss of control or a vehicle tip over. Check the terrain carefully before attempting to drive on a slope.
 - Never drive on a slope that you are not comfortable with. Avoid a slope that is so rough, slippery, or loose that you feel like you could tip over.
 - When driving up a slope, proceed at a steady rate of speed and throttle position.
 - Never move the throttle lever, 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 a slope.
 - When going over the top of a slope, go slow; an obstacle, a sharp drop, or another vehicle or person could be on the other side of the crest.
 - Avoid driving the machine across a slope.
 - Before driving down a slope, stop and shift auxiliary transmission to [LOW] position. Drive slowly. Use the engine speed to help keep the machine speed low.

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.

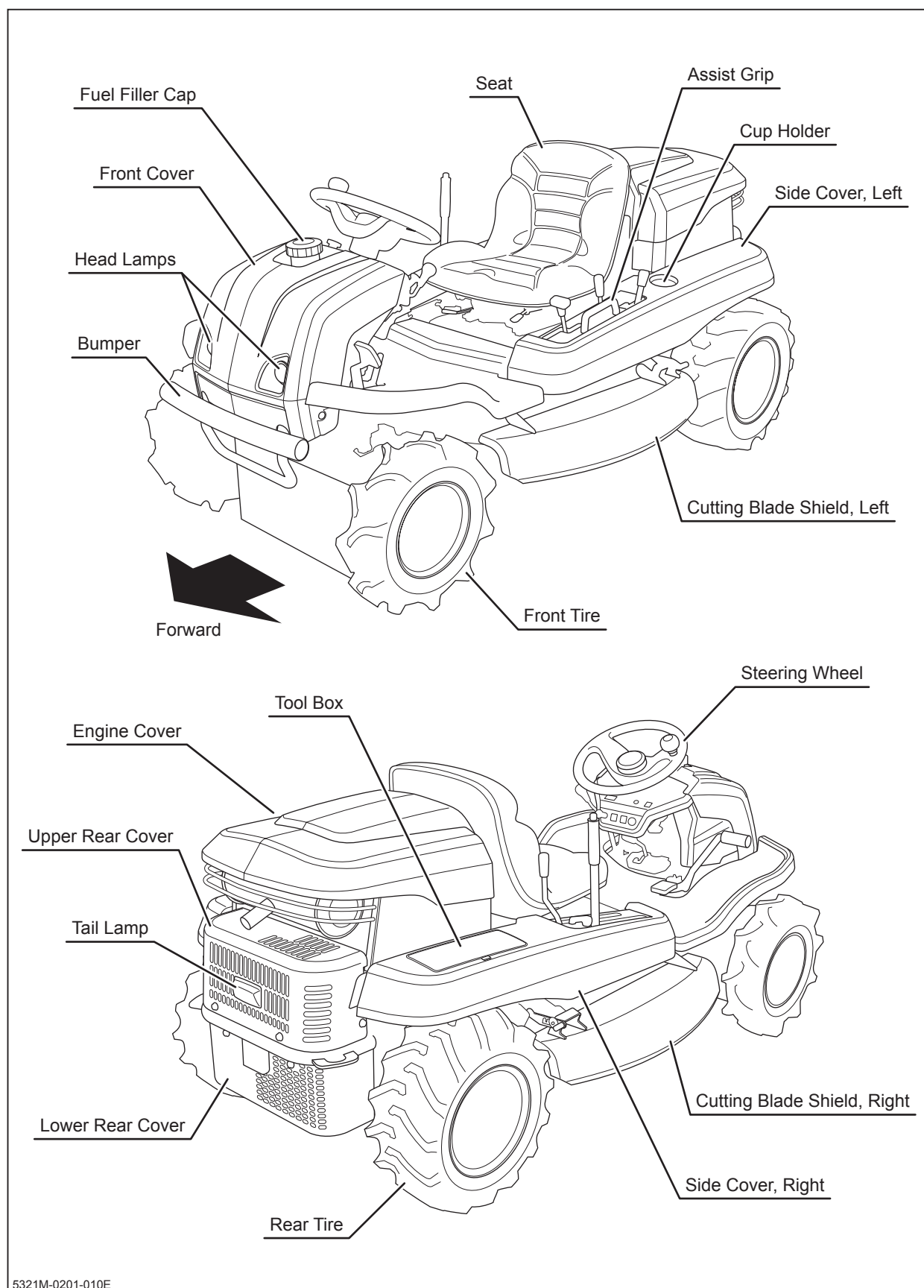
Parking

- 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 a slope.
- Never park on an instable surface. Do not park near the edge of a cliff.
- Observe all the previous precautions for driving, driving on a slope and cutting.
- 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

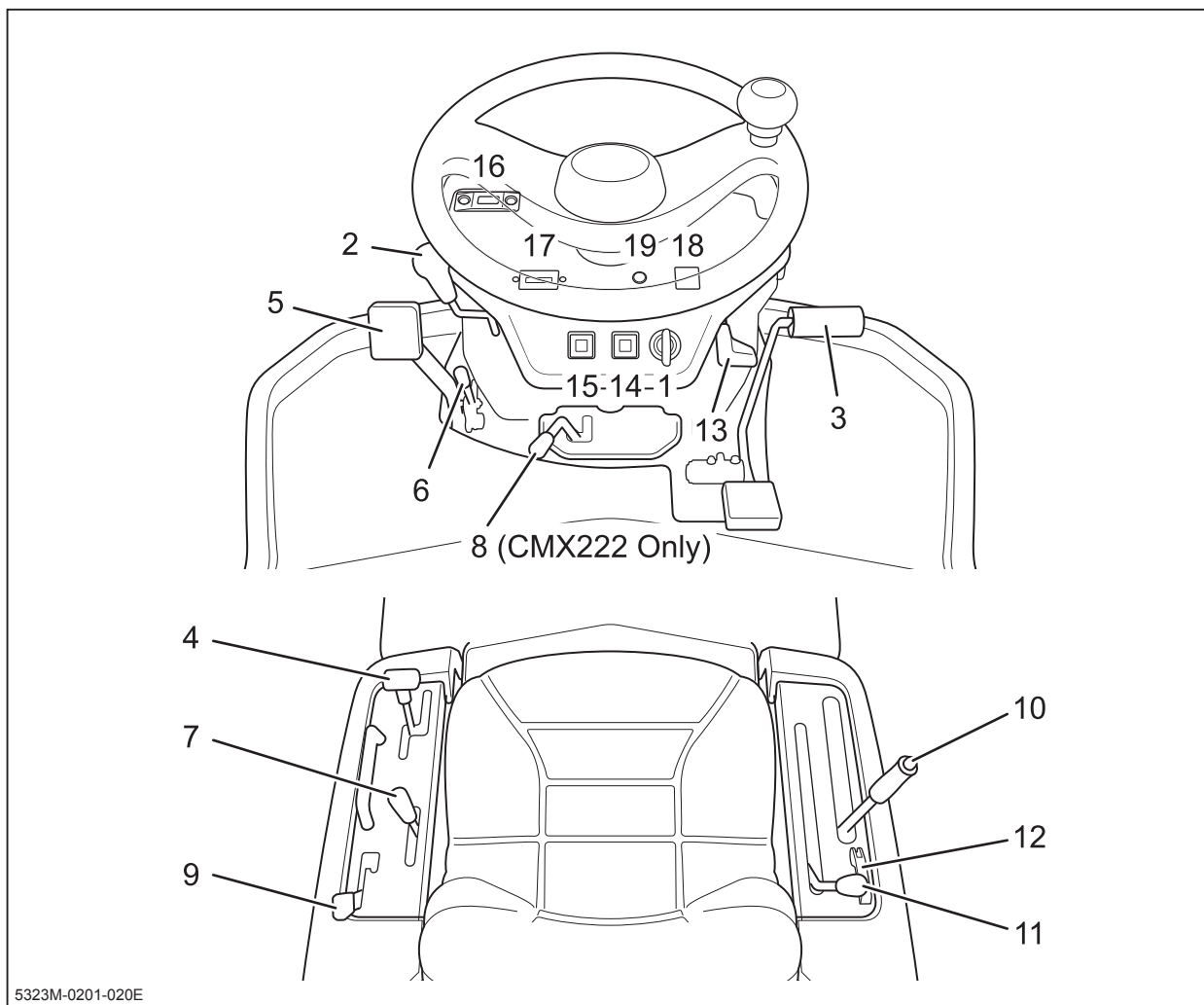
- Do not service the machine when the engine is running. If it is absolutely necessary to run the engine while servicing, beware of the moving parts.
- Do not operate the engine in a confined space where dangerous carbon monoxide fumes can accumulate.
- Make sure all hydraulic line connectors are tight 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



2

Controls and Components



- 1 Main Switch** Main switch is used to start or stop engine.
- 2 Throttle Lever** Throttle lever is used to control engine speed.
- 3 Drive Pedal** Drive pedal is used to control the traveling direction and speed of the machine. Machine moves forward when the front of drive pedal is depressed and backward when the rear of drive pedal is depressed. Angle of drive pedal determines the speed.
- 4 Drive Lever** Drive lever is used to control the traveling direction and speed of machine. Machine moves forward when lever is tilted forward and backward when lever is tilted backward. Angle of drive lever determines the speed.

-
- | | |
|--|--|
| 5 Brake Pedal | Brake pedal is used to stop machine. When brake pedal is depressed, drive lever returns to neutral position and brake is engaged. |
| 6 Parking Brake Lock Lever. | Parking brake lock lever is used when parking machine securely. Pulling parking lock lever while brake pedal is depressed locks brake pedal. |
| 7 Auxiliary Transmission . . .
Shift Lever | Auxiliary transmission shift lever is used to shift auxiliary transmission to change the speed of the machine. |
| 8 2WD/AWD Shift Lever
(CMX222 only) | 2WD/AWD shift lever is used to switch between 2WD (rear-wheel drive) and AWD (all-wheel drive) modes. |
| 9 Differential Lock Lever . . . | Differential lock lever is used to lock differential when rear wheels slip. Tilting differential lock lever to [ON] position locks differential. |
| 10 Cutting Height Adjust
Lever | Cutting height adjust lever is used to adjust the cutting height. |
| 11 Cutting Rotary Clutch
Lever | Cutting rotary clutch lever is used to start or stop rotating cutting rotary. |
| 12 Cutting Height Memory . .
Lever | Cutting height memory lever is used to set the desired minimum cutting height. |
| 13 Tilt Lever | Tilt lever is used to adjust the angle of steering wheel. |
| 14 Head Lamp Switch | Head lamp switch is used to turn on or off head lamps. When head lamps are on, switch is also illuminated. |
| 15 Tail Lamp Switch | Tail lamp switch is used to turn on or off tail lamp. When tail lamp is on, switch is also illuminated. |
| 16 Fuel Gauge | Fuel gauge indicates the amount of fuel in fuel tank. |
-

- 17 Hour Meter** Hour meter indicates the cumulative total operating time of the machine in 0.1 hour increments.
- 18 Oil Pressure Warning.** Under normal condition, oil pressure warning lamp goes off once engine is started. It is illuminated when problem with engine oil pressure is detected while engine is running.
Lamp
- 19 Start Lamp** Start lamp is illuminated when the condition for starting engine is met (parking brake [ON], cutting blade clutch [OFF]).

Product Specifications

⚠ CAUTION!

· Use this product properly after understanding its specifications thoroughly.

Model and Type				CMX222		CM223	
Machine Mass				kg		355	
Mowing Rate				m ² /h		7300* ¹ 6700* ¹	
Dimensions	Overall Length			mm		1970	
	Overall Width			mm		1040	
	Overall Height			mm		940920	
	Wheelbase			mm		13651370	
	Tread	Front		mm		810830	
		Rear		mm		780780	
	Ground Clearance			mm		145125	
Engine	Model					Robin EH65DS	
	Type					Air-cooled 4-cycle V-twin Gasoline	
	Cylinder (Bore×Stroke)			mm		80X65	
	Displacement			cm ³		653	
	Maximum Output			kw(PS)/rpm		16.4 (22) / 3600	
	Maximum Torque			N•m(kgf•m)/rpm		45.6 (4.65) / 2500	
	Starter System					Electric	
	Fuel					Automotive Unleaded Gasoline	
	Fuel Consumption			g/kW•h(g/PS•h)		310 (230)	
	Fuel Tank Capacity			L		14.5	
	Ignition					Contactless Magneto	
	Spark Plug					NGK BP6ES	
Electrical	Battery Type					38B19R	
	Battery Capacity			V/AH		12/28	
Performance	Speed	High		km/h		0~12.10~11.1	
		Low		km/h		0~7.50~6.9	
	Minimum Turning Radius			m		1.991.9	
	Gradeability			Degrees		2515	
	Stability Angle	Left		Degrees		3030	
		Right		Degrees		3030	

*1 Estimated at the maximum speed with the auxiliary transmission in Low position (7.5km/h)

Model and Type			CMX222	CM223
Drive Train	Main Transmission		HST (Continuously Variable)	
	Auxiliary Transmission		Constant Mesh	
	Tires	Front	TA 4.00-8 (2PR)	AGS4.00-7 (4PR)
		Rear	19X8.00-10 (4PR)	17X8.00-8 (4PR)
	Steering		Rack and Pinion, Round Steering Wheel	
	Brakes		Internally Expanding	
Cutting System	Cutting Width		mm	975
	Cutting Height		mm	0~180 (Continuous) 0~160 (Continuous)
	Blade Type		Free Knife & Stepped Stay	
	Number of Blades		2	
	Blade Drive Train		Shaft Drive	

*These specifications are subject to change without notice.

Contents of Tool Bag

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

Preparation

Pre-start up Inspection

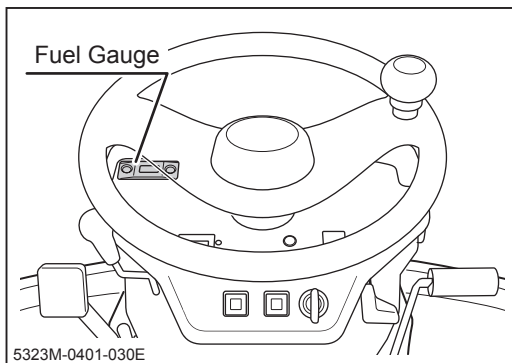
Always perform an inspection before use.

Refer to the **Maintenance Schedule** (page 39) for the inspection schedule and procedure.

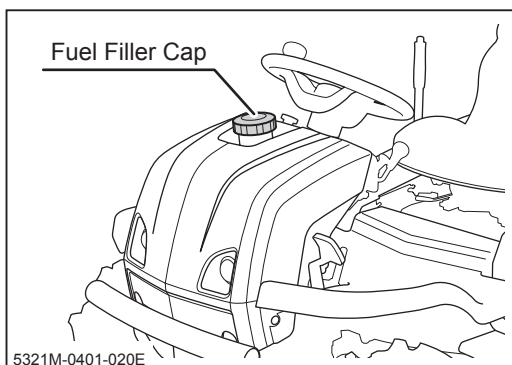
Checking and Filling Fuel

⚠ WARNING!

- Keep fire and spark away when handling fuel.
- Always stop 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 fuel gauge. If fuel level is low, fill fuel.



2. Open fuel filler cap and fill fuel.

3. Put fuel filler cap back in place and close it securely.

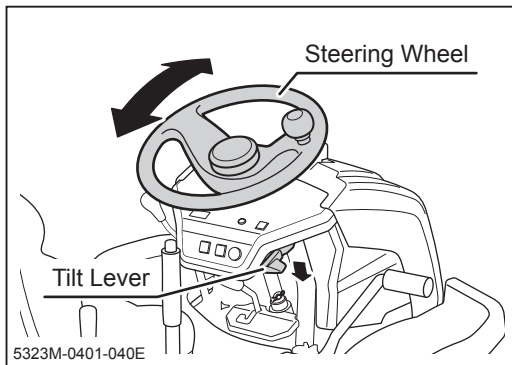
NOTE

- Fuel : Automotive Unleaded Gasoline
- Fuel Tank Capacity : 14.5L

Adjusting Steering Wheel

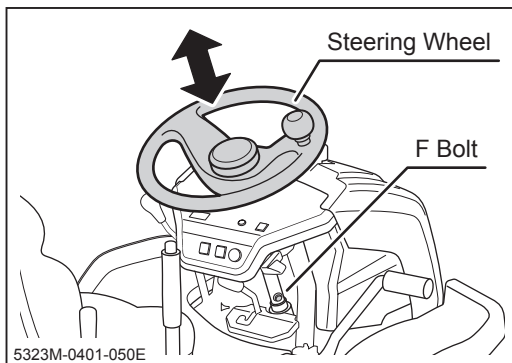
⚠ CAUTION!

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



Adjusting Angle (Tilting)

1. Press down tilt lever to adjust steering wheel angle.
2. There are three positions for steering wheel angle.
3. After adjusting angle, return tilt lever to lock steering wheel securely.



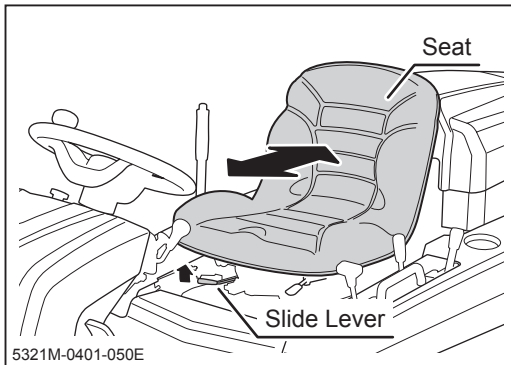
Adjusting Height

1. Remove U-nut to remove F-bolt which secures steering shaft.
2. Move steering wheel up or down to the desired position. There are three positions for height.
3. Line up holes on steering shafts and insert F-bolt. Lock F-bolt securely with U-nut.

Adjusting Seating Position

⚠ CAUTION!

- Beware of pinch points when adjusting seating position.
- After adjusting seat, try moving seat back and forth and up and down to make sure it is securely locked in its position.



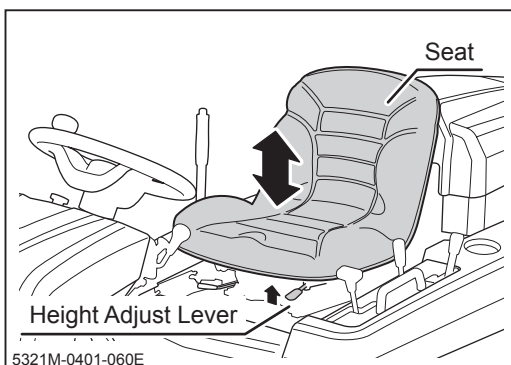
Sliding seat

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

Adjusting Seating Height (CMX222 Only)

⚠ CAUTION!

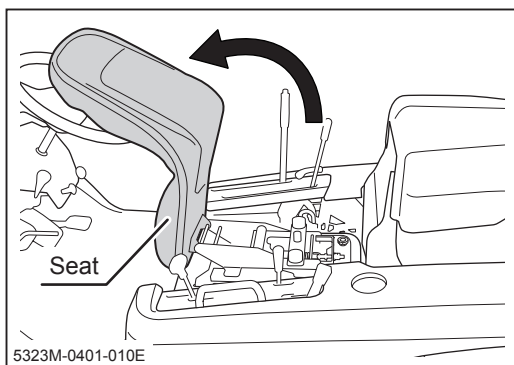
- Beware of pinch points when adjusting seating position.



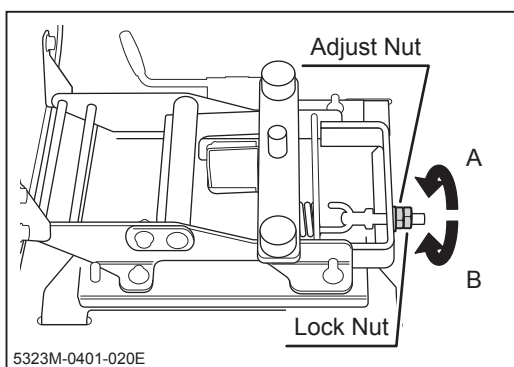
Adjusting Height

1. Pull up height adjust lever to adjust seat height. Height can be adjusted freely within its range.
2. When seat is in a desired position, release height adjust lever. Seat locks at that height.

Adjusting Seat Suspension (CM223 Only)



1. Lift seat up



2. Loosen lock nut.
3. Turn adjust nut toward A direction to harden suspension.
4. Turn adjust nut toward B direction to soften suspension.
5. Tighten lock nut.
6. Put seat back.

Driving

Starting

WARNING!

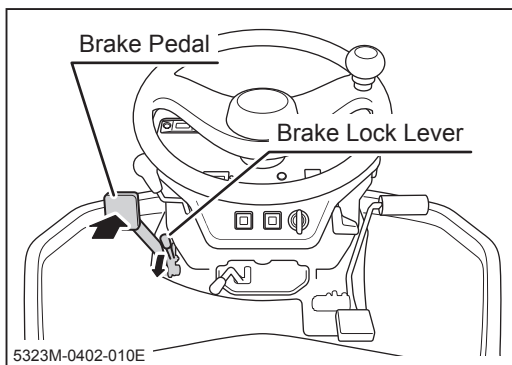
- Always start and run engine in a well ventilated place.
- Always stay on seat when starting engine. Never attempt to start engine away from machine. Run over accident may result.

CAUTION!

- Do not turn main switch to [ (start)] position when engine is running. Starter motor and/or engine may be damaged.
- Position throttle lever to [ (slow)] when starting.
- Do not turn the starter for more than 5 seconds. If the engine does not start, turn main switch back to [ (off)] position and wait for 10 seconds or more before attempting to start again.
- If engine does not start after starting procedure is performed several times, turn off main switch and wait for 5 to 10 minutes and try again.
- Do not use this machine in 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 machine.
- In the winter or cold climate, warm up engine thoroughly before driving machine. A cold engine delivers poor performance, which may result in an accident. It also causes excessive wear.
- Do not use this machine in dusty places such as desert. Dust may clog air cleaner or enter engine, which may result in loss of performance and an accident. It also causes excessive wear.

⚠ CAUTION!

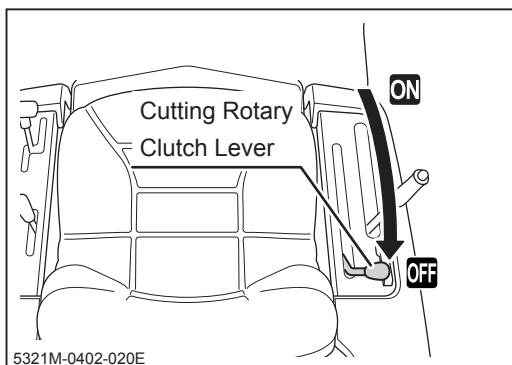
- Do not use this machine in the altitude above 1500m (4920ft.) in its original configuration. This machine cannot perform adequately above that altitude. Using this machine under such conditions may result in an accident or cause damage to machine. If you need to use this machine above that altitude, contact your CANYCOM representative.



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

NOTE

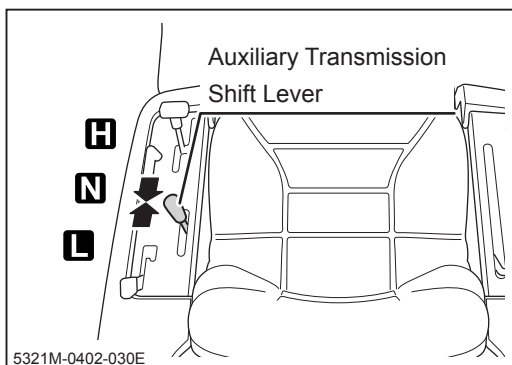
- Safety feature: engine cannot be started unless brake pedal is depressed.



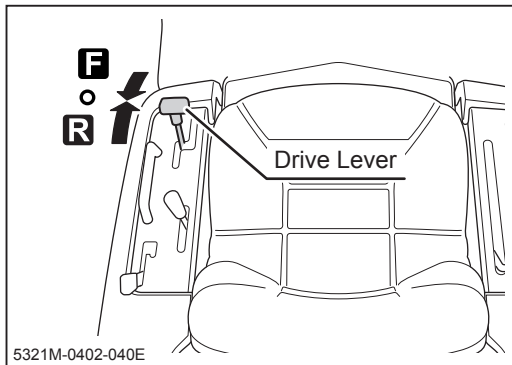
2. Make sure cutting rotary clutch lever is in [OFF] position.

NOTE

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



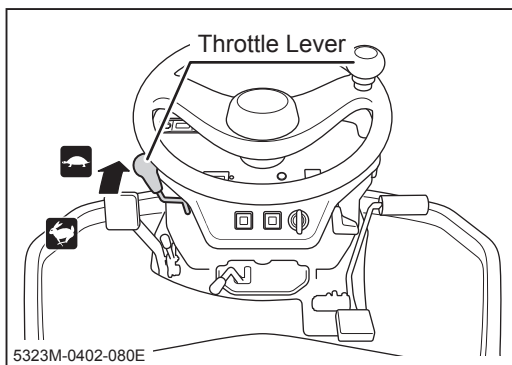
3. Make certain auxiliary transmission shift lever is in [N (neutral)] position.



4. Make certain drive lever is in [O (neutral)] position.

NOTE

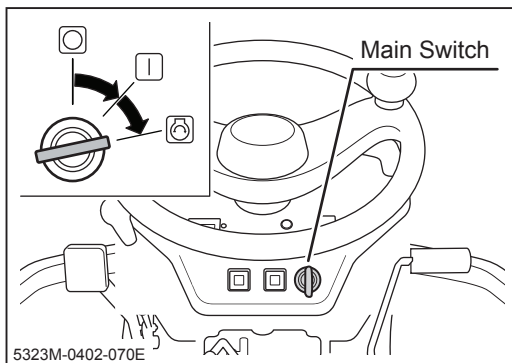
- Drive lever returns to [O (neutral)] when brake pedal is fully depressed.



5. Make sure throttle lever is in the [🚗 (slow)] position. In the cold weather below 10 degrees celsius when engine revolution is not stable, position throttle lever 1/3 toward the [🚗 (fast)] position.

NOTE

- This machine is equipped with the autochoke system and may start more easily with throttle lever in the [🚗 (slow)] position.



6. Insert ignition key into main switch.
7. Turn key to [O (start)] position to start engine. Release key immediately after engine starts. Key automatically returns to [I (ON)] position.
8. Run engine without load for about 5 minutes to warm up.

NOTE

- Avoid frequent starting. Once engine starts, run it for a while to charge battery.
- Drive machine gently in the first week (40 to 50 hours) of operation after purchase for breaking-in.

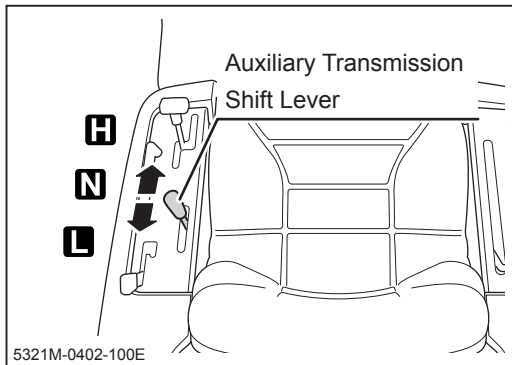
Driving

WARNING!

- Always wear protective footwear, long trousers, hardhat, safety glasses and ear protection when operating or servicing the machine. Proper clothing will minimize the chance of injury. Do not operate the equipment if you have long hair, loose clothing, or jewelry; all of which may get tangled in moving parts. Do not operate the machine barefoot or with open sandals.
- Do not allow bystanders to come near machine when driving.
- Always make certain of the safety of your surroundings before driving; start slow.
- Always make certain of the safety of your surroundings before turning
- Do not make sudden starts, acceralation, change of speed, change of direction, or stop. Do not turn at speed. Avoid sudden maneuvers; this may cause the operator to fall or to be thrown, or machine to tip over.
- Do not operate drive pedal and drive lever simultaneously. Machine may loose control and keeps moving even releasing feet from drive pedal.
- Do not turn the key to [○ (off)] position while traveling.

CAUTION!

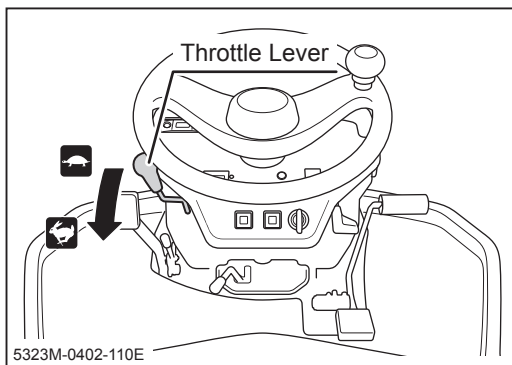
- Do not operate drive pedal or drive lever when brake is locked with parking brake lock lever. It can wear out brake.



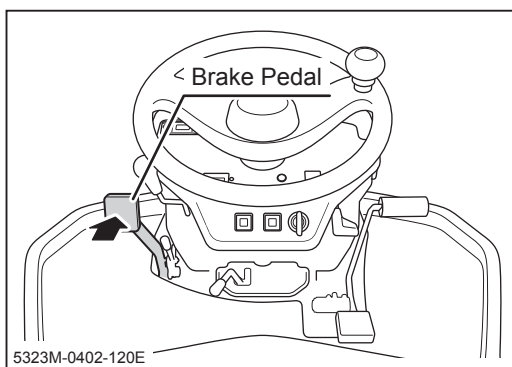
1. Make certain of the safety of your surroundings.
2. Move auxiliary transmission shift lever to either [H (high speed)] or [L (low speed)] position.

NOTE

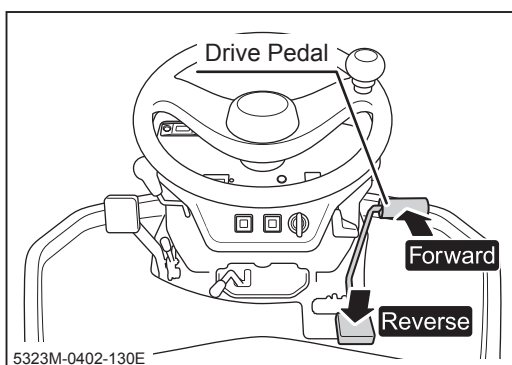
- See Specifications (page 15) for the speed range in either gear position.



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



4. Depress brake pedal to release brake pedal lock.

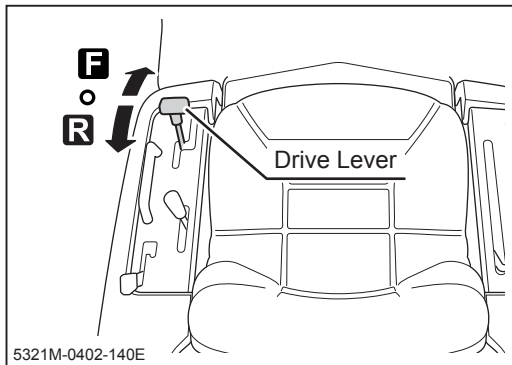


Driving with Drive Pedal

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

NOTE

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

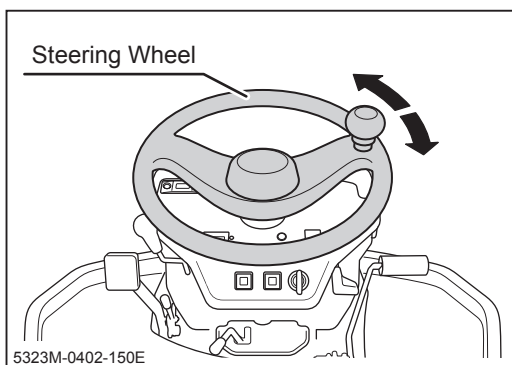


Driving with Drive Lever

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

NOTE

- Speed can be adjusted continuously by the position of drive lever.
- * If seat tilts backward while machine is driven with drive lever, safety mechanism automatically returns drive lever to neutral and stops machine. This is to avoid an accident where operator is caught by an overhanging obstacle.



6. Turn steering wheel to turn.

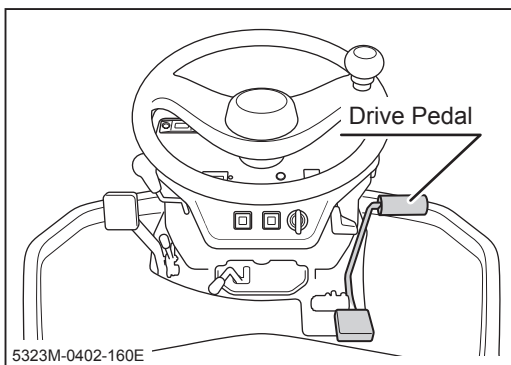
Stopping

⚠ WARNING!

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

⚠ CAUTION!

- Do not depress brake pedal when drive pedal is depressed. HST may be damaged.
- Do not hold drive lever in a position other than neutral and depress brake pedal simultaneously. HST may be damaged.

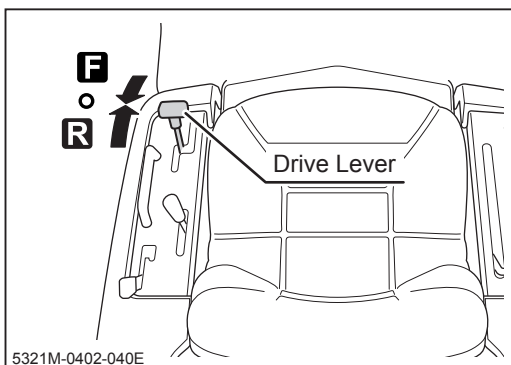


When Driving with Drive Pedal

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

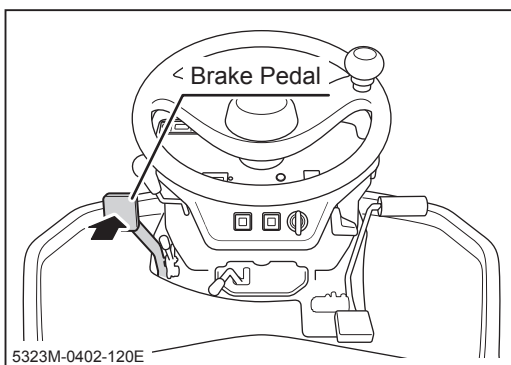
NOTE

- Drive pedal automatically returns to neutral when released.



When Driving with Drive Lever

1. Gradually return drive lever to [O (neutral)] to slow down.
2. Release hand off drive lever.



3. Depress brake pedal to stop machine completely.

NOTE

- When brake pedal is depressed, drive lever returns to [O (neutral)].

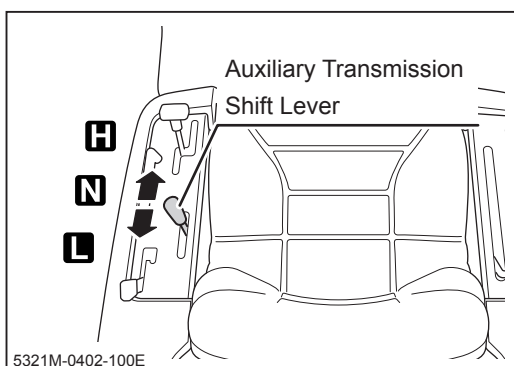
Shifting

⚠ WARNING!

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

⚠ CAUTION!

- Always stop machine to shift gears. Shifting gears while machine is in motion can damage transmission.



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

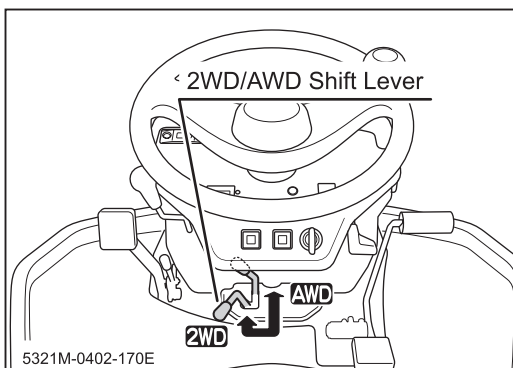
NOTE

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

Shifting Between 2WD and AWD (CMX222 Only)

⚠ CAUTION!

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



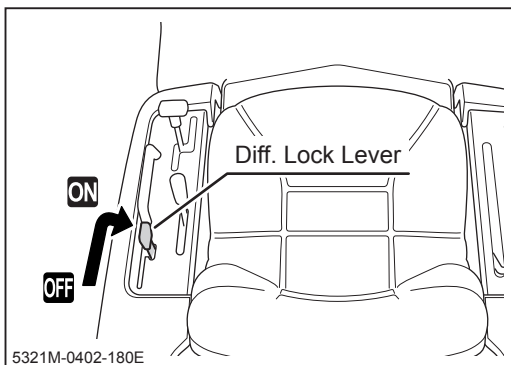
1. Stop machine.
2. Move 2WD/AWD shift lever to [2WD] or [AWD] position firmly.

Locking Differential

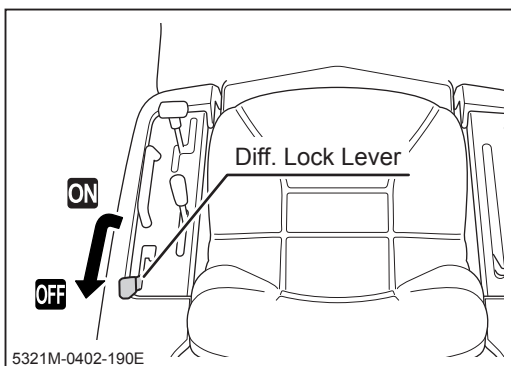
Differential can be locked to minimize slipping on slippery surface.

⚠ CAUTION!

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



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

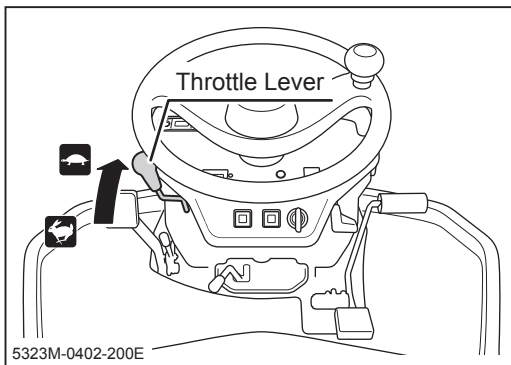


4. Once machine is out of the slippery area, stop and move differential lock lever to [OFF] position.

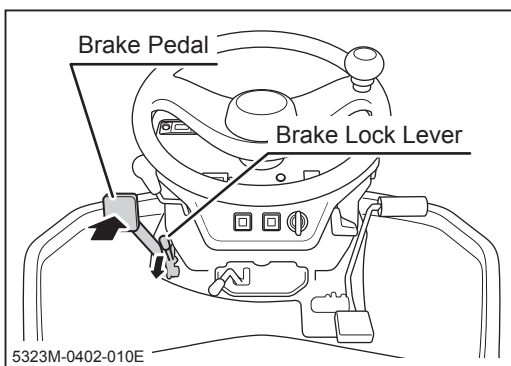
Parking

⚠ WARNING!

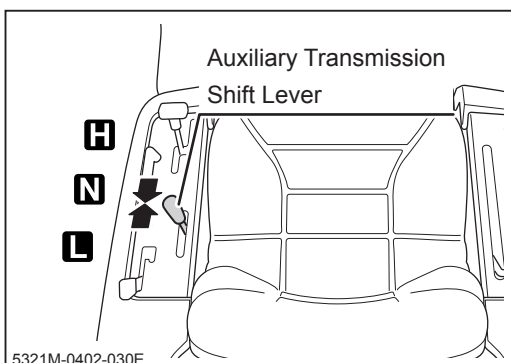
- Always park on a firm, level place. Never park on a potentially dangerous place.
- Avoid parking on a slope. Never park on a slope with an incline of 10 degrees or steeper. If it is absolutely necessary to park machine on a slope less than 10 degrees, make certain to apply parking brake firmly and block wheels with chocks.



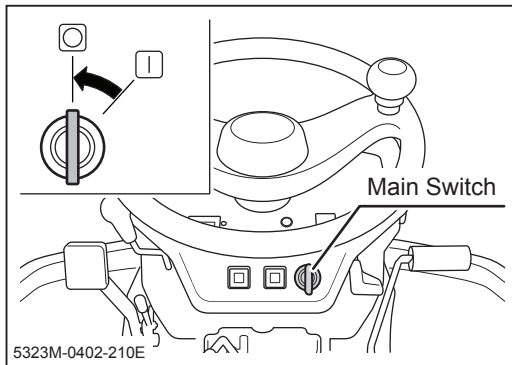
1. Stop machine.
2. Move throttle lever toward [↩(slow)] to slow engine speed.



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



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



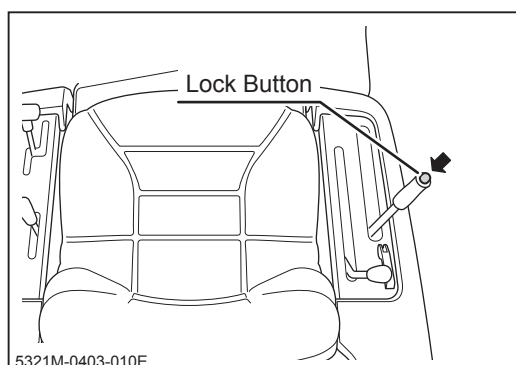
5. Turn main switch to [O (off)] to stop engine.
Remove ignition key.

Working

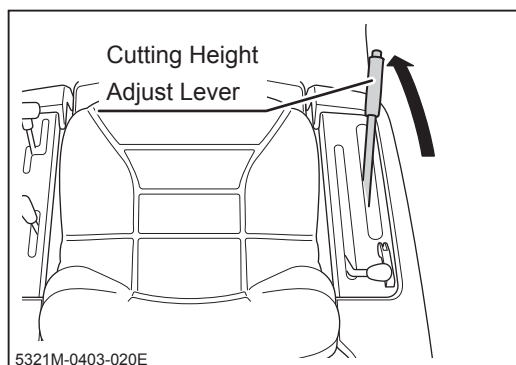
Inspecting Cutting Blade

Inspect cutting blade before work. Refer to **Cutting Blades** (page 63) for inspection procedure.

Adjusting Cutting Height



1. Push lock button to unlock cutting height adjust lever.



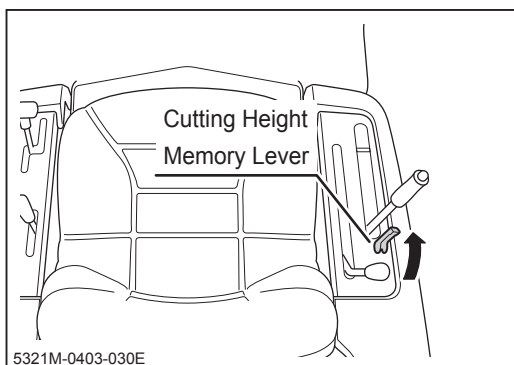
2. With lock button depressed, move cutting height adjust lever to a desired position.
3. Release lock button to lock cutting height adjust lever.

NOTE

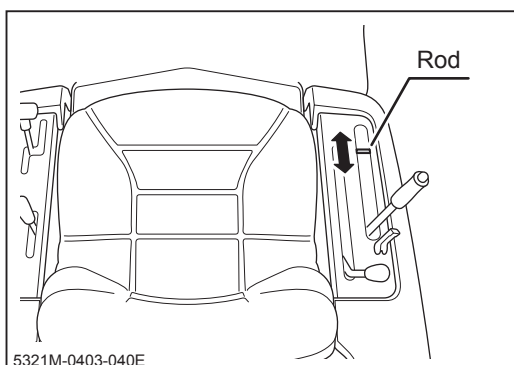
- **Cutting Height Range: 0mm - 180mm.**
(CMX222)
0mm - 160mm
(CM223)
- Cutting rotary clutch cannot be engaged when cutting height adjust lever is set above 180mm for CMX222 or 160mm for CM223.
- Cutting Height indicated on the side of the adjust lever is for reference purpose only; actual cutting height may vary due to the condition of ground or brush, and other factors.

Using Cutting Height Memory Function

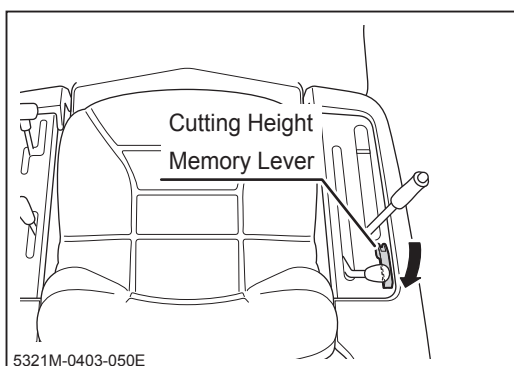
Cutting height memory function provides the means to set a minimum cutting height. This feature makes it easy to return to the set cutting height when repeated raising and lowering of cutting blade is required.



1. Lower cutting height adjust lever.
2. Turn up cutting height memory lever.



3. Slide rod to a desired cutting height.



4. Turn down cutting height memory lever to lock rod in the position.

Cutting

DANGER!

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

WARNING!

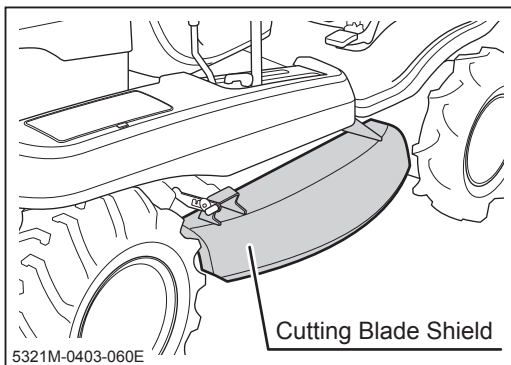
- Always wear protective footwear, long trousers, hardhat, safety glasses and ear protection when operating or servicing the machine. Proper clothing will minimize the chance of injury. Do not operate the equipment if you have long hair, loose clothing, or jewelry; all of which may get tangled in moving parts. Do not operate the machine barefoot or with open sandals.
- Do not allow bystanders to come near machine when cutting.
- 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 cutting blade shield open.
- When cutting, drive forward. Machine is intended to cut brush while moving forward, and this best prevents stones and debris from being thrown.
- Turn cutting rotary 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.

⚠ WARNING!

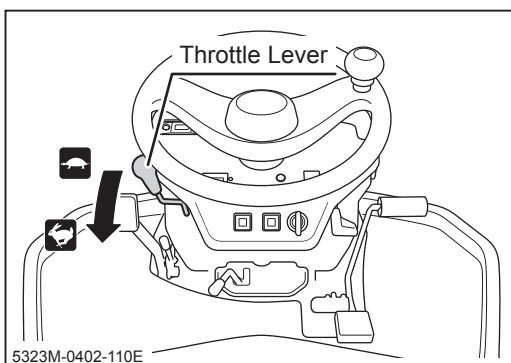
- Do not use CMX222 on an incline steeper than 25 degrees and CM223 on an incline steeper than 15 degrees.
- Always stay on machine when working.

⚠ CAUTION!

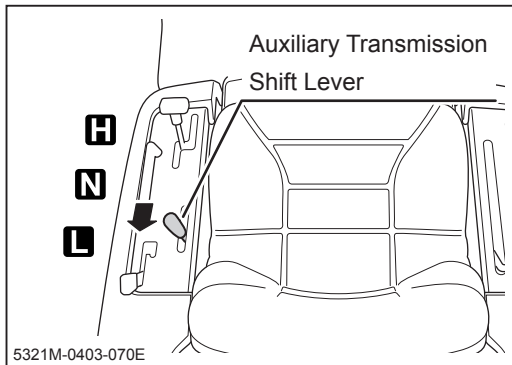
- When working in a dusty area, clean air cleaner element twice a day. Dirty air cleaner element results in poor starting, poor performance, or short life.
- When a cutting blade is broken, replace it and the other blade with a new pair. A broken blade causes excessive vibration, which damages machine.
- When something is tangled to cutting blade, stop engine immediately and remove the tangled object. Such object causes excessive vibration, which damages machine.



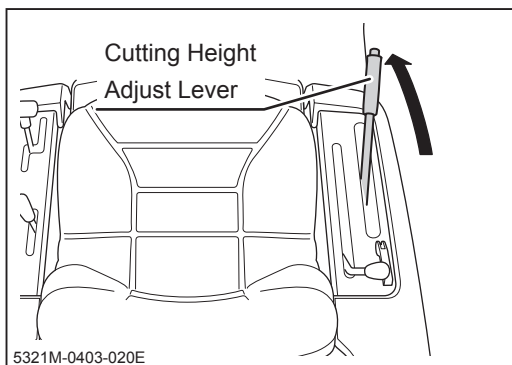
1. Make sure cutting blade shield is closed.



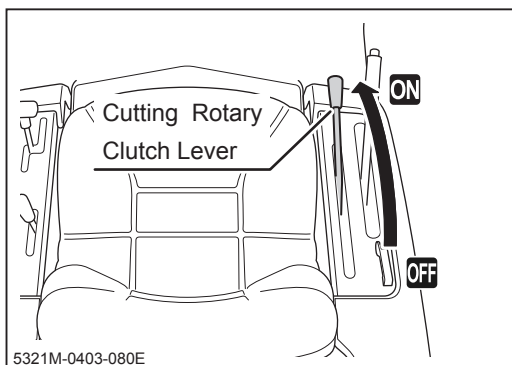
2. Turn throttle lever to [ (fast)] position to raise engine speed.



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



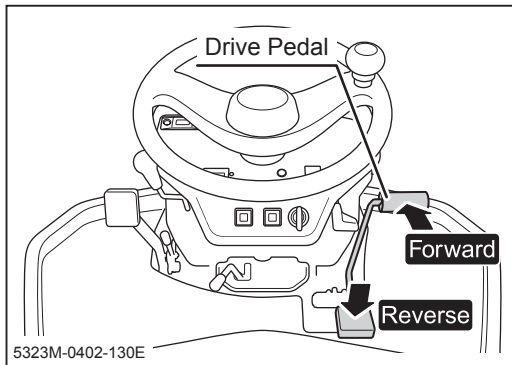
4. Move cutting height adjust lever to a desired height.



5. Move rotary clutch lever to [ON] to start cutting blade.

NOTE

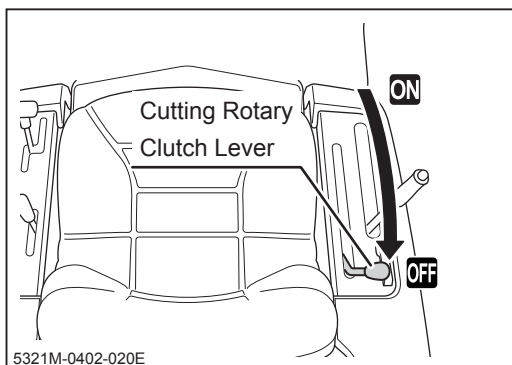
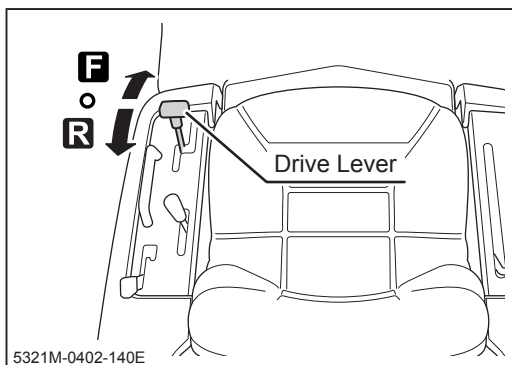
- **Safety feature: engine stops automatically if operator leaves seat while cutting blade is rotating.**



6. Drive machine forward to cut.

NOTE

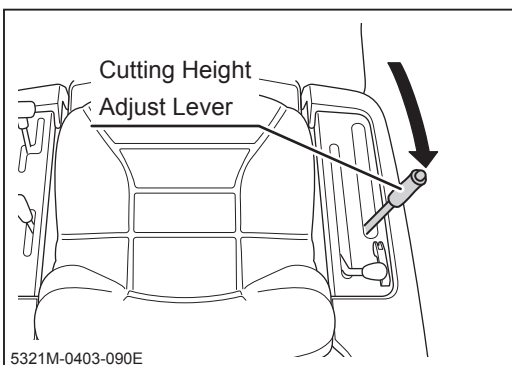
- When cutting with this machine for the first time, start on a flat surface. Drive slowly and in an overlapping pattern.
- If load to cutting blade is high, drive slowly, or cut twice.
- Safety feature: engine stops automatically if operator leaves seat while cutting blade is rotating.



7. Move cutting rotary clutch lever to [OFF] to stop cutting blade.

NOTE

- Moving cutting rotary clutch lever to [OFF] applies brake on cutting blade to stop.



8. Move cutting height adjust lever to [Transport].

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 Cleaner 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

Hours used	8 hours (daily)	50 hours (weekly)	200 hours (monthly)	500 hours
Clean and check fastenrs	○ (everyday)			
Check and fill oil	○ (everyday)			
Clean air cleaner element	○ (everyday)			
Change oil	(1st time:20 hours)	○		
Clean spark plugs		○		
Replace fuel strainer			○	
Replace air cleaner element			○	
Check and adjust spark plug gap			○	
Replace oil filter		(1st time:50 hours)	○	
Check and adjust tappets				◎ (300 hours)
Remove carbon deposit from cylinder head				◎
Clean oil pan				◎
Clean carburator				◎
Perform valve lapping				◎
Replace fuel hose				Every two years
Overhaul				1000 hours

◎: for items maked with this symbol, please consult with your CANYCOM representative.

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 56
		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 Diff. *1 Front Knuckle *1 *2	Irregular noise or overheating shall not be observed when traveling.		√	
		There shall not be oil leaks in or around front differential case or knuckles.		√	
	Center Gearbox*1	Transmission can be shifted to either 2WD or AWD position positively and performs normally.		√	
		Irregular noise or overheating shall not be observed when traveling.		√	
		There shall not be oil leaks in or around center gearbox.		√	

*1 CMX222

*2 CM223

Item		Description	Schedule			Note
			PSI	Mon	Year	
Drive Train	HST	HST shall perform normally..	√	√	√	
		Hydraulic fluid shall be filled to a proper level and shall be clean and free of dirt or contamination.		√	√	Page 59
		Lever or pedal shall not be loose or have excessive play.		√	√	
	V-belt	Belt tension shall be properly adjusted.		√	√	Page 61
		Belt shall be free of damage or excessive wear.		√	√	Page 61
	Brake	Brake shall work properly.	√	√	√	Page 62
	Parking Brake	Parking brake shall be able to hold the machine on a 25-degree *1 or 15-degree *2 slope.		√	√	
	Steering Wheel	Turn steering wheel right and left; front wheels shall turn accordingly.		√	√	
	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.	√	√	√	
Cutting System	Labels	Warning labels and instruction plates shall be clean, legible, and free of damage.	√	√	√	
	Cutting System	Blades shall be free of cracks or damage.	√	√	√	Page 63
		Blade mounting bolts shall be free of cracks or damage.	√	√	√	Page 63
		Cutting blade shield shall be free of cracks or damage.	√	√	√	
		Skirt on cutting blade shield shall be free of cracks or damage, and shall not be missing.	√	√	√	

*1 CMX222

*2 CM223

Item		Description	Schedule			Note
			PSI	Mon	Year	
Cutting System	Cutting System	Belt tension shall be properly adjusted.	√	√	√	Page 66
		Belt shall be free of damage or excessive wear.	√	√	√	Page 66
		When activated, cutting blade brake shall stop cutting Rotary.	√	√	√	Page 67
		Greasing points shall be properly greased.		√	√	Page 44
Electrical System	Charging System	Charging system shall charge battery.			√	
	Battery	Battery fluid (electrolyte) shall be of proper level.		√	√	Page 69
		Terminals shall be free of looseness or excessive corrosion.		√	√	
	Head Lamp Tail Lamp	Head and tail lamps shall work.	√	√	√	
		Lamp lens shall be free of cracks or chipping and water shall not be in the lamp.		√	√	
	Wiring	Connections shall not be loose.		√	√	
		Wiring shall be free of damages.		√	√	

List of Fluids and Lubricants

Item	Schedule	Grade	Cap.
Fuel	As needed.	Automotive Unleaded Gasoline	14.5 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 1.55L ^{*1}
Transmission Oil	Change Initially - After 50 hours of use. Every 500 hours afterwards.	Gear Oil API rating: GL-4 or 5 SAE rating: 80	1.5L
Front Differential Oil *2 (Center)	As needed.	Gear Oil API rating: GL-4 or 5 SAE rating: 80	0.6L
Front Knuckle Oil (Either sides) *2	As needed.	Gear Oil API rating: GL-4 or 5 SAE rating: 80	0.1L
Center Gearbox Oil *2	As needed.	Gear Oil API rating: GL-4 or 5 SAE rating: 80	0.2L
HST Fluid	As needed.	Gasoline Engine Oil API rating: SE or better. SAE rating: 10W-30	7.0L
Cutting Rotary Gearbox Oil	As needed.	Gear Oil API rating: GL-4 or 5 SAE rating: 80	0.25L
Battery Electrolyte	Fill Inspect every 50 hours and fill when necessary.	Distilled Water	-

*1 indicate the capacity including the oil filter cartridge.

*2 CM222 only

Greasing Points

⚠CAUTION!

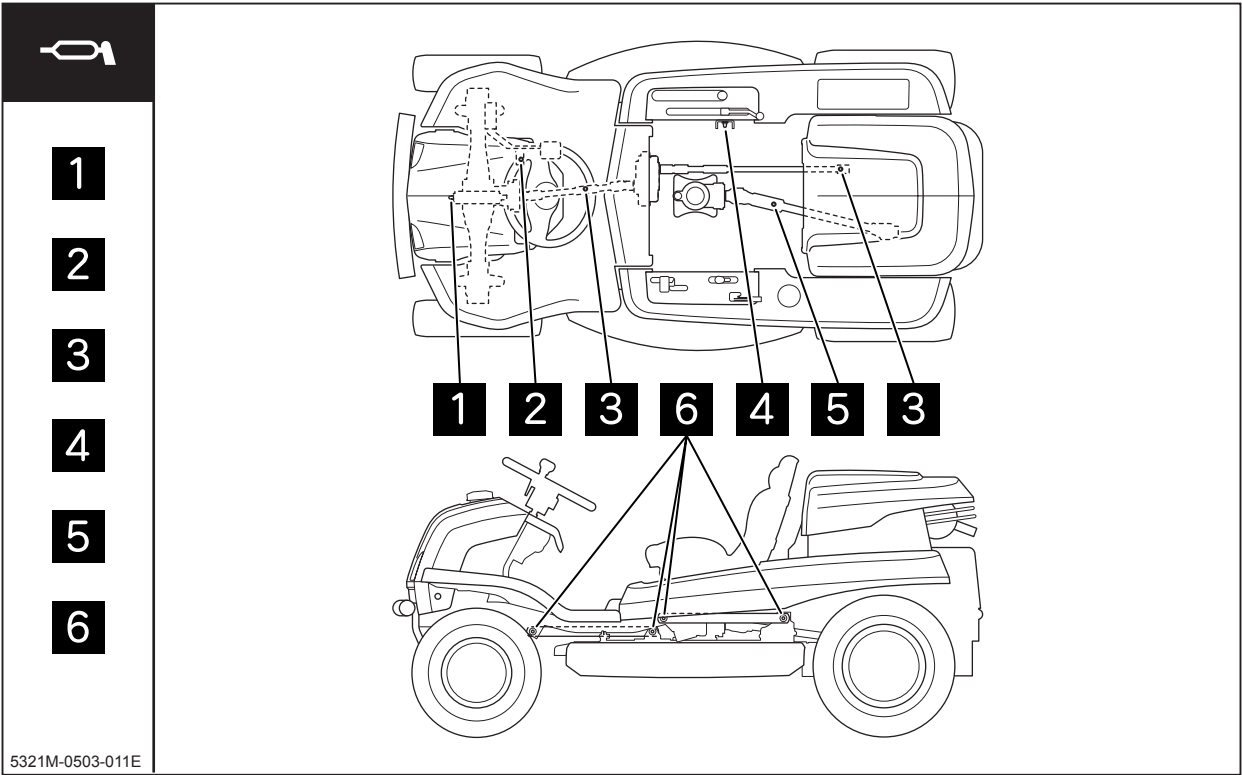
- Grease regularly. Insufficient greasing may result in seizure or rusting, affecting smooth operation of machine.

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.

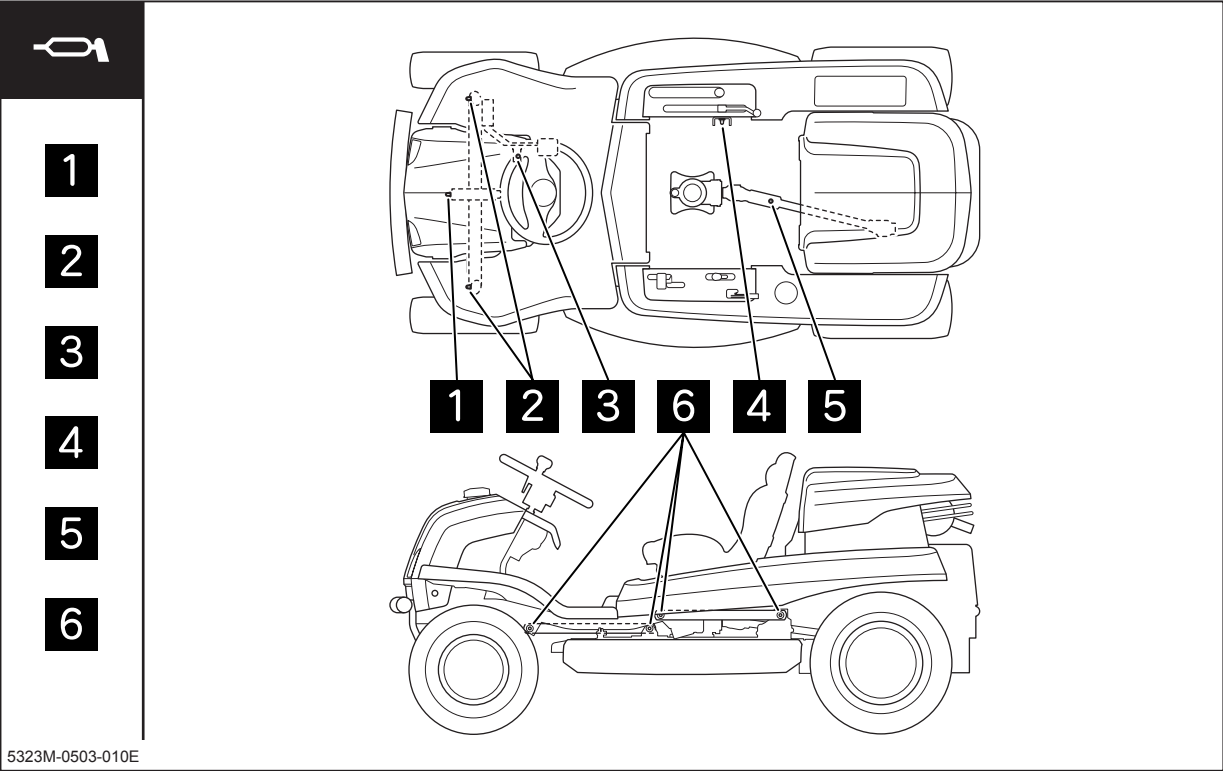
Greasing Points (CMX 222)

Location	Schedule	Grade
1 Center pivot, front axle	Every 6 Months	Chassis Grease
2 Drive pedal pivot	Every 6 Months	Chassis Grease
3 Propeller shaft	Every 6 Months	Chassis Grease
4 Cutting rotary clutch lever pivot	Every 6 Months	Chassis Grease
5 Cutting rotary drive shaft	Every 6 Months	Chassis Grease
6 Cutting rotary link pivots	Every 6 Months	Chassis Grease



Greasing Points (CM 223)

Location	Schedule	Grade
1 Center pivot, front axle	Every 6 Months	Chassis Grease
2 Both ends pivot, front axle	Every 6 Months	Chassis Grease
3 Drive pedal pivot	Every 6 Months	Chassis Grease
4 Cutting rotary clutch lever pivot	Every 6 Months	Chassis Grease
5 Cutting rotary drive shaft	Every 6 Months	Chassis Grease
6 Cutting rotary link pivots	Every 6 Months	Chassis Grease



List of Consumables and Spares

⚠ CAUTION!

- When replacing consumable or spare, always use CANYCOM genuine part. Using non-CANYCOM parts may reduce machine's performance or service life. Note that it may also void warranty and certification for relevant standards.

Item	Part No.	Schedule	Qty.
Engine			
Oil Filter Cartridge	248-65801-00	Inspect every 50 hours. Replace if defective.	1
Air Cleaner Element	263-32610-A1	Every 200 hours or seasonally.	1
Spark Plug (NGK BPR5ES)	065-01402-80	Clean: every 50 hours. Replace if defective.	2
Wire (Throttle)	53210105000	Replace if defective.	1
Fuel System			
Hose (Carburator Fuel Pump)	263-68006-B6	Every 2 years.	
Hose (Fuel Pump - Fuel Filter)	263-68007-B6	Every 2 years.	
Hose (Fuel Filter - Fuel Tank)	53210308000	Every 2 years.	
Drive Train			
V-belt (HST)	08521300032	Replace if defective.	1
Tire TA 4.00-8 (Front)*1	34072407000	Replace if defective or worn out.	2
Tire 19X8.00-10 (Rear)*1	34152313000	Replace if defective or worn out.	2
Tire Tube (Front)*1	34072408000	Replace if defective.	2
Tire Tube (Rear)*1	37052204000	Replace if defective.	2
Tire AGS 4.00-7 (Front)*2	53142204000	Replace if defective.	2
Tire 17X8.00-8 (Rear)*2	34076002900	Replace if defective.	2
Tire Tube (Front)*2	53042205000	Replace if defective.	2
Brake Lining (Front)	73064019000	Replace if defective. (Replace in pairs)	2
Brake Lining (Rear)*1	73014007000	Replace if defective. (Replace in pairs)	2
Wire (Front Brake)	37145121000	Replace if defective.	1
Wire (Rear Brake)*1	37145121000	Replace if defective.	1
Wire (Differential Lock)	37145121000	Replace if defective.	1
Wire (Parking Brake)	35213322000	Replace if defective.	1
Cooling Fan	73061137000	Replace if defective.	1

*1 CMX222

*2 CM223

Item	Part No.	Schedule	Qty.
Cutting System			
Blade Set (Pink)	Z3214212010	Replace if defective.	1
Blade Set (Silver)	Z3214206010	Replace if defective.	1
Blade Set (Black)	Z3104205010	Replace if defective.	1
	Z3104205050	Replace if defective.	5
Blade Set (Red)	Z3096201010	Replace if defective.	1
	Z3096201030	Replace if defective.	3
	Z3096201050	Replace if defective.	5
	Z3096201100	Replace if defective.	10
Rubber Plate (Front Skirt, Center)*1	53212116000	Replace if defective.	1
Rubber Plate (Front Skirt, Sides)*1	53212121000	Replace if defective.	2
Rubber Plate (Front Axle.-Blade Shield)*1	53212112000	Replace if defective.	1
Rubber Plate (Front Axle, RearRight)*1	53212118000	Replace if defective.	1
Rubber Plate (Front Tire, Inside)*1	53212142000	Replace if defective.	2
Rubber Plate (Front Skirt, Center)*2	53232124000	Replace if defective.	1
Rubber Plate (Front Skirt, Sides)*2	53232128000	Replace if defective.	2
Rubber Plate (Front axle, -Blade Shield)*2	53232126000	Replace if defective.	1
Rubber Plate (Front axle, Rear Right)*2	53212118000	Replace if defective.	1
Rubber Plate (Front Tire, Behind)*2	53212132000	Replace if defective.	2
Rubber Plate (Front Tire, Inside)*2	53062121000	Replace if defective.	2
Rubber Plate (Blade Shield, Rear)	53214125000	Replace if defective.	1
Rubber Plate (Blade Shield, Rear Left)	53214124000	Replace if defective.	1
V-Belt (Cutting Rotary)	08521600037	Replace if defective.	2
Brake Lining (Cutting Rotary)	73054005000	Replace if defective.	2
Wire (Cutting Rotary Clutch)	53132431000	Replace if defective.	1
Wire (Cutting Height Adjuster)	53214013000	Replace if defective.	1
Cutting Height Adjuster Lock	53214009000	Replace if defective.	1
Cutting Blade Stay	53214204000	Replace if defective.	1
Blade Replace Tool*3	53139004000		
Electrical System			
Battery (38B19R)	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 Lamp)	09808121509	Replace if defective.	2
Light Bulb (Tail Lamp)	09808120318	Replace if defective.	1
Chassis			
Wire (Seat Height Adjuster)*1	53213533000	Replace if defective.	1
Height Adjuster Lock *1	53213525100	Replace if defective.	1

*1 CMX222

*2 CM223

*3 Can not use for Blade Set "Silver" or "Pink"

Removing and Installing Body Panels

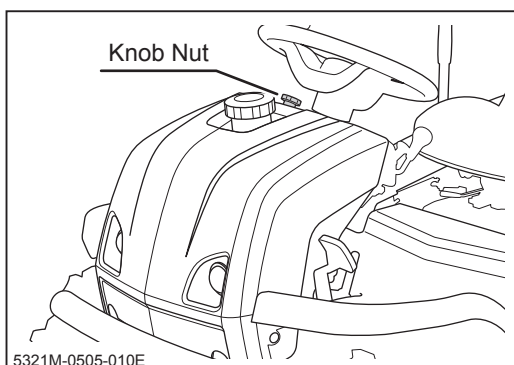
⚠ WARNING!

- Always stop engine and remove ignition key before servicing.

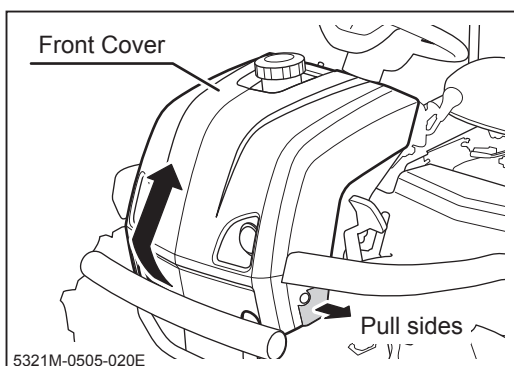
⚠ CAUTION!

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

Front Cover

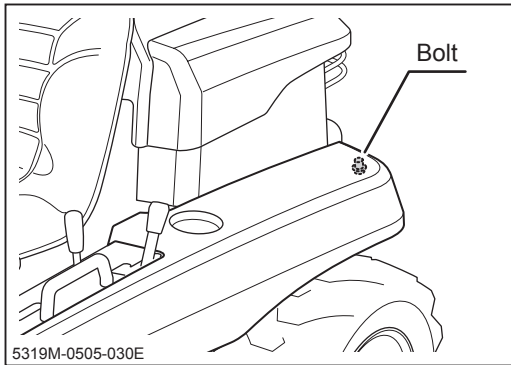


1. Unfasten knob nut.

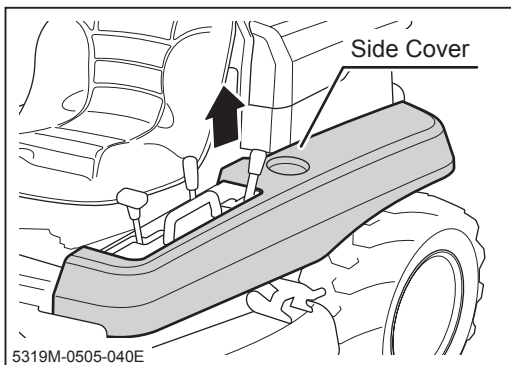


2. Pull sides of cover wide as shown, then pull up cover to remove.

Side Covers

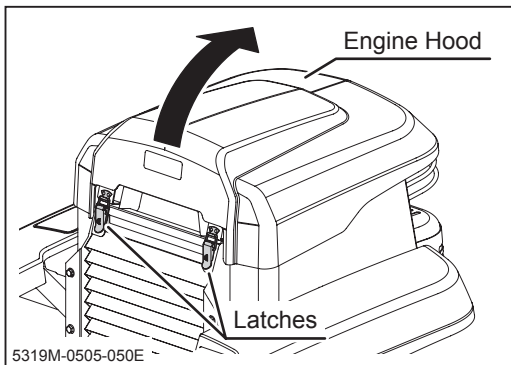


1. Unfasten bolt.



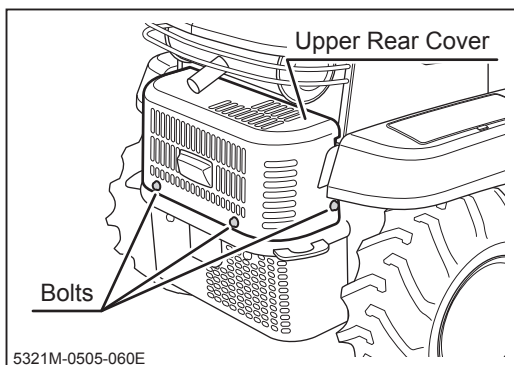
2. Pull up cover to remove.

Engine Hood



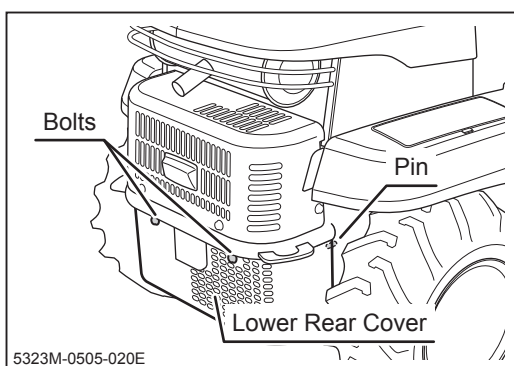
1. Undo latches.
2. Open engine hood.

Upper Rear Cover



1. Unfasten 4 bolts.
2. Remove upper rear cover.

Lower Rear Cover

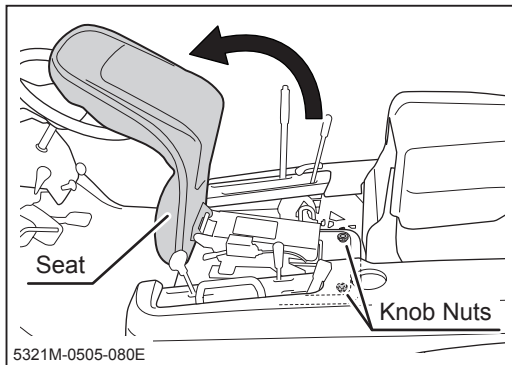


1. Unfasten 2 bolts.
2. Remove lower rear cover.
3. When installing, insert pins on cover into corresponding holes on frame, then fasten with 2 bolts.

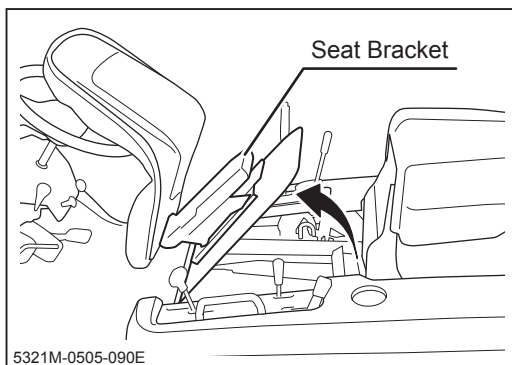
Seat Bracket

⚠ CAUTION!

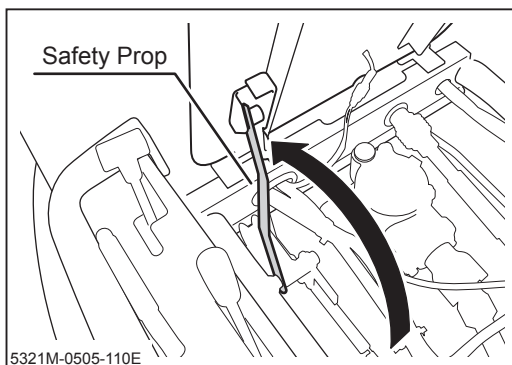
- Shift seat position to the rear end to prevent contact of seat bracket and step.



1. Raise seat.
2. Unfasten 2 knob nuts.

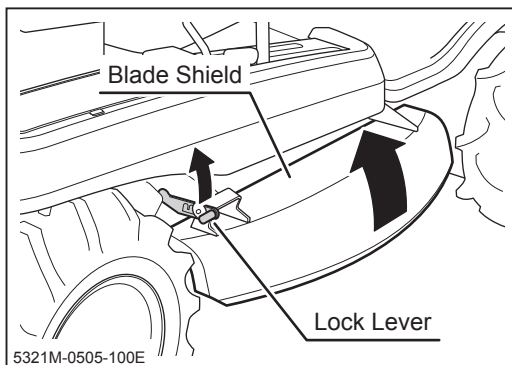


3. Raise seat bracket.



4. Hold seat with safety prop.

Cutting Blade Shield



1. Raise lock lever.
2. Hold lock lever and raise blade shield.
3. Release lock lever to lock shield in the raised position.

NOTE

- Change cutting height less than 100mm to fully open the cutting blade shield.

Engine

⚠ WARNING!

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

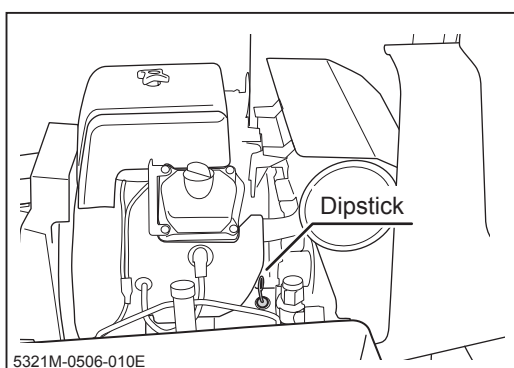
Engine Oil

⚠ CAUTION!

- Make certain to fill 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 engine.
- Dispose of the drained oil properly.

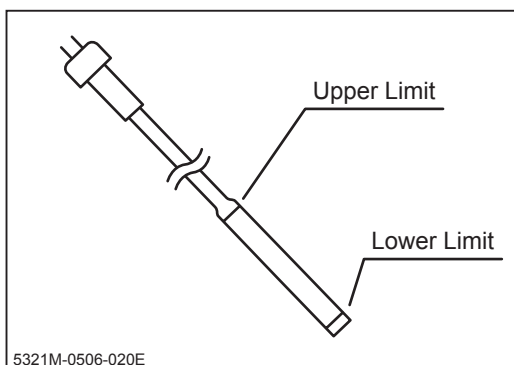
NOTE

- To obtain correct reading, check oil level before starting, or wait about 10 minutes after stopping engine to allow oil to drain back to oil pan.
- Always check oil level on a level surface.
- Oil to Use: Page 43.
- Oil Capacity: Page 43.

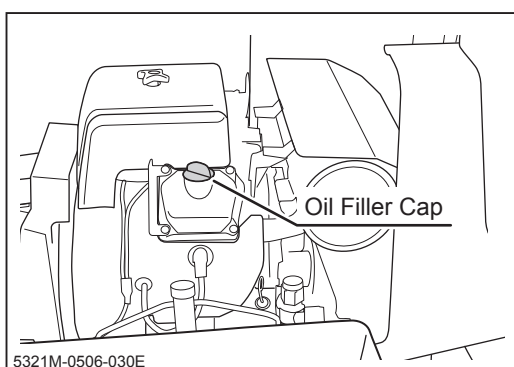


Inspecting

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

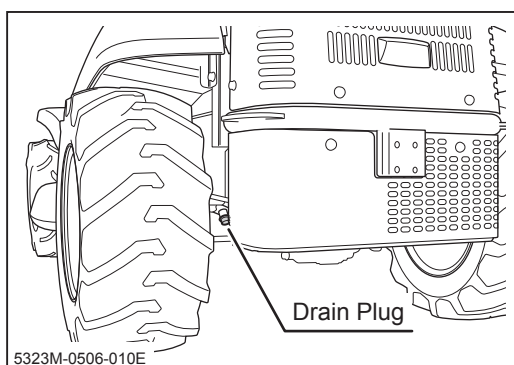


5. Visually inspect oil level. Make sure oil level is between upper and lower limits. If it is below lower limit, add oil.
6. Visually inspect condition of oil. If it is too dirty or viscosity is not normal, change oil.
7. Put dipstick back in place.
8. Close engine hood.



Filling

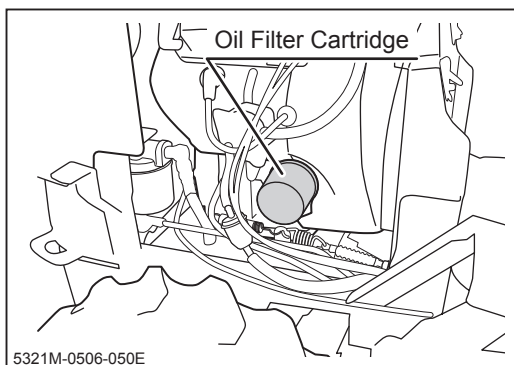
1. Open engine hood.
2. Remove oil filler cap.
3. Fill specified amount of correct oil into filler.
4. Check oil level. Make sure oil level is between upper and lower limits.
5. Put oil filler cap back in place.
6. Close engine hood.



Changing

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

Oil Filter Cartridge

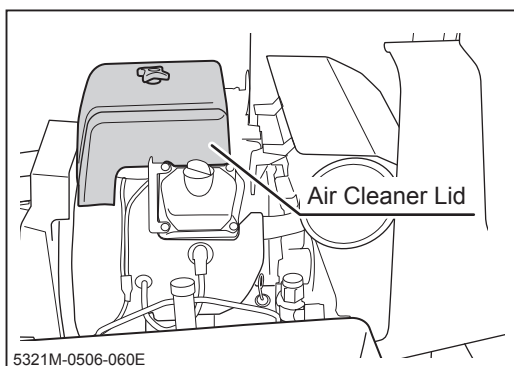


1. Open engine hood.
2. Remove right side cover.
3. Drain engine oil.
4. Follow the instructions in **Operator's Manual for the engine** to change oil filter cartridge.
5. Fill oil.
6. Install right side cover back in place.
7. Close engine hood.

Air Cleaner

⚠ CAUTION!

- Clean air cleaner element daily. Dirty air cleaner element causes poor starting, reduces engine performance and shortens engine life.
- Replace air cleaner element if damaged.

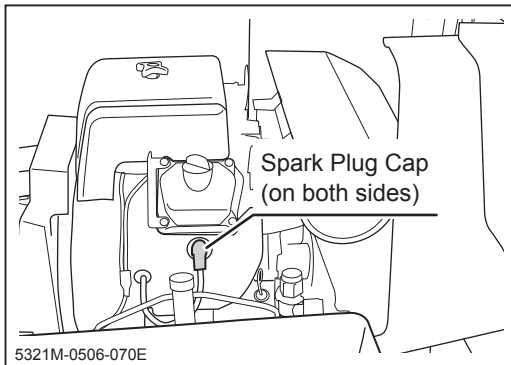


1. Open engine hood.
2. Follow the instructions in **Operator's Manual for the engine** to inspect, clean or change air cleaner element.
3. Close engine hood.

Spark Plugs

⚠ CAUTION!

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



1. Open engine hood.
2. Remove spark plug cap.
3. Remove spark plug with included spark plug wrench.
4. Follow the instructions in **Operator's Manual for the engine** to inspect, clean, or change spark plugs.
5. Install spark plug.
6. Put plug cap back in place.
7. Close engine hood.

Drive Train

⚠ WARNING!

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

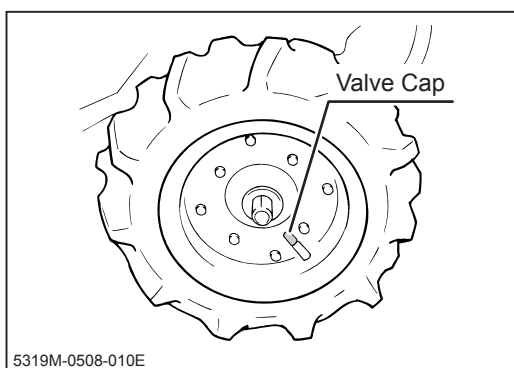
⚠ CAUTION!

- Dispose of drained oil properly.

Tires

⚠ CAUTION!

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



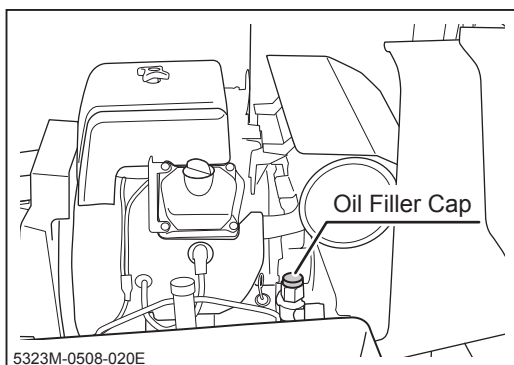
1. Park machine on a level ground.
2. Remove valve cap.
3. Check tire air pressure. If different from the specified values, adjust pressure.
4. Put valve cap back in place.

	Tire Size	Pressure KPa(kgf/cm ²)
CMX222		
Front	TA 4.00-8 (2PR)	110 (1.1)
Rear	19×8.00-10 (4PR)	220 (2.2)
CM223		
Front	AGS 4.00-7 (4PR)	220 (2.2)
Rear	17X8.00-8	220 (2.2)

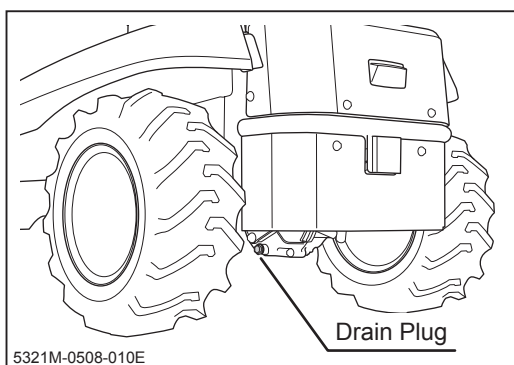
Transmission Oil

NOTE

- Oil to Use: Page 43.
- Oil Capacity: Page 43.



1. Park machine on a level ground.
2. Have an appropriate oil drain pan.
3. Open engine hood.
4. Remove transmission oil filler cap.

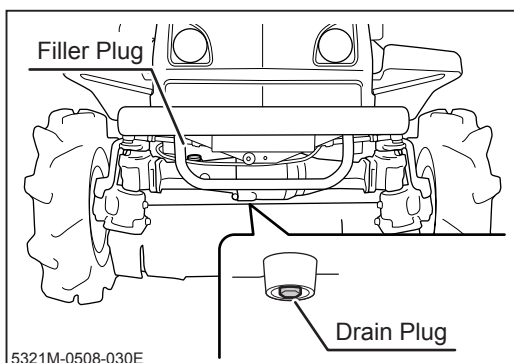


5. Remove transmission oil drain plug to drain oil.
6. Install drain plug back in place.
7. Fill specified amount of correct oil into filler.
8. Put filler cap back in place.
9. Close engine hood.

Front Differential Oil (CMX222 Only)

NOTE

- Oil to Use: Page 43.
- Oil Capacity: Page 43.

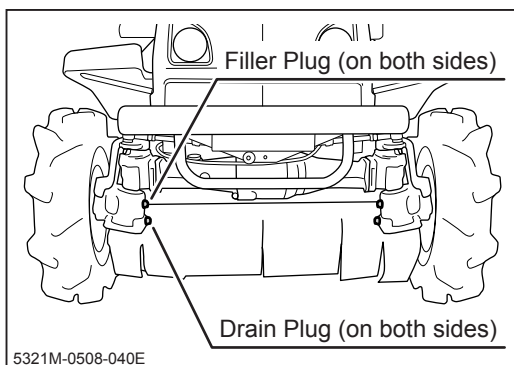


1. Park machine on a level ground.
2. Have an appropriate oil drain pan.
3. Remove front differential oil drain plug to drain oil.
4. Install drain plug back in place.
5. Remove front differential oil filler plug.
6. Fill specified amount of correct oil into filler.
7. Install filler plug back in place.

Front Knuckle Oil (CMX222 Only)

NOTE

- Oil to Use: Page 43.
- Oil Capacity: Page 43.

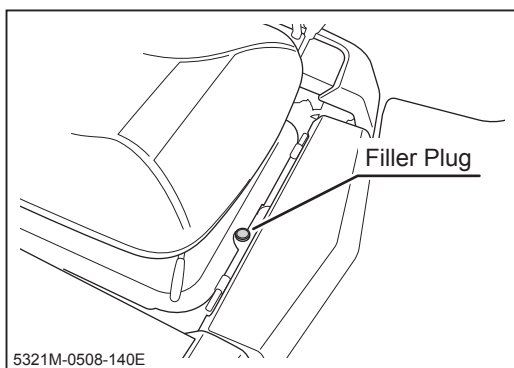


1. Park machine on a level ground.
2. Have an appropriate oil drain pan.
3. Remove front knuckle oil drain plug to drain oil.
4. Install drain plug back in place.
5. Remove front knuckle oil filler plug.
6. Fill specified amount of oil into filler.
7. Install filler plug back in place.

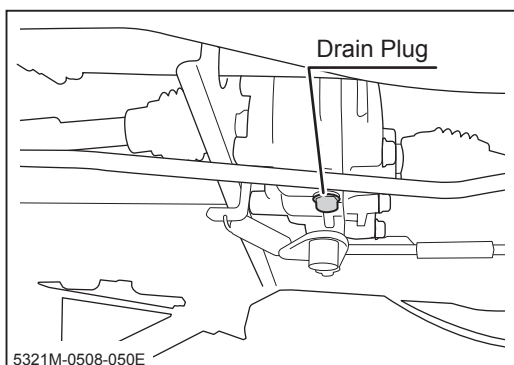
Center Gearbox Oil (CMX222 Only)

NOTE

- Oil to Use: Page 43.
- Oil Capacity: Page 43.



1. Park machine on a level ground.
2. Have an appropriate oil drain pan.
3. Open seat bracket
4. Remove center gearbox oil filler plug.

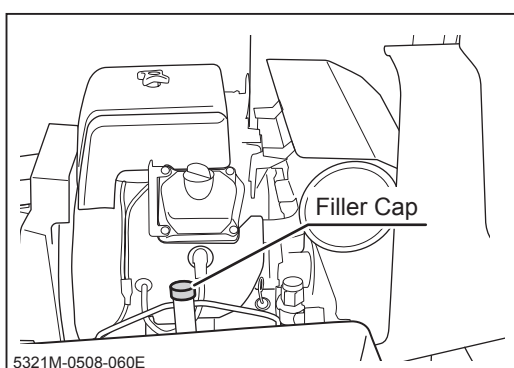
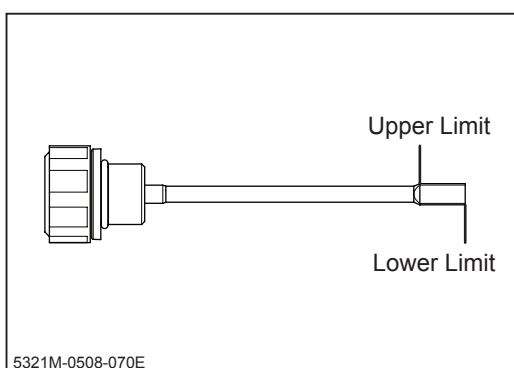
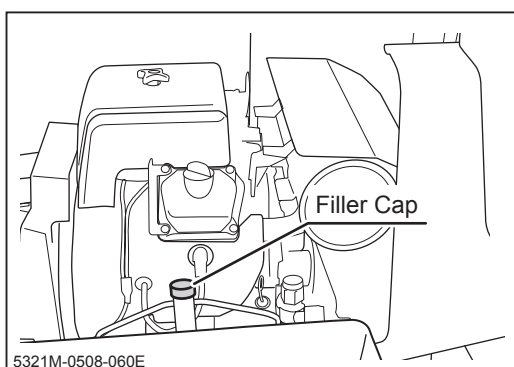


5. Remove center gearbox oil drain plug to drain oil.
6. Install drain plug back in place.
7. Fill specified amount of oil into filler.
8. Install filler plug back in place.

HST (Hydrostatic Transmission) Fluid

NOTE

- To obtain correct reading, check HST fluid level before starting, or wait until HST fluid cools off sufficiently. Hot HST fluid expands in volume and does not provide correct reading.
- Always check oil level on a level surface.
- Oil to Use: Page 43.
- Oil Capacity: Page 43.

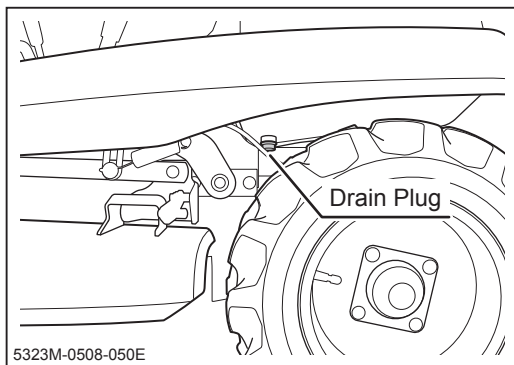


Inspecting

1. Park machine on level ground.
2. Open engine hood.
3. Remove HST fluid filler cap and wipe its dipstick clean.
4. Put filler cap back and fully screw it back.
5. Remove filler cap again.
6. Visually inspect fluid level. Make sure fluid level is between upper and lower limits. If it is below lower limit, add fluid.
7. Visually inspect condition of fluid. If it is too dirty or viscosity is not normal, change fluid.
8. Put filler cap back in place and screw it securely.
9. Close engine hood.

Filling

1. Open engine hood.
2. Remove HST fluid filler cap.
3. Fill HST fluid into filler.
4. Check fluid level.
5. Put filler cap back in place and screw it securely.
6. Close engine hood.



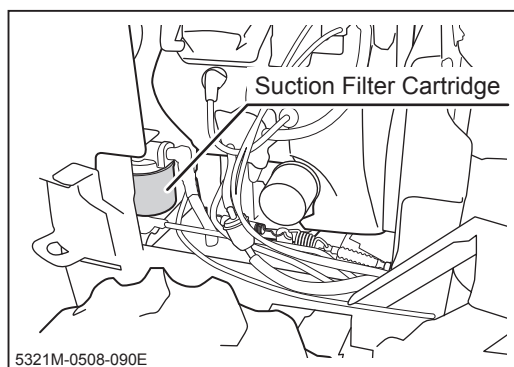
Changing

1. Have an appropriate oil drain pan.
2. Open engine hood.
3. Remove oil filler cap.
4. Remove drain plug to drain fluid.
5. Install drain plug back in place.
6. Fill specified amount of fluid.
7. Check fluid level. Make sure it is at the specified level.
8. Install oil filler cap back in place.
9. Close engine hood.

Suction Filter

NOTE

- Replace suction filter when replacing HST fluid.

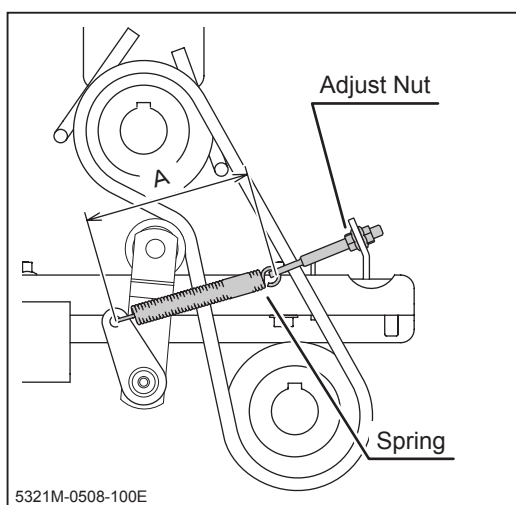


1. Open engine hood.
2. Remove right side cover.
3. Remove suction filter cartridge.
4. Have a new suction filter cartridge. Coat its seal with clean engine oil evenly.
5. Screw it into its mount. Tighten it by hand until the cartridge is firmly in place.
6. Install right side cover back in place.
7. Close engine hood.

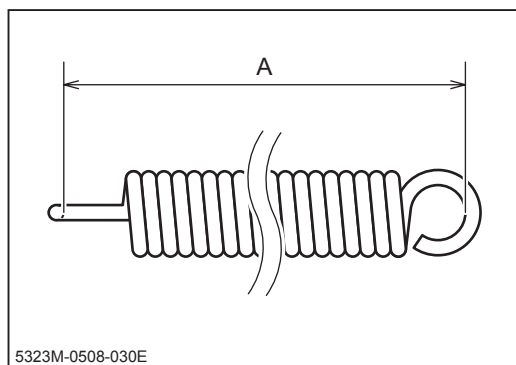
Drive Belt

⚠ CAUTION!

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



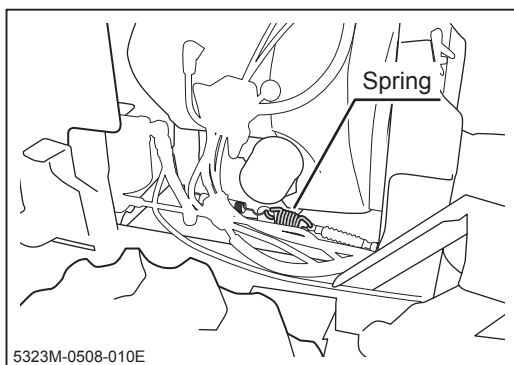
1. Remove upper rear cover.
2. Check V-belt tension. Inspect that the length A of spring is within the range of 135mm+/-3mm. If it is out of this range, adjust spring with adjust nut.
3. Visually inspect belt. Replace belt if it is damaged. For replacement, contact your CANYCOM representative.
4. Install upper rear cover back in place.



Parking Brake

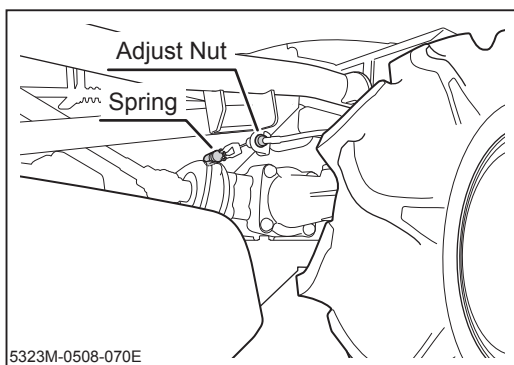
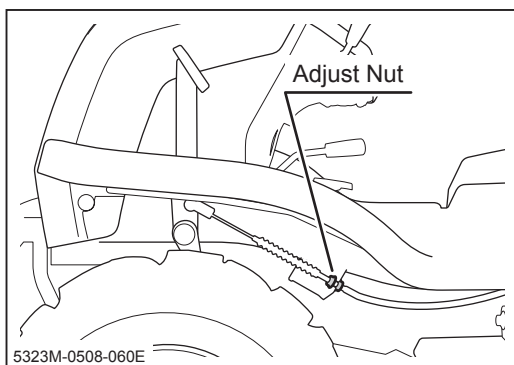
⚠ WARNING!

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



Rear Brake

1. Lock brake pedal with parking brake lock lever.
 2. Inspect that the stretch of spring is 3mm. If it is not, adjust it with adjust nut.
- For adjustment, contact your CANYCOM representative.



Front Brake (CMX222 Only)

1. Lock brake pedal with parking brake lock lever.
2. Inspect that the stretch of spring is between 3mm and 5mm. If it is not within this range, adjust it with adjust nut. For adjustment, contact your CANYCOM representative.

Cutting System

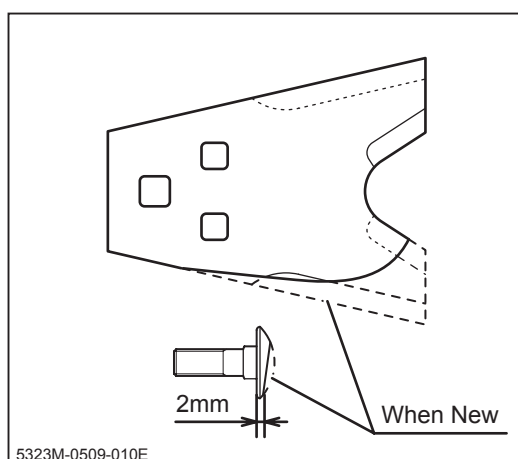
⚠ WARNING!

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

Cutting Blades

⚠ CAUTION!

- 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 carriage bolts 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.
- Blades have sharp edges. When replacing blades, use special tool, wear thick gloves, or wrap the blade with thick cloth and handle carefully.

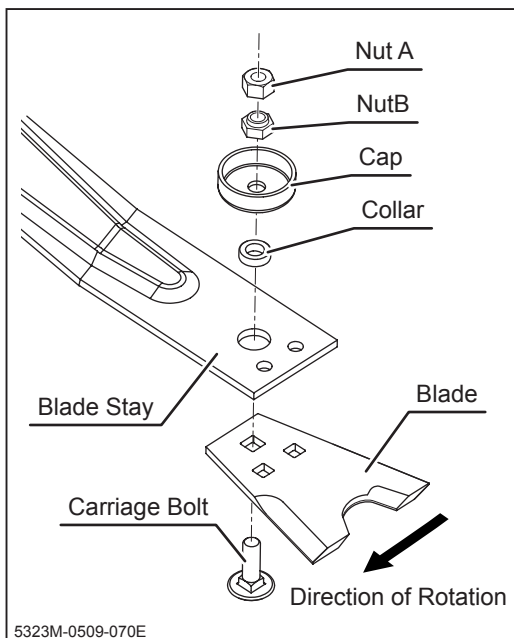
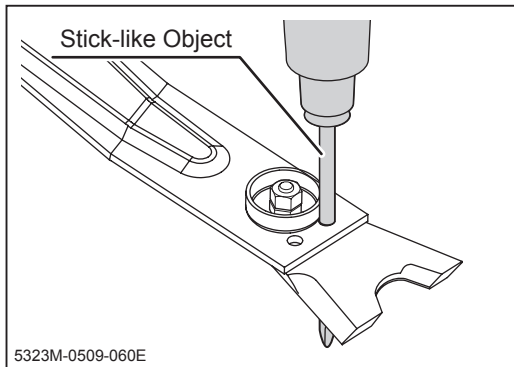


Inspecting

1. Open cutting blade shield.
2. Visually inspect blades and bolts for wear and damage. If blades or bolts are excessively worn, deformed, damaged, or missing, replace them with new components.
3. Close cutting blade shield.

NOTE

- **Wear Limit:** to the solid line in the figure on the left.



Replacing

1. Open cutting blade shield.
2. Hold blade with a strong stick-like object (such as screw driver).
3. Unfasten nut A, then nut B to remove blade.
4. Place a new or flipped blade under blade stay. Insert carriage bolt.
5. Place collar and cap.
6. Hold blade with strong, stick-like object.
7. Thread nut B and tighten it to a specified torque.

NOTE

- **Torque for Nut B - M12: 44.1-53.9N•m (450-550kgf•cm).**

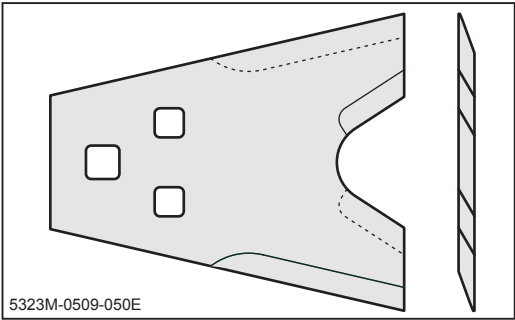
8. Thread nut B. Tighten it by hand. When it cannot be turned by hand, tighten it for one turn by a wrench.

NOTE

- **Nut A provides sufficient locking when installed as described above.**

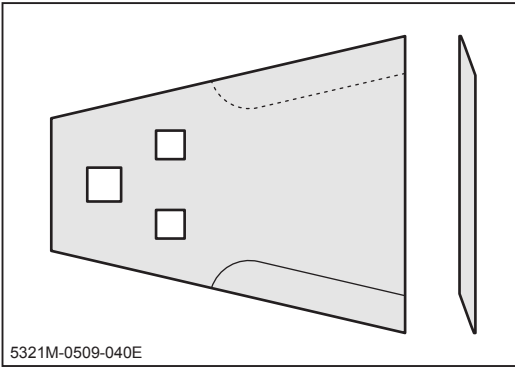
Blade Types

We have 4 different types of blades for different cutting conditions.



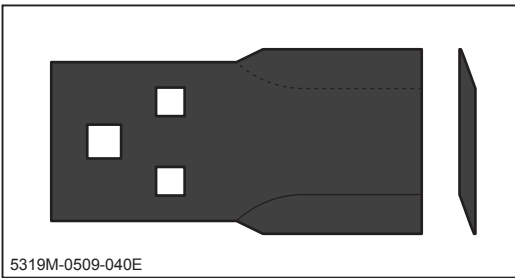
Pink

- Original equipment.
- Wider end increases durability.
- Additional center blade enhanced cutting ability.
- Can be used as free or fixed (with optional bolts) knife.



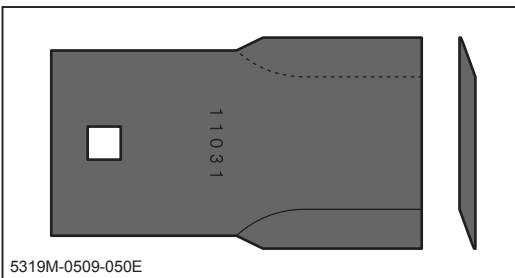
Silver

- Wider end increases durability.
- Can be used as free or fixed (with optional bolts) knife.



Black

- Can be used as free or fixed (with optional bolt) knife.
- Very versatile.
- Also suitable for using as fixed knife to cut soft grass.



Red

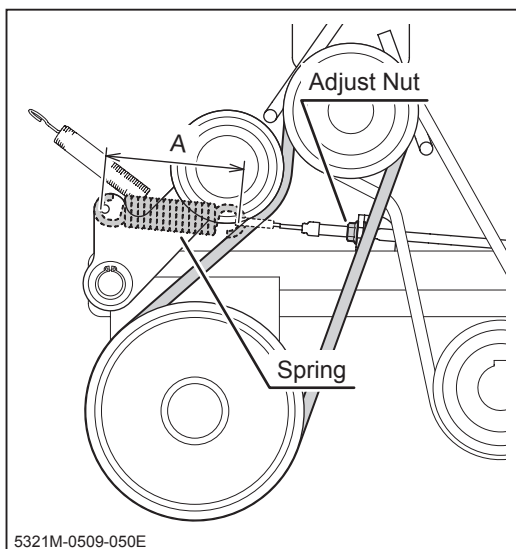
- Reinforced version of the Black.

	Black	Red	Pink Silver
Durability	Low	↔ High	

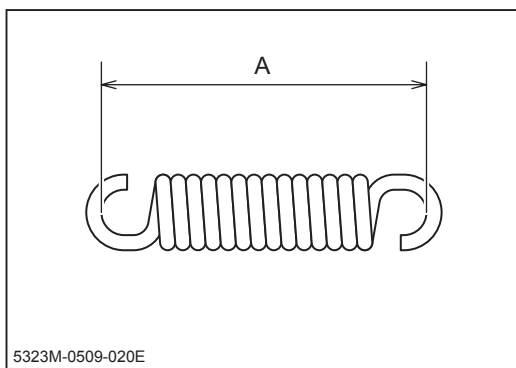
Cutting Rotary Drive Belt

⚠ CAUTION!

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



1. Remove upper rear cover.
2. Move cutting height adjust lever to [180].
3. Move cutting rotary clutch lever to [ON].
4. Check v-belt tension. Inspect that the length of spring is within the range of 115mm+/-1mm. If it is out of this range, adjust spring with adjust nut.
5. Visually inspect belt. Replace belt if it is damaged. For replacement, contact your CANYCOM representative.
6. Move cutting rotary clutch lever to [OFF].
7. Move cutting height adjust lever to [Transport].
8. Install upper rear cover back in place.



Cutting Rotary Brake

DANGER!

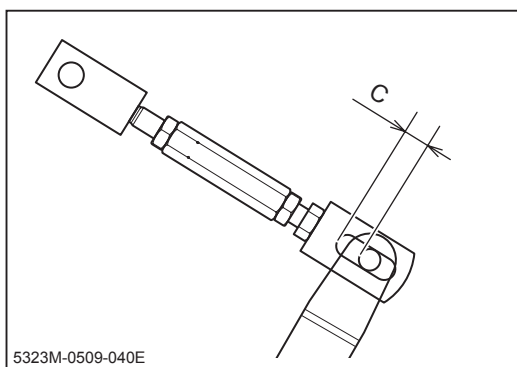
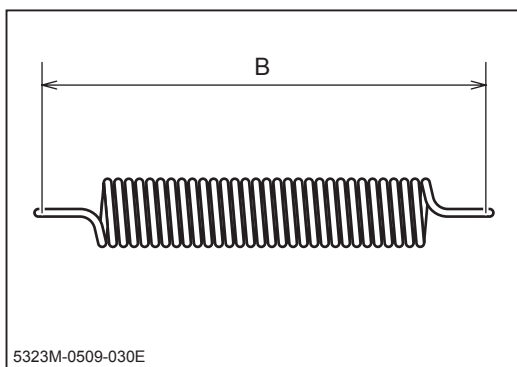
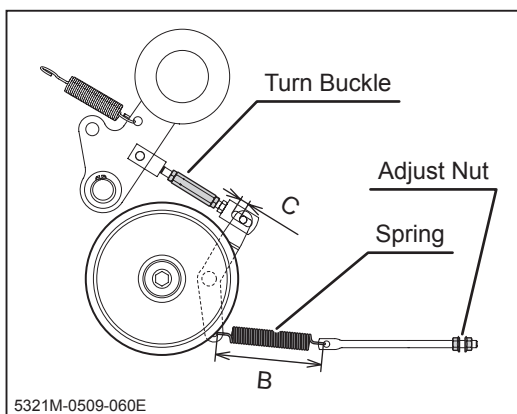
- Never place any part of body under cutting blade shield when cutting blade is rotating.

WARNING!

- Do not allow bystanders to come near machine when inspecting cutting rotary brake.
- Never attempt to check the performance of cutting rotary brake with cutting blade shield open. Stones or rocks can be thrown and cause damage to surrounding properties or persons.
- Inspect cutting rotary brake whenever the performance of it seems inadequate.

Inspecting

1. Start engine.
2. Turn throttle lever to [ (fast)] to raise engine speed.
3. Move cutting height adjust lever to [180 (160)].
4. Move cutting rotary clutch lever to [ON] to rotate cutting blade.
5. Move cutting rotary clutch lever to [OFF] to observe if cutting blade stops within 5 seconds. If it takes more than 5 seconds to stop, adjust cutting rotary brake.
6. Move cutting height adjust lever to [Transport].
7. Turn throttle lever to [ (slow)] to slow engine speed.
8. Park machine and stop engine.



Adjusting

1. Remove upper and lower rear covers.
2. Adjust the length B of spring with adjust nut so that it is approximately 106mm when clutch lever is in [OFF] position.
3. Adjust the play C with turn buckle so that it is between 3mm and 5mm when clutch lever is in [OFF] position.
4. Install upper and lower rear covers back in place.
5. Check if cutting blade stops within 5 seconds. If it does not, consult with your CANYCOM representative.

Electrical System

⚠ WARNING!

- Always stop engine and remove ignition key when servicing electrical system.

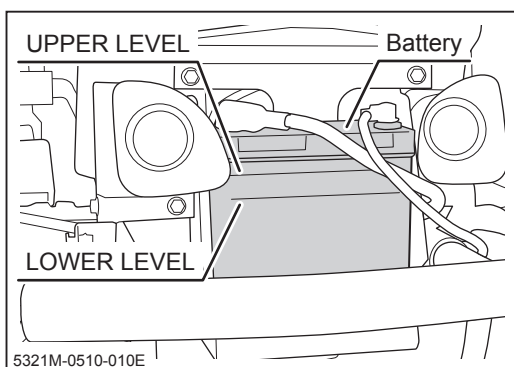
Battery

⚠ WARNING!

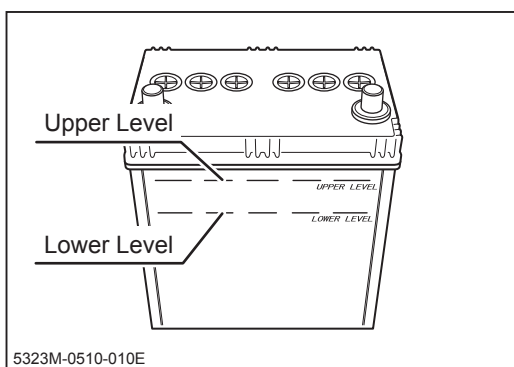
- Never charge battery when the fluid level is below "lower level" line. Charging battery with insufficient fluid may shorten battery life or cause an explosion.
- Battery fluid (diluted sulfuric acid) is corrosive and causes severe burns. Be extremely cautious when handling battery fluid. If battery fluid is spilled on clothes, immediately rinse with plenty of water. If spilled on skin or in an eye, immediately rinse with plenty of water and promptly consult a physician.
- Explosion hazard. Keep open flame or spark away from 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 machine or injury to person.
- Always disconnect (-) terminal first, and connect (+) terminal first. Disconnecting or connecting in the opposite order may cause a short circuit.
- When installing battery, make certain to connect (+) and (-) terminals to their original positions. Avoid contact between terminals and other surrounding parts.
- Use wet cloth to clean battery. Dry cloth may generate static electricity, which may cause explosion.
- Do not touch terminals. Electric shock may occur.

⚠ CAUTION!

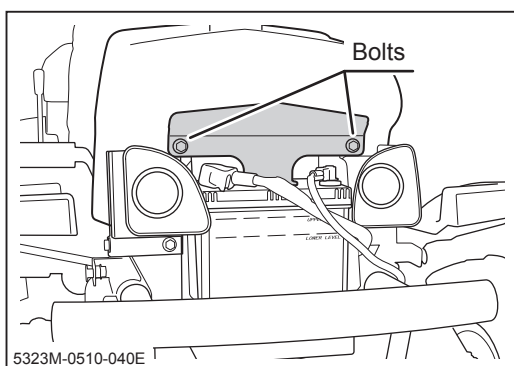
- Always remove battery from machine before charging. Failure to do so causes damage to electrical components and wiring.
- Follow battery charger user's manual when charging.

**Inspecting**

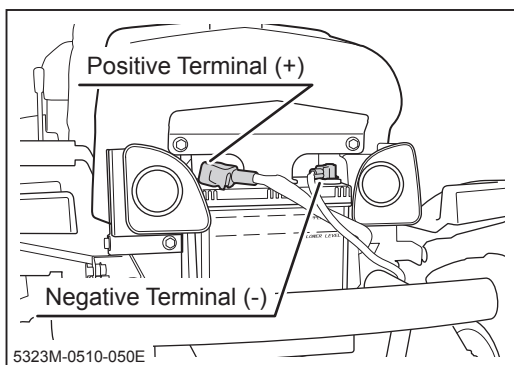
1. Park machine on level ground.
2. Remove front cover.



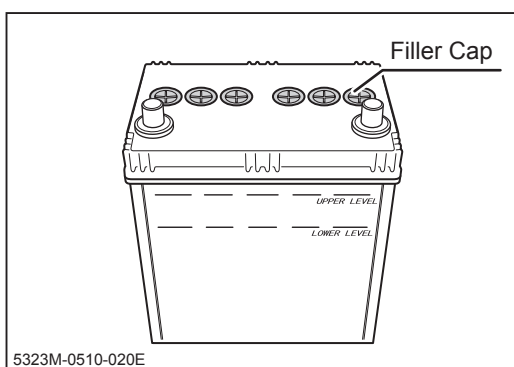
3. Visually inspect that battery fluid level is between "UPPER LEVEL" and "LOWER LEVEL" lines.
4. If fluid level is near or below "LOWER LEVEL" line, fill.
5. Install front cover back in place.

**Filling**

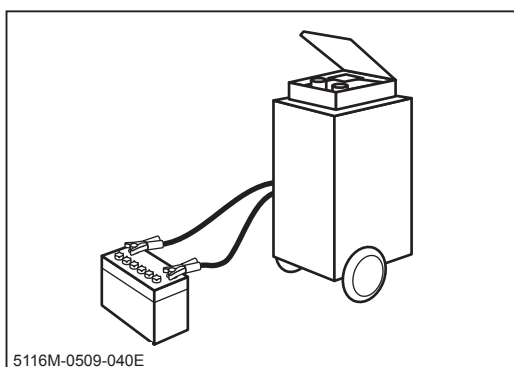
1. Remove front cover.
2. Remove two bolts and remove plate.



3. Remove negative cable(-) of battery.
4. Remove positive cable (+) of battery.
5. Remove battery.



6. Remove filler cap.
7. Fill distilled water to "UPPER LEVEL" line.
8. Put filler caps back in place.
9. Install battery back in place.
10. Install positive cable (+) back in place.
11. Install negative cable (-) back in place.
12. Install plate back in place.
13. Install front cover back in place.



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.

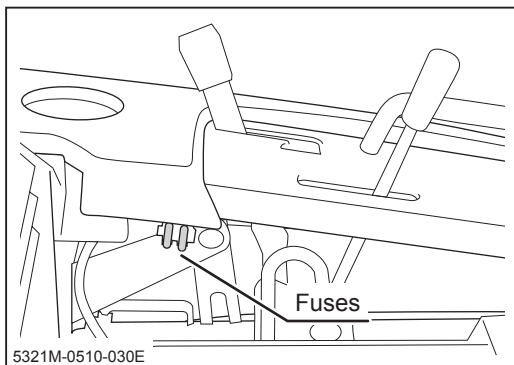
Fuses

⚠ 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 47.



1. Raise seat.
2. Remove fuse and visually inspect. If it is blown, replace it with new one of the same rating.
3. Install fuse back in place.
4. Put seat back in place.

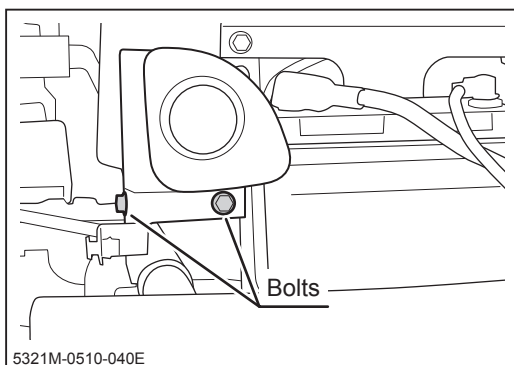
Light Bulbs

⚠ CAUTION!

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

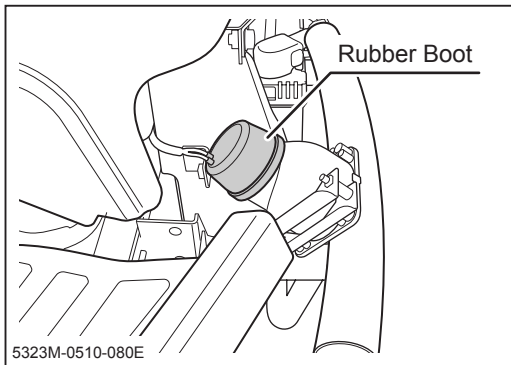
NOTE

- Light Bulbs to use: Page 47.

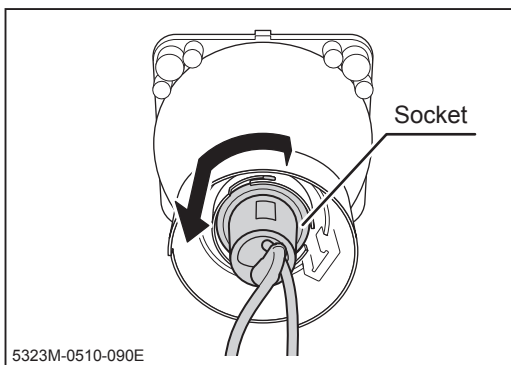


Head Lamp

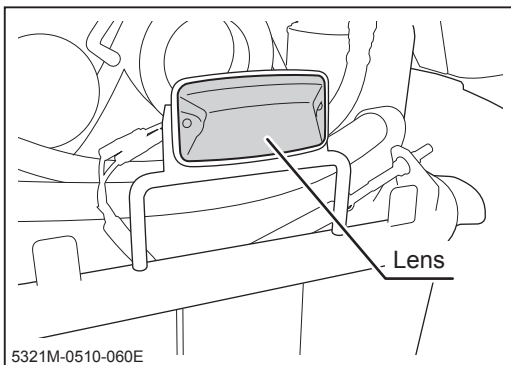
1. Remove front cover.
2. Remove 2 bolts to remove light unit.



3. Remove rubber boot.

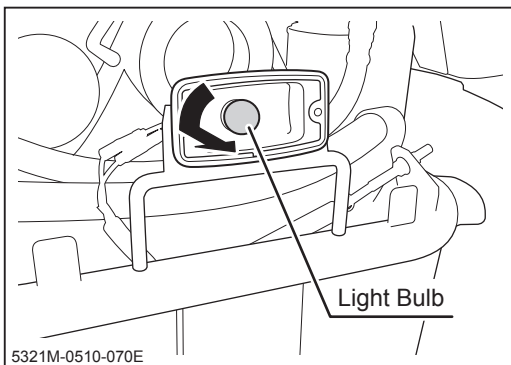


4. Remove socket.
5. Replace with a new light bulb.
6. Put rubber boot back in place.
7. Install light unit back in place.
8. Install front cover back in place.



Tail Lamp

1. Remove upper rear cover.
2. Remove 2 screws to remove lens.



3. Replace with a new light bulb.
4. Install lens back in place.
5. Install upper rear cover back in place.

After Use Care

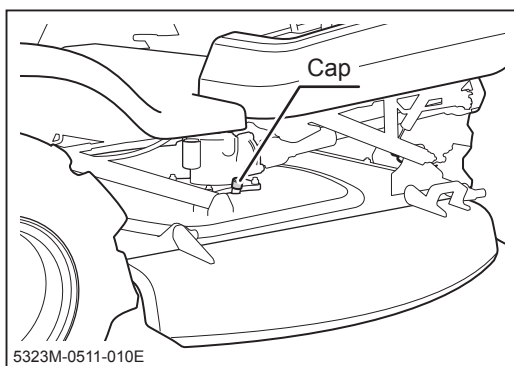
Cutting System

⚠ DANGER!

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

⚠ WARNING!

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



1. Park machine.
2. Set cutting height to about 50mm.

NOTE

- Do not set cutting height too low It may hit ground.

3. Remove cap and connect hose. Run water through hose.
4. Start engine.
5. Turn throttle lever to [ (fast)] to raise engine speed.
6. Move cutting rotary clutch lever to [ON] to rotate cutting blade to clean.
7. When cleaning is done, move cutting rotary clutch lever to [OFF] to stop cutting blade.

8. Turn throttle lever to [ (slow)] to slow engine speed.
9. Stop engine
10. Stop water and remove hose.
11. Install cap back in place.
12. Move cutting rotary clutch lever to [Transport]

After Normal Use

WARNING!

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

CAUTION!

- Do not wash engine or control panel with running water; water may enter inside and cause rust or damage.

1. Clean machine; wash off dirt, mud, and remove grass and other foreign materials after use.
2. If machine is to be left outside, cover machine with protective, water-proof covering after it is cooled off.

After Cold Weather Use

⚠ WARNING!

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

⚠ CAUTION!

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

1. Clean machine; wash off dirt, mud, and remove grass and other foreign materials after use.
2. Park machine on a paved or firm, a dry surface, or a bed of lumber.
3. If machine is to be left outside, cover machine with protective, water-proof covering after it is cooled off.

Storage

WARNING!

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

CAUTION!

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

1. Park machine.
2. Clean machine; wash off dirt, mud, and remove grass and other foreign materials after use.
3. Check machine according to **Maintenance Schedule** (Page 39). If a problem is found, repair.
4. Wipe steel parts clean with oiled cloth and grease specified grease points.
5. Change engine oil.
6. Clean air cleaner element.
7. Drain fuel from carburetor and fuel tank.
8. Inflate tires to a pressure slightly higher than the specified value. Chock front and back of front wheels.
9. Remove battery from machine. Inspect, fill, and charge battery.
10. Cover machine with protective, water-proof covering after machine is cooled off.

NOTE

- Battery discharges even when it is not in use. A battery may hold charge for a few months, but it is a good practice to charge battery before it goes flat; it will extend battery life.
- Refer to Operation Manual for the engine, for detailed instructions on preparing 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 64 Page 64
		Battery cable is disconnected.	→Connect the battery cable.	
		Insufficient or wrong oil.	→Fill or change oil.	Page 48
		Dirty or damaged spark plug.	→Clean or replace the spark plug.	Page 51
		Other (other than the above).	→Follow the instructions in "Starting" to restart. If problem persists, please contact your CANYCOM representative.	Page 20
	Engine stalls.	Out of fuel.	→Fill fuel.	Page 17
	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 cleaner).	→Clean or replace the air cleaner.	Page 50
		Other (other than the above).	→Please contact your CANYCOM representative.	

Area	Malfunction	Possible Cause	Corrective Measure	Ref.
Engine	Poor power or acceleration	Bad fuel	→Change fuel.	
		Insufficient intake air (clogged air cleaner).	→Clean or replace the air cleaner.	Page 50
		Loose drive belt.	→Adjust	Page 56
		Other (other than the above).	→Follow the instructions in "Starting" to restart. If problem persists, Please contact your CANYCOM representative.	Page 20
	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 48
		Rotating screen or cooling fins are clogged or blocked.	→Clean.	
	Excessive fuel consumption	Clogged air cleaner.	→Clean or replace the air cleaner.	Page 50
		Other (other than the above).	→Please contact your CANYCOM representative.	
	Black smoke comes out of exhaust	Clogged air cleaner.	→Clean or replace the air cleaner.	Page 50
		Other (other than the above).	→Please contact your CANYCOM representative.	
	White or blue smoke comes out of exhaust	Bad fuel.	→Change fuel.	
		Engine oil level is too high.	→Adjust the oil level.	Page 48
		Improper engine oil.	→Change oil.	Page 48
		Other (other than the above).	→Please contact your CANYCOM representative.	

Area	Malfunction	Possible Cause	Corrective Measure	Ref.
Drive Train	Machine does not move when drive lever or pedal is operated.	Insufficient or deteriorated HST fluid.	→Add or change fluid.	Page 54
		Parking brake is applied	→Release the parking brake.	
		V-belt is loose.	→Adjust V-belt.	Page 56
		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 52
		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.	
Brake	Brake or parking brake does not work well, or machine pulls to one side when braked.	Brake is not properly adjusted.	→Adjust.	Page 57
		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 52
		Other (other than the above).	→Please contact your CANYCOM representative.	

Area	Malfunction	Possible Cause	Corrective Measure	Ref.
Electrical System	Head lamp or rear lamp does not illuminate properly.	Blown bulb.	→Replace bulb.	Page 67
		Blown fuse.	→Replace fuse.	Page 66
		Other (other than the above).	→Please contact your CANYCOM representative.	
Cutting System	Cutting blade does not rotate	Cutting rotary drive belt is severed.	→Replace.	
	Cutting blade does not stop	Blake lining is worn.	→Replace.	
	Cutting rotary drive belt slips.	Belt is loose.	→Adjust belt tension.	Page 61
		Belt is worn.	→Replace.	Page 61
		Cut grass or vines accumulate in the cutting blade shield.	→Clean.	Page 69
	Abnormal vibration occurs when cutting blade is rotated..	Cutting blade is damaged or lost.	→Replace cutting blades.	Page 58
		Foreign object is caught by cuttingblade.	→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.	
	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 cutting blade shield.	→Clean.	Page 69

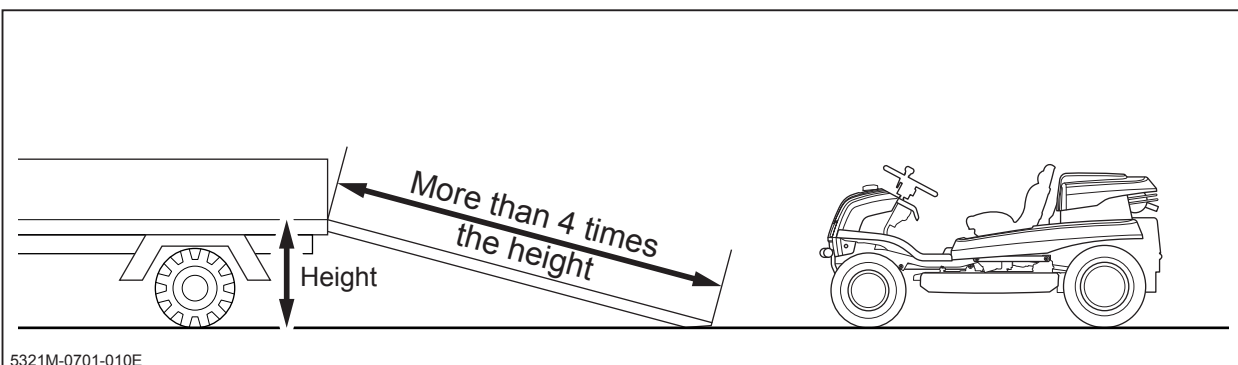
Area	Malfunction	Possible Cause	Corrective Measure	Ref.
Cutting System	Cutting blade cuts into ground.	Cutting height is too low.	→Raise cutting height.	
		Machine turns too fast.	→Turn slowly.	
		Work site has undulations.	→Raise cutting height.	
		Cutting blade (knives or stay) is bent.	→Replace.	
	Cutter load is too high.	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 transporter (truck) on a level ground. Always use chocks to secure wheels.
- Do not allow bystandars to come close to machine or transporter when loading or unloading machine.
- Use only loading ramps with sufficient strength (to withstand the combined weight of machine and operator), width (more than twice the width of tire.), and length (more than 4 times the height of loading deck of transporter), and have anti-slip ramp surfaces.
- Secure the hooks of loading ramps firmly and flush with loading deck.
- Move slowly forward when loading onto, and move slowly backward when unloading off of transporter. Pay special care when going over the joint between loading deck and ramps; machine may tip.
- Do not turn on loading ramps. Machine may fall.
- Tie down machine securely. Make sure machine does not move around.



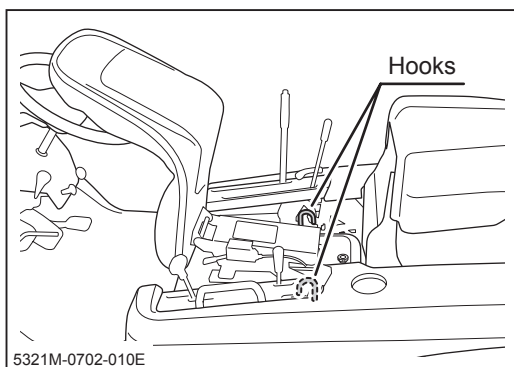
1. Park the transporter on a level ground. Secure wheels with chocks.
2. Place loading ramps. Secure hooks of ramps firmly and flush with loading deck.

3. Shift auxiliary transmission shift lever to [Low], set cutting height adjuster lever to [Transport], and drive machine slowly forward onto loading deck.
4. Park machine according to the instructions in **"Parking"** (Page 29). Tie machine with rope or tie-down belts and secure it onto loading deck of transporter securely.

Hoisting

⚠ WARNING!

- Licence 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 machine when hoisting.



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

NOISE LEVEL

Model	Engine		LwA
Type	Type	Speed rpm	
CMX222, CM223	Robin EH65DS	2900 rpm	96 dB (A)

NOISE LEVEL evaluated based on factory standard.

VIBRATION

Model	Engine Rated revolution	Vibration			
		Mower Blade Clutch	Steering wheel (top)	Steering wheel (bottom)	Seat
CMX222, CM223	3300 rpm	ON	10.0 m/s ²	11.0 m/s ²	7.0 m/s ²
		OFF	9.0 m/s ²	7.0 m/s ²	4.8 m/s ²

VIBRATION evaluated based on factory standard.