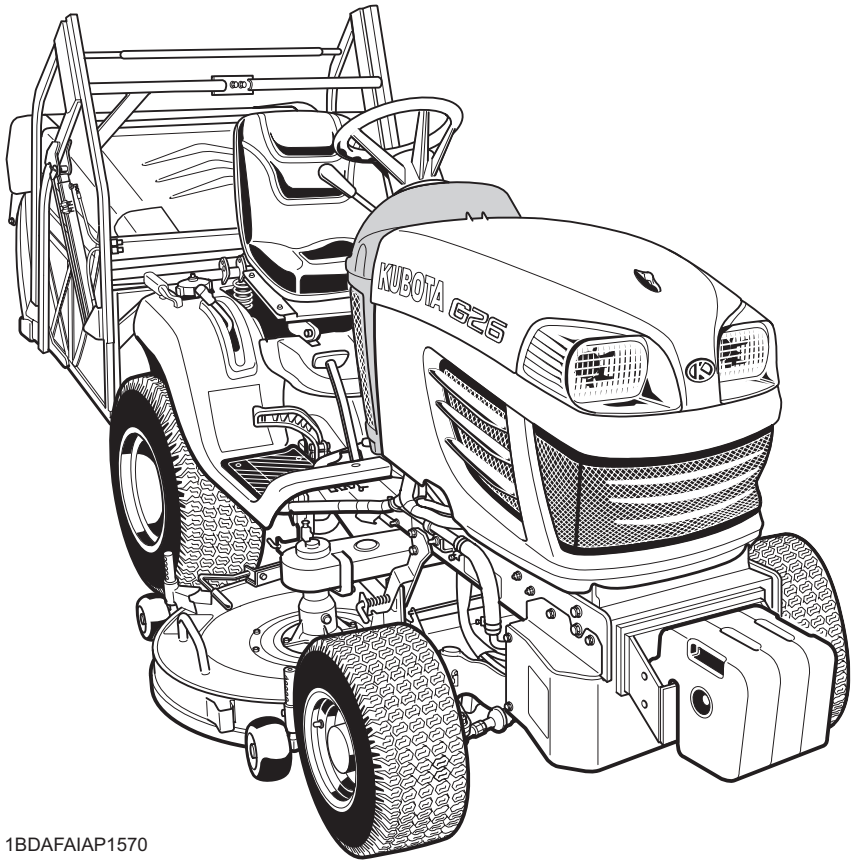
OPERATOR'S MANUAL

ENGLISH

KUBOTA
RIDING MOWER

MODELS G23-2
G26-2



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K2073-7121-1

READ AND SAVE THIS MANUAL
- Original instructions -

Kubota

ABBREVIATION LIST

Abbreviations	Definitions
API	American Petroleum Institute
PTO	Power Take Off
RH/LH	Right-hand and left-hand sides are determined by facing in the direction of forward travel
ROPS	Roll-Over Protective Structures
rpm	Revolutions Per Minute
SAE	Society of Automotive Engineers

UNIVERSAL SYMBOLS

As a guide to the operation of your tractor, various universal symbols have been utilized on the instruments and controls. The symbols are shown below with an indication of their meaning.


Safety Alert Symbol


Read Operator's Manual


Hourmeter/Elapsed Operating Hours


Diesel Fuel


Fuel-Level


Coolant Temperature


Preheat


Brake


Parking Brake


Battery


Oil Pressure


Turn Signal

Engine-Stop


Engine-Run


Starter Control


Power Take-Off Clutch Control-Off Position


Power Take-Off Clutch Control-On Position


Differential Lock


Cutting Height


Mower-Lowered position


Mower-Raised position


Master Lighting Switch


Electrical Power-accessories


Headlight-Low Beam


Headlight-High Beam


Beacon Light


Audible Warning Device


Hazard Warning Lights


Position Light/Parking Light


Fast


Slow


Engine Speed Control


Speed set-On


Speed set-Off


Grass Container-Lowered Position (HD)


Grass Container-Raised Position (HD)


Grass Container Tilted Forward Position (LD)


Grass Container Tilted Backward Position (LD)


Grass Container Tilted Forward Position (HD)


Grass Container Tilted Backward Position (HD)

Clean Lever-Open Position

Clean Lever-Closed Position

NOTE:

- This machine is meant for cutting lawn only, not for cutting extensive maintained grass, not for cutting hedges or brushwood, not for removing snow and not for pulling any implement or trailer.

ENGLISH

FOREWORD

You are now the proud owner of a KUBOTA RIDING MOWER. This machine is a product of KUBOTA's quality engineering and manufacturing. It is made of excellent materials and under a rigid quality control system. It will give you long, satisfactory service. To obtain the best use of your riding mower, please read this manual carefully. It will help you become familiar with the operation of the machine and contains many helpful hints about riding mower maintenance. It is KUBOTA's policy to utilize, as quickly as possible, every advance in our research. The immediate use of new techniques in the manufacturing of products may cause some small parts of this manual to become outdated. KUBOTA distributors and dealers will have the most up-to-date information. Please do not hesitate to consult them.

SAFETY FIRST

This symbol, the industry's "Safety Alert Symbol", is used throughout this manual and on labels on the machine itself to warn of the possibility of personal injury. Read these instructions carefully. It is essential that you read the instructions and safety regulations before you attempt to assemble or use this unit.

DANGER : Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

WARNING : Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION : Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

IMPORTANT : Indicates that equipment or property damage could result if instructions are not followed.

NOTE : Gives helpful information.

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⚠ SAFE OPERATION

Careful operation is your best insurance against an accident. Read and understand this section carefully before operation. All operators, no matter how experienced they may be, should read this and other related manuals before operation of the machine or any implement attached to it. It is the owner's obligation to instruct all operators in safe operation.
This cutting machine is capable of amputating hands and feet and throwing objects. Failure to observe the following safety instructions could result in serious injury or death.

1. BEFORE OPERATING

1. Know your equipment and its limitations. Read, understand and follow all instructions in this manual before attempting to start and operate the machine.
2. Know the controls and how to stop quickly.
3. Pay special attention to the safety labels on the machine and mower.
4. The exhaust gas from the muffler is very hot. To prevent fire, do not expose dry grass, mowed grass, oil or any other combustible materials to exhaust gas. Use a spark arrester where required. Also keep the engine and muffler clean all the time. Replace the muffler if it has a fault.
5. Never wear loose, torn, or bulky clothing. It may catch on moving parts or controls, leading to the risk of accident. Safety boots or shoes, eye and hearing protection, gloves, dust mask, etc. are recommended.
6. While mowing, always wear substantial foot wear and long trousers. Do not operate the equipment when barefoot or wearing open sandals.
7. Do not operate machine or any implement attached to it while under the influence of alcohol, drugs, or other substances or while fatigued.
8. Check brakes, and other mechanical parts for faulty adjustment and wear. Replace worn or damaged parts promptly. Check the tightness of all nuts and bolts regularly. (For further details, see "MAINTENANCE" section.)
9. Keep the machine and attachments in good operating condition and keep safety devices in place and in proper working condition.
10. This machine is equipped with many safety devices. Do not attempt to remove or alter them.
11. Keep all shields and guards in place. Replace all missing or damaged items for your safety.
12. Never allow any bystanders around or near machine during operation.
    Be sure the area is clear of other people before mowing.
    Stop machine if anyone enters the area.
13. Before allowing other people to use your machine, explain proper operation to them and have them read this manual before operation.
14. Never allow passengers or non-qualified operators on the machine at any time. You must operate the machine from the seat only.
15. Carefully check the area to be mowed and clear any objects such as rocks, bottles, cans, toys, etc., that may damage the mower, the grass catcher or cause personal injury.
16. Keep your machine clean. Dirt, grease, and trash accumulations contribute to fires or lead to personal injury.
17. Keep all nuts, bolts, and screws tight to be sure the equipment is in safe working condition.
    Check the mower blade mounting bolts for proper tightness at frequent intervals. On multi-bladed mowers, take care as rotating one blade can cause other blades to rotate.
18. Use only attachments recommended by KUBOTA.
    Use proper ballast to front or rear of machine to reduce the risk of upsets. Follow the "Safe Operation" procedures, specified in the Equipment's Manual.
19. Follow the maintenance recommendations. See "MAINTENANCE " section.
20. It is recommended that your machine be thoroughly inspected at least once a year by an authorized KUBOTA Dealer.

2. OPERATING

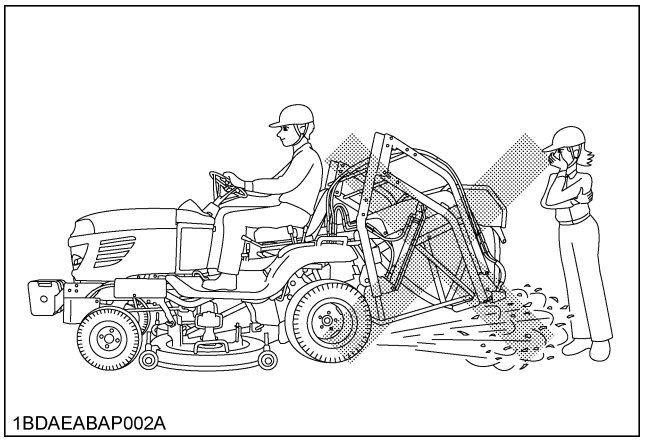
◆ **Starting**

1. Never start engine or operate levers from anywhere other than the seat.
2. Before starting the engine, make sure that all levers (including auxiliary control levers) are in their neutral positions, that the parking brake is engaged, and that both the mower clutch and the Power Take-Off (PTO) are disengaged.
3. Do not start engine by shorting across starter terminals or by by-passing the safety start switch. The machine may start and move if normal starting circuitry is bypassed.
4. Do not operate or idle engine in a poorly ventilated area. Exhaust contains poisonous carbon monoxide, a colorless and odorless gas.

◆ **Working**

1. Watch where you are going at all times. Watch for and avoid obstacles. Be alert near trees and other obstructions.
2. When working in groups, always let others know what you are doing ahead of time.

3. Never try to get on or off a moving machine.
4. When using any attachments, never direct discharge material toward bystanders. Do not allow anyone near the attachments while in operation.
   Do not mow when bystanders are present in the mowing area.



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5. To reduce fire hazards, keep the engine exhaust area free of grass or leaves.
6. Slow down before turning.
7. Turn off blades when not mowing.
8. Mow only in daylight.
9. Be sure rotating blades and engine are stopped and the key is removed before placing hands or feet near blades and cleaning blockages or unclogging chute.
10. Know what is behind you and disengage power to mower before backing up. Do not mow while in reverse unless absolutely necessary and only after observation of the entire area behind the mower.
11. When mowing for the first time, cut the grass higher than desired.
    This will uncover any unseen object that may damage the mower or grass catcher.
12. Always inspect the mower and grass catcher after striking any foreign object. This will insure that all mower and grass catcher parts are safe and secure and not damaged.
    Repair or replace any damaged parts before re-starting.
13. Use only attachment recommended in this manual. Use proper ballast to front or rear of machine to reduce the risk of upsets. Follow the "SAFE OPERATION" procedures specified in the manuals included with the equipment.
14. Do not operate the mower without either the grass container or the guard in place.
    Be aware of the mower discharge direction and do not point it at anyone.
15. Watch for traffic when operating near or crossing roadways.
16. Stop the blades rotating before crossing surface other than grass.
17. Never leave a running machine unattended.
    Always turn off blades, set parking brake, stop engine, and remove the key before dismounting.
18. Be extremely alert for all other traffic when operating the mower and grass catcher near public roads or highways.
19. Do not operate where machine could tip or slip.
    Do not operate near ditches, holes, embankments, or other terrain which may collapse under the machine's weight. The risk of machine tip-over is increased when the ground is loose or wet.
20. Raise and dump collected leaves or grass clippings ONLY while sitting on the operator's seat.
21. Empty the grass container ONLY from a firm and level surface, with the mower stopped, and the unit stationary. Dumping the grass container on soft or uneven ground, or while moving, could cause the unit to tip over, causing serious injury and extensive equipment damage.
22. Make sure the dumping area is clear of all bystanders and pets, before emptying grass clippings or leaves from the grass container.
23. If the machine starts to vibrate abnormally, disengage the drive to the attachments, stop the engine and remove the key. Then check the machine immediately.
24. With the grass container raised, do not run the machine too fast, on slopes, nor make a sharp turn. Otherwise the machine may turn over.
25. Keep hands away from the grass container, while lowering it. Otherwise they may get caught.

◆ Pulling loads

Use extra care when pulling loads to reduce the risk of serious personal injury or death due to a machine tip-over.

a) Pull only from the hitch. Never attach loads to the axle housing or any other point above hitch.
b) Limit loads to those you can safely control.
c) Do not turn sharply.
d) Use care when backing.
e) Use front ballast or wheel weights when suggested in this Operator's Manual.

◆ Operation on slopes

Slopes are a major factor related to loss-of-control and tip-over accidents, which can result in severe injury or death. All slopes require extra caution. If you cannot back up the slope or if you feel uneasy on it, do not mow it. The control of a ride-on machine sliding on a slope will not be regained by the application of the brake.

- Do not lift the grass container on a slope.

DO

1. Mow up and down slopes, not across, to avoid machine tip-over. Stay off hills and slopes too steep for safe operation.
2. Remove obstacles such as rocks, tree limbs, etc.

3. Stay alert for holes in the terrain and other hidden hazards. Keep away from drop-offs. Uneven terrain could overturn the machine. Tall grass can hide obstacles.
4. Use slow speed.
5. Follow KUBOTA's recommendations for wheel weights or counterweights to improve stability.
6. The weight of grass in the grass container may increase the possibility of tip over.
7. Keep all movement on slopes slow and gradual. Do not make sudden changes in speed or direction.
8. Avoid starting or stopping on a slope. If tires lose traction, disengage the blades and proceed slowly straight down the slope.
9. If the machine stops going uphill, disengage PTO and back slowly down.
10. Reduce speed and exercise extreme caution on slopes and in sharp turns to prevent tip-over or loss of control.
11. Use special caution when changing direction on slopes.

DO NOT

1. Do not turn on slopes unless necessary and then turn slowly and gradually downhill, if possible.
2. Do not use the machine on slopes of more than 11°.
3. Do not mow near drop-offs, ditches, or embankments. The machine could suddenly turn over if a wheel falls over the edge of a cliff or ditch, or if an edge caves in.
4. Do not mow on wet grass. Reduced traction could cause sliding.
5. Do not try to stabilize the machine by putting your foot on the ground.
6. Do not stop or start suddenly when going uphill or downhill.
7. Never "freewheel". Do not let the machine travel downhill with HST pedal at neutral position.
8. Do not modify or alter the riding mower.

◆ **Children**

Tragic accidents can occur if the operator is not alert to the presence of children. Children are attracted to the machine and the mowing activity. Never assume that children will remain where you last saw them.

1. Keep children out of the mowing area and under the watchful care of another responsible adult.
2. Be alert and turn the machine off if children enter the area.
3. Before and when backing, look behind and down for small children.
4. Never carry children. They may fall off and be seriously injured or interfere with safe machine operation.
5. Never allow children to operate the machine, even under adult supervision. Local regulation can restrict the age of the operator.
6. Use extra care when approaching blind corners, shrubs, trees, or other obstructions that might hide children from sight.

◆ **Operators, age 60 years and above**

Data indicates that operators, age 60 years and above, are involved in a large percentage of machine-related injuries. These operators should evaluate their ability to operate the machine safely enough to protect themselves and others from serious injury.

◆ **Stopping**

1. Make sure that the machine has come to a complete stop before dismounting.
2. Before dismounting, disengage the PTO, lower all implements, place all control levers in their neutral positions, apply parking brake, turn off the engine and remove the key.
3. Do not park the machine on a steep incline. Park on relatively flat areas.

3. USING THE PTO

1. Before installing or using PTO-driven equipment, read the manufacturer's manual and review the safety labels attached to the equipment.
2. Wait until all moving components have completely stopped before connecting, disconnecting, adjusting, cleaning, or servicing any PTO-driven equipment.
3. Use the PTO with KUBOTA approved attachments.

4. USING THE LIFT LINK

1. Use lift link only with authorized attachments designed for lift link usage.

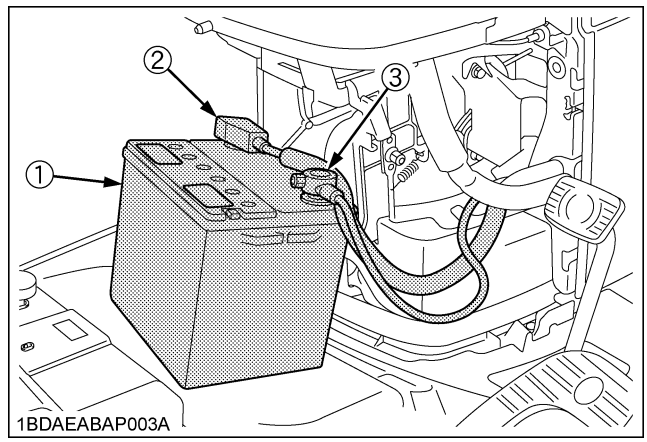
5. TRANSPORTING

1. Disengage power to attachment(s) when transporting or not in use.
2. Do not tow this machine. Use a suitable truck or trailer when transporting on public roads.
3. It is recommended that this machine not be used on public roads.
4. Use extra care when loading or unloading the machine into a trailer or truck.

6. SERVICING

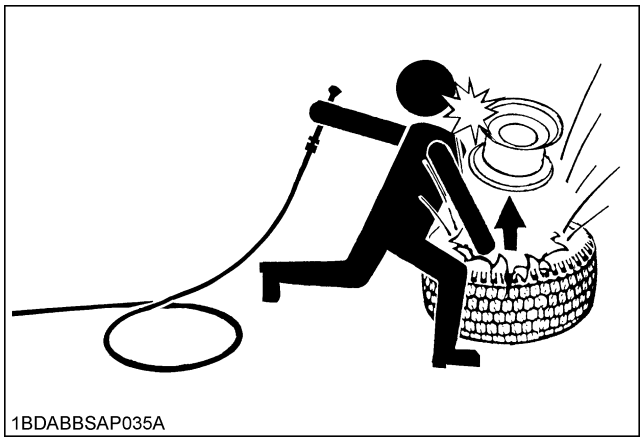
1. Before servicing the machine, park the machine on a firm, level surface, set the parking brake, stop the engine and remove the key.

2. Securely support machine or any machine elements with stands or suitable blocking before working underneath. For your safety do not rely on hydraulically supported devices, they may leak down, suddenly drop or be accidently lowered.
3. To avoid injury, do not adjust, unclog or service the mower or grass catcher with the engine running. Make sure rotating blades are stopped before dismounting the riding mower.
4. Disengage power to attachment(s), stop the engine and remove the key before making any repairs or adjustments.
5. Allow the machine to cool off before servicing the engine, muffler, etc.
6. Keep your riding mower clean. Dirt and grass build-up can cause fires and may lead to serious personal injury.
   Periodically wash the grass container to insure the safety signs can be read.
   Replace all safety signs that are damaged, lost or have otherwise become illegible. If a part to be replaced has a sign on it, obtain a new safety sign from your KUBOTA Dealer and install it in the same place as on the removed part.
7. Use extra care in handling diesel fuels. They are flammable.
   (1) Use only an approved container.
   (2) Do not remove fuel cap or refuel with the engine running. Allow engine to cool before refueling. Do not smoke while refueling or when standing near fuel.
   (3) Do not refuel the machine indoors and always clean up spilled fuel or oil.
   (4) Do not store the machine or fuel container inside where there is an open flame, such as in a water heater.
   (5) If the fuel tank has to be drained, this should be done outdoors.
   (6) Replace all fuel tanks and container caps securely
8. Do not change the engine governor setting or overspeed the engine. Operating the engine at excessive speed can increase the hazard of personal injury.
9. Never run a machine inside a closed area.
10. Mower blades are sharp and can cut your hands. Wrap the blade(s) or wear gloves, and use extra caution when servicing them.
11. Keep nuts and bolts, especially blade attachment bolts, tight and keep equipment in good condition. On multi-bladed mowers, take care as rotating one blade can cause other blades to rotate.
12. Do not smoke when working around the battery.
    Keep all sparks and flames away from battery. The battery presents an explosion hazard because it gives off hydrogen and oxygen...especially when recharging.
13. Before "JUMP STARTING" a dead battery, read and follow all of the instructions to help protect the alternator from damage due to extreme load changes. (See "JUMP STARTING" in "OPERATING THE ENGINE" section.)
    Batteries contain sulfuric acid and produce explosive gases. Follow the instructions below to prevent personal injury.
    - Wear eye and skin protection.
    - Keep sparks and flame away.
    - Always have adequate ventilation while charging or using the battery.
14. Keep first aid kit and fire extinguisher available at all times.
15. Disconnect the battery's negative (-) cable before working on or near electric components.
16. To avoid sparks from an accidental short circuit, always disconnect the battery's negative (-) cable first and connect it last.



(1) Battery
(2) Positive cable (+)
(3) Negative cable (-)

17. Make sure cir-clips, nuts and bolts are properly secured on the front and rear wheels, respectively.
18. Never tamper with safety devices.
    Check their proper operation regularly.
19. Check brake operation frequently. Adjust and service as required.
20. Do not attempt to mount a tire on a rim. This should be done by a qualified person with the proper equipment.
21. Always maintain the correct tire inflation pressure. Do not inflate tires above the recommended pressure shown in the Operator's Manual.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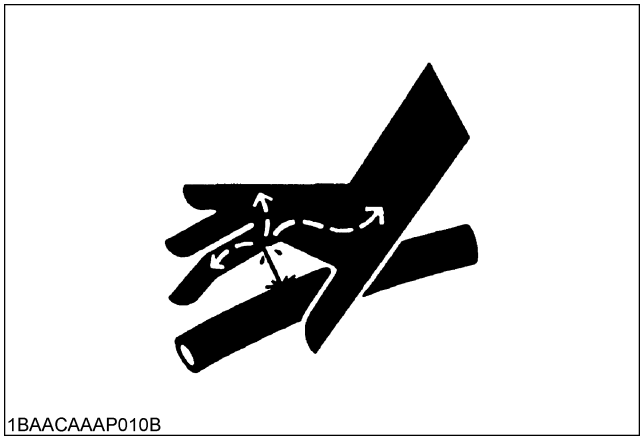
22. Securely support the machine when changing wheels.
23. Make sure that wheel bolts have been tightened to the specified torque.
24. Do not put yourself below the raised grass container.
25. Escaping hydraulic fluid under pressure has sufficient force to penetrate the skin causing serious personal injury. Before disconnecting lines, be sure to relieve all pressure. Before applying pressure to the system, make sure all connections are tight and that lines, pipes, and hoses are not damaged.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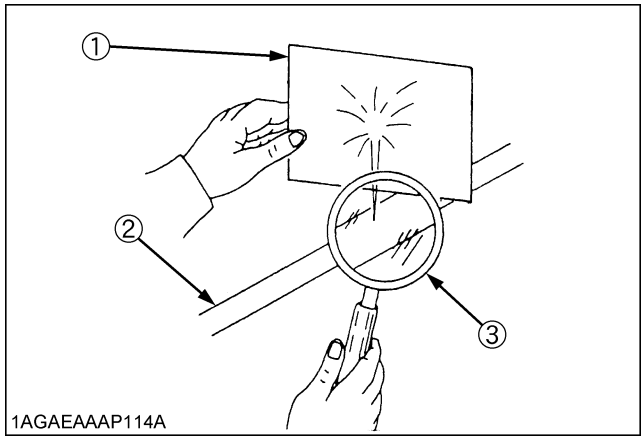
26. Fluid escaping from pinholes may be invisible. Use a piece of cardboard or wood to search for suspected leaks: do not use hands. Use safety goggles or other eye protection.
    If injured by escaping fluid, see a medical doctor at once. Serious infection or reaction will result if proper medical treatment is not administered immediately. This fluid can produce gangrene or severe allergic reaction.



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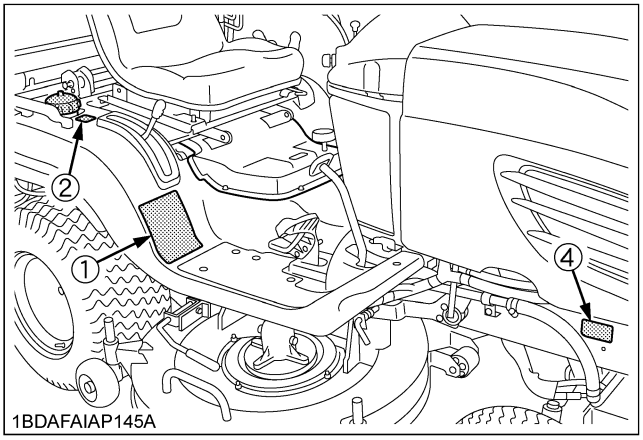
(1) Cardboard
(2) Hydraulic line
(3) Magnifying glass

27. Do not use beverage containers for waste fluids or other products. Someone, particularly children, may drink them by mistake.
28. Waste products such as used oil, fuel, hydraulic fluid, and batteries, can harm the environment, people, pets and wildlife. Please dispose properly.
29. See your local Recycling Center or KUBOTA Dealer to learn how to recycle or get rid of waste products.
    - A Material Safety Data Sheet (MSDS) provides specific details on chemical products; physical and health hazards, safety procedures, and emergency response techniques. The seller of the chemical products used with your machine is responsible for providing the MSDS for that product upon request.

7. STORAGE

1. Keep the machine and supply of fuel in locked storage and remove the key to prevent children or others from playing or tampering with them.
2. When machine is to be stored for a long time, disconnect battery cables or remove the battery. Always remove the negative (-) cable first and reinstall the negative (-) cable last.
3. Do not store the machine with fuel in the tank inside a building where fumes may ignite. Allow the engine to cool before storing.
4. To avoid the danger of exhaust fume poisoning, do not operate the engine in a closed building without adequate ventilation.
5. To reduce fire hazards, clean the machine thoroughly before storage. Dry grass and leaves around the engine and mufflers may ignite.
6. Moisture content in most grasses can damage the mower and grass catcher if these components are not properly cleaned after use. Also, dry grass and leaves left in the container can be a fire hazard. Always make sure the container and the duct are clean and completely empty before storage.

8. PICTORIAL SAFETY LABELS



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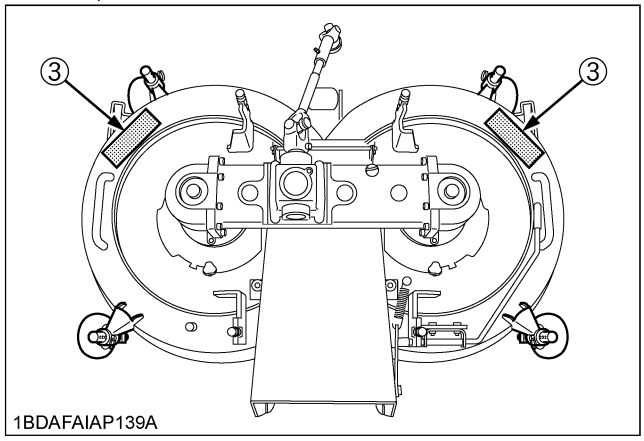

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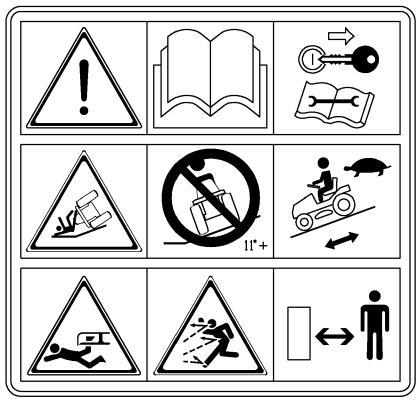
(1) Part No. K2063-6551-1



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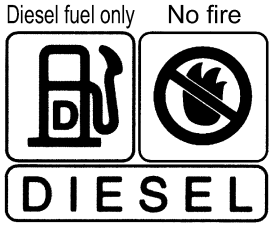
TO AVOID INJURY OR DEATH:

- Read and understand Operator's Manual.
- Stop the engine and remove key before servicing.

- DO NOT operate where machine could slip or tip.
- DO NOT operate on slopes of more than 11°.
- Mow up and down slopes, not across.

- DO NOT allow any bystanders or children around or near machine at any time when the engine is running.

(2) Part No. K2110-6585-1



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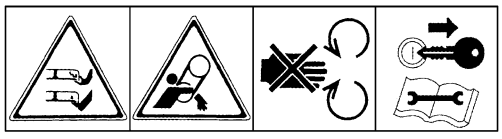
(3) Part No. K5254-7311-1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ROTATING BLADES HAZARDOUS:

- DO NOT put hands or feet into mower when engine is running.
- Keep all shields and guards in place.
- Stay clear of rotating parts.
- Stop the engine and remove key before servicing.

(4) Part No. K2063-6555-2


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TO AVOID MACHINE RUNAWAY:

- DO NOT start engine by shorting across starter terminals or bypassing the safety start switch.

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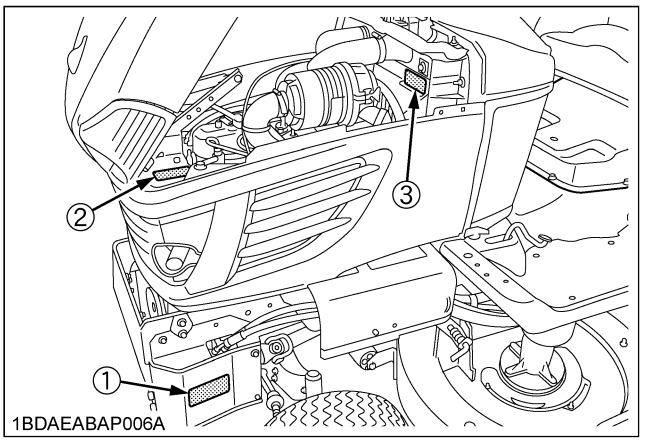
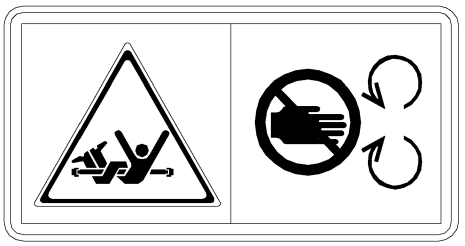


(1) Part No. K2063-6554-1
Stay clear of the PTO belt.



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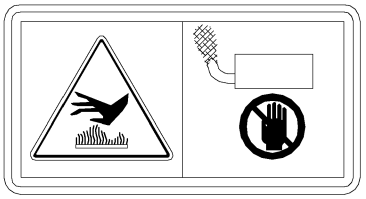
(2) Part No. K2063-6553-1
Do not touch hot
surface like muffler, etc.



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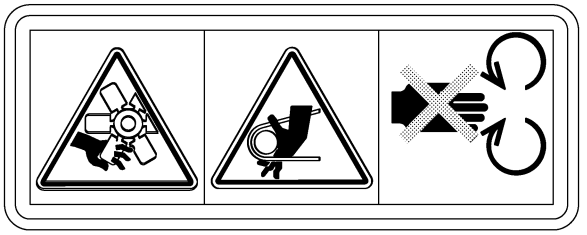
(3) Part No. K2581-6543-1
Do not get your hands close to
engine fan and fan belt.



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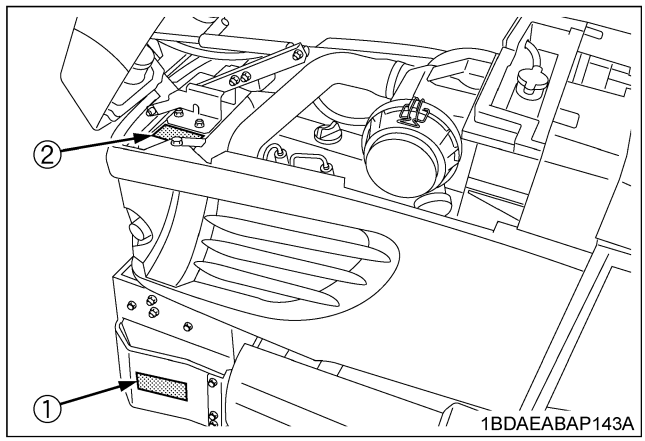

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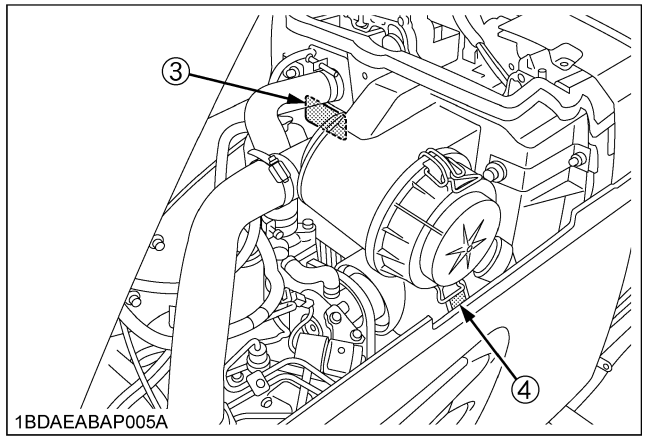
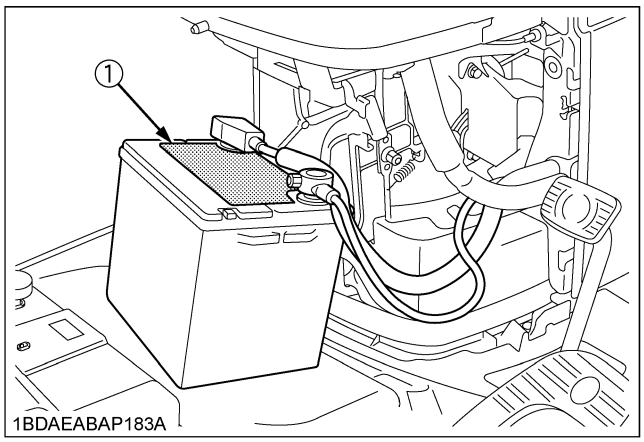
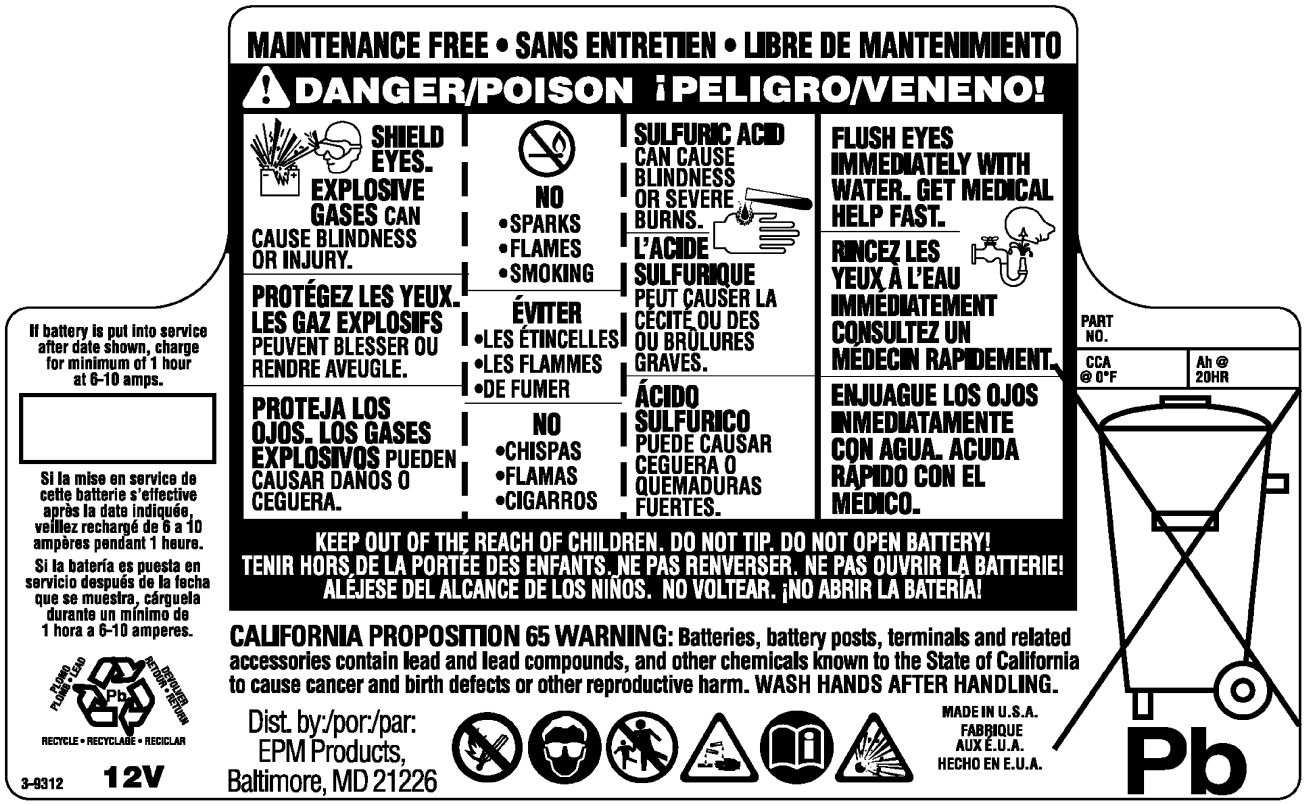


(4) Part No. K2581-6547-1
Do not get your hands close to engine fan
and fan belt.

1AGAJAXAP049E



(1) Part No. K1221-6118-1

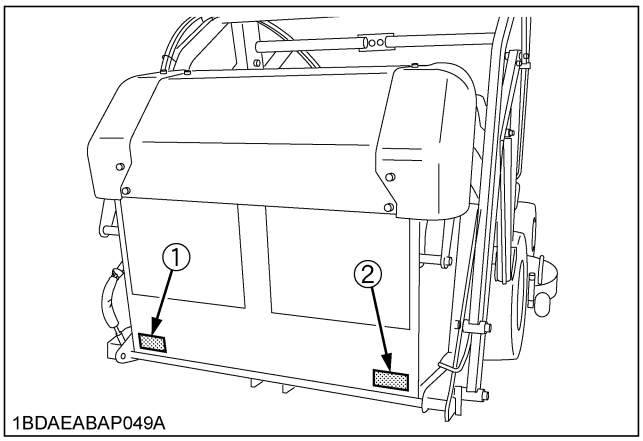


1BDAFAIAP136A

DANGER / POISON

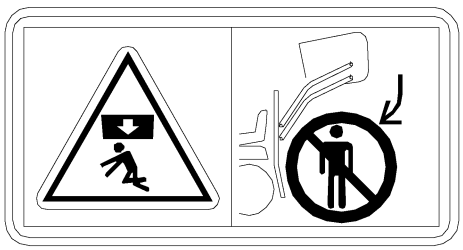
- SHIELD EYES
  EXPLOSIVE GASES can cause blindness or injury.
- NO SPARKS / FLAMES / SMOKING
- SULFURIC ACID can cause blindness or severe burns.
- Flush eyes immediately with water.
- Get medical help fast.

1BDAFAIAP137A



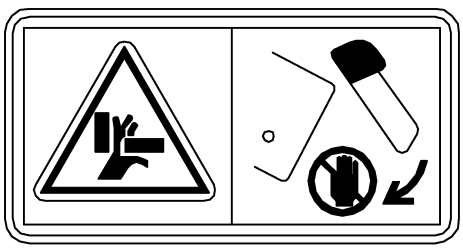
1BDAEABAP049A

(1) Part No. K6313-6583-2 [HD]
Do not put yourself below the grass container.
It may fall accidentally.



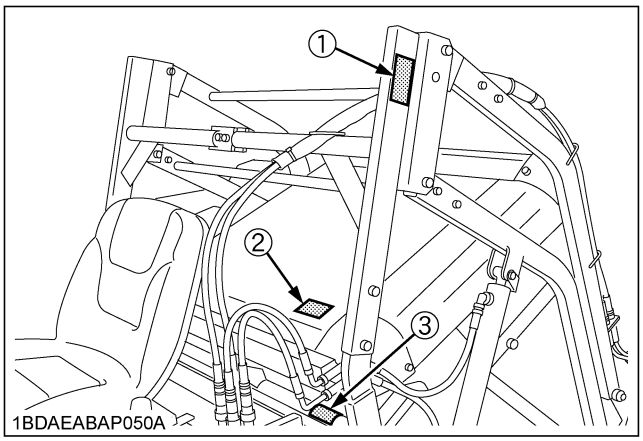
1BDAEABAP1750

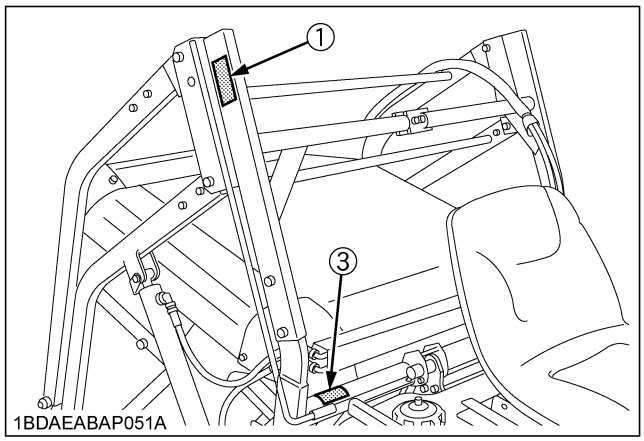
(2) Part No. K6313-6582-1 [HD]
Do not reach your hands too close.
They may get caught.



1BDAEABAP1760

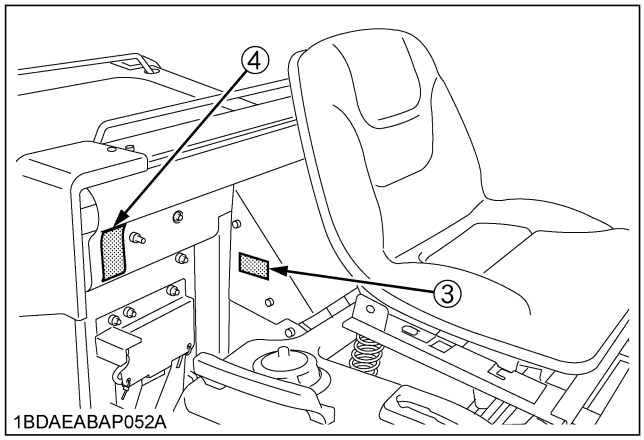
1BDAEABAP120A



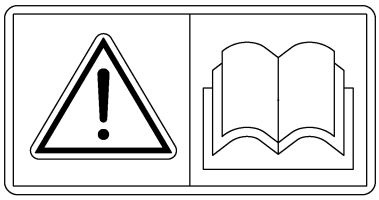


(1) Part No. K6313-6581-1 [HD]
Do not put yourself below the grass container.
It may fall accidentally.


1BDAEABAP1770

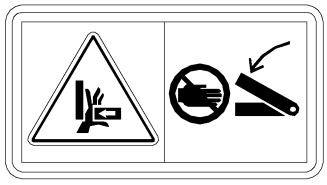


(2) Part No. K6313-6584-2 [HD]
WHEN USING THE UNIT YOU ARE ADVISED.
TO REDUCE FORWARD SPEED WHEN CUTTING LONG OR WET GRASS:
- NEVER TO RAISE THE GRASS CONTAINER WHILE THE TRACTOR IS ON SOFT SLOPING OR UNEVEN GROUND.
- NEVER DRIVE THE TRACTOR OR TURN SHARPLY WHILE THE GRASS CONTAINER IS RAISED.
- ALWAYS DISENGAGE THE PTO BEFORE RAISING THE GRASS CONTAINER.
- ALWAYS TO STOP THE TRACTOR ENGINE BEFORE CLEARING ANY BLOCKAGES.
- TO FIT COUNTER WEIGHTS TO THE FRONT OF THE TRACTOR.

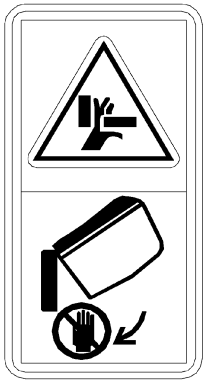

1BDAEABAP1180

1BDAFAIAP144A

(3) Part No. K6312-6582-1 [HD, LD] (Both sides)
Do not reach your hands too close.
They may get caught.


1BDAEABAP1780

(4) Part No. K6312-6581-1 [LD] (Both sides)
Do not reach your hands too close.
They may get caught.


1BDAEABAP1790

9. CARE OF PICTORIAL SAFETY LABELS

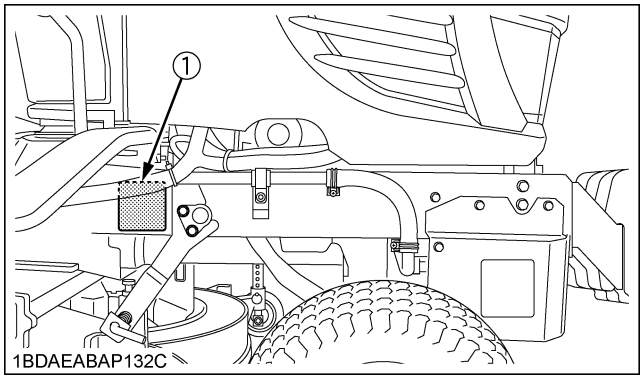
1. Keep pictorial safety labels clean and free from obstructing material.
2. Clean pictorial safety labels with soap and water, dry with a soft cloth.
3. Replace damaged or missing pictorial safety labels with new labels from your local KUBOTA Dealer.
4. If a component with pictorial safety label(s) affixed is replaced with new part, make sure new label(s) is (are) attached in the same location(s) as the replaced component.
5. Mount new pictorial safety labels by applying on a clean dry surface and pressing any bubbles to outside edge.

SERVICING OF RIDING MOWER

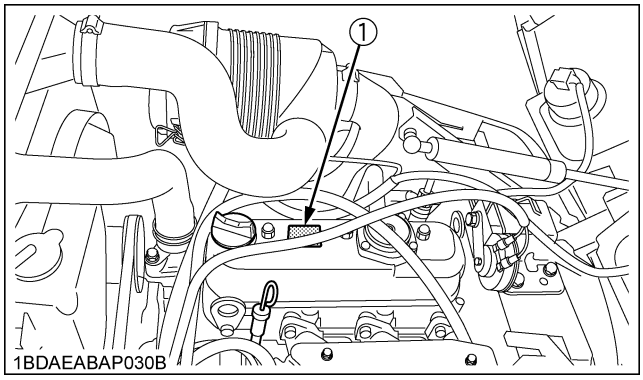
After reading this manual thoroughly, you will find that you can do some of the regular maintenance yourself. Your dealer is interested in helping you get the best performance from your new machine and wants to help you get the most value from it. When in need of parts or major service, be sure to see your KUBOTA Dealer. When in need of parts, be prepared to give your dealer the serial number of the machine, engine and mower.
Locate the serial numbers now and record them in the space provided.

KUBOTA G23-2, G26-2 RIDING MOWER

	Type	Serial No.
Machine		
Engine		
Mower		
Grass Catcher		
Date of Purchase		
Name of Dealer		
(To be filled in by purchaser)		

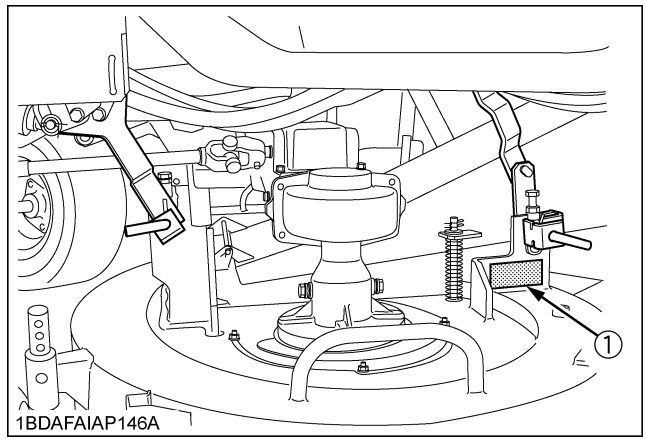


(1) Machine serial No.

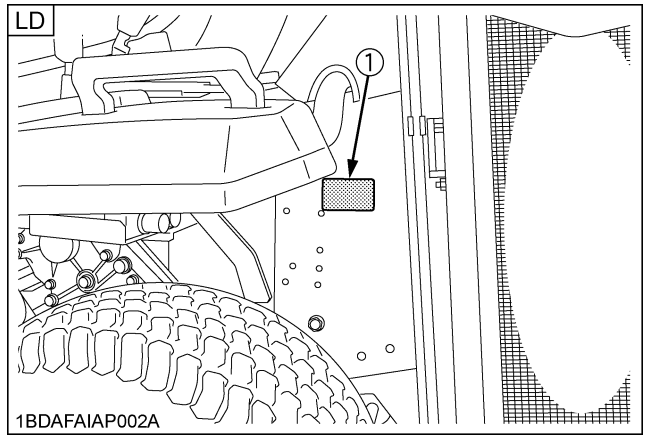


(1) Engine serial No.

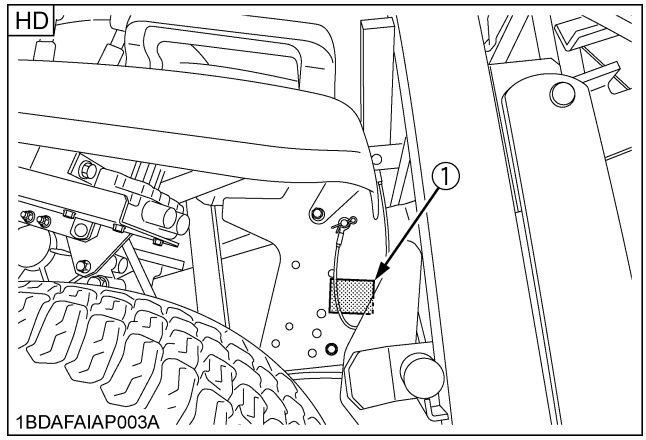
[RCK48, RCK54]



(1) Mower serial No.



(1) Grass catcher serial No.



(1) Grass catcher serial No.

SPECIFICATIONS

	Model			G23-2		G26-2	
				LD	HD	LD	HD
Engine	Model			D902		D1005	
	Type			Liquid-cooled diesel			
	Total displacement		cm^3	898		1001	
	Gross power		kW	17.1		18.8	
	No. of cylinders			3		3	
	Starter			Electric starter with battery			
	Battery			526RMF (12V, RC:80 min, CCA: 540A)			
	Fuel			Diesel fuel No.1 (below -10℃) Diesel fuel No.2 (above -10℃)			
	Preheating system			Super glow			
	Engine stop			Key stop			
Capacity	Fuel tank		L	20			
	Engine oil		L	3.1		3.5	
	Radiator coolant		L	3.1		3.3	
	Hydrostatic transmission oil		L	11			
Machine	PTO			Shaft drive			
	PTO clutch			Belt Tension		Wet Discs	
	PTO brake			Shoe		Wet Discs	
	Tires	Front		16 x 7.5 - 8		16 x 7.50 - 8	
		Rear		24 x 12.00 - 12		24 x 12.00 - 12	
	Steering type			Hydraulic type power steering			
	Brake			Wet Discs			
	Travel speed control			Foot pedal			
	Transmission			Hydrostatic			
	Traveling speeds	Forward	km/h	0 - 15.5		0 - 17	
		Reverse	km/h	0 - 10		0 - 10	
Dimensions	Overall length (with Grass Catcher, without Front weight bracket for HD)		mm	2980	3160	3035	3215
	Overall width (with Mower)		mm	1226		1418	
	Overall height		mm	1350	1600	1350	1600
	Wheel base		mm	1390		1460	
	Tread	Front	mm	900			
		Rear	mm	840			
	Weight (without Mower and Grass Catcher)		kg	535	500	565	535

	Model			RCK48-G23-2	RCK54-G26-2
Mower	Cutting width		mm	1219	1372
	Cutting height		mm	25 to 102	
	Adjustment of cutting height			Dial gauge	
	Mounting method			Quick joint, Parallel linkage	
	Weight (Approx.)		kg	120	135
	Dimensions	Total length	mm	895	980
		Total width	mm	1266	1418
		Total height	mm	400	400
	Discharge direction			Rear	
	Gear box oil		L	1.9	2.1

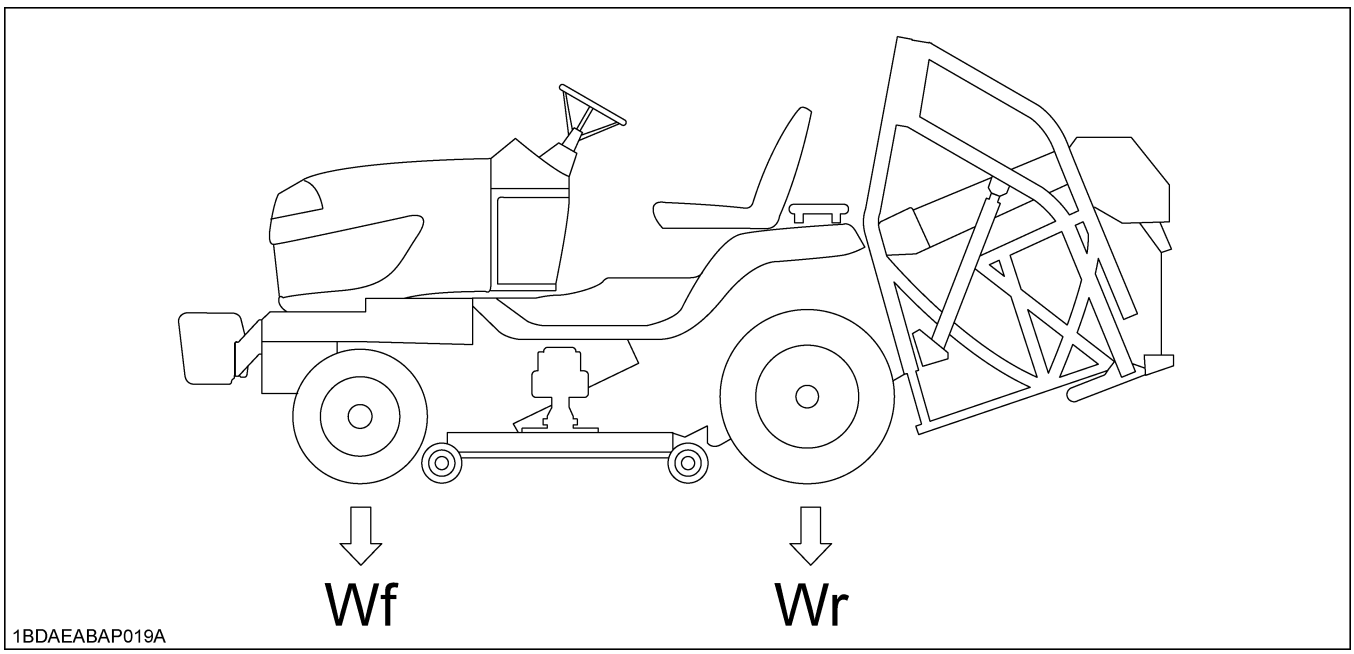
	Model		GCK-G23LD	GCK-G26HD
Grass catcher	Container Capacity	L	560	640
	Weight (Approx.)	kg	35	220

Note: The company reserves the right to change the specifications without notice.

IMPLEMENT LIMITATIONS

The KUBOTA Machine has been thoroughly tested for proper performance with implements sold or approved by KUBOTA. Use of implements which exceed the maximum loading weight listed below, or which are not recommended for use with the KUBOTA Machine may result in malfunctions or failures of the machine, damage to other property and injury to the operator or others. (Any malfunctions or failures of the machine resulting from use with improper implements are not covered by the warranty.)

	Maximum axle loading weight		
MODEL	Front axle Wf	Rear axle Wr	Total gross weight
G23-2	400 kg	850 kg	1200 kg
G26-2	400 kg	850 kg	1200 kg



■ Ballast

CAUTION

To avoid personal injury:

- **Additional ballast will be needed for operating heavy attachments. When the attachment is raised, drive slowly over rough ground, regardless of how much ballast is used.**
- **Add front ballast to increase front end stability and help prevent possible front end tip up.**
- **Always back up when going up a slope. Driving forward could cause the machine to tip over backward. Stay off hills and slopes too steep for safe operation.**

NOTE :

- Front weight kit must be installed for high dump grass catcher.

Front ballast is added for stability and steering control when heavy rear mounted equipment such as the rotary tiller is installed.

Front ballast also compensates for weight transferred to the rear wheels by the draft of towed implements through the hitch.

Add additional front ballast, if necessary, for stability and safety during transport of heavy rear mounted equipment.

Front end ballast may not always maintain the required stability if the machine is driven too fast over rough ground with heavy rear mounted equipment in the raised position. Use care and drive slowly under these conditions.

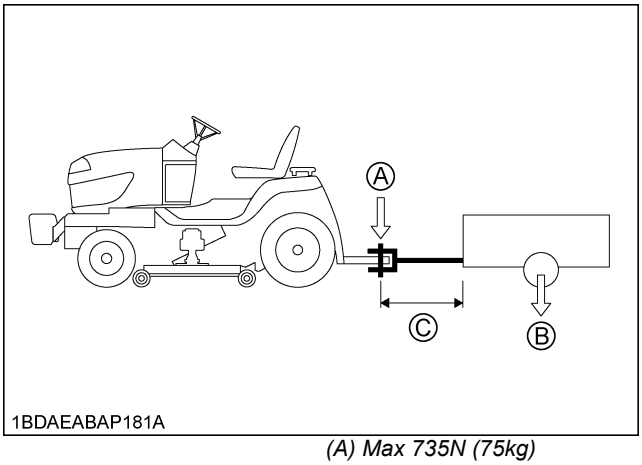
Limit ballast to machine operating capacity. Be sure to remove ballast when it is not needed.

Add ballast to rear end if needed for stability. Heavy front mounted attachments tend to lift rear wheels. Add enough ballast to maintain steering control and prevent tipover. The Attachment's Manual shows how much rear ballast is required for your application. Rear ballast are available from your KUBOTA Dealer.

■ Pulling Loads

Use extra care when pulling loads to reduce the risk of serious personal injury or death due to a machine rollover:

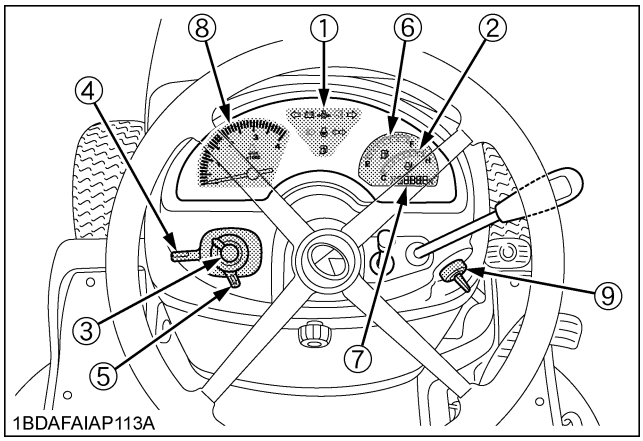
- **Pull only from the hitch. Never attach loads to the axle housing or any other point above the hitch.**
- **Limit loads to those you can control safely.**
- **Do not turn sharply.**
- **Use caution when backing.**
- **Use the front ballast or the wheel weights if suggested in this Operator's Manual.**



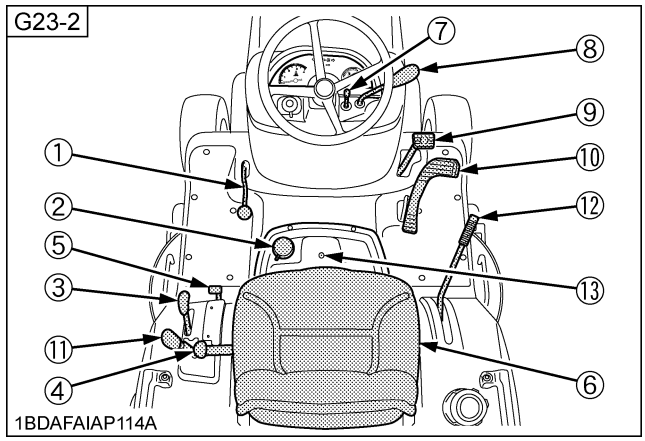
(A) Max 735N (75kg)
(B) Max 4168N (425kg)
(C) Min 550mm

ENGLISH

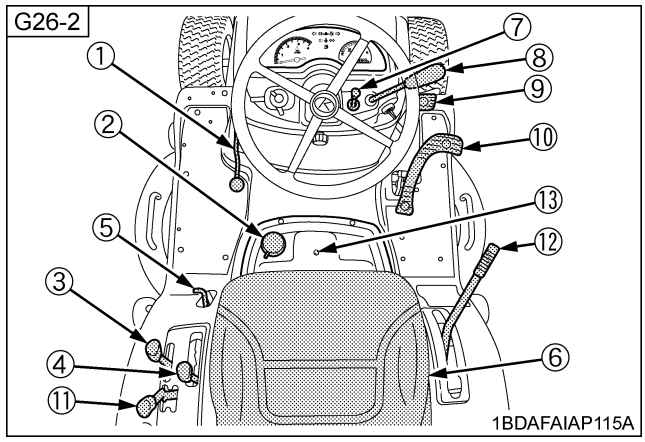
INSTRUMENT PANEL AND CONTROLS



G23-2



G26-2



MOWER MOUNTING

ATTACHING THE MOWER

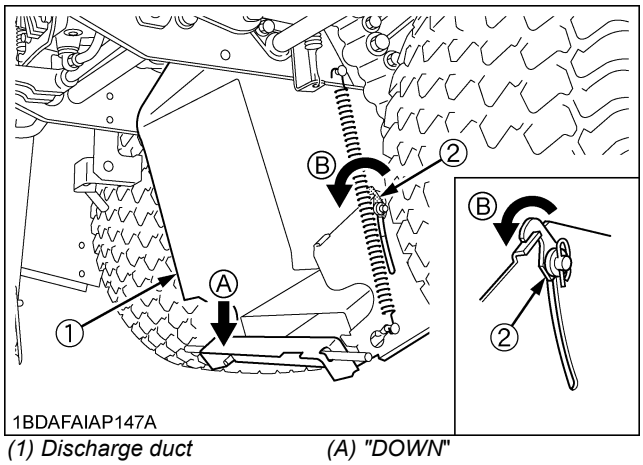
CAUTION

To avoid personal injury:

- **Shut off the engine and remove the key before attaching the mower.**

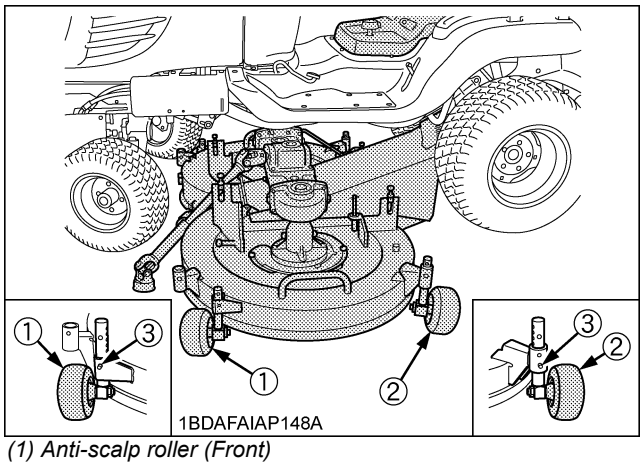
■Mounting the Mower Deck

1. Park the machine on level ground and place the mower deck at the left side of the machine.
2. Turn the front wheel to the right.
3. Lower the duct and set at the lowest position by the lock plate.

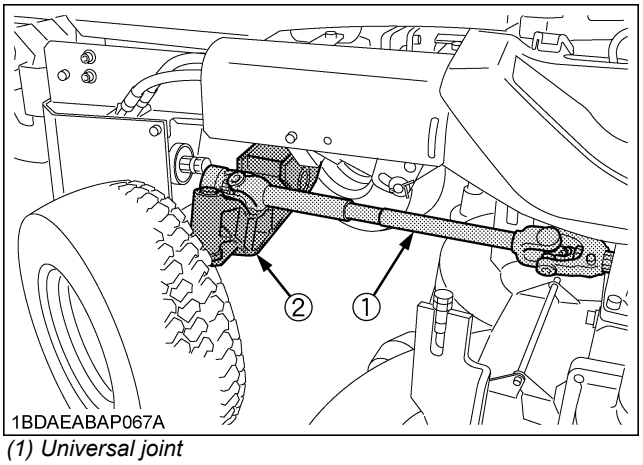


(1) Discharge duct *(A) "DOWN"*
(2) Lock plate *(B) "LOCK"*

4. Slide the mower deck under the machine and place the universal joint on the front axle.
   Then make sure that the clevis pins are set into the lower holes of all front and rear anti-scalp rollers.



(1) Anti-scalp roller (Front)
(2) Anti-scalp roller (Rear)
(3) Clevis pin



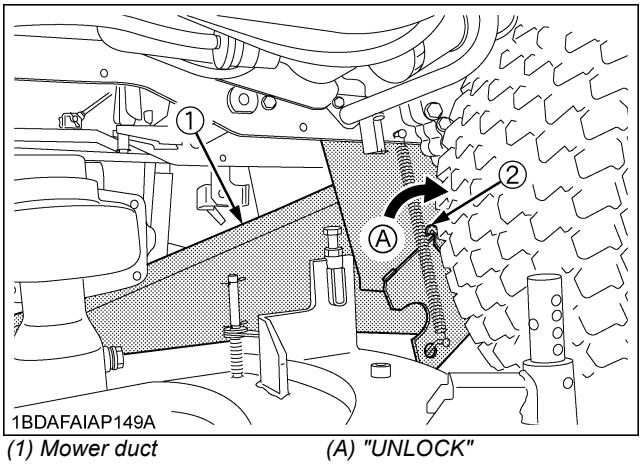
(1) Universal joint
(2) Front axle

5. Move the mower toward rear side of the machine and insert the mower duct into the discharge duct.

NOTE :

- Make sure that the mower duct is positioned properly inside of the discharge duct.

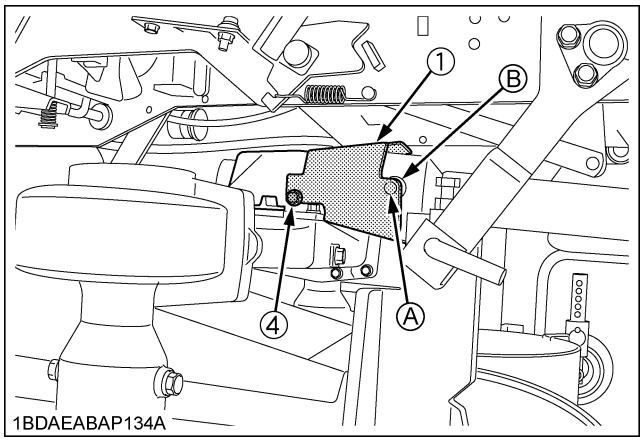
6. Unlock the lock plate.

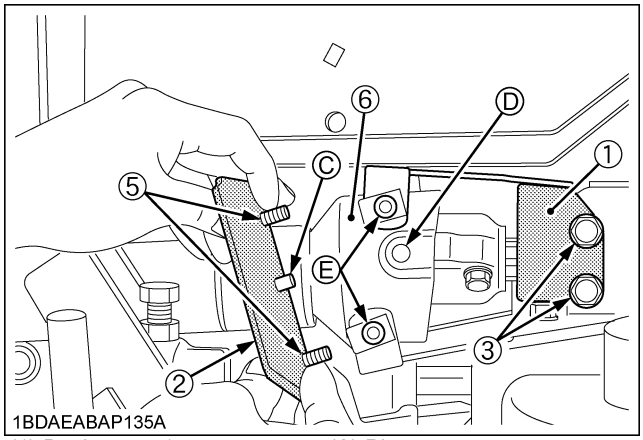


(1) Mower duct *(A) "UNLOCK"*
(2) Lock plate

ENGLISH

7. [Model with the universal joint cover]
   Install the back cover 1 with the two bolts on the left side, and a bolt on the right side.
   Install the back cover 2 with the two bolts, and then make sure that the pins are inserted to the holes of the universal joint cover.

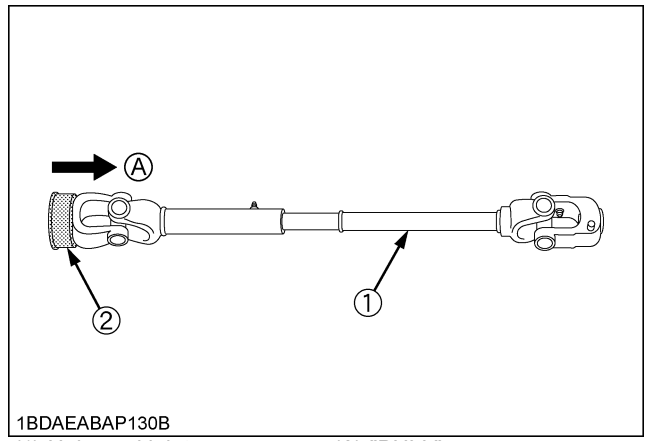




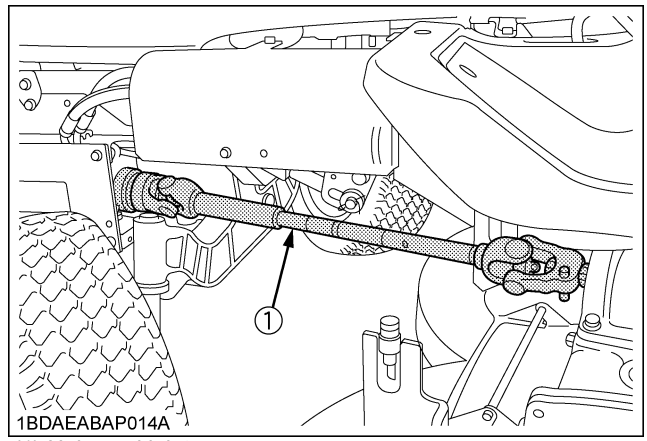
(1) Back cover 1
(2) Back cover 2
(3) Bolt (LH)
(4) Bolt (RH)
(5) Bolt
(6) Universal joint cover
(A) Pin
(B) Hole for the pin (A)
(C) Pin
(D) Hole for the pin (C)
(E) Hole for the bolt (5)

8. Pull back the coupler of the universal joint.
   Push the universal joint into the PTO shaft until the coupler locks.
   Slide the universal joint back and forth to make sure the universal joint is locked securely.

IMPORTANT :
- Finally pull the universal joint to check if it is tight in position.

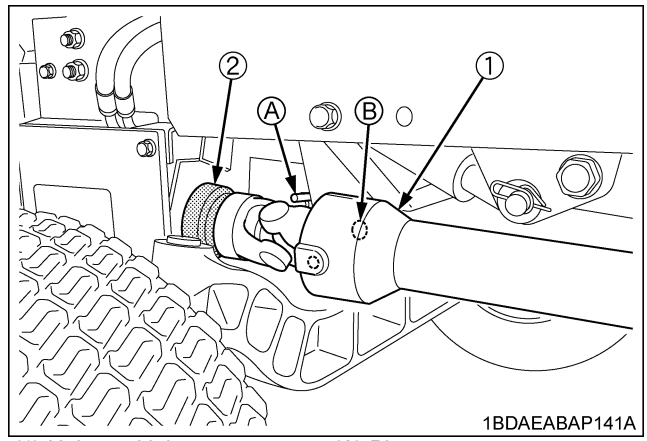


(1) Universal joint
(2) Coupler
(A) "PULL"



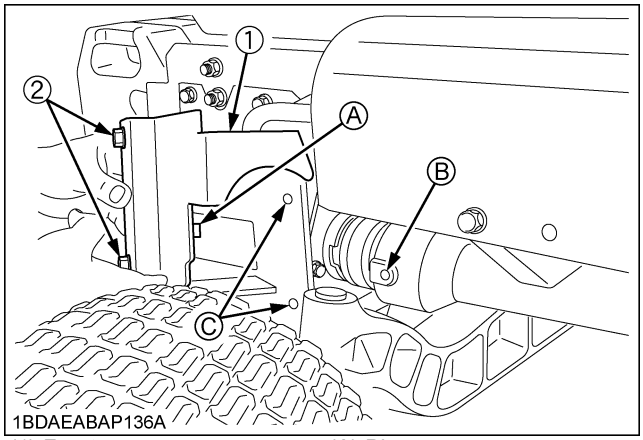
(1) Universal joint

9. [Model with the universal joint cover]
   Extend the universal joint cover to the coupler of the universal joint with its cover set the pin.



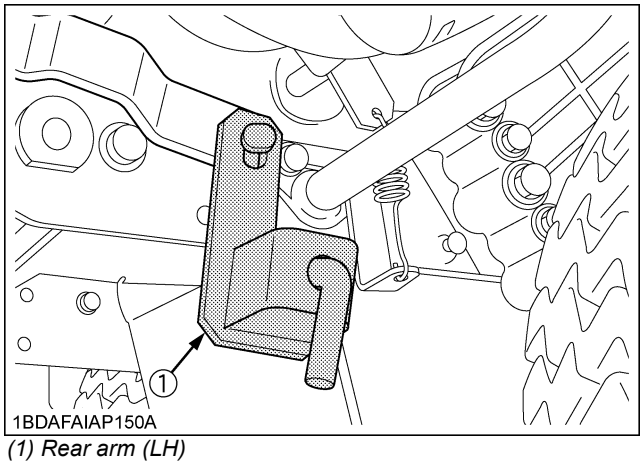
(1) Universal joint cover
(2) Coupler
(A) Pin
(B) Hole for the pin (A)

10. [Model with the universal joint cover]
    Install the front cover with the two bolts, and then make sure that the pins are inserted to the hole of the universal joint cover.



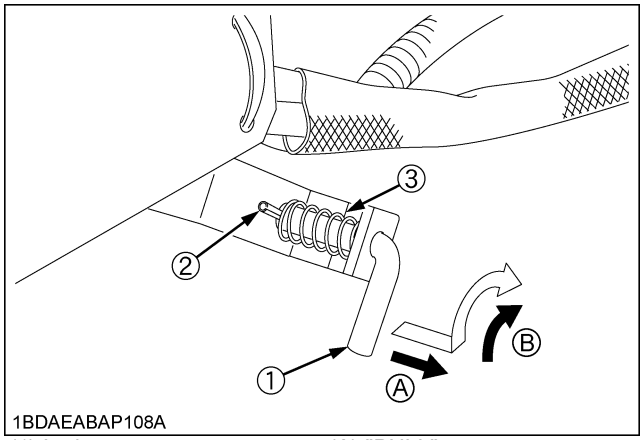
(1) Front cover
(2) Bolt
(A) Pin
(B) Hole for the pin (A)
(C) Hole for the bolt (2)

11. Attach the rear arm (LH).



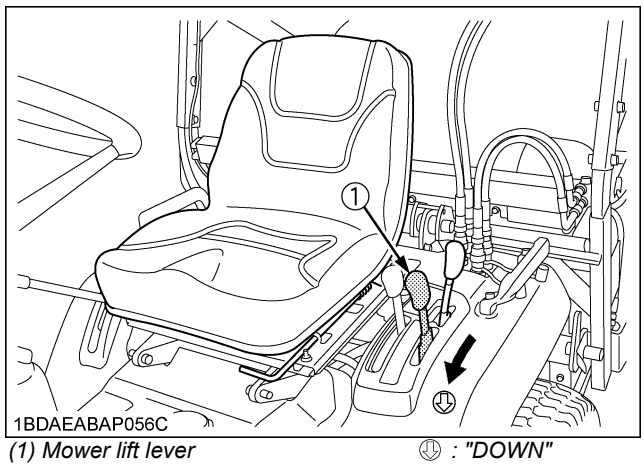
(1) Rear arm (LH)

12. Pull and lock the L pins.

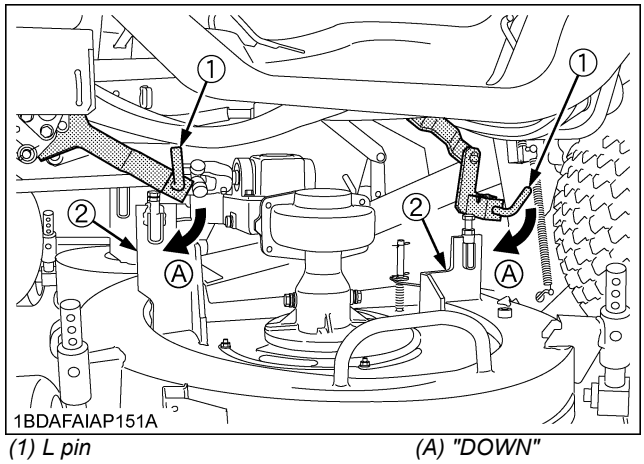


(1) L pins
(2) Pin
(3) Notch
(A) "PULL"
(B) "LOCK"

13. Turn the cutting height control dial to 0 position.
    Place the mower lift lever in the "DOWN" position. Push down the link arms to align with the mower bracket.

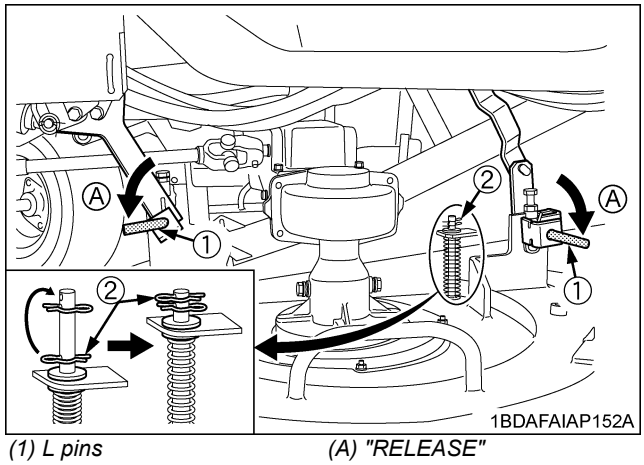


(1) Mower lift lever
⇩ : "DOWN"



(1) L pin
(2) Mower bracket
(A) "DOWN"

14. Insert the L pins lock to the mower deck. Move the lower snap pin to the top position.



(1) L pins
(2) Snap pin
(A) "RELEASE"

15. Start the engine and set the mower at 5 inch position.

16. Shut off the engine.

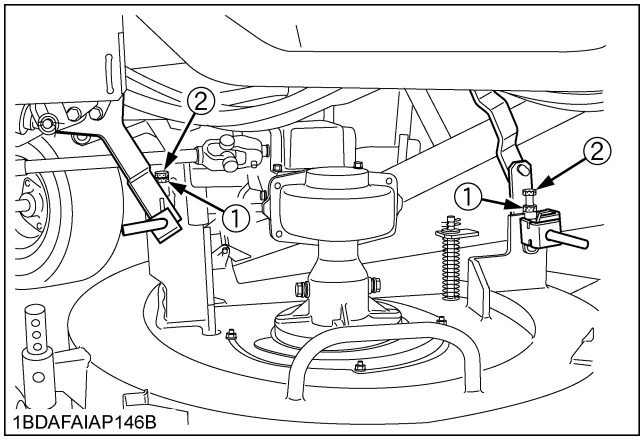
ADJUSTING THE MOWER DECK (FRONT TO REAR)

CAUTION

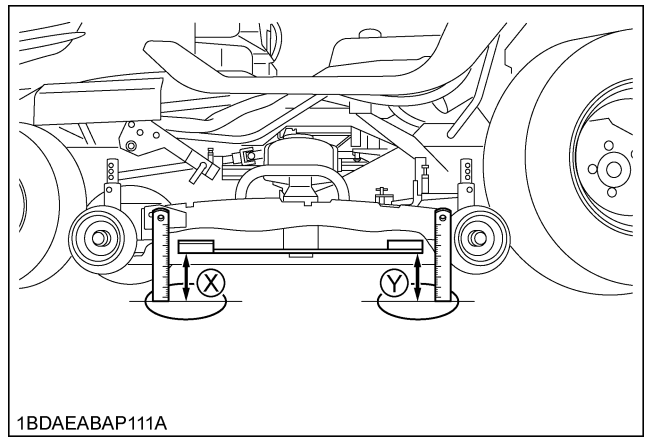
To avoid personal injury:

- **Shut off the engine and remove the key.**
- **Set the parking brake.**
- **Allow the blades to stop before making adjustments.**
- **Wear heavy gloves or wrap end of the blade with a rag when you handle blades; Blades may be sharp.**

1. Park the machine on a level surface.
2. Tire inflation pressure must be correct.
   (See "TIRE AND WHEELS" section.)
3. Raise the mower lift lever to the top position.
   Turn the cutting height control dial to adjust height to the desired height.
4. Lower the mower deck by pushing the mower lift lever forward.
5. Turn the left blade so that it is parallel to the machine direction.
6. Make sure the mower blades are level. Then tighten the lock nuts securely.
   Adjust bolts with the lock nut so that A is 0 to 5 mm.
   A = (Y) - (X)



(1) Lock nut
(2) Adjusting bolt



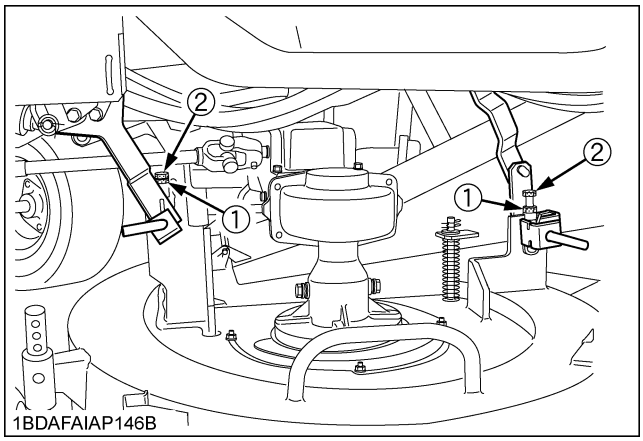
ADJUSTING THE MOWER DECK (SIDE TO SIDE)

CAUTION

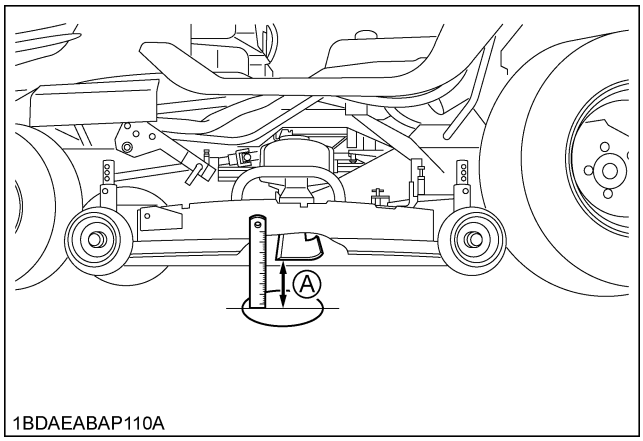
To avoid personal injury:

- **Shut off the engine and remove the key.**
- **Set the parking brake.**
- **Allow the blades to stop before making adjustments.**
- **Wear heavy gloves or wrap end of the blade with a rag when you handle blades; Blades may be sharp.**

1. Park the machine on a level surface.
2. Tire inflation pressure must be correct.
   (See "TIRE AND WHEELS" section.)
3. Raise the mower lift lever to the top position.
   Turn the cutting height control dial to adjust height to the desired height
4. Lower the mower deck by pushing the mower lift lever forward.
5. Turn the left blade so that it is parallel to rear axle.
6. Measure from outside blade tip (L) to the level surface. Then turn the right blade so that it is parallel to rear axle. Measure from outside blade tip (R) to the level surface.



(1) Lock nut
(2) Adjusting bolt



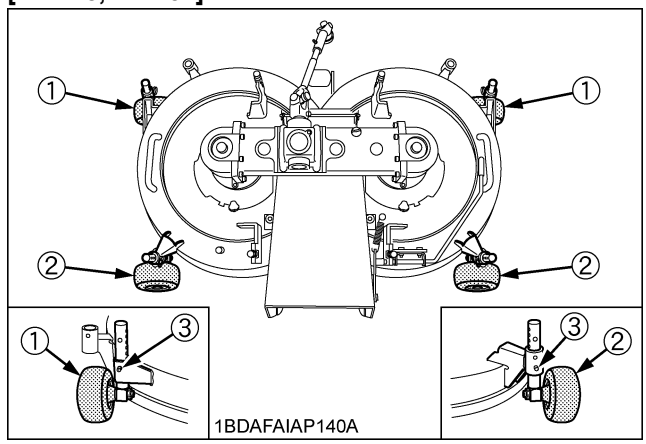
(A) "Outside blade tip to the level surface"

7. Adjust the bolts with the lock nut on Mower stay so that the difference between measurements (L) and (R) is less than 3mm.

DISMOUNTING THE MOWER DECK

1. Raise the mower deck to the top position.
   For installation and uninstallation, set the anti-scalp rollers (Front) as shown the figure below. Then make sure that the clevis pins are set into the lower holes of front anti-scalp rollers.
   RCK48, RCK54 : Two places
2. Set the cutting height less than 3.5 in..
   For installation and uninstallation, set the anti-scalp rollers (Rear) as shown the figure below. Then make sure that the clevis pins are set into the lower holes of rear anti-scalp rollers.
   RCK48, RCK54 : Two places

[RCK48, RCK54]



(1) Anti-scalp roller (Front)
(2) Anti-scalp roller (Rear)
(3) Clevis pin

3. Place the mower lift lever in the "DOWN" position.
4. And then reverse the procedures of mounting the mower deck.

ENGLISH

GRASS CATCHER MOUNTING

ATTACHING THE GRASS CATCHER

CAUTION

To avoid personal injury:

- **Shut off the engine and remove the key before attaching the grass catcher.**
- **Set the parking brake.**

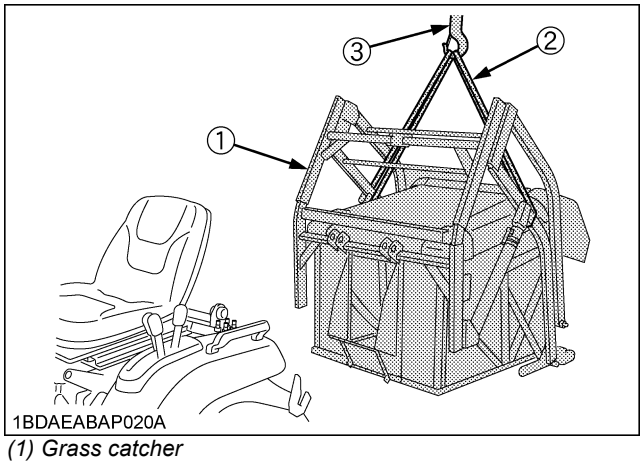
<High Dump>

NOTE :

- Front weight kit must be installed for high dump grass catcher.

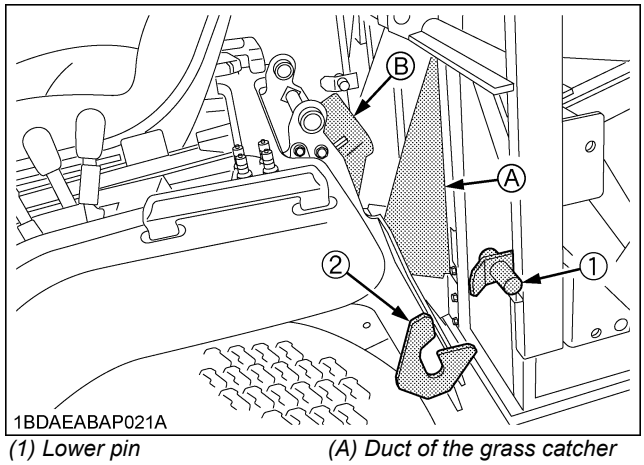
■Mounting the grass catcher

1. Park the machine on a level ground, shut off the engine and remove the key.
2. Hook up the grass catcher as shown.



(1) Grass catcher
(2) Nylon sling
(3) Winch

3. Slide the lower pins into the hook.

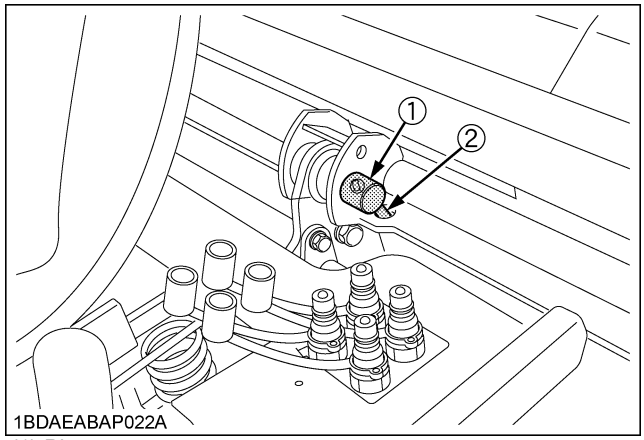


(1) Lower pin
(2) Hook
(A) Duct of the grass catcher
(B) Duct of the base

NOTE :

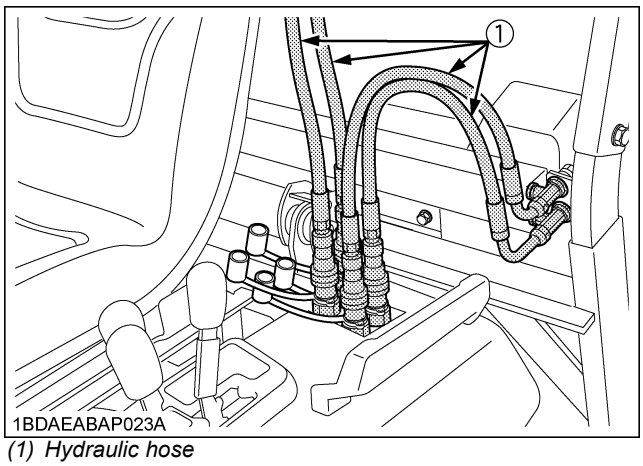
- Make sure that the duct of the grass catcher is inserted into the duct of the base.
- Make sure that the hydraulic hoses are not pinched between the fender and the grass catcher.

4. Insert pin to the boss.
   Make sure that the rod is inserted to the hole.



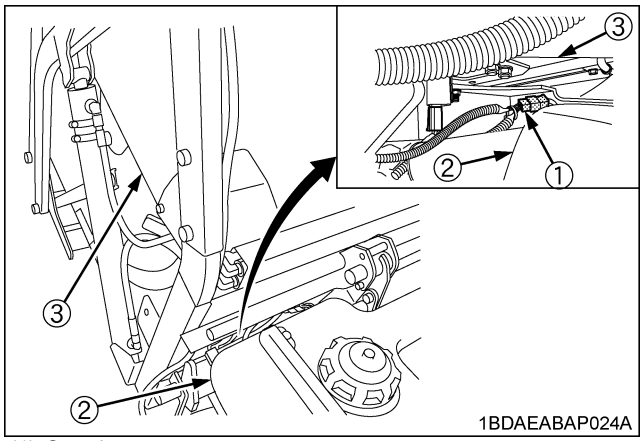
(1) Pin
(2) ROD

5. Attach the couplers to the hose with the same color tag.



(1) Hydraulic hose

6. Connect the wire harness.



(1) Coupler
(2) Machine
(3) Grass catcher

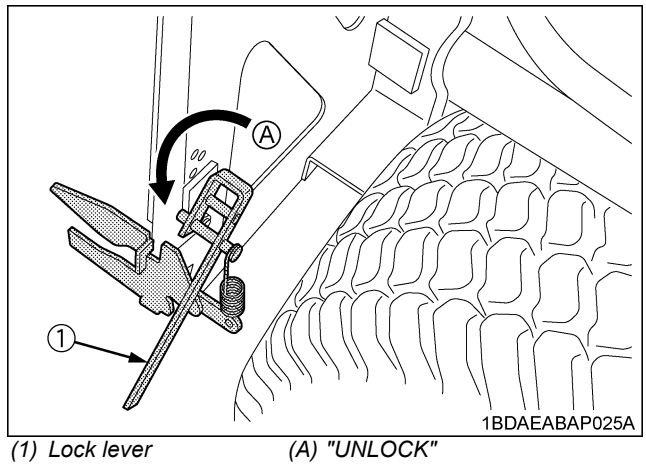
■Dismounting the grass catcher

For dismounting the grass catcher, reverse the above procedures.

<Low Dump>

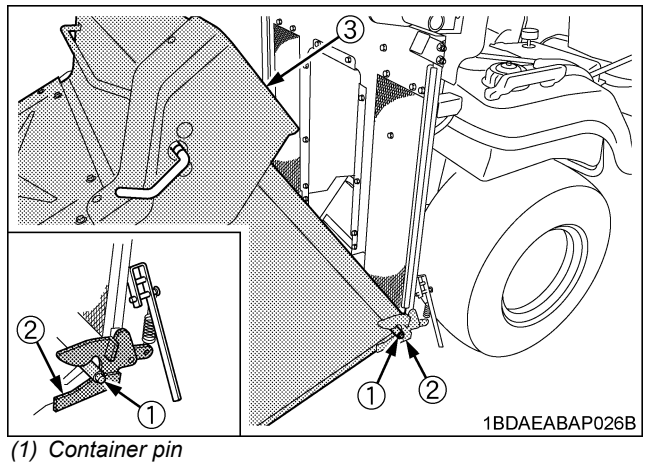
■Mounting the bag

1. Park the machine on a level ground, shut off the engine and remove the key.
2. Turn the lock levers to outside of the machine.



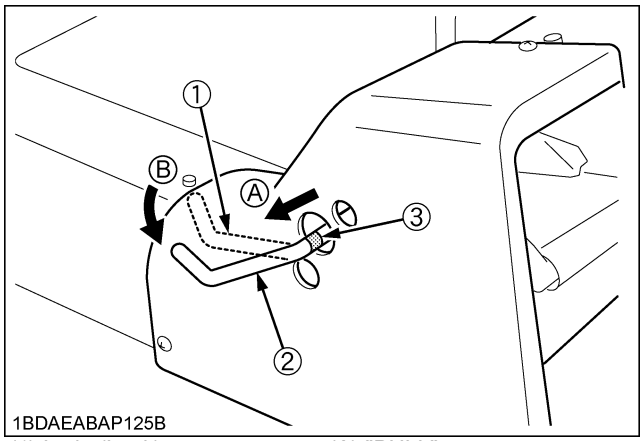
(1) Lock lever *(A) "UNLOCK"*

3. Slide the container pins into the hook.



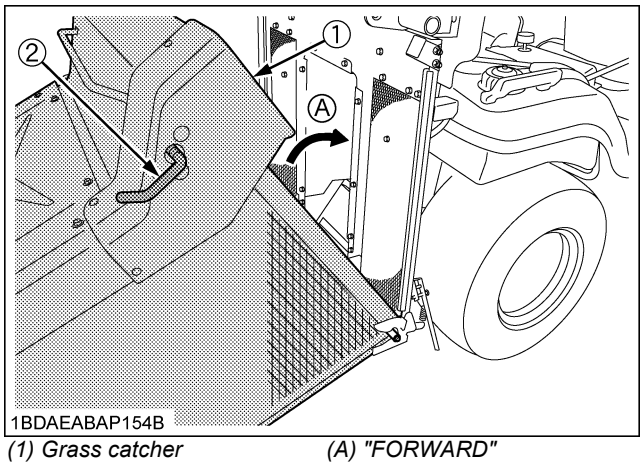
(1) Container pin
(2) Hook
(3) Grass catcher

NOTE :
- L pin must be in unlock position.
- When L pin are unlocked, the pin lock labels can be seen from outside.
  When L pin are locked, the pin lock labels can not be seen from outside.



(1) L pin (Lock) *(A) "PULL"*
(2) L pin (Unlock) *(B) "TURN"*
(3) Pin lock label

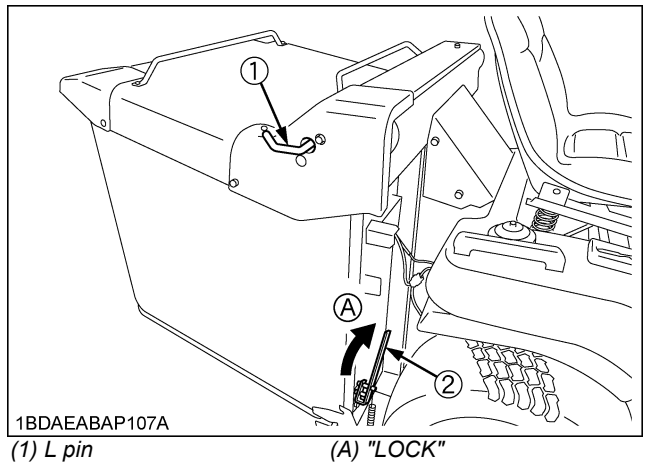
4. Tilt the grass catcher forward, and then lock the both L pins.



(1) Grass catcher *(A) "FORWARD"*
(2) L pin

NOTE :
- Make sure that the both L pins were locked.

5. Turn the lock levers to inside of the machine.



(1) L pin *(A) "LOCK"*
(2) Lock lever

■Dismounting the grass catcher

1. Shut off the engine.
2. Move the grass container control lever several times.
3. Reverse the above procedures.

OPERATING THE ENGINE

CAUTION

To avoid personal injury:

- **Read and understand "SAFE OPERATION" in the front of this manual.**
- **Read and understand the pictorial safety labels located on the machine.**
- **To avoid danger of exhaust fume poisoning, do not operate the engine in a closed building without proper ventilation.**
- **Never start the engine while standing on the ground. Start the engine only at the operator's seat.**
- **Make it a rule to set all shift levers to the "NEUTRAL" positions and to place the PTO lever in the "OFF" position before starting the engine.**

IMPORTANT :

- Do not use starting fluid or ether.
- To protect the battery and the starter, make sure that the starter is not continuously turned for more than 30 seconds.

STARTING THE ENGINE

1. Make sure the parking brake is set.

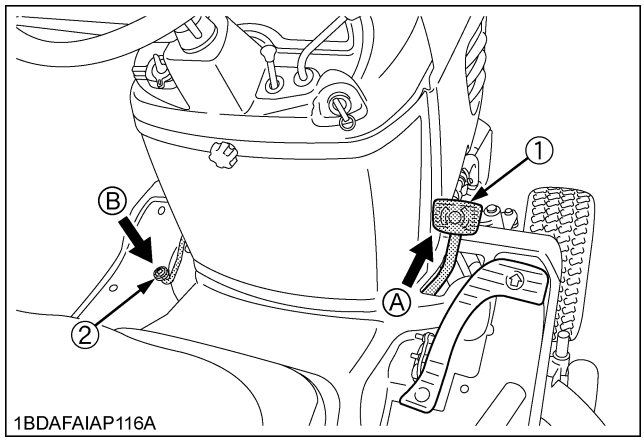
■Parking Brake

CAUTION

To avoid personal injury:

- **Always set the parking brake, stop the engine and remove the key before leaving the machine seat.**

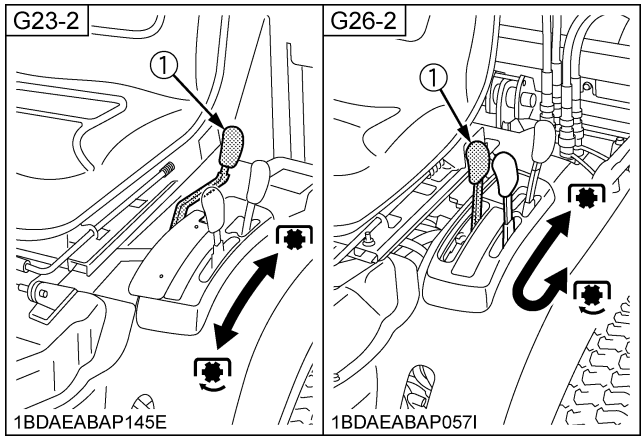
1. When parking, be sure to set the parking brake.
   To set the parking brake;
   (1) Depress the brake pedal.
   (2) Latch the brake pedal with the parking brake lock pedal.



(1) Brake pedal *(A) "DEPRESS"*
(2) Parking brake lock pedal *(B) "PUSH DOWN WHILE DEPRESSING (1)"*

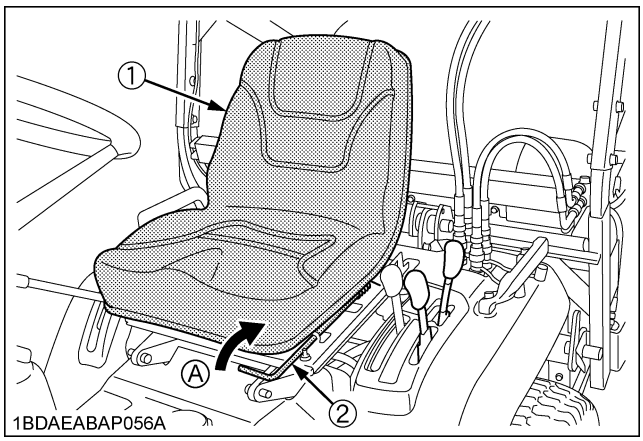
2. Before getting off the machine, disengage the PTO, lower all implements to the ground, place all control levers in their "NEUTRAL" positions, set the parking brake, stop the engine and remove the key.
3. If it is necessary to park on an incline, be sure to chock the wheels to prevent accidental rolling of the machine.

2. Make sure that the PTO lever is in the "DISENGAGED" position.



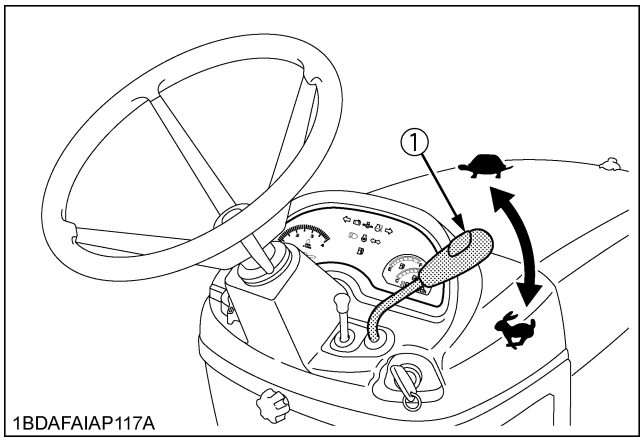
(1) PTO lever
: "ENGAGED"
: "DISENGAGED"

3. Sit on the operator's seat and adjust the seat position.



(1) Seat
(2) Position adjust lever
(A) "PULL UP"

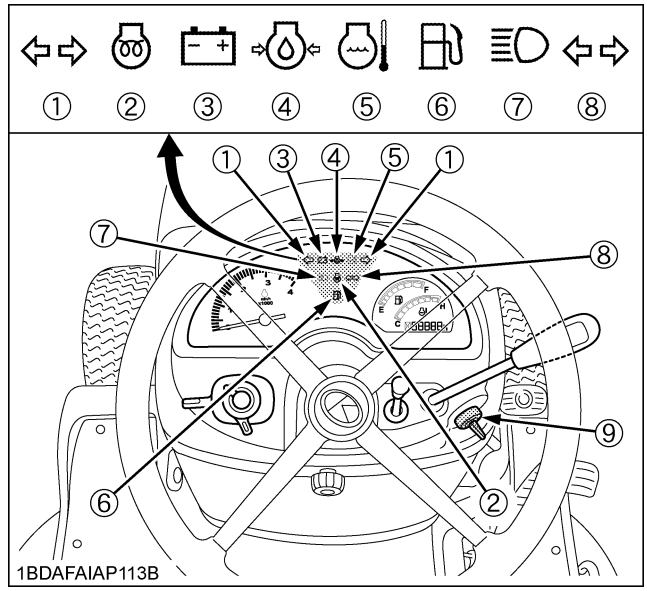
4. Set the throttle lever 1/2 way forward.



(1) Throttle lever
: "INCREASE"
: "DECREASE"

5. Insert the key into the key switch and turn it "ON".

◆ **Check Easy Checker(TM) Lamps;**
When the key is turned "ON", lamps (2) (3) (4) (5) (6) only should come on. If trouble should occur at any location while the engine is running, the warning lamp corresponding to that location come on.

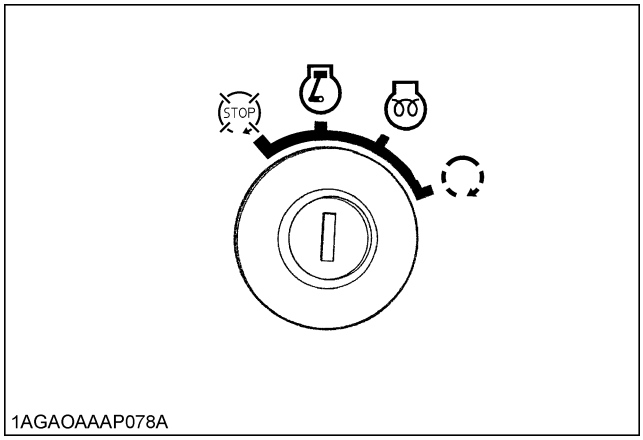


(1) Turn signal / Hazard light indicator
(2) Preheat
(3) Electric charge
(4) Engine oil pressure
(5) Coolant temperature indicator
(6) Low fuel indicator
(7) High beam indicator
(8) Position light indicator
(9) Key switch

IMPORTANT :
- Daily checks with the Easy Checker (TM) only, are not sufficient. Never fail to contact daily checks carefully by referring to Daily Check section.
  (See "DAILY CHECK" in "PERIODIC SERVICE" section.)

■Key Switch

OFF.....	The position where the key can be inserted into or removed from the key switch. [When the key is turned to this position, the engine stops the moment.]
ON.....	The engine is running.
PREHEAT.....	The super glow plug is heated.
START.....	Depress the brake pedal fully and pull the PTO lever to the "DISENGAGED" position, turn the key switch to this position to start the engine.



: "OFF" *: "PREHEAT"*
: "ON" *: "START"*

6. Turn the key switch to the "PREHEAT" position and hold it for about 2 to 3 seconds.

For the appropriate preheating time, refer to the table below.

Temperature	Preheating Time
Over 0℃	2 to 3 sec.
-5℃ to 0℃	5 sec.
-15℃ to -5℃	10 sec.

IMPORTANT :
- Glow plug indicator (2) comes on while engine is being preheated.

7. Turn the key switch to the "START" position and release when the engine starts.

IMPORTANT :
- Because of safety devices, the engine will not start except when the speed control pedal is in the "NEUTRAL" position and the PTO clutch lever is in the "OFF" position respectively.

■Cold Weather Starting

When the ambient temperature is below -5℃ and the engine is very cold. If the engine fails to start after 10 seconds, turn off the key for 30 seconds. Then repeat steps 6 and 7. To protect the battery and the starter, make sure that the starter is not continuously turned for more than 30 seconds.

■Block Heater (Option)

A block heater is available as an option from your local dealer. It will assist you in starting your machine when the ambient temperature is below -15℃.

8. Check to see that all the lamps on the Easy Checker(TM) are "OFF".

If the lamp is still "ON", immediately stop the engine and determine the cause.

STOPPING THE ENGINE

1. After slowing the engine to idle, turn the key switch to the "OFF" position.
2. Remove the key.
3. Do not leave the key switch "ON" (key in the "ON" position) as the battery will discharge when the engine is not running.
4. Set the parking brake.

WARMING UP

CAUTION

To avoid personal injury:

- **Be sure to apply the parking brake during warm-up.**

For 5 minutes after engine start-up, allow engine to warm up without applying any load. This is to allow oil to reach every part of the engine. If load should be applied to the engine without this warm-up period, problems may develop such as seizure, breakage or premature wear may develop.

■Warm-up and Transmission Oil in the Low Temperature Range

Hydraulic oil serves as transmission fluid. In cold weather, the oil may be cold with increased viscosity. This can cause delayed oil circulation or abnormally low hydraulic pressure for some time after engine start-up. This in turn can create problems with the hydraulic system or a damage to the hydraulic clutch.

To prevent the above, observe the following instructions:

Warm up the engine at about 50% of rated rpm according to the table below:

Atmospheric temperature	Warm-up time requirement Higher
Higher than 0℃	Approx. 5 minutes
-10 to 0℃	5 to 10 minutes
-20 to -10℃	10 to 15 minutes
Below -20℃	More than 15 minutes

IMPORTANT :

- Do not operate unless the engine is well warmed up. If operation is attempted while the engine is still cold, the hydraulic mechanism will not function properly and its service life will be shortened.
- If noises are heard after the hydraulic control lever has been activated and the implement is lifting, the hydraulic mechanism is not adjusted properly. Unless corrected, the unit will be damaged. Contact your local KUBOTA Dealer for adjustment.

JUMP STARTING

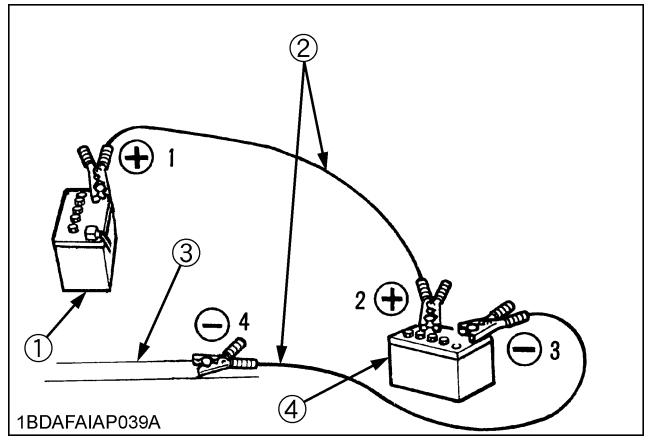
WARNING

To avoid serious injury:

- **Battery gases can explode. Keep cigarettes, sparks, and flames away from battery.**
- **If machine battery is frozen, do not jump start engine.**
- **Do not connect other end of negative (-) jumper cable to negative (-) terminal of machine battery.**

When jump starting the engine, follow the instructions below to safely start the engine.

1. Bring helper vehicle with a battery of the same voltage as the disabled machine within easy cable reach. "THE VEHICLES MUST NOT TOUCH".
2. Apply the parking brakes of both vehicles and put the shift levers in neutral. Shut the engine off.
3. Put on safety goggles and rubber gloves.
4. Ensure the vent caps are securely in place. (if equipped)
5. Attach the red clamp to the positive (red, (+) or pos.) terminal of the dead battery and clamp the other end of the same cable to the positive (red, (+) or pos.) terminal of the helper battery.
6. Clamp the other cable to the negative (black, (-) or neg.) terminal of the helper battery.
7. Clamp the other end to the engine block or frame of the disabled machine as far from the dead battery as possible.
8. Start the helper vehicle and let its engine run for a few moments. Start the disabled machine.
9. Disconnect the jumper cables in the exact reverse order of attachment. (Steps 7, 6 and 5).



(1) Dead battery
(2) Jumper cables
(3) Engine block or frame
(4) Helper battery

Connect cables in numerical order.
Disconnect in reverse order after use.

IMPORTANT :

- This machine has a 12 volt negative (-) ground starting system.
- Use only same voltage for jump starting.
- Use of a higher voltage source on machine could result in severe damage to machine electrical system. Use only matching voltage source when "Jump starting" a low or dead battery condition.

ENGLISH

OPERATING THE MACHINE

OPERATING NEW MACHINE

How a new machine is operated and maintained will determine the life of the machine.

A new machine just off the factory production line has been tested, but the various parts are not accustomed to each other, so care should be taken to operate the machine for the first 50 hours at a slower speed and avoid excessive work or operation until the various parts become "broken-in." The manner in which the machine is handled during the "breaking-in" period greatly affects the life of your machine. Therefore, to obtain the maximum performance and the longest life of the machine, it is very important to properly break-in your machine. In handling a new machine, the following precautions should be observed.

■Changing Lubricating Oil for New Machines

The lubricating oil is especially important in the case of a new machine. The various parts are not "broken-in" and are not accustomed to each other; small metal grit may develop during the operation of the machine; and this may wear out or damage the parts. Therefore, care should be taken to change the lubricating oil a little earlier than would ordinarily be required.

For further details of change interval hours, see "SERVICE INTERVALS" in "MAINTENANCE" section.

■Engine Break-in

After the first 50 hours of operation, change the engine oil and filter. (See "EVERY 100 HOURS" "EVERY 200 HOURS" in "PERIODIC SERVICE" section.)

■Machine Break-in

After the first 200 hours of operation, change the transmission fluid.

After the first 50 hours of operation, change the oil filter cartridge. (See "EVERY 200 HOURS" in "PERIODIC SERVICE" section.)

⚠ WARNING

To avoid serious injury:

- **Do not allow any person other than the driver to ride on the machine.**
- **Do not drive the machine close to the edges of ditches or banks which may collapse under the weight of the machine, especially when the ground is loose or wet.**
- **Slow down before turning.**
- **To avoid tip over, operate up and down slopes, not across. Avoid sudden starts and stops on slopes. Slow down, and use extra caution when changing direction on a slope. Do not use the machine on steep incline.**
  Park the machine on a firm, level surface.
- **Watch where you are going at all times. Watch for and avoid obstacles. Be alert at curbs, near trees, and other obstructions and hidden hazards.**
- **Do not drive a machine on streets or highways. Watch for traffic when you cross roads or operate near roads.**
- **Look to the rear before and when backing. Make sure the area immediately behind you is clear of obstructions, holes and small children. Use extra caution when a machine is equipped with Grass Catcher.**

⚠ CAUTION

To avoid personal injury:

- **Clear the work area of objects which might be picked up and thrown by blades.**
- **Do not direct the opening of the chute at bystanders or animals. Ejected objects may cause injury. Plan your mowing carefully before starting operation.**
- **Keep bystanders especially children and animals away from the mowing area.**
- **Be sure to disengage the PTO and sit on the operator's seat before starting the engine.**

STARTING

1. Adjust the operator's position.

■Seat

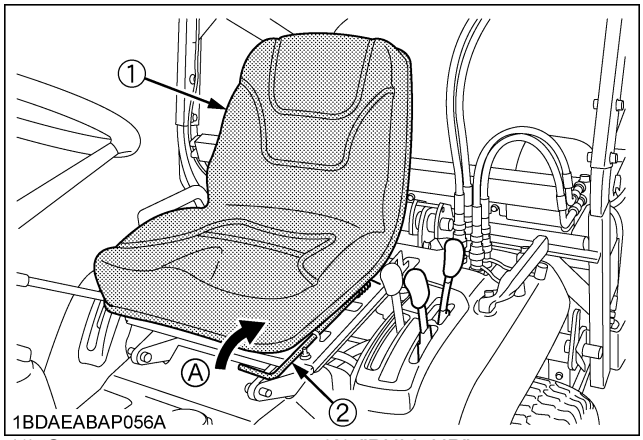
CAUTION

To avoid personal injury:

- **Make adjustments to the seat only while the machine is stopped.**
- **Make sure that the seat is completely secured after each adjustment.**
- **Do not allow any person other than the driver to ride on the machine.**

◆ Travel adjustment

Pull up the position adjust lever and slide the seat backward or forward, as required. The seat will lock in position when the lever is released.



(1) Seat *(A) "PULL UP"*
(2) Position adjust lever

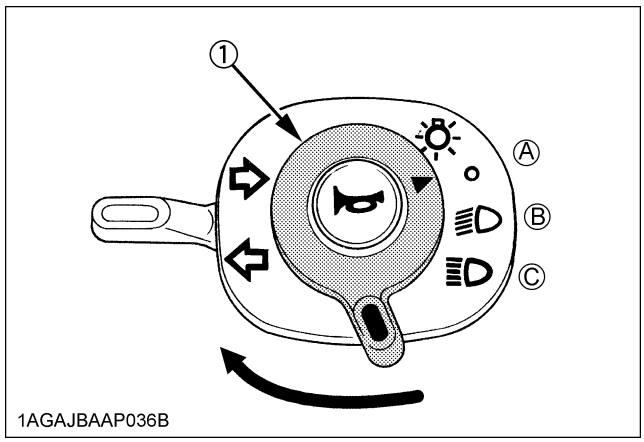
IMPORTANT :

- After adjusting the operator's seat, be sure to check that the seat is properly locked.

2. Select the light switch positions.

■Head Light Switch

Turn the light switch clockwise, and the following lights are activated on the switch position.



(1) Head light switch

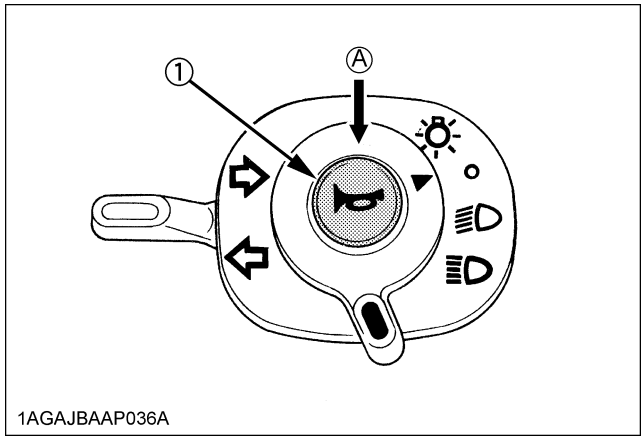
Light name	Switch Position		
	(A)	(B)	(C)
Head light(Low Beam)	OFF	ON	---
Head light(High Beam)	OFF	---	ON
High beam indicator	OFF	OFF	ON

NOTE :

- High beam indicator will be on when head light switch is in "High beam" position.

■Horn Button

The horn will sound when the key switch is in the "ON" position and the horn button pressed.



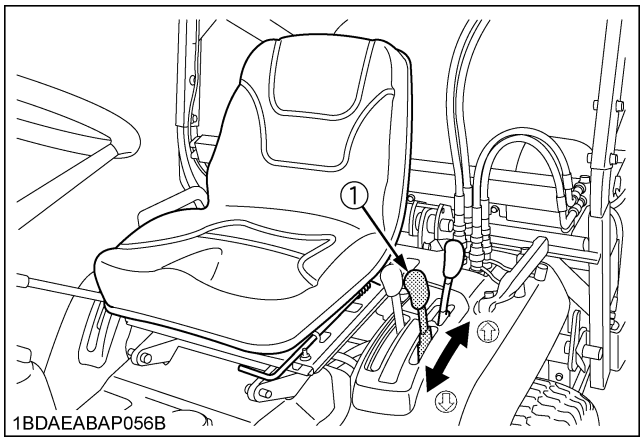
(1) Horn button *(A) "PUSH"*

3. Start the engine.
See "OPERATING THE ENGINE" section.

4. Raise the implement.

■Mower Lift Lever

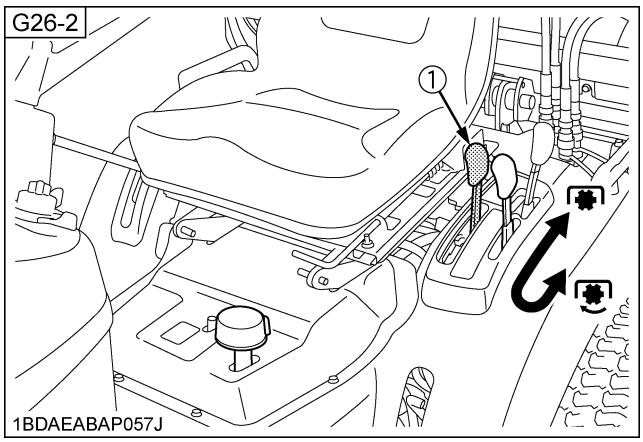
The mower lift lever is used to raise and lower the mower.
To lower the mower, push the lever FORWARD.
To raise it, pull the lever BACKWARD.



(1) Mower lift lever
: "DOWN"
: "UP"

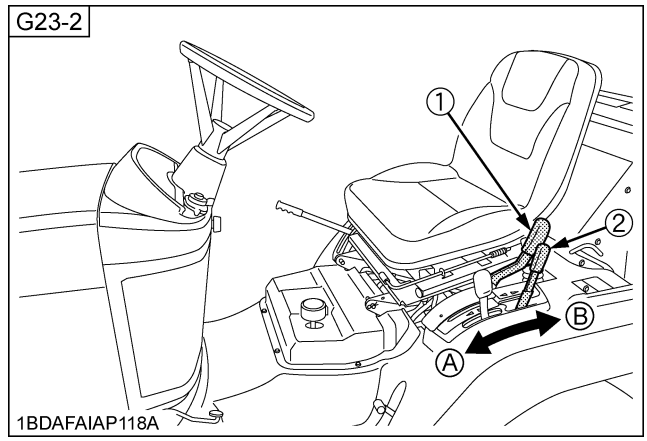
■Grass Container Control Lever

The Grass container control lever is used to dump and close the grass catching container.
Before operation:
Pull the PTO lever to the "DISENGAGED" position. And allow the blades to stop.



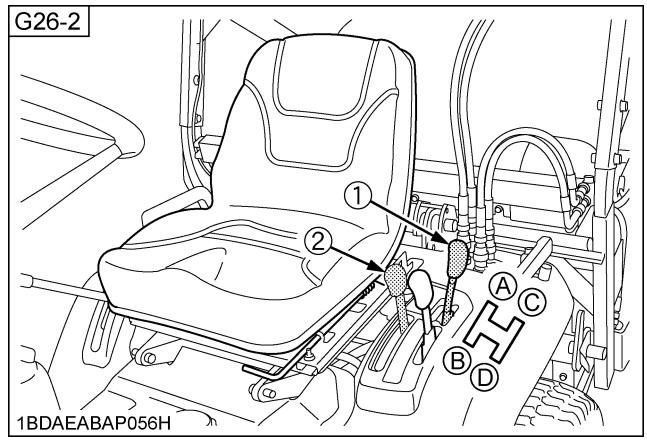
(1) PTO lever
: "ENGAGED"
: "DISENGAGED"

[G23-2]
To dump the grass, pull the lever BACKWARD (B).
To close the container, push the lever FORWARD (A).



(1) PTO lever
(2) Grass container control lever
(A) "CLOSE"
(B) "DUMP"

[G26-2]
Move the grass container control lever to the Right Rear (A) to lift the container. Move it to the Right Front (B) to lower it.
With the container raised, move the control lever to the Left Rear (C) and the container will tilt backward to discharge grass. Move it to the Left Front (D) and the container will back in the original position.

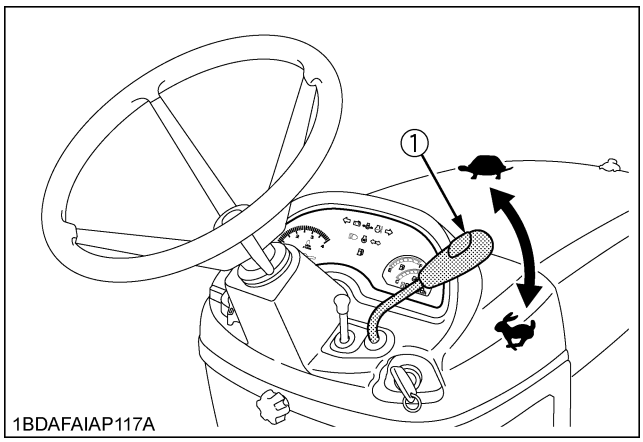


(1) Grass container control lever
(2) PTO lever
(A) "UP"
(B) "DOWN"
(C) "TILT BACKWARD"
(D) "TILT FORWARD"

5. Accelerate the Engine.

■Throttle Lever

Pulling the throttle lever back increases the engine speed and pushing it forward decreases the engine speed.

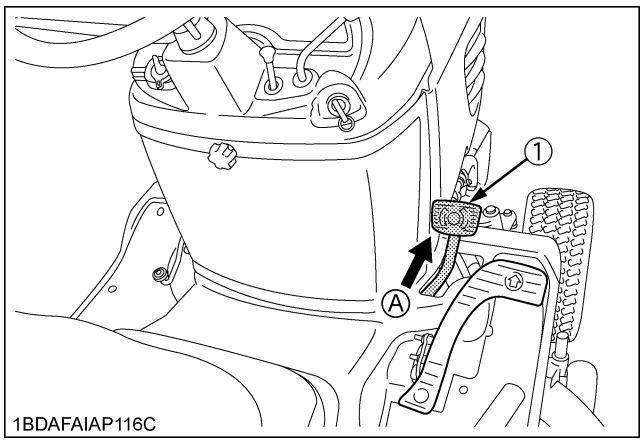


(1) Throttle lever

: "INCREASE"
: "DECREASE"

6. Unlock the Parking Brake.

To release the parking brake, depress the brake pedal again.



(1) Brake pedal *(A) "DEPRESS"*

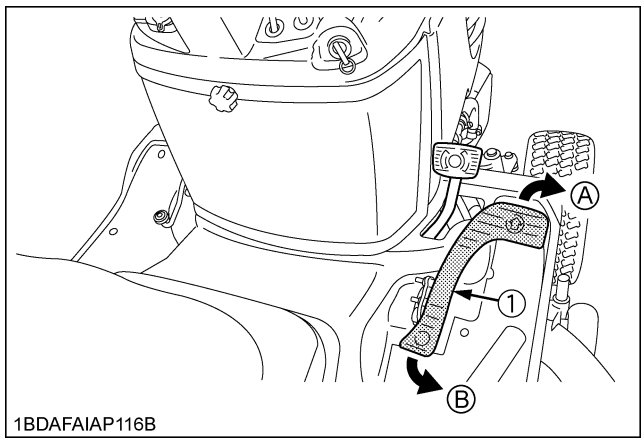
7. Depress the Speed Control Pedal.

■Speed Control Pedal

WARNING

To avoid serious injury:

- **Do not operate if the machine moves on a level ground with foot off Speed Control Pedal.**



(1) Speed control pedal *(A) "FORWARD"* *(B) "REVERSE"*

Forward Pedal (⇧)

Depress the forward pedal with the toe of your right foot to move forward.

Reverse Pedal (⇩)

Depress the reverse pedal with the heel of your right foot to move backward.

NOTE :

- When the parking brake is applied, the speed control pedal is locked in the neutral position.
- When reversing or turning the machine, use care to prevent the grass container from running against wall, bank, tree, etc.

■Speed Set Device

The Speed Set Device is designed for the machine operating efficiency and the operator's comfort. This device will provide a constant forward operating speed by mechanically holding the speed control pedal at a selected position.

◆ **To engage Speed Set Device**

1. Accelerate speed to desired level using Speed Control Pedal.
2. Push and hold the speed set rod downward to "ON" position.
3. Release Speed Control Pedal.
4. Release the speed set rod and desired speed will be maintained.

◆ **To disengaged Speed Set Device**

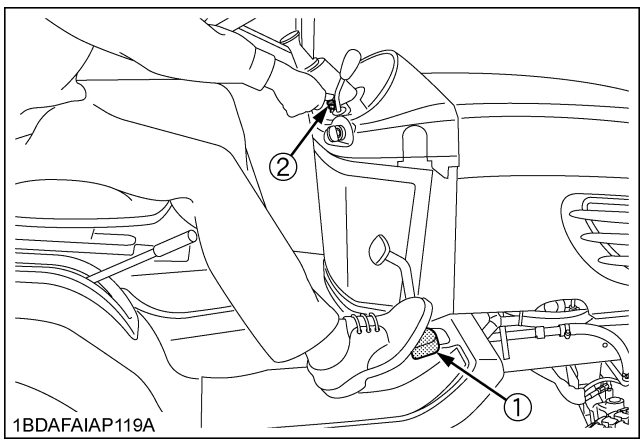
1. Depress the brake pedal.

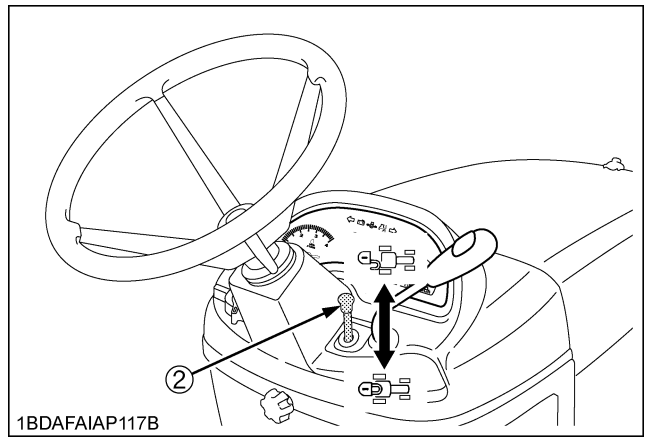
NOTE :

- If you step on the pedal on the forward acceleration side, the speed set device will disengage.
- Speed set device will not operate in reverse.

IMPORTANT :

- To prevent the damage of speed set device, do not depress the reverse pedal when the speed set device is engaged.





(1) Speed control pedal
(2) Speed set rod
: *"ON"*
: *"OFF"*

STOPPING

■Stopping

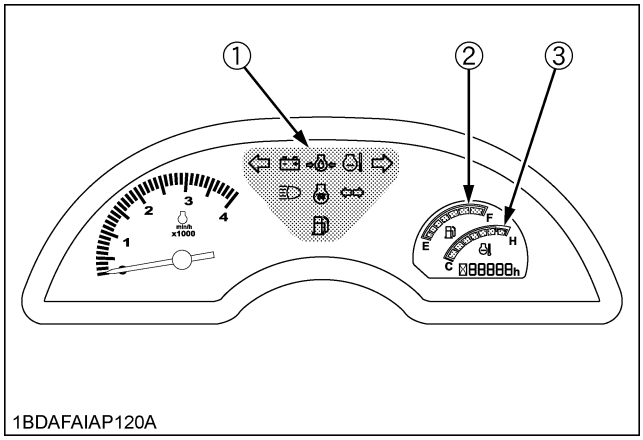
1. Slow down the engine.
2. Step on the brake pedal.
3. After the machine has stopped, disengage the PTO, lower the implement to the ground and set the parking brake.

CHECK DURING DRIVING

■Immediately Stop the Engine if:

- The engine suddenly slows down or accelerates.
- Unusual noises suddenly occur.
- Exhaust fumes suddenly become very dark.

While driving, make the following checks to see that all the parts are functioning normally.



1BDAFAIAP120A

(1) Easy Checker(TM)
(2) Fuel gauge
(3) Coolant temperature gauge

■Easy Checker (TM)

If the warning lamps in the Easy Checker(TM) come on during operation, stop the engine immediately, and find the cause as shown below.
Never operate the machine while Easy Checker(TM) lamp is "ON".

: Engine oil pressure
If the oil pressure in the engine goes below the prescribed level, the warning lamp in the Easy Checker(TM) will come on.
If this should happen during operation, and it does not go off when the engine is accelerated to more than 1000 rpm, check the level of engine oil.
(See "Checking Engine Oil Level" in "DAILY CHECK" in "PERIODIC SERVICE" section.)

: Electrical charge
If the alternator is not charging the battery, the warning lamp in the Easy Checker(TM) will come on.
If this should happen during operation, check the electrical charging system or consult your local KUBOTA Dealer.

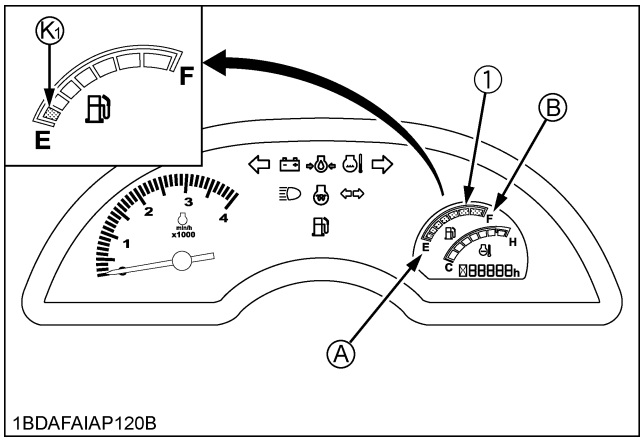
: Glow plug indicator (Pre-heating Indicator)
When the key switch is in the "PREHEAT" position, the glow plug indicator illuminates.

NOTE :

- For checking and servicing of your machine, consult your local KUBOTA Dealer for instruction.

■Fuel Gauge

When the key switch is "ON", the fuel gauge indicates the fuel level.
It's for the check if the gauge is working.
When the fuel is close to empty level, the low fuel indicator of the Easy Checker(TM) comes on and the segment K1 of the fuel gauge starts blinking at 1-second intervals.
Be careful not to empty the fuel tank. Otherwise air may enter the fuel system.
Should this happen, the system should be bled. (See "Bleeding Fuel System" in "SERVICE AS REQUIRED" in "PERIODIC SERVICE" section.)



(1) Fuel gauge
(A) "EMPTY"
(B) "FULL"
(K1) Blinking segment

■Coolant Temperature Gauge

CAUTION

To avoid personal injury:

- **Do not remove radiator cap until coolant temperature is well below its boiling point. Then loosen cap slightly to the stop to relieve any pressure before removing cap completely.**

Overheat indication:

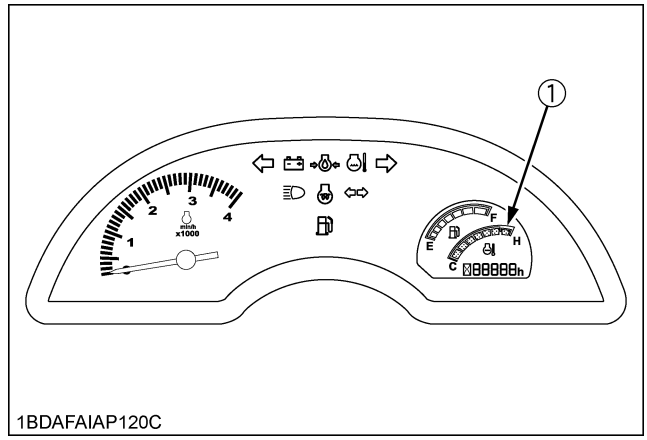
1. When the coolant temperature stays at 125 ℃ for 5 seconds, the indicator on the Easy Checker(TM) comes on.
2. When the coolant temperature stays above 130 ℃ for 5 seconds, the indicator remains on and all segments of the coolant temperature gauge start blinking at 1-second intervals.
3. When the coolant temperature stays below 120 ℃ for 5 seconds, the indicator turns off.

If the coolant temperature indicator on the Easy Checker(TM) comes on:

1. Place the PTO clutch lever in "OFF" (DISENGAGE) position.
2. Move the machine to the level surface, and apply the parking brake.
3. Place the throttle lever in the engine idle position, and let the engine run for a few minutes.
4. Check the Cooling System, after it has sufficient time to cool down.

Check the following items:

1. Shortage or leakage of the coolant.
2. Foreign matter on the radiator net or dust and dirt between the radiator fins.
3. Looseness of fan belt.
4. Blockage in the radiator tube.
   (See "PERIODIC SERVICE" section.)



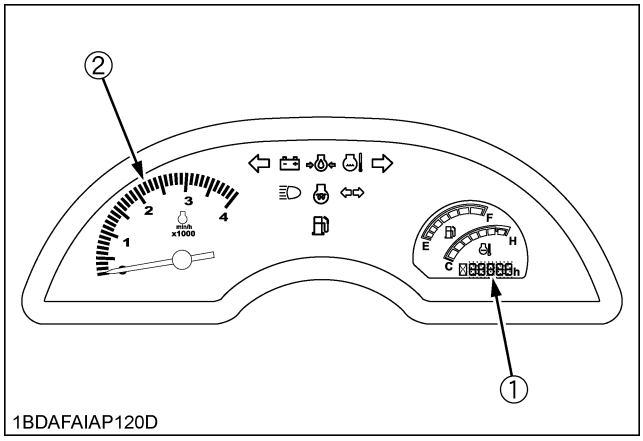
(1) Coolant temperature gauge

■Hourmeter / Tachometer

The hourmeter indicates in six digits the hours the machine has been used; the last digit indicates 1/10 of an hour.

When the key is turned "ON", the tachometer should indicate 4000 engine revolutions per minute (rpm) for just a moment.

When the key switch is "ON" and the engine is "ON", the tachometer indicates the engine revolution per minute.



(1) Hourmeter
(2) Tachometer

PARKING

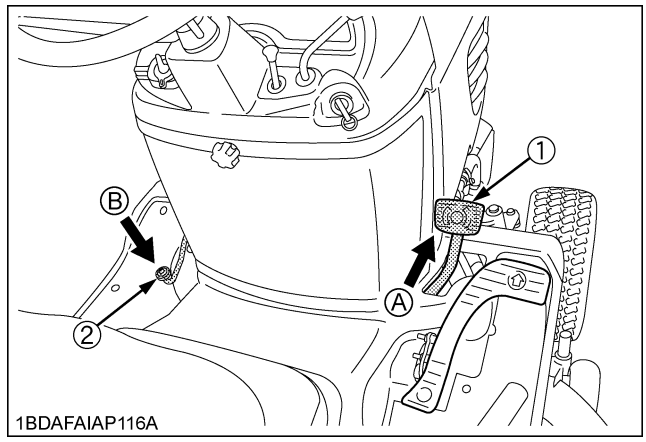
■Parking

WARNING

To avoid serious injury:

- **Always set the parking brake, stop the engine and remove the key before leaving the machine seat.**

1. When parking, be sure to set the parking brake.
   To set the parking brake;
   (1) Depress the brake pedal.
   (2) Latch the brake pedal with the parking brake lock pedal.



(1) Brake pedal
(2) Parking brake lock pedal
(A) "DEPRESS"
(B) "PUSH DOWN WHILE DEPRESSING (1)"

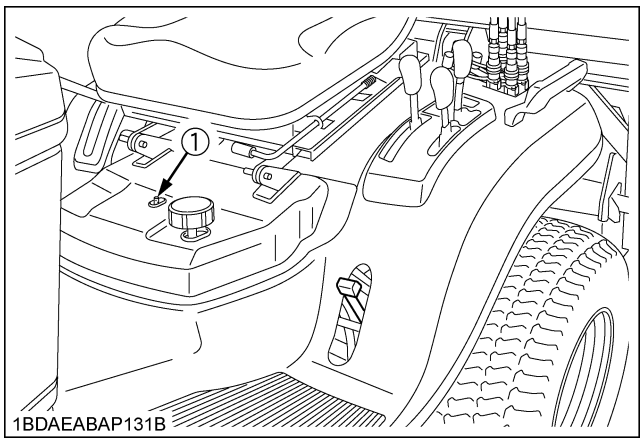
2. Before getting off the machine, disengage the PTO, lower all implements to the ground, place all control levers in their "NEUTRAL" positions, set the parking brake, stop the engine and remove the key.
3. If it is necessary to park on an incline, be sure to chock the wheels to prevent accidental rolling of the machine.

■Hydrostatic Transaxle Bypass Button

IMPORTANT :

- Do not push the machine without pushing the bypass button or transmission damage may occur.
- Never push the button with the engine running.

1. To push the machine, push the HST bypass button.
2. After starting the engine, the button will return automatically to normal position.



(1) HST bypass button

OPERATING TECHNIQUES

■Differential Lock

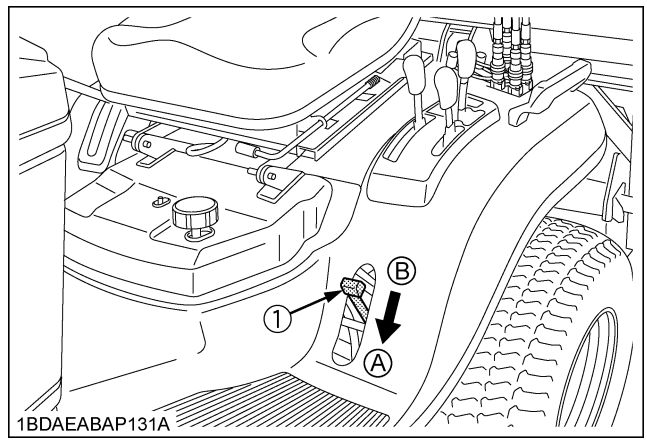
WARNING

To avoid personal injury due to the loss of steering control:

- **Do not operate the machine at high speed with differential lock engaged.**
- **Do not attempt to turn with the differential lock engaged.**
- **Be sure to release the differential lock before making a turn in the field conditions.**

If one of the rear wheel should slip, step on the differential lock pedal. Both wheels will then turn together, reducing slippage.

Differential lock is maintained only while the pedal is depressed.



(1) Differential lock pedal
(A) Press to "ENGAGE"
(B) Release to "DISENGAGE"

IMPORTANT :

- When using the differential lock, always slow the engine down.
- To prevent damage to power train, do not engage differential lock when one wheel is spinning and the other is completely stopped.
- If the differential lock cannot be released in the above manner, alternately press speed control pedal forward and backward slightly.

OPERATING THE MOWER

MAKING THE MOST OF YOUR MOWER

1. When using your mower for the first time, choose a smooth level area and cut in straight and slightly overlapping strips.
2. The size and type of the area to be mowed will determine the proper mowing pattern. Take into account obstructions, such as trees, fences and buildings.
3. Most lawns should be mowed to keep the grass approximately 50 to 80 mm high. Best results are obtained by cutting often and not too short. To keep a green lawn, never mow more than one third of the height of the grass or a maximum of 25 mm in one mowing.
   For extremely tall grass, set the cutting height at maximum cutting height for the first mowing, then reset to the desired height and mow again. Allow the grass to grow to 80 mm, then cut off only the top inch.
4. For best appearance, grass should be cut in the afternoon or evening when it is free of moisture.

DANGER

To avoid serious injury or death:

- **Do not operate mower without Grass Catcher.**

WARNING

To avoid serious injury:

- **Clear the work area of objects which might be picked up and thrown by blades.**
- **Keep bystanders and animals away from the mowing area.**
- **Be sure to disengage the PTO and sit on the operator's seat before starting the engine.**

ADJUSTING CUTTING HEIGHT

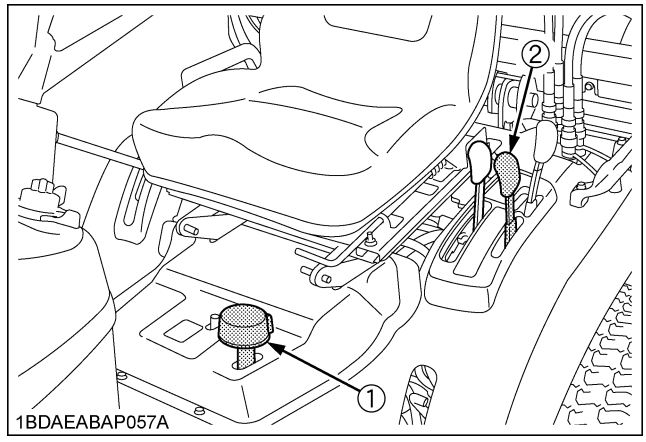
DANGER

To avoid serious injury or death:

- **Do not operate mower in the "TOP" position.**

■Cutting Height Control Dial

Raise the mower deck to the top position by pulling the mower lift lever backward (see Mower lift lever page 22). Turn the cutting height control dial to the desired cutting height. But do not use 0 position for mowing.
Lower the mower deck by pushing the mower lift lever forward.
Then the mower deck will be set to the cutting height.



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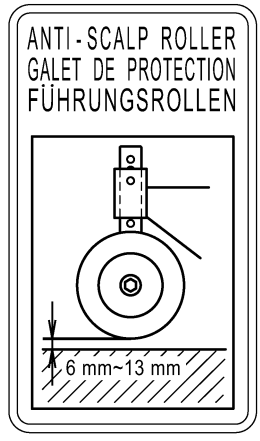

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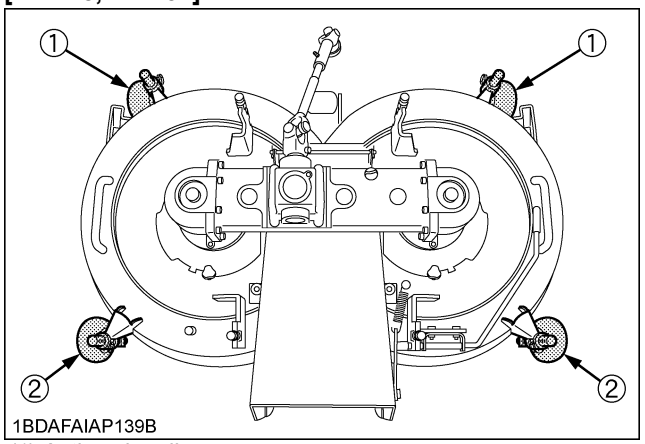
(1) Cutting height control dial
(2) Mower lift lever

1. To set the cutting height, pull the mower lift lever backward to raise mower deck to the "TOP" position. Turn the cutting height control dial to adjust height.

2. Set the anti-scalp rollers height as shown to keep clearance between rollers and ground more than 6mm. See the table below.
3. Lower the mower deck by pushing the mower lift lever downward. This lowers the mower deck from the "TRANSPORT" position to the "OPERATING" position.
4. Use the higher settings for mowing in a rough area or when mowing tall grass. Lower settings should be used only for smooth lawns where short grass is desired.

[RCK48, RCK54]



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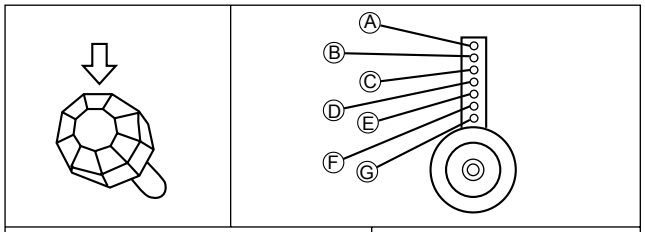
(1) Anti-scalp roller
(2) Anti-scalp roller (rear)



DIAL (CUTTING HEIGHT)	ANTI-SCALP ROLLER
1.0 (25mm), 1.25 (32mm)	G
1.5 (38mm), 1.75 (45mm)	F
2.0 (51mm), 2.25 (57mm)	E
2.5 (64mm), 2.75 (70mm)	D
3.0 (76mm), 3.25 (83mm)	C
3.5 (89mm), 3.75 (95mm)	B
4.0 (102mm)	A

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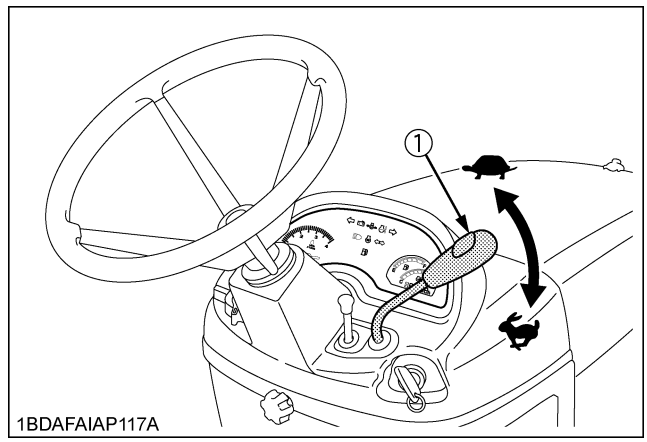
OPERATING THE MOWER

1. Start the engine.

2. Set the throttle lever to the "FAST" position.



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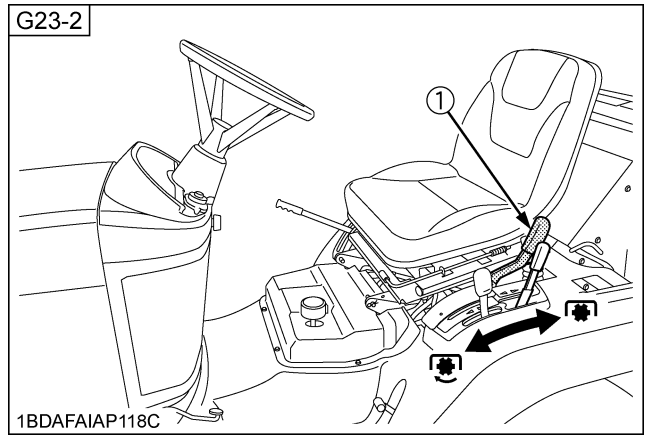
(1) Throttle lever
: Fast position
: Slow position

3. Push down the PTO lever to the "ENGAGED" position.

■PTO Lever

1. To engage mower blade, shift the PTO lever to the "ENGAGED" position. To stop the mower blades, shift the PTO lever to the "DISENGAGED" position.



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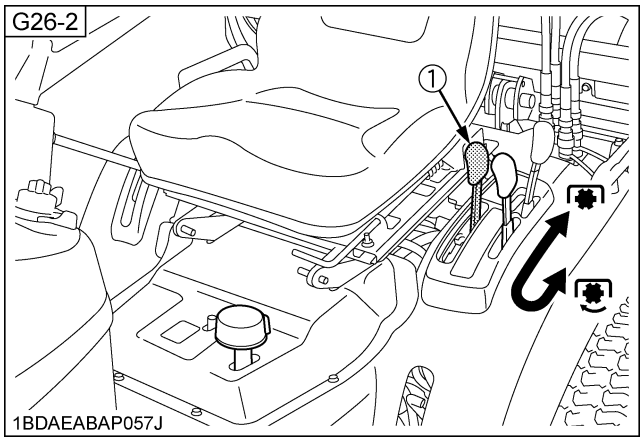
(1) PTO lever
: "ENGAGED"
: "DISENGAGED"



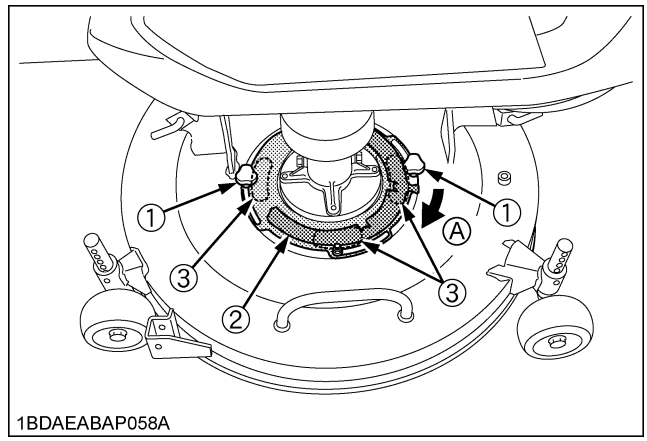
(1) PTO lever
: "ENGAGED"
: "DISENGAGED"

IMPORTANT :
- To avoid shock loads to the PTO, reduce engine throttle from full to half speed by pushing up on engine throttle when engaging the PTO, then re-engage the engine to full.
- To avoid damage to PTO clutch and implement, shift the PTO clutch lever slowly, when engaging the PTO clutch. Do not keep the PTO clutch lever half way.

NOTE :
This machine is equipped with safety devices.
- If you dismount from the seat while the PTO is running, the engine will stop automatically.
  (Operator Presence Control)
- Before starting the engine, pull the PTO lever to the "DISENGAGED" position and depress brake pedal, otherwise, the starter will not operate.
- If you dump the grass container while the PTO is running or engaged, the engine will stop automatically.
- If you engage the PTO lever while grass container or rear discharge deflector is not installed, the engine will stop automatically.
- For best cut quality and performance, always mow with the throttle lever in the "FAST" position.

Use the speed control pedal to select the desired mowing speed range.

(1) During heavy duty use, operate the machine at slower ground speed or go over the area twice. The first pass should be with the deck at the highest position then mow to desired height.
(2) The mower will not cut cleanly if the ground speed is too high or if the blade speed drops due to an overload.
(3) If the better collecting performance is needed on cutting at lower position, open the slot with moving the cover clockwise.



(1) Knob bolt
(2) Cover
(3) Slot
(A) "OPEN" (Move the cover clockwise)

NOTE :
- Slot should be closed on normal operation.

4. Control ground speed by using the speed control pedal of the machine.

NOTE :
- Keep the mower deck in the fully raised position when the mower is not engaged.

WARNING

To avoid serious injury or death:
- **Engine components can get extremely hot from operation. To prevent severe burns, do not touch these areas while the engine is running, or immediately after it is turned off.**
  Never operate the engine with heat shields or guards removed.

OPERATING THE GRASS CATCHER

DANGER

To avoid serious injury or death:

- **Do not operate mower without grass catcher.**

OPERATING PERFORMANCE

1. Overall grass collecting performance depends on the airflow from the mowing blades, through the ducts, into the grass container.
2. Mow and collect when the grass is dry and not too tall. Never mow grass when it is wet or heavy with dew as the grass catcher duct may plug rapidly.
3. If the grass is unusually tall, mow and collect at a higher than desired height of cut.
   Attempting to mow with the deck too low in tall grass will restrict intake air necessary for good collecting performance.
   Tall grass clippings may also plug the ducts before the container is filled.
   After tall grasses have been mowed, reset the mower to the desired height of cut and remow the area.
4. Always mow at full engine throttle. If the engine lugs down while mowing, reduce riding mower ground speed.

◆ Full Grass Buzzer
If grass gets stuck up to the grass sensor set position, the buzzer sounds. If the buzzer sounds, dump the grass inside of the bag.

5. During the mowing operation, when the lumps of the grass clippings begin to drop on the mowing track, the machine tells you that the discharging duct is plugged and the grass container is filled. In such cases, empty the container and clean the duct by operating the lever of the duct clean system to discharge the grass completely.
6. Thoroughly clean the mower deck, discharge duct and the container after each mowing. Grass build-up, left to dry, will be very difficult to remove, and if not removed, will effect future mowing and bagging performance.

EMPTYING THE GRASS CATCHER

CAUTION

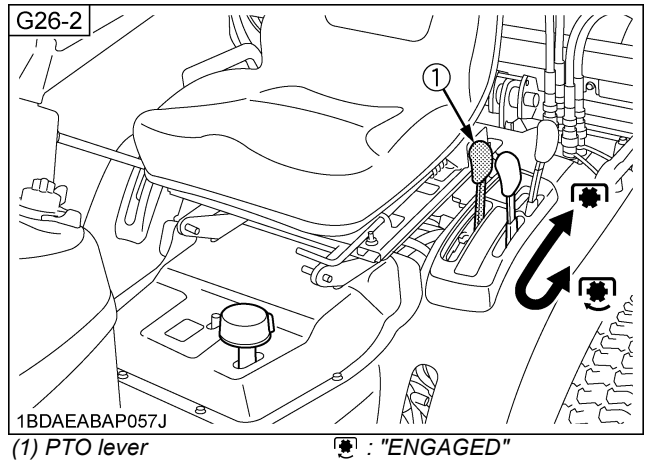
To avoid personal injury:

- **Raise and dump collected leaves or grass clippings ONLY while sitting on the Operator's Seat.**
- **Empty the container ONLY from a firm and level surface, with the mower stopped, and the machine stationary. Dumping the container on soft or uneven ground, or while moving, could cause the machine to tip over, causing serious injury and extensive equipment damage.**
- **Make sure the dumping area is clear of all bystanders and pets, before emptying grass clippings or leaves from the container.**

To empty:

<High Dump>

1. Disengage the PTO lever.

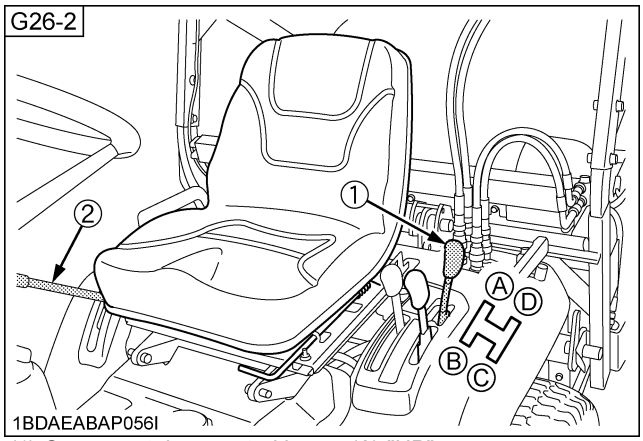


(1) PTO lever

: "ENGAGED"
: "DISENGAGED"

2. Lift the grass container with moving the grass container control lever to the right rear.
3. Tilt the grass container backward to discharge grass with moving the grass container control lever to left rear.
4. Move the rear quick clean lever several times.
5. Tilt the grass container forward to the original position with moving the grass container control lever to left front.
6. Lower the grass container with moving the grass container control lever to the right front.

G26-2



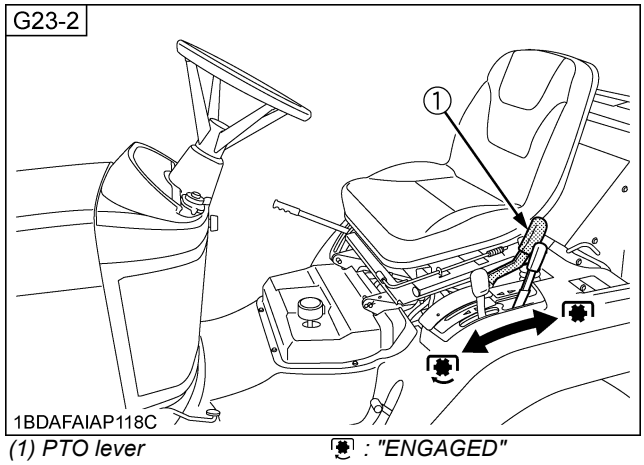
(1) Grass container control lever
(2) Rear quick clean lever
(A) "UP"
(B) "DOWN"
(C) "TILT BACKWARD"
(D) "TILT FORWARD"

IMPORTANT :
- Make sure the grass container is fully lowered.

<Low Dump>

1. Disengage the PTO lever.

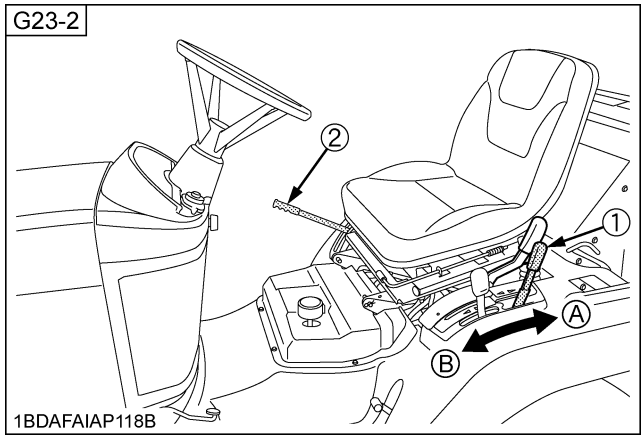
G23-2



(1) PTO lever
: "ENGAGED"
: "DISENGAGED"

2. Tilt the grass container with moving the grass container control lever to rear.
3. Move the rear quick clean lever several times.
4. Close the container with moving the grass container control lever to front.

G23-2



(1) Grass container control lever
(2) Rear quick clean lever
(A) "TILT BACKWARD"
(B) "CLOSE"

IMPORTANT :
- Make sure the grass container is fully lowered.

NOTE :
- To facilitate grass collection after mowing, it is also better to put grass in 2 or 3 heaps instead of spreading them over the area to be mowed.

STOPPER (High Dump only)

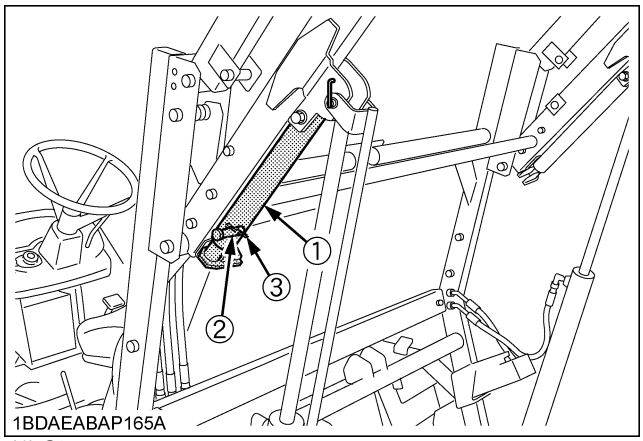
WARNING

To avoid personal injury or death:

- **Park the machine on a firm and level surface.**
- **Apply the parking brake.**
- **Empty the grass container.**

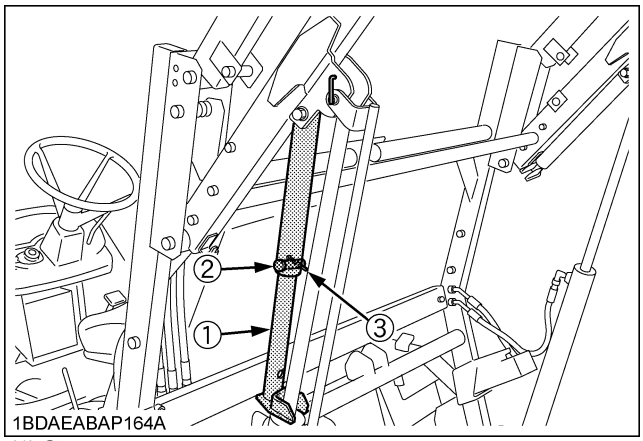
■Lock the stopper

1. Lift up the grass container.
2. Remove the snap pin and clevis pin.



(1) Stopper
(2) Clevis pin
(3) Snap pin

3. Extend the stopper and insert the clevis pin and snap pin.
4. Set the stopper to the cylinder.



(1) Stopper
(2) Clevis pin
(3) Snap pin

■Release the stopper

1. For release the stopper, reverse the above procedures.

NOTE :

- If it is hard to release the stopper, lift up the grass container. Then release the stopper.

2. Lower the grass container.

IMPORTANT :

- Make sure the grass container is fully lowered.

GRASS CONTAINER NET MATERIAL

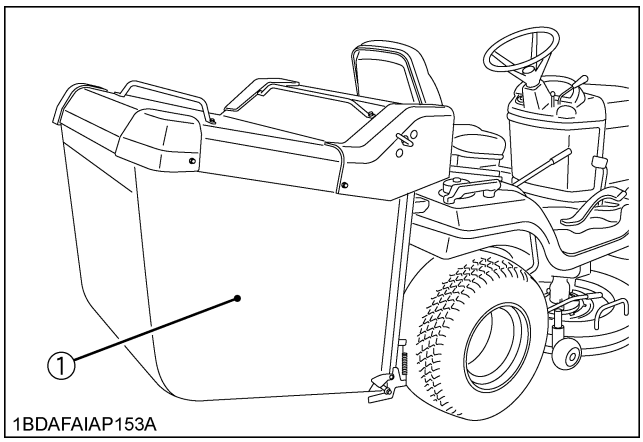
■Checking

CAUTION

To avoid personal injury:

- **Be sure to stop the engine before checking the grass container net condition.**
- **The grass container net material is subject to deterioration and wear. Check it frequently. Use only genuine replacement net from KUBOTA.**
- **Make sure all shields and guards are securely in place following all service, cleaning, or repair work.**

The grass container net material should be checked daily.



(1) Grass container net

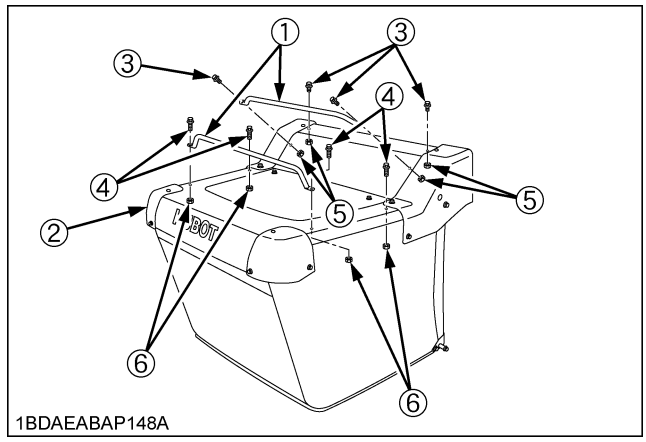
1. The net material is made of cloth and plastic.
2. Check grass container net material for deterioration, wear and damage.
3. After inspection, if the net material is found worn or deteriorated, replace it as shown in "Replacing".
4. If the grass container net is unusually dirty or grass stained, it should be washed with a mild detergent and hung up to dry. Reinstall it as shown in "Replacing".

NOTE :

- Do not attempt to dry the container net in a clothes dryer!

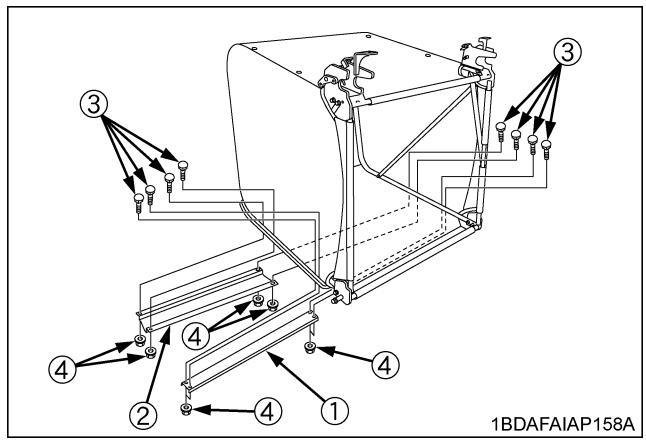
■Replacing

1. Remove L pins, handles, flange nuts and flange bolts from the top of the grass container cover.
2. Remove the plastic cover from the container.



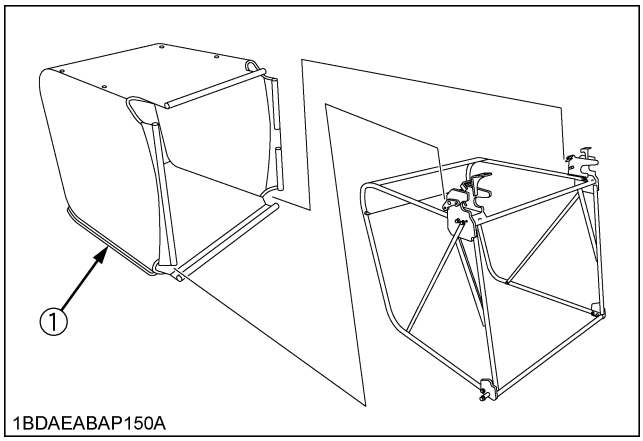
(1) Handle
(2) Cover
(3) Flange bolt (M8 x 16)
(4) Flange bolt (M6 x 35)
(5) Flange nut (M8)
(6) Flange nut (M6)

3. Remove square neck bolts and nuts to remove the bottom plate1 and the bottom plate 2.



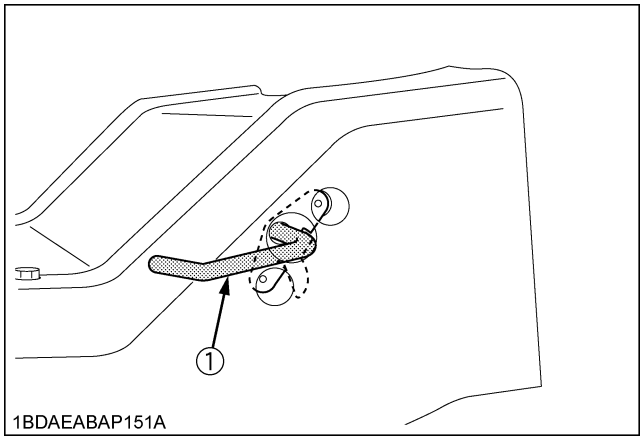
(1) Bottom plate1
(2) Bottom plate2
(3) Square neck bolt
(4) Flange nut

4. Then remove the container net from the frame.
5. To attach new or cleaned net, reverse the above procedures and be sure to install removed components.



(1) New or cleaned net

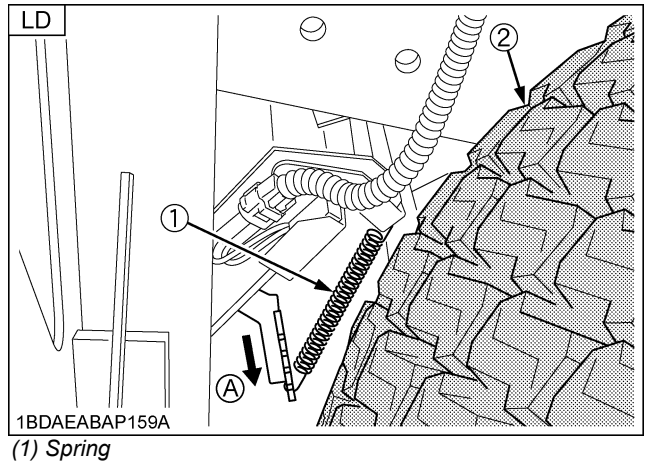
NOTE :
- Install the L pins as shown below.
- Be sure to check the direction of both L pins.



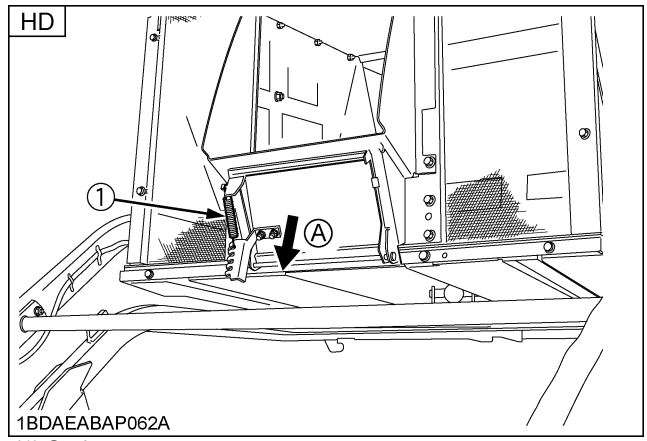
(1) L pin (RH)

ADJUSTING THE GRASS CATCHER SENSOR

Before mowing, adjust the grass sensor position according to the grass and field conditions.
If the more collecting performance is needed, hook the spring toward A.



(1) Spring
(2) Rear tire (RH)



(1) Spring

NOTE :
- Be sure to park the machine on flat surface and stop the engine when the sensor is adjusted.

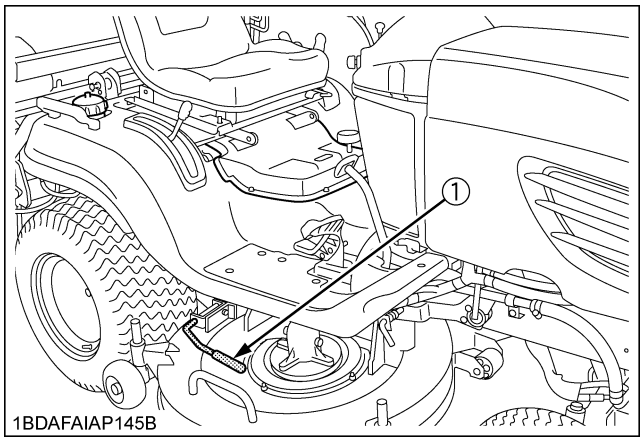
QUICK CLEAN LEVER

■Front Quick Clean Lever

The front quick clean lever is designed for discharging the grass, which is plugged at the outlet of the mower.

To operate:

1. Park the machine on a level surface.
2. Pull the PTO lever to the "DISENGAGED" position. And allow the blades to stop before operating the lever.
3. Rotate the lever back and forth several times.
4. After use, replace the lever to the original position.



(1) Front quick clean lever

NOTE :

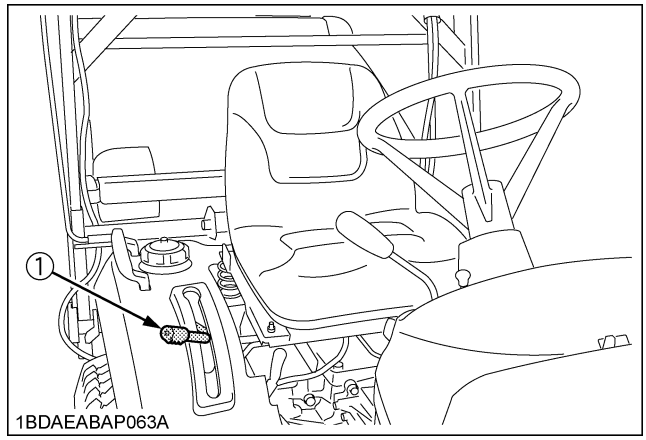
- To effectively discharge the grass, be sure to rotate the lever several times.

■Rear Quick Clean Lever

The rear quick clean lever is designed for discharging the grass, which is plugged at the rear of the duct.

To operate:

1. Pull the PTO lever to the "DISENGAGED" position. And allow the blades to stop before operating the lever.
2. Pull up the lever several times.



(1) Rear quick clean lever

NOTE :

- To effectively discharge the grass from the duct, be sure to push down the lever several times.

ENGLISH

CLEANING

CAUTION

To avoid personal injury:

- **Do not clean the machine with engine running.**
- **Be sure to set the parking brake during cleaning.**

CLEANING WITH WATER

The use of a high pressure cleaner is not recommended. However if you use one, take care not to splash water on engine parts such as the air filter, exhaust muffler, battery. Do not direct jet towards hydraulic elements.

CLEANING THE GRASS CATCHING CONTAINER

The grass catching container must be cleaned after each use in order to allow optimum evacuation of air. This is done with a water jet.

A cutting system with a properly maintained collection container will cut and collect grass more efficiently.

CLEANING THE MOWING SYSTEM

After each use, carefully clean the mowing deck, particularly underneath. Switch the engine off before cleaning your machine.

The inside part of the mowing system can also be cleaned with water through the discharge duct.

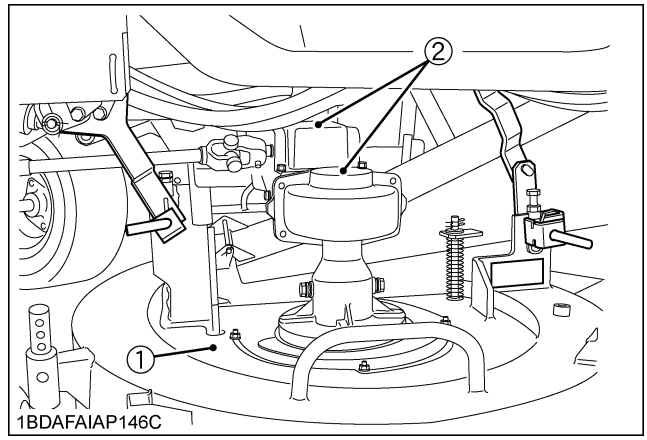
Remove the grass container to access the discharge duct.

Operate the mowing system for a few minutes after cleaning.

Clean the grass buildup on the top of mower deck and gear case as shown in the figure.

NOTE :

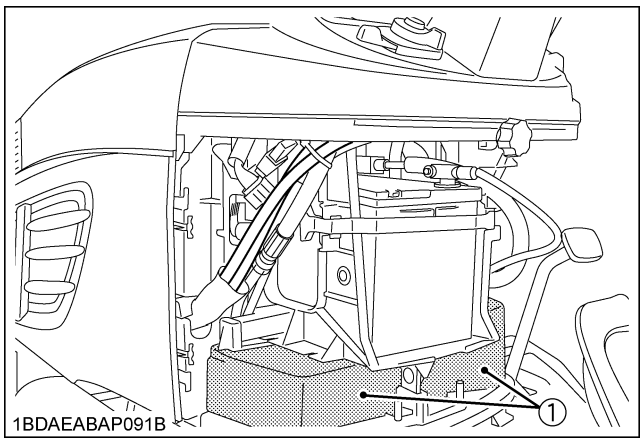
- If the mower was used under very difficult conditions (very wet grass, mowing in a very low position), it may be necessary to remove the cutting deck to clean it. At the same time, you should take the opportunity to check the condition of the blades, belts and bolts and replace them if needed.



(1) Top of mower deck
(2) Top of gear case

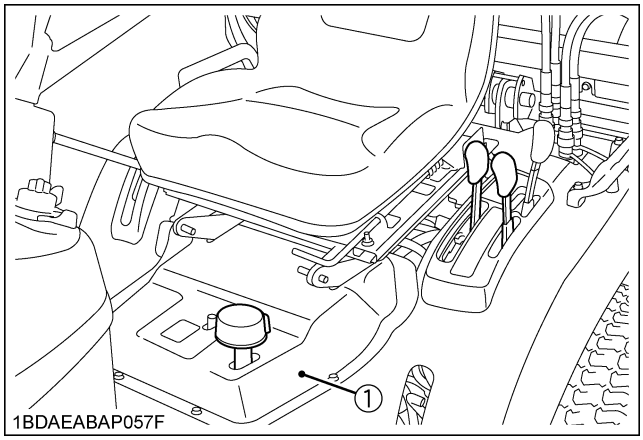
CLEANING THE BODY

1. Clean the grass buildup under battery behind the valve covers.



(1) Valve cover

2. Clean the grass buildup around the HST fan area under the HST fan cover.



(1) HST fan cover

DANGER

To avoid serious injury or death:

- **Do not clean the mower deck without the Grass Catcher attached.**

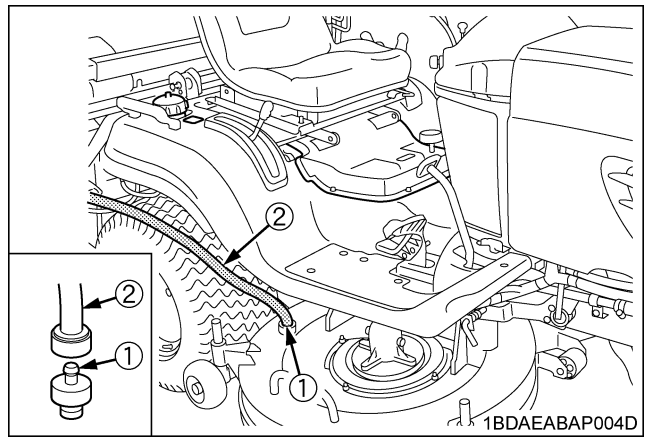
CAUTION

To avoid personal injury:

- **Clear the work area of objects which might be picked up and thrown by blades.**
- **Keep bystanders and animals away from the mower deck.**
- **Be sure to disengage the PTO and sit on the operator's seat before starting the engine.**
- **Be sure to set the parking brake during cleaning.**

CLEANING THE MOWING SYSTEM USING HOSE

1. Attach the water hose to the mower joint and turn on water.



(1) Joint (if equipped)
(2) Water hose

NOTE :

- Mower has G1/2 thread on the boss for joint.

2. Start the engine.
3. Set the throttle lever to the "FAST" position.
4. To engage mower blades, push down the PTO lever to the "ENGAGED" position for a few minutes.
5. To stop the mower blades, pull the PTO lever to the "DISENGAGE" position.
6. Stop the engine.
7. Turn off water and remove the water hose.
8. Install the water hose to the mower joint of opposite side and turn on water.
   Repeat steps 2 through 7.

ENGLISH

TIRE AND WHEELS

TIRES

WARNING

To avoid serious injury:

- **Do not attempt to mount a tire. This should be done by a qualified person with the proper equipment.**
- **Always maintain the correct tire pressure. Do not inflate tires above the recommended pressure shown in the Operator's Manual.**
- **Inflation pressure in front tires rises quickly when using compressed air.**

CAUTION

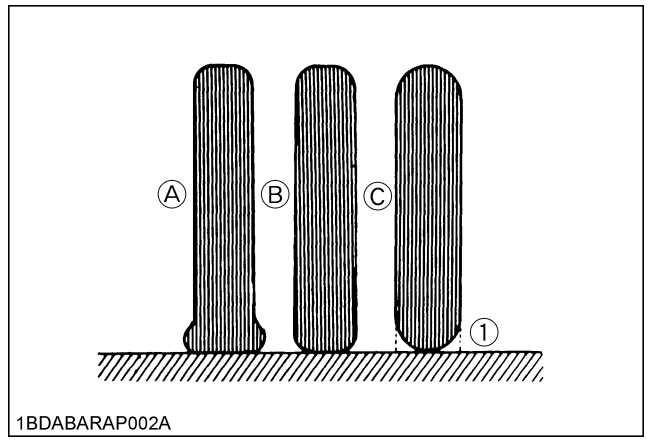
Never operate machine with a loose rim, wheel, or axle.

- **Whenever bolts are loosened, retighten to specified torque.**
- **Check all bolts frequently and keep them tightened.**

■Inflation Pressure

Though the inflation pressure is factory-set to the prescribed level, it naturally drops slowly in the course of time. Thus, check it everyday and inflate as necessary.

	Tire sizes	Recommended Inflation Max. Pressure
Front	16 x 7.50 - 8, Turf	120 kPa (1.2 kgf/cm²)
Rear	24 x 12.00 - 12, Turf	100 kPa (1.0 kgf/cm²)



1BDABARAP002A

(1) Ground

(A) "INSUFFICIENT"
(B) "NORMAL"
(C) "EXCESSIVE"

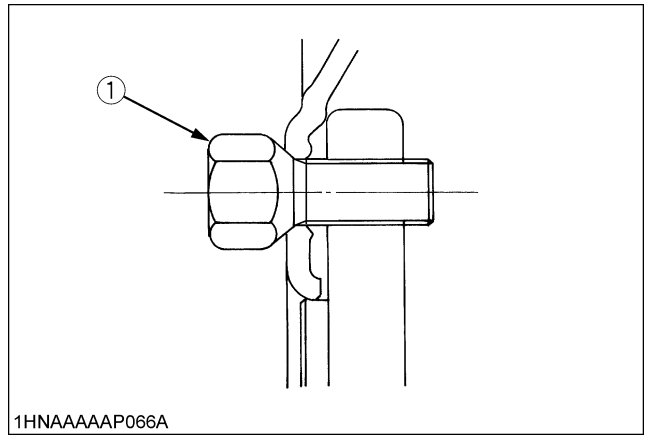
WHEELS

IMPORTANT :

- When re-fitting or adjusting a wheel, tighten the bolts to the following torques then recheck after driving the machine 200 m, after one day (8 hours) and thereafter every 50 hours (as per maintenance chart).

NOTE :

- Use the tapered bolts for wheels with beveled or tapered holes.



1HNAAAAAP066A

(1) Bolt

Front 149.2 to 179.0 N-m (15.2 to 18.3 kgf-m)
Rear 108.5 to 130.2 N-m (11.1 to 13.3 kgf-m)

ENGLISH

MAINTENANCE

SERVICE INTERVALS

The following servicing tasks should be carried out on the machine at the stated running-time intervals.

No.	Items		Indication on hour meter (Hr)												After since	Ref. page	
			50	100	150	200	250	300	350	400	450	500	550	600			
1	Engine oil	Change	◎			○				○				○	every 200 Hr	67	
2	Engine oil filter	Replace	◎			○				○				○	every 200 Hr	68	
3	Transmission fluid	Change								○					every 400 Hr	73	
4	Transmission oil filter	Replace	◎			○				○				○	every 200 Hr	69	
5	Transmission strainer	Clean								○					every 400 Hr	74	
6	Front axle pivot	Adjust				○				○				○	every 200 Hr	71	*2
7	Engine start system	Check	○	○	○	○	○	○	○	○	○	○	○	○	every 50 Hr	51	
8	OPC system	Check	○	○	○	○	○	○	○	○	○	○	○	○	every 50 Hr	52	
9	PTO control system	Check	○	○	○	○	○	○	○	○	○	○	○	○	every 50 Hr	52	
10	Oiling	-	○	○	○	○	○	○	○	○	○	○	○	○	every 50 Hr	60	
11	Greasing	-	○	○	○	○	○	○	○	○	○	○	○	○	every 50 Hr	54	
12	Mower gear box oil	Check	○	○	○	○	○	○	○	○	○	○	○	○	every 50 Hr	54	
		Change	◎		○			○			○			○	every 150 Hr	67	
13	Air cleaner element	Clean	○	○	○	○	○	○	○	○	○	○	○	○	every 50 Hr	53	*1
		Replace													every 1 year	74	
14	Battery condition	Check	○	○	○	○	○	○	○	○	○	○	○	○	every 50 Hr	61	
15	Front PTO belt tension	Adjust	○	○	○	○	○	○	○	○	○	○	○	○	every 50 Hr	62	*5
16	Brake	Check		○		○		○		○		○		○	every 100 Hr	64	*2
17	Fan drive belt	Check		○		○		○		○		○		○	every 100 Hr	66	*2
18	HST neutral spring	Adjust		○		○		○		○		○		○	every 100 Hr	66	
19	Fuel filter element	Check		○		○		○		○		○		○	every 100 Hr	63	
		Replace								○					every 400 Hr	74	*2

No.	Items		Indication on hour meter (Hr)												After since	Ref. page	
			50	100	150	200	250	300	350	400	450	500	550	600			
20	Fuel line	Check		○		○		○		○		○		○	every 100 Hr	63	
		Replace													every 2 years	76	*2
21	Hydraulic hose	Check				○				○				○	every 200 Hr	70	
		Replace													every 2 years	76	*2
22	Radiator hose and clamp	Check				○				○				○	every 200 Hr	69	
		Replace													every 2 years	76	*2
23	Intake air line	Check				○				○				○	every 200 Hr	72	
		Replace													every 2 years	79	*4
24	Toe-in	Adjust				○				○				○	every 200 Hr	72	
25	Fuel injection nozzle (injection pressure)	Check													every 1500 Hr	74	*3
26	Injection pump	Check													every 3000 Hr	74	*3
27	Radiator	Clean													every 2 years	74	
28	Coolant	Change													every 2 years	74	
29	Anti-Freeze	-													every 2 years	75	
30	Mower gear box oil seal	Replace													every 2 years	76	*2
31	Engine breather hose	Replace													every 2 years	76	*3
32	Fuel system	Bleed													Service as Required	79	
33	Fuse	Replace														76	
34	Blade	Replace														77	
35	Light Bulb	Replace														77	
36	Jump plate	Check														79	

IMPORTANT :

- The jobs indicated by ◎ must be done initially.

*1 This maintenance should be done daily more often in dusty conditions than in normal conditions.
Suggested cleaning interval is every 100 hours in normal conditions.

*2 These items should be serviced by an authorized KUBOTA Dealer, unless the owner has the proper tools and is mechanically proficient.

*3 Consult your local KUBOTA Dealer for this service.

*4 Replace only if necessary.

*5 Initial elongation of the front PTO belt may occur prior to 25 hours.
Adjust the tension spring length as needed to maintain belt tension.

LUBRICANTS, FUEL AND COOLANT

Place	Capacities				Lubricants
	G23-2		G26-2		
	LD	HD	LD	HD	
Fuel	20 L				• No.2-D diesel fuel • No.1-D diesel fuel if temperature is below -10 ℃
Coolant (with recovery tank)	3.1 L		3.3 L		Fresh clean water with anti-freeze
Engine crankcase	3.1 L *		3.5 L *		• Engine oil: API Service Classification CF or higher Above 25 ℃ .....SAE30, SAE10W-30 or 15W-40 0 to 25 ℃ .....SAE20, SAE10W-30 or 15W-40 Below 0 ℃ .....SAE10W, SAE10W-30 or 15W-40
Transmission case	11 L				• KUBOTA UDT or SUPER UDT fluid*1
Mower gear box	1.9 L		2.1 L		• KUBOTA UDT or SUPER UDT fluid*1

Greasing	No. of greasing points				Capacity	Type of grease
	G23-2		G26-2			
	LD	HD	LD	HD		
Front axle (King Pin)	2				Until grease overflows	• Multipurpose EP2 Grease (NLGI Grade No.2)
Front axle (Center Pin)	1					
Middle link	10					
Brake pedal link	6					
HST speed change pedal dumper	2					
HST pedal boss	1					
Tension PTO arm	1					
PTO (Spline)	1					
Parking lock pedal link	2					
Cruise control link	2					
Differential lock pedal link	4					
Under duct pivot	4					
Sensor system pivot	2					
Duct cleanup system link	4					
Seat adjuster	2					
Seat pivot	2					
Throttle cable	1				Moderate amount	• Oil
Mower universal joint	3				Until grease overflows	• Multipurpose EP2 Grease (NLGI Grade No.2)
Mower universal joint (Grease nipple)	2					
Mower lift cylinder	5					
Mower lift arm front (RH)	1					
Mower lift link front	3					
Mower lift arm rear (LH, RH)	4					
Mower lift pin front (LH, RH)	2					
Mower lift link rear (LH, RH)	4					
Dump cylinder	2	-	2	-		
Grass container rotation pivot	4	-	4	-		
Lock lever (LH, RH)	2	-	2	-		
Grass container pivot (Grease nipple) (LH, RH)	-	10	-	10		
Grass container lift cylinder (LH, RH)	-	4	-	4		
Dump pivot (LH, RH)	-	2	-	2		

Note * Oil amount when the oil level is at the upper level of the oil level gauge.

NOTE :
- Check the oil level of the transmission case with the mower lifted up and grass catcher lowered.

IMPORTANT :
- To prevent serious damage to hydraulic systems, use only KUBOTA genuine fluid or its equivalent.

NOTE :

◆ **Engine Oil:**
- Oil used in the engine should have an American Petroleum Institute (API) service classification and Proper SAE Engine Oil according to the ambient temperatures as shown above:
- With the emission control now in effect, the CF-4 and CG-4 lubricating oils have been developed for use of a low-sulfur fuel on on-road vehicle engines. When an off-road vehicle engine runs on a high-sulfur fuel, it is advisable to employ the "CF or better" lubricating oil with a high Total Base Number (TBN of 10 minimum).

- Refer to the following table for the suitable API classification engine oil according to the engine type (with internal EGR, external EGR or non-EGR) and the fuel (low-sulfur or high-sulfur fuel).

Fuel used	Engine oil classification (API classification)	
	Oil class of engines except external EGR	Oil class of engines with external EGR
High Sulfur Fuel [≧ 0.05% (500 ppm)]	**CF** (If the "CF-4, CG-4, CH-4 or CI-4" lubricating oil is used with a high-sulfur fuel, change the lubricating oil at shorter intervals. (approximately half))	---
Low Sulfur Fuel [<0.05% (500 ppm)] or Ultra Low Sulfur Fuel [<0.0015% (15 ppm)]	**CF, CF-4, CG-4, CH-4** or **CI-4**	**CF** or **CI-4** (Class CF-4, CG-4 and CH-4 engine oils cannot be used on EGR type engines)

EGR: Exhaust Gas Re-circulation
- The CJ-4 engine oil is intended for DPF (Diesel Particulate Filter) type engines, and cannot be used on this machine.

	except external EGR	with external EGR
Models	G23-2, G26-2	---

◆ **Fuel:**
- Cetane number of 45 minimum. Cetane number greater than 50 is preferred, especially for temperatures below -20℃ or elevations above 1500 m.
- If diesel fuel with sulfur content greater than 0.5% (5000 ppm) sulfur content is used, reduce the service interval for engine oil and filter by 50%.
- NEVER use diesel fuel with sulfur content greater than 0.05% (500 ppm) for EXTERNAL EGR type engine.
- DO NOT use diesel fuel with sulfur content greater than 1.0% (10000 ppm).
- Diesel fuels specified to EN 590 or ASTM D975 are recommended.
- No.2-D is a distillate fuel of lower volatility for engines in industrial and heavy mobile service. (SAE J313 JUN87)

◆ **Transmission Oil:**

The oil used to lubricate the transmission is also used as hydraulic fluid. To insure proper operation of the hydraulic system and to complete lubrication of the transmission, it is important that a multi-grade transmission fluid is used in this system. We recommend the use of **KUBOTA UDT or SUPER UDT fluid** for optimum protection and performance. (Consult your local KUBOTA Dealer for further detail.)
Do not mix different brands together.

- Indicated capacities of water and oil are manufacturer's estimate.

ENGLISH

PERIODIC SERVICE

CAUTION

To avoid personal injury:

- **Do not work under any hydraulically supported devices. They can settle, suddenly leak down, or be accidentally lowered. If necessary to work under the machine or any machine elements for servicing or adjustment, securely support them with stands or suitable blocking beforehand.**

HOW TO OPEN THE HOOD

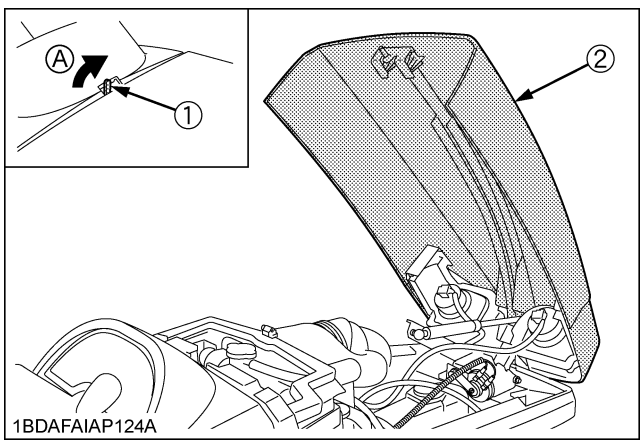
CAUTION

To avoid personal injury from contact with moving parts:

- **Never open the hood or engine side cover while the engine is running.**
- **Do not touch muffler or exhaust pipes while they are hot;**
  Severe burns could result.

■Hood

To open the hood, rotate the knob to release the latch and open the hood.



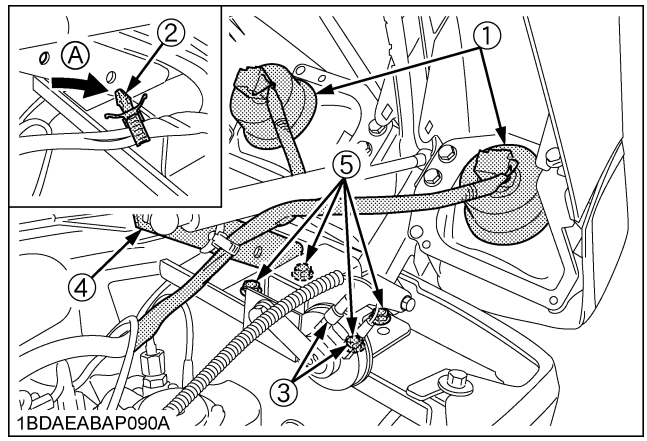
(1) Knob
(2) Hood
(A) "ROTATE"

■Engine Cover

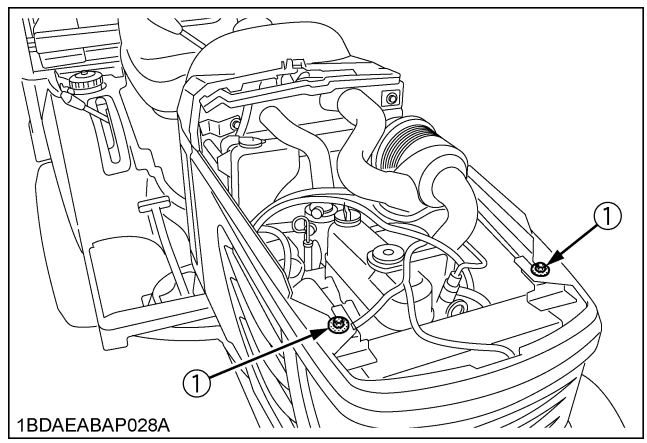
1. To detach the hood, disconnect the headlight connector and the couplers of the horn, and draw the cord clamp out to the hole in the hood post.
2. Remove the four nuts, and the hood can be detached together the hood post.
3. To remove the engine cover, loosen the bolts.

NOTE :

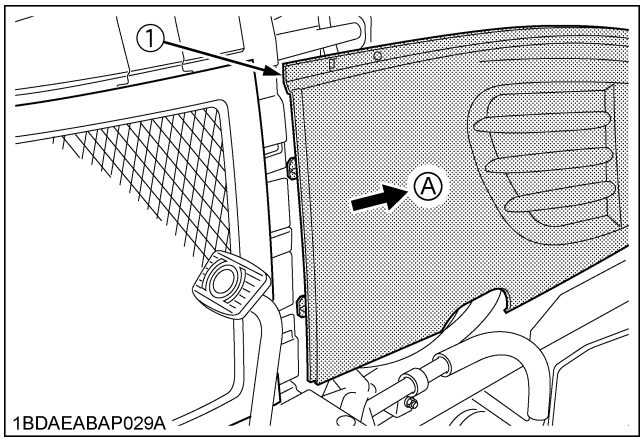
- It is not necessary to detach the engine cover for daily check.



(1) Connector
(2) Cord clamp
(3) Coupler
(4) Hood post
(5) Nut
(A) "DRAW OUT"



(1) Bolt



(1) Engine cover *(A) "PULL"*

DAILY CHECK

To prevent trouble from occurring, it is important to know the condition of the machine. Check it before starting.

WARNING

To avoid serious injury:

- **Be sure to check and service the machine on a level surface with the engine shut off, the key removed and the parking brake securely set.**

	No.	Check item	Ref. Page
Walking around the machine	1	Tire pressure, wear and damage	40, 50
	2	Oil and water leak	-
	3	Engine oil level	48
	4	Transmission fluid level	50
	5	Coolant level in the recovery tank	51
	6	Damage to machine body, tightness of all bolts and nuts	-
	7	Radiator screen	49
	8	Panel screen	49
	9	Brake free travel	64
	10	Fuel level	49
	11	Check air cleaner	53
Mower	1	Oil leak	54
	2	Make sure blade cap screws are tight	77
	3	Blade wear or damage	77
	4	Check all hardware.	-
	5	Make sure all pins are in place	-
	6	Mower deck cleaning	-
While sitting in the operator's seat	1	Speed control pedal Brake pedal	-
	2	Brake lock	-
Turning the key switch "ON"	1	Performance of the easy checker light	17

	No.	Check item	Ref. Page
Starting the engine	1	Color of the exhaust fumes	-
	2	Safety start switch, seat safety control and another safety devices. If either of these do not operate properly, contact your local KUBOTA Dealer immediately.	51
	3	Check for abnormal noise and vibration.	-
Others	1	Check the areas where previous trouble was experienced.	-

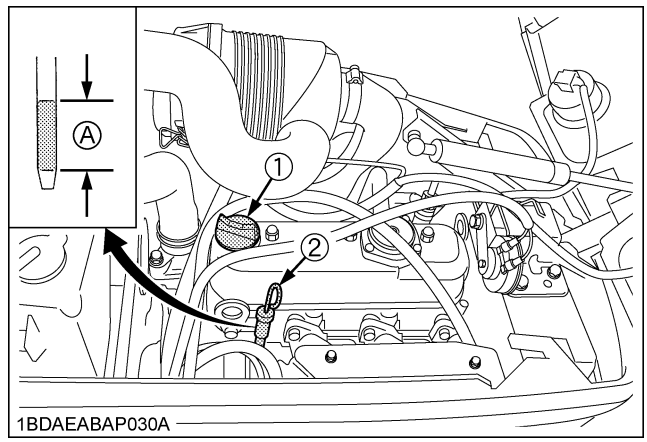
■Checking Engine Oil Level

CAUTION

To avoid personal injury:

- **Be sure to stop the engine before checking the oil level.**

1. Park the machine on a flat surface.
2. Check engine oil before starting the engine or 5 minutes or more after the engine has stopped.
3. To check the oil level, draw out the dipstick, wipe it clean, replace it, and draw it out again. Check to see that the oil level lies between the two notches.
   If the level is too low, add new oil to the prescribed level at the oil inlet.
   (See "LUBRICANTS, FUEL AND COOLANT" in "MAINTENANCE" section.)



(1) Oil inlet *(A) Oil level is acceptable within this range*
(2) Dipstick

IMPORTANT :

- When using an oil of different maker or viscosity from the previous one, remove all of the old oil and oil filter. Never mix two different types of oil.
- If oil level is low, do not run the engine.

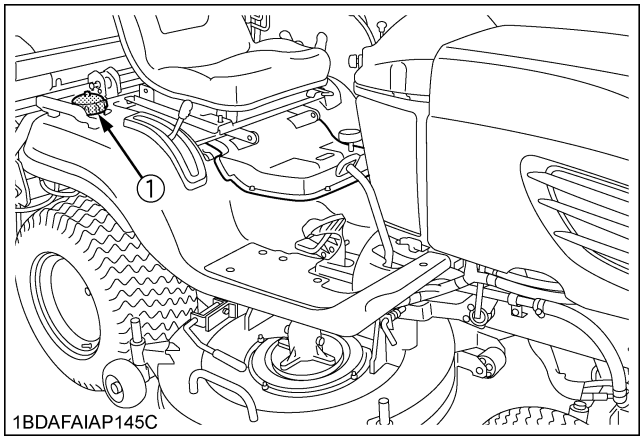
■Checking and Refueling

WARNING

To avoid serious injury:

- **Do not smoke while refueling.**
- **Be sure to stop the engine and remove the key before refueling.**
- **Handle fuel carefully. If the engine is running, do not fill the fuel tank. If engine is hot, let engine cool several minutes before adding fuel. Do not smoke while filling the fuel tank or servicing the fuel system. Fill fuel tank only to bottom of filler neck.**
- **To avoid allergic skin reaction: Wash hands immediately after contact with diesel fuel.**

1. Turn the key switch to "ON", check the amount of fuel by fuel gauge.
2. Fill fuel tank when fuel gauge shows 1/4 or less fuel in tank.
3. Use grade No.2-Diesel fuel at the temperature above -10℃.
   Use grade No.1-Diesel fuel at the temperature below -10℃.



(1) Fuel tank cap

Fuel tank capacity	20 L

IMPORTANT :

- Do not permit dirt or trash to get into the fuel system.
- Be careful not to let the fuel tank become empty, otherwise air will enter the fuel system, necessitating bleeding before next engine start.
- Be careful not to spill during refueling. If should spill, wipe it off at once, or it may cause a fire.
- To prevent condensation (water) accumulation in the fuel tank, fill the tank before parking overnight.

■Checking and Cleaning Panel and Radiator Screen

CAUTION

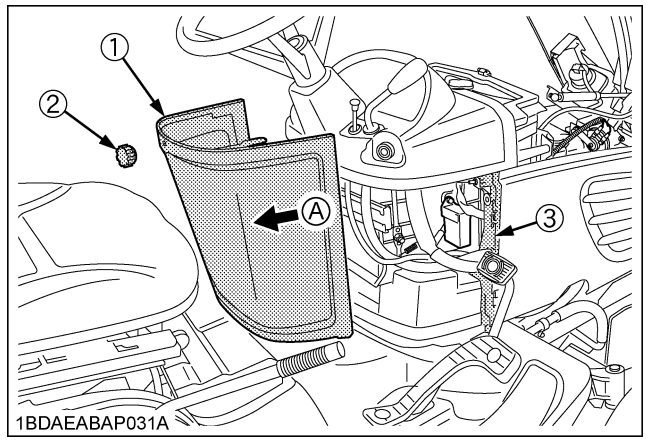
To avoid personal injury:

- **Be sure to stop the engine and remove the key before removing the screen.**

1. Check the panel screens to be sure they are clean from debris.
2. Detach the lower panel plate.

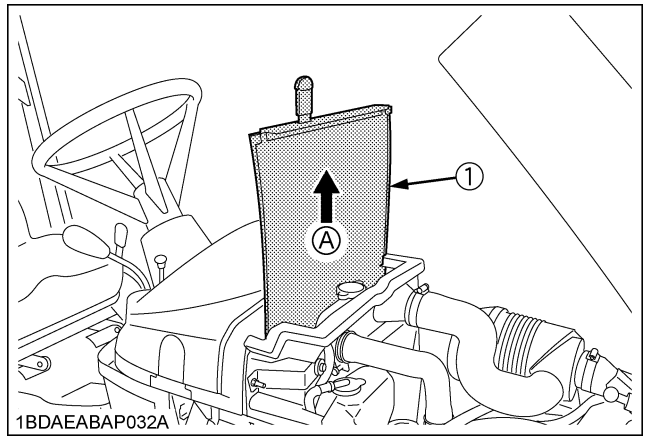
NOTE :

- If the dust or chaff is accumulated in the battery compartment, clean it thoroughly.



(1) Panel
(2) Knob
(3) Center pillar
(A) "DETACH"

3. Detach the radiator screen, and then remove all the foreign material.



(1) Radiator screen
(A) "DETACH"

IMPORTANT :

- Panel and radiator screen must be clean from debris to prevent engine from overheating and to allow good air intake for air cleaner.

- Be sure to reinstall the panel on the pillar completely to prevent the invasion of dust.
- Be sure to stop the engine to avoid personal injury and to allow good air intake for air cleaner.

■Checking Tire Pressure

WARNING

To avoid personal injury:

- **Do not attempt to mount a tire on a rim. This should be done by a qualified person with the proper equipment.**
- **Always maintain the correct tire pressure. Do not inflate tires above the recommended pressure shown in the Operator's Manual.**
- **Inflation pressure in front tires rises quickly when using compressed air.**

CAUTION

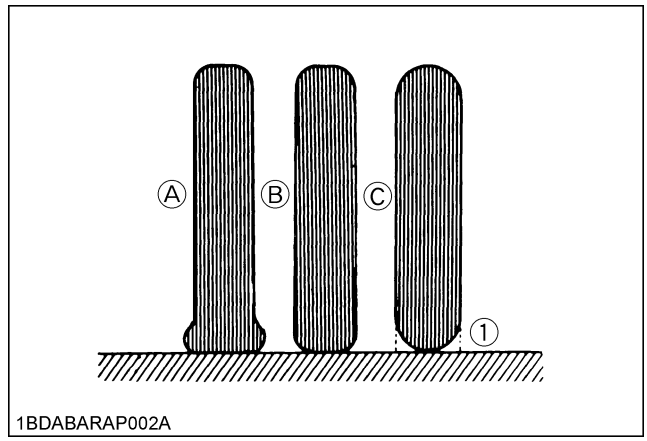
Never operate machine with a loose rim, wheel, or axle.

- **Whenever bolts are loosened, retighten to specified torque.**
- **Check all bolts frequently and keep them tightened.**

◆ Inflation Pressure

Though the inflation pressure is factory-set to the prescribed level, it naturally drops slowly in the course of time. Thus, check it everyday and inflate as necessary.

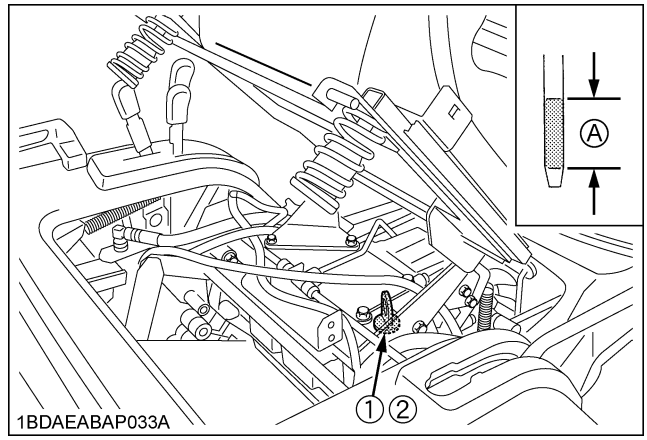
	Tire sizes	Recommended Inflation Max. Pressure
Front	16 x 7.50 - 8, Turf	120 kPa (1.2 kgf/cm^2)
Rear	24 x 12.00 - 12, Turf	100 kPa (1.0 kgf/cm^2)



(1) Ground
(A) "INSUFFICIENT"
(B) "NORMAL"
(C) "EXCESSIVE"

■Checking Transmission Fluid Level

1. Park the machine on a flat surface, raise the mower and lower the grass catcher and shut off engine.
2. To check the oil level, draw out the dipstick, wipe it clean, replace it, and draw it out again. Check to see that the oil level lies between the two notches.
   If the level is too low, add new oil to the prescribed level at the oil inlet.
   (See "LUBRICANTS, FUEL AND COOLANT" in "MAINTENANCE" section.)



(1) Oil inlet
(2) Dipstick
(A) Oil level is acceptable within this range.

IMPORTANT :

- If oil level is low, do not run the engine.

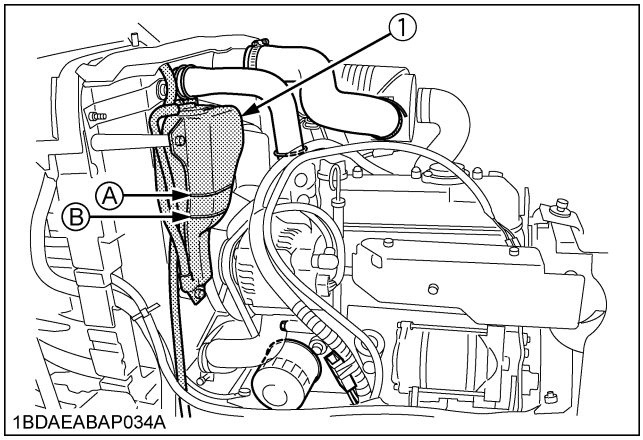
■Checking Coolant Level

CAUTION

To avoid personal injury:

- **Be sure to stop the engine and remove the key before checking coolant level.**
- **Do not remove the radiator cap while coolant is hot. When cool, slowly rotate cap to the first stop and allow sufficient time for excess pressure to escape before removing the cap completely.**

1. Check to see that the coolant level is between the "H" and "L" marks of recovery tank.
2. When the coolant level drops due to evaporation, add water only. In case of leakage, add anti-freeze and water in the specified mixing ratio up to the "H" level. (See "Flush Cooling System and Changing Coolant" in "EVERY 2 YEAR" in "PERIODIC SERVICE" section.)



(1) Recovery tank *(A) "H"* *(B) "L"*

IMPORTANT :

- If the radiator cap has to be removed, follow the caution above and securely retighten the cap.
- Use clean, distilled water and anti-freeze to fill the radiator.
- If water should leak, consult your local KUBOTA Dealer.

■Checking Movable Parts

If any of the movable parts, such as levers and pedals, is not smoothly moved because of rust or anything sticky, do not attempt to force it into motion.

In the above case, remove the rust or the sticky object, and apply oil or grease on the relevant spot.

Otherwise, the machine may get damaged.

EVERY 50 HOURS

■Checking Engine Start System

The Engine Start System in your machine are designed to protect you while operating. Please check these Engine Start System periodically - daily is best - to test function of the Engine Start System before operation.

CAUTION

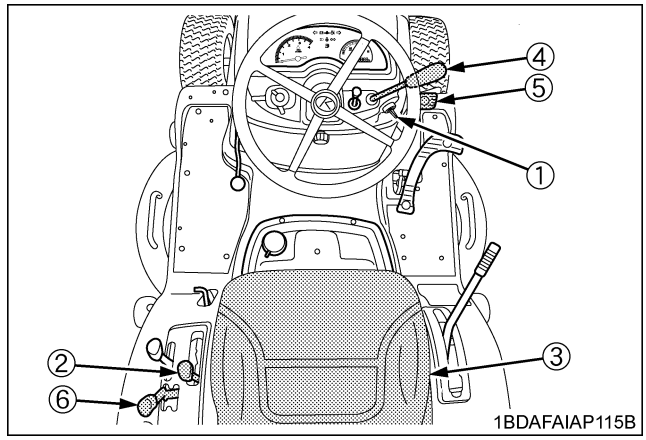
To avoid personal injury:

- **Do not allow anyone near the machine while testing.**
- **If the machine does not pass one of the following tests, do not operate the machine. Contact your KUBOTA Dealer.**

IMPORTANT :

- Check the following tests before operating the machine.

1. Check the following tests before operating the mower. Sit on the operator's seat for all tests.
2. If the machine does not pass one of the following tests, do not operate the machine.
   Contact your KUBOTA Dealer.



(1) Key switch *(4) Hand throttle lever*
(2) PTO clutch lever *(5) Brake pedal*
(3) Operator's seat *(6) Hydraulic container dump lever*

◆ **Safety Start Control 1**

1. Depress the brake pedal (5) fully.
2. Engage the PTO lever (2).
3. Turn the key switch (1) to the "START" position.
4. The engine should not crank.

◆ **Safety Start Control 2**

1. Disengage the PTO lever (2).
2. Release the brake pedal (5).
3. Turn the key (1) to the "START" position.
4. The engine should not crank.

■Checking OPC System

The OPC (Operator Presence Control) system in your machine are designed to protect you while operating. Please check these OPC system periodically - daily is best - to test function of the OPC system before operation.

CAUTION

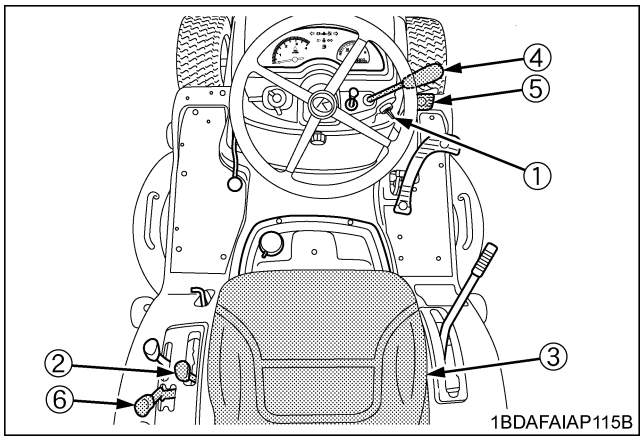
To avoid personal injury:

- **Do not allow anyone near the machine while testing.**
- **If the machine does not pass one of the following tests, do not operate the machine. Contact your KUBOTA Dealer.**

IMPORTANT :

- Check the following tests before operating the machine.

1. Check the following tests before operating the mower. Sit on the operator's seat for all tests.
2. If the machine does not pass one of the following tests, do not operate the machine.
   Contact your KUBOTA Dealer.



(1) Key switch
(2) PTO clutch lever
(3) Operator's seat
(4) Hand throttle lever
(5) Brake pedal
(6) Hydraulic container dump lever

◆ **Seat Safety Control 1**

1. Run the engine at half throttle (4).
2. Engage the PTO lever (2).
3. Stand up. (DO NOT GET OFF THE MACHINE.)
4. Engine should shut off.

◆ **Seat Safety Control 2**

1. Run the engine at half throttle (4).
2. Disengage the PTO lever (2).
3. Release the brake pedal (5).
4. Stand up. (DO NOT GET OFF THE MACHINE.)
5. Engine should shut off.

■Checking PTO Control System

The PTO control system in your machine are designed to protect you while operating. Please check these PTO control system periodically - daily is best - to test function of the PTO control system before operation.

CAUTION

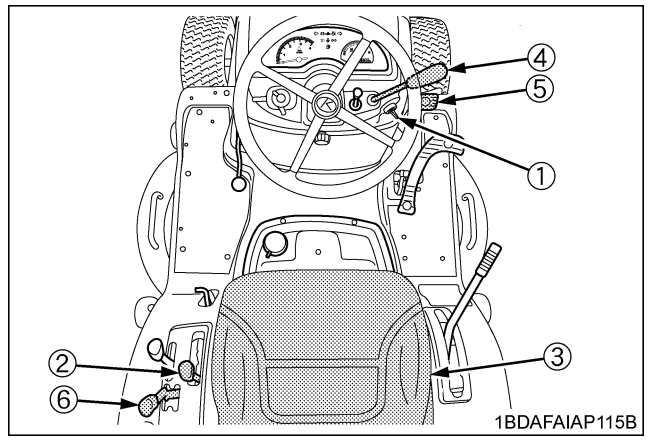
To avoid personal injury:

- **Do not allow anyone near the machine while testing.**
- **If the machine does not pass one of the following tests, do not operate the machine. Contact your KUBOTA Dealer.**

IMPORTANT :

- Check the following tests before operating the machine.

1. Check the following tests before operating the mower. Sit on the operator's seat for all tests.
2. If the machine does not pass one of the following tests, do not operate the machine.
   Contact your KUBOTA Dealer.



(1) Key switch
(2) PTO clutch lever
(3) Operator's seat
(4) Hand throttle lever
(5) Brake pedal
(6) Hydraulic container dump lever

◆ **PTO Safety Control 1**

1. Dismount the container from the platform.
2. Run the engine at half throttle (4).
3. Engage the PTO lever (2).
4. Engine should shut off.

◆ **PTO Safety Control 2**

1. Run the engine at half throttle (4).
2. Engage the PTO lever (2).
3. Dump or lift up the grass catcher with the hydraulic container dump lever (6).
4. Engine should shut off.

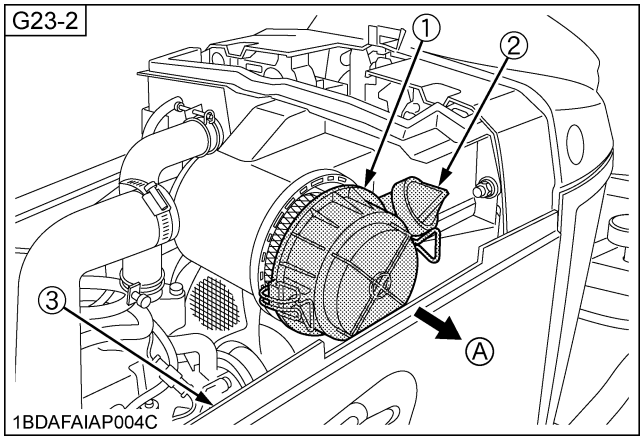
■Cleaning Air Cleaner Element

CAUTION

To avoid personal injury:

- **Be sure to stop engine and remove the key before cleaning air cleaner element.**

1. Remove the air cleaner cover and element.
   (1) Undo the hook.
   (2) Turn the cover clockwise and detach it.
   (3) **[Only G23-2]**
   Turn the cover, and place the evacuator valve on the position as shown in the figure.
   Take out the cover while pulling the upper edge of the engine cover forward.



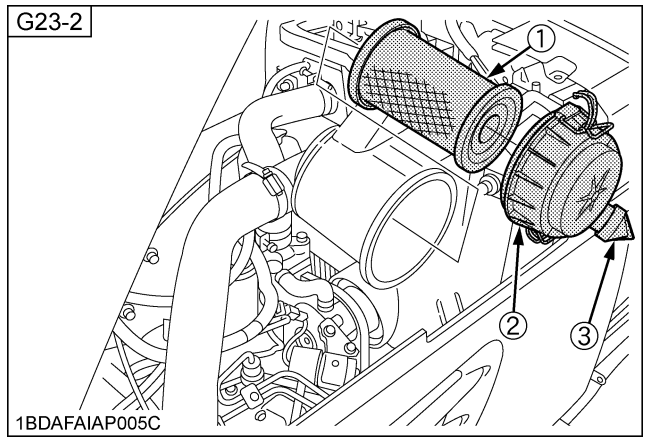
(1) Cover
(2) Evacuator valve
(3) Engine cover
(A) "PULL"

2. Clean the element:
   (1) When dry dust adheres to the element, blow compressed air from the inside, turning the element. Pressure of compressed air must be under 205kPa (2.1kgf/cm^2, 30psi).
   (2) When carbon or oil adheres to the element, soak the element in detergent for 15 minutes, and then wash it several times in water, rinse with clean water and dry it naturally. After element is fully dried, inspect the inside of the element with a light and check if it is damaged or not. (referring to the instructions on the label attached to the case.)

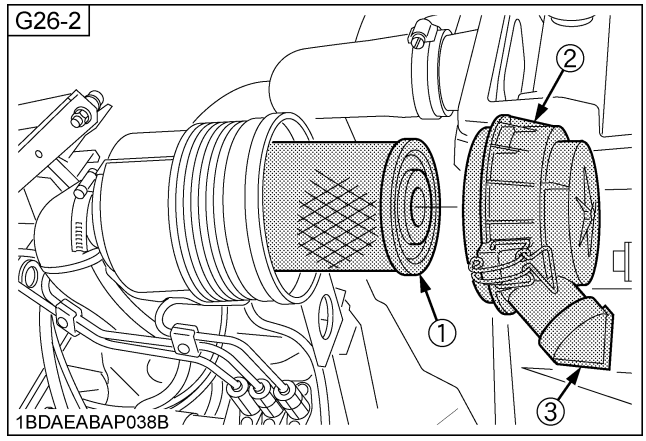
3. Replace the air cleaner element if:
   Once yearly or after every sixth cleaning, whichever comes first.

NOTE :

- Checked to see if the evacuator valve is blocked with dust.



(1) Element
(2) Cover
(3) Evacuator valve



(1) Element
(2) Cover
(3) Evacuator valve

IMPORTANT :

- The air cleaner uses a dry element, never apply oil.
- Do not run the engine with the filter element removed.
- Align the arrow marks when reinstalling the cover. If the cover is improperly fitted, dust passes by the baffle and directly adheres to the element.

◆ **Evacuator valve**

Open the evacuator valve one a week under ordinary conditions - or daily when used in a dusty place - to get rid of large particles of dust and dirt.

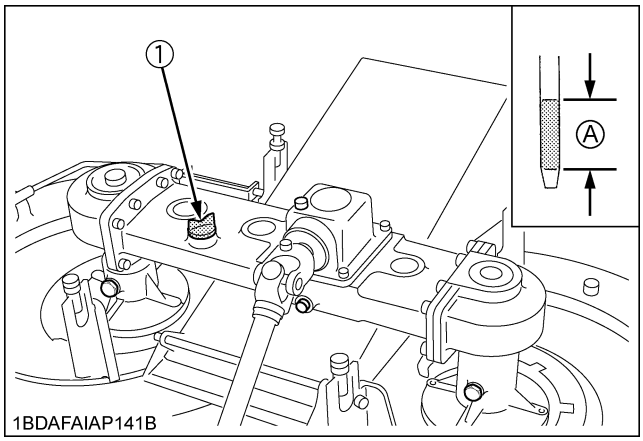
■Checking Gear Box Oil Level

CAUTION

To avoid personal injury:

- **Always stop the engine and remove the key before checking oil.**

1. Park the machine on a flat surface and lower the mower to the ground.
   To check the oil level, draw out the dipstick, wipe it clean, replace it, and draw it out again. Check to see that the oil level lies between the two notches.
   If the level is too low, add new oil to the prescribed level at the oil inlet.
   (See "LUBRICANTS, FUEL AND COOLANT" in "MAINTENANCE" section.)



(1) Oil level dipstick *(A) Oil level is acceptable within this range*

NOTE :

- Check the oil level of the transmission case with the mower lifted up.

IMPORTANT :

- If oil level is low, do not run the engine.

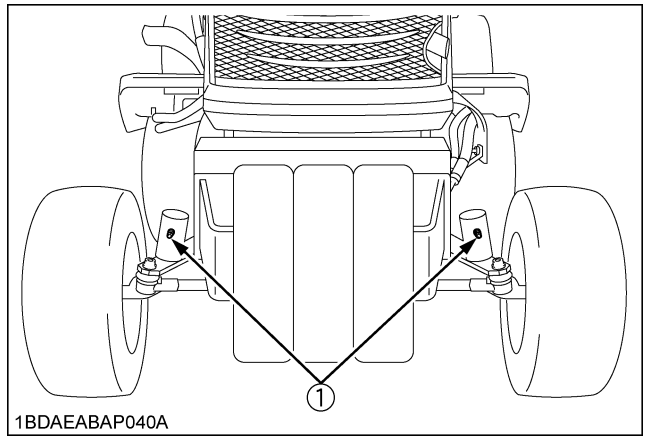
■Greasing

CAUTION

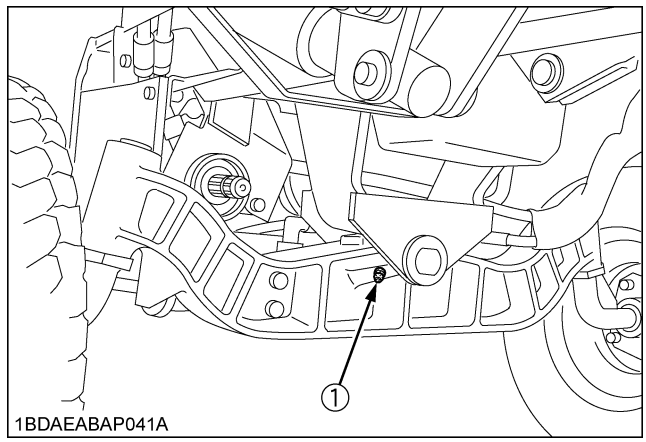
To avoid personal injury:

- **Be sure to stop the engine and remove the key before greasing.**

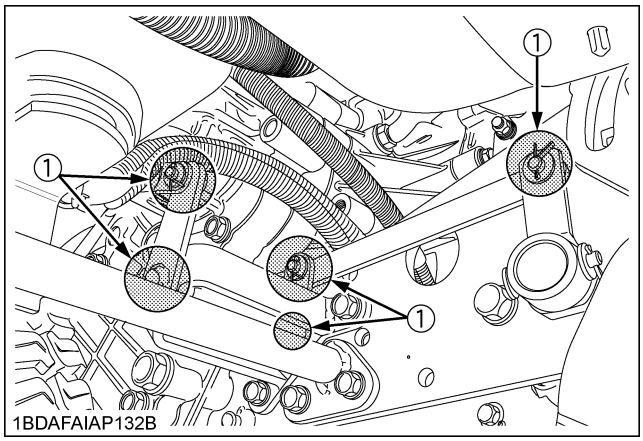
Grease the following locations.



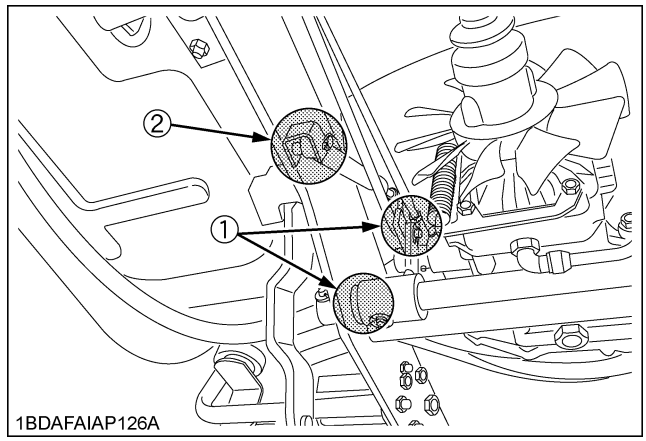
(1) Front axle (King pin)



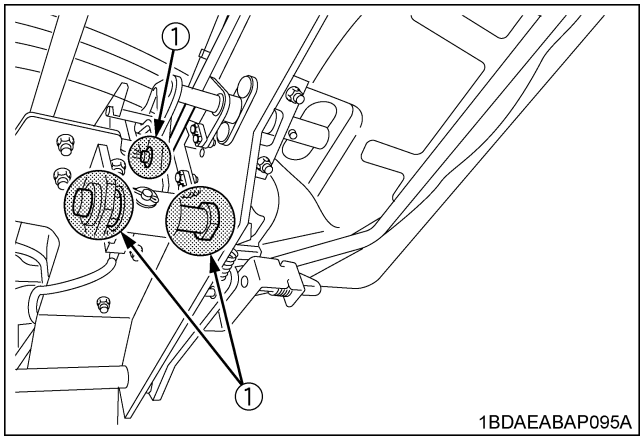
(1) Front axle (Center pin)



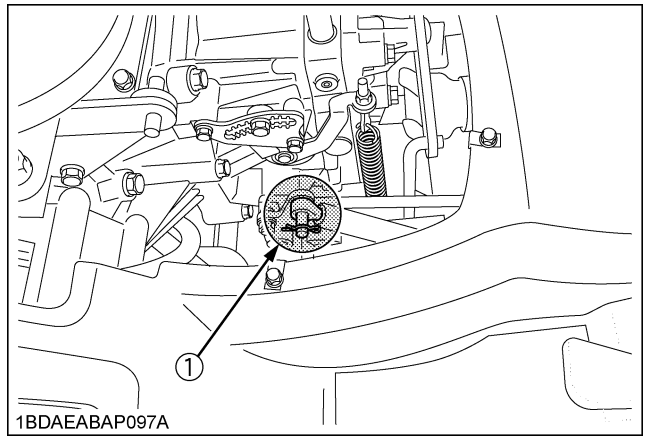
(1) Middle link (LH, RH)



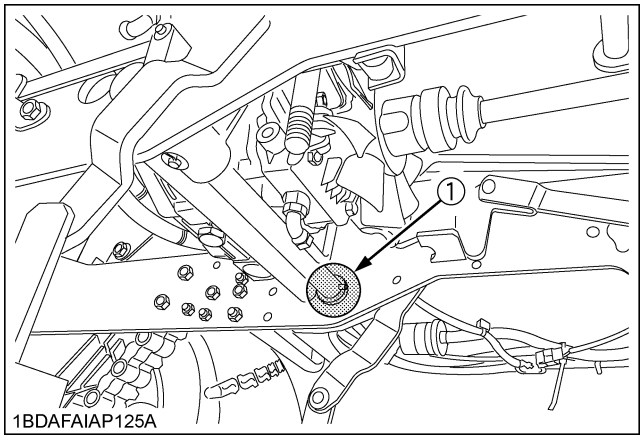
(1) Brake pedal link
(2) HST speed change pedal dumper



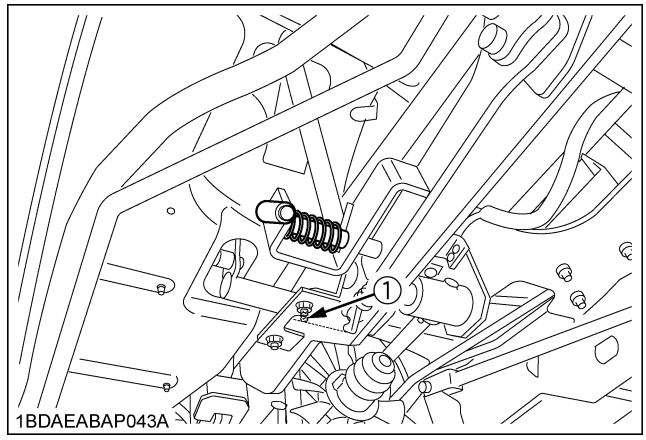
(1) Brake pedal link



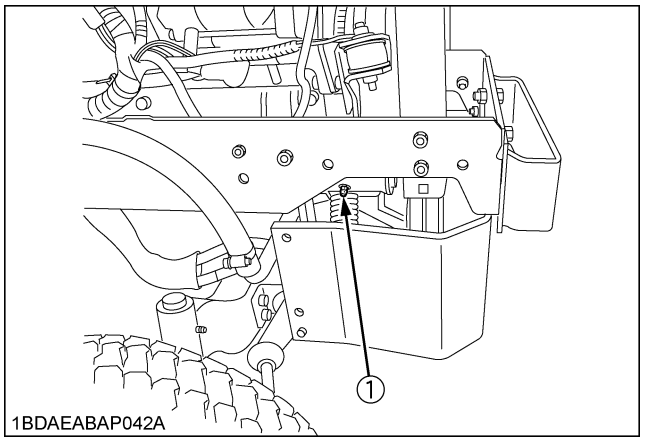
(1) HST speed change pedal dumper



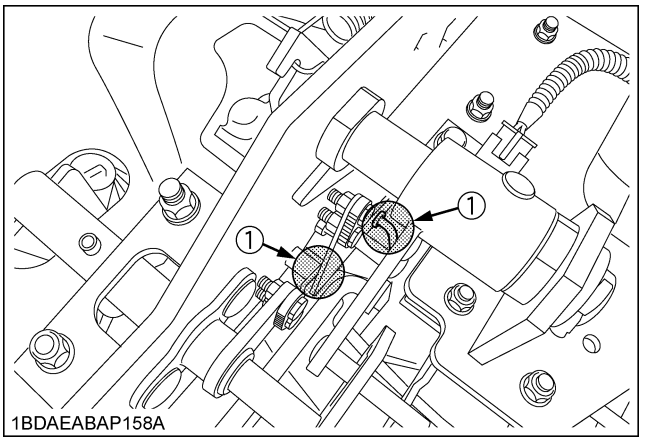
(1) Brake pedal link



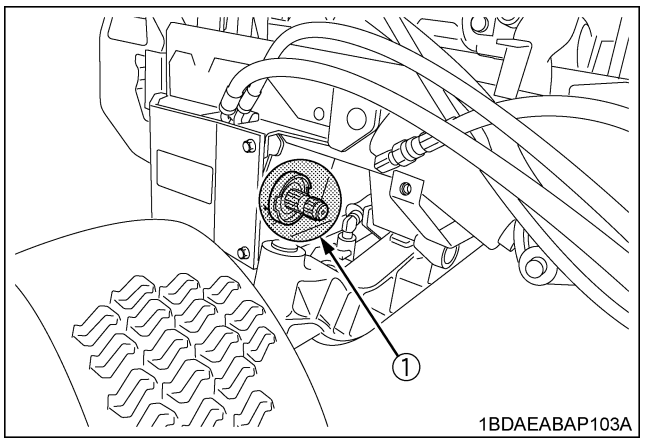
(1) HST pedal boss



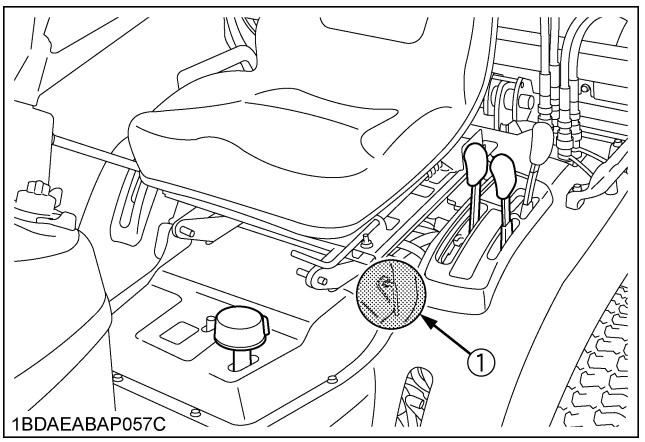
(1) Tension PTO arm



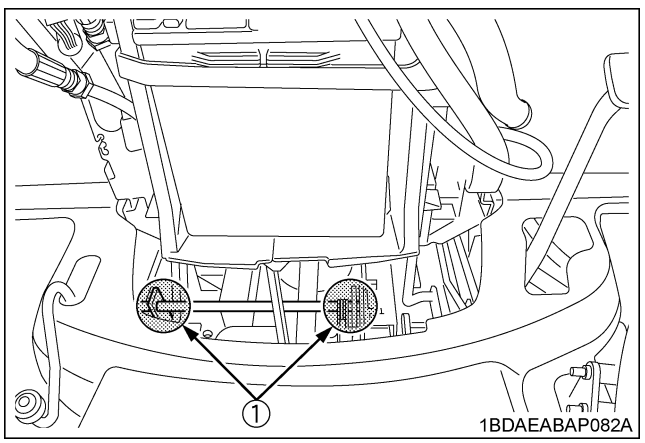
(1) Cruise control link



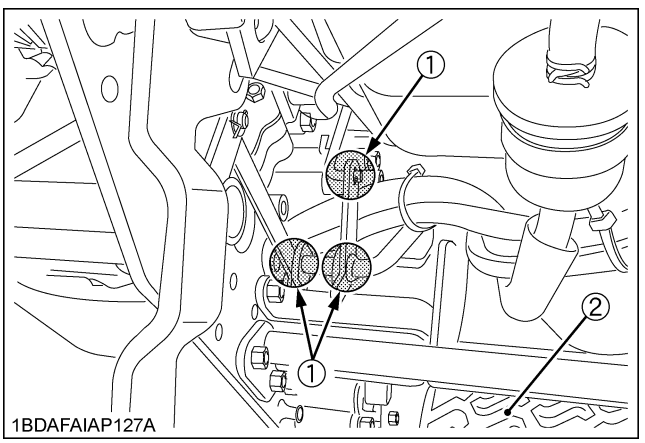
(1) PTO (Spline)



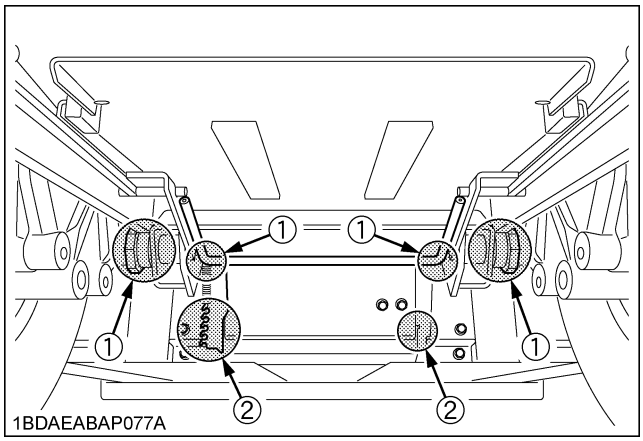
(1) Differential lock pedal link



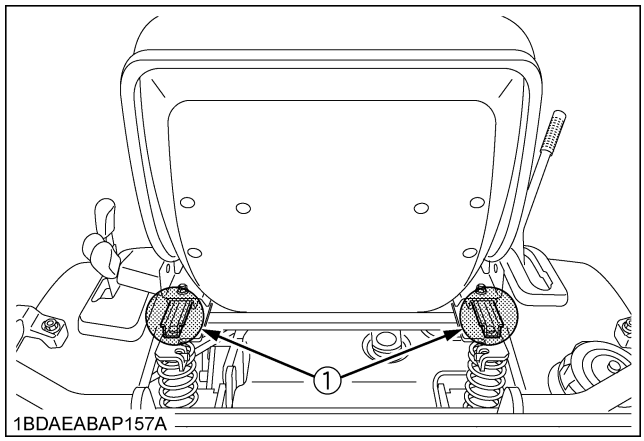
(1) Parking lock pedal link



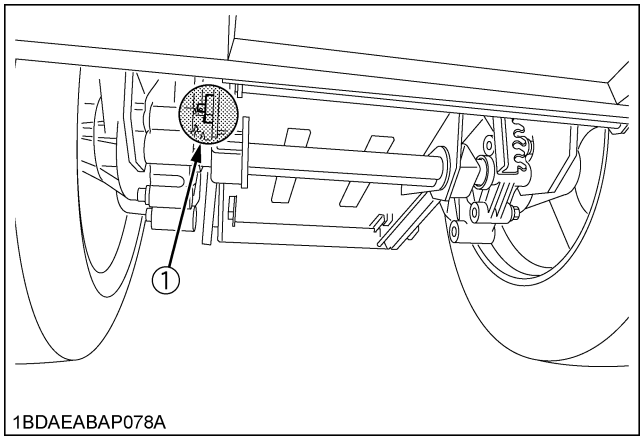
(1) Differential lock pedal link (2) Rear tire (LH)



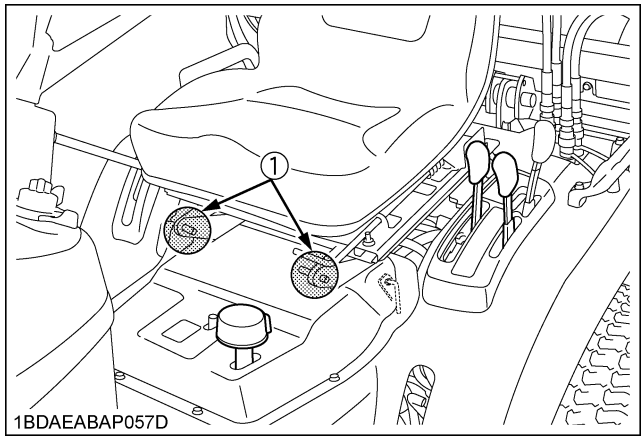
(1) Under duct pivot *(2) Sensor system pivot*



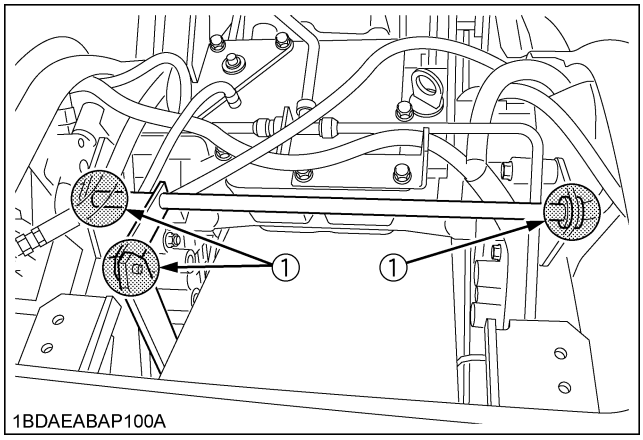
(1) Seat adjuster



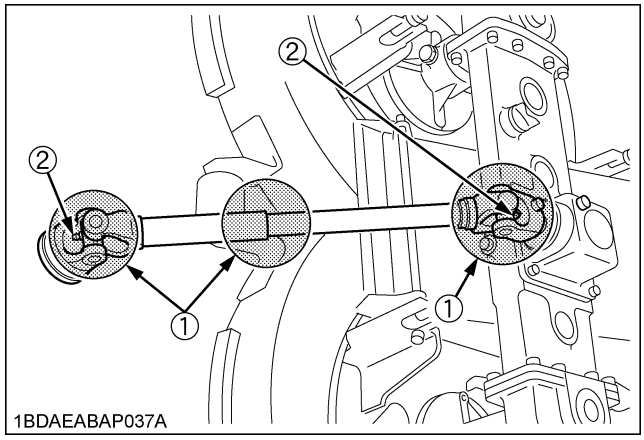
(1) Duct cleanup system link



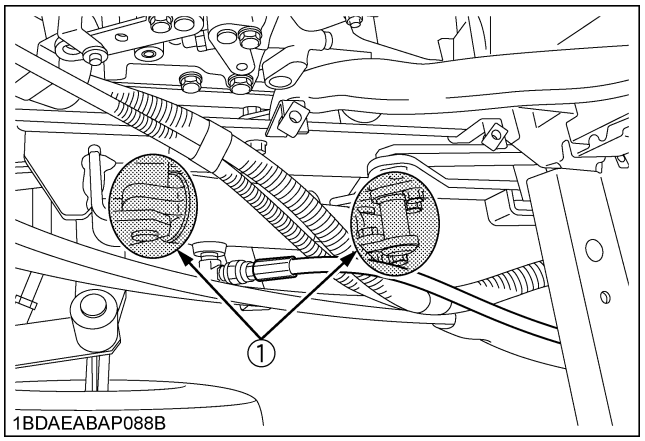
(1) Seat pivot



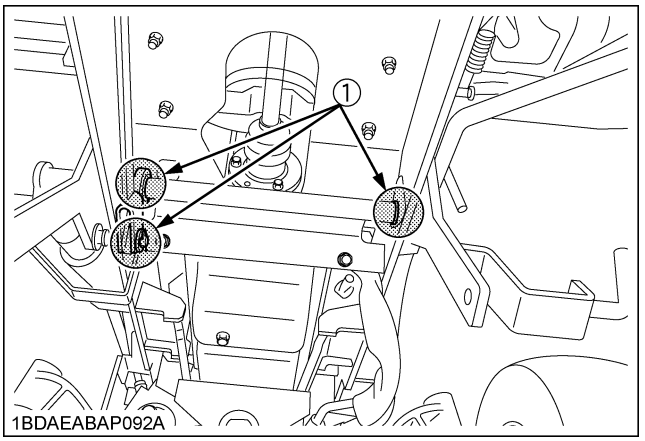
(1) Duct cleanup system link



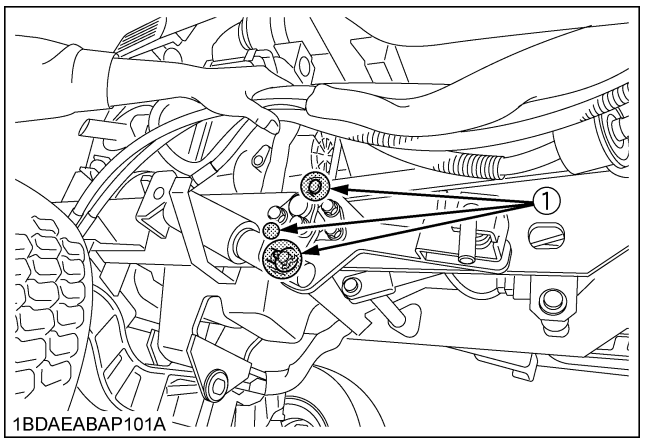
(1) Mower universal joint
(2) Mower universal joint (Grease nipple)



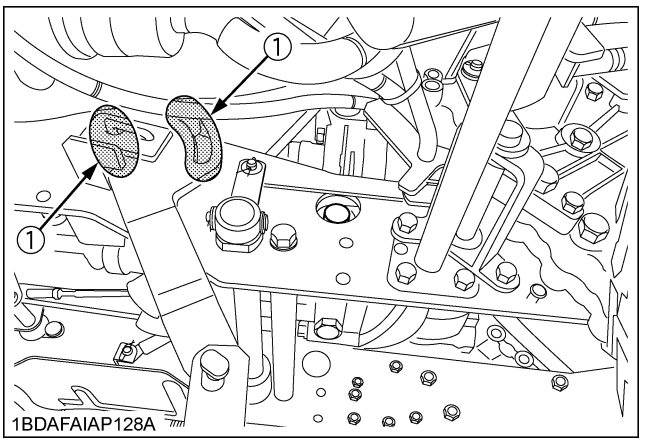
(1) Mower lift cylinder



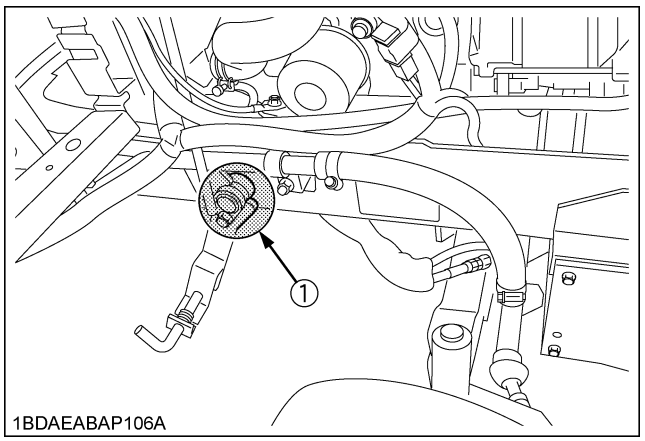
(1) Mower lift link front



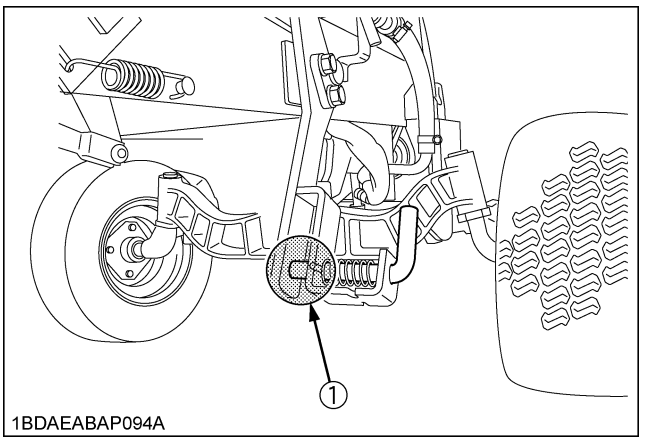
(1) Mower lift cylinder



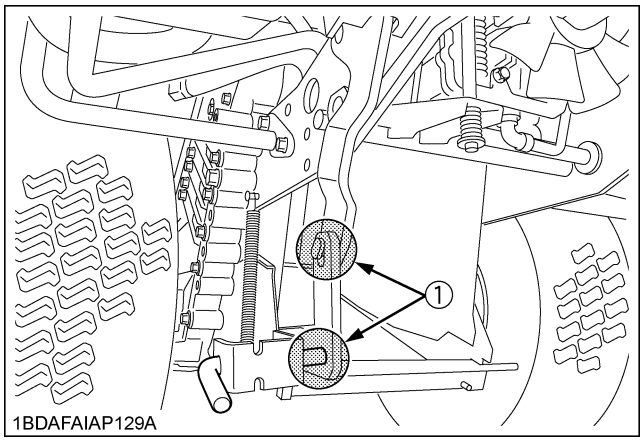
(1) Mower lift arm rear (LH, RH)



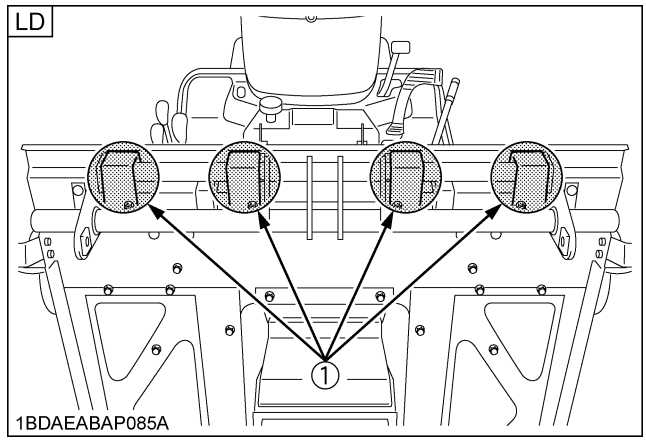
(1) Mower lift arm front (RH)



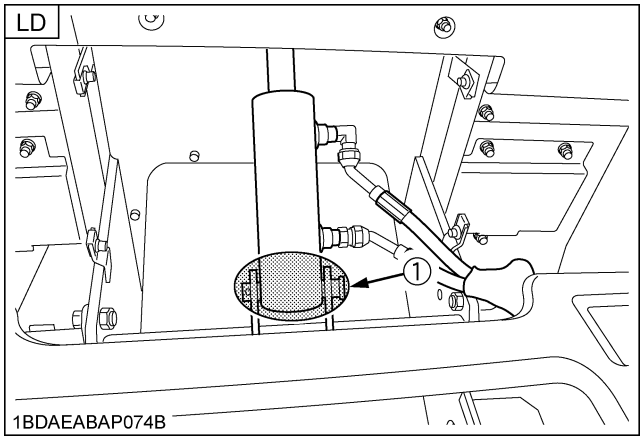
(1) Mower lift pin front (LH, RH)



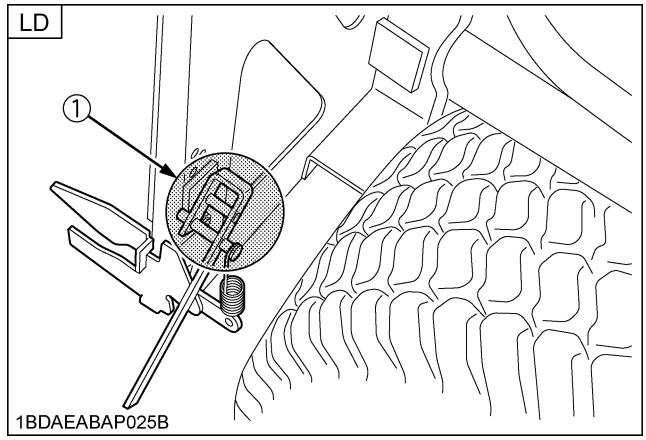
(1) Mower lift link rear (LH, RH)



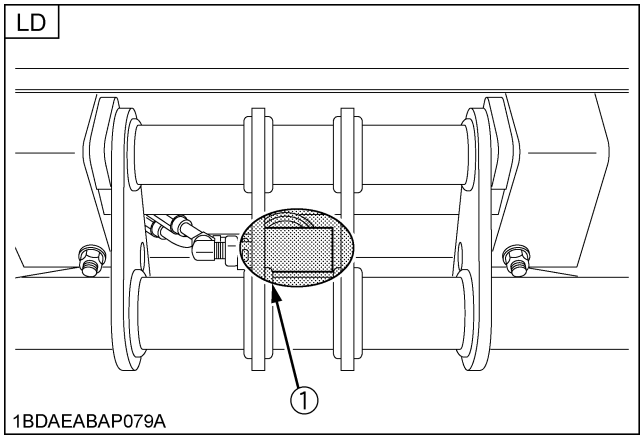
(1) Grass container rotation pivot



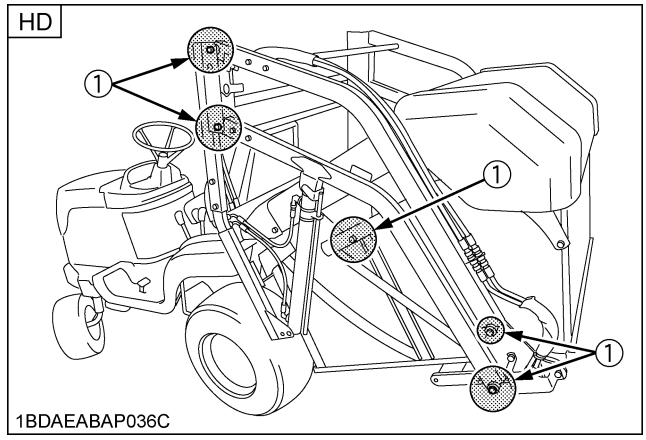
(1) Dump cylinder



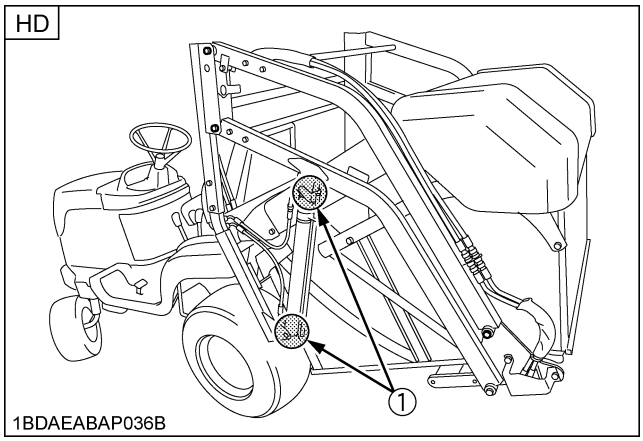
(1) Lock lever (LH, RH)



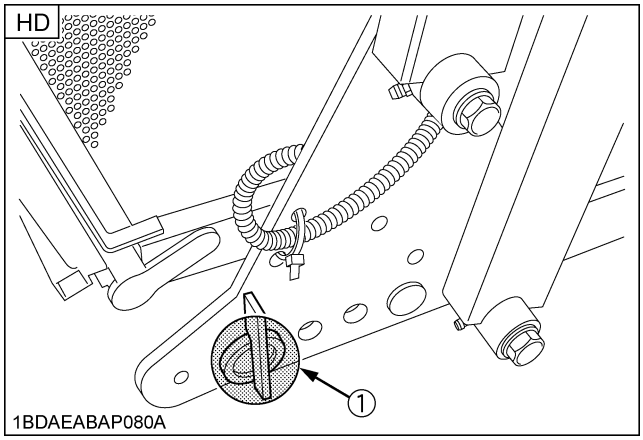
(1) Dump cylinder



(1) Grass container pivot (Grease nipple) (LH, RH)



(1) Grass container lift cylinder (LH, RH)



(1) Dump pivot (LH, RH)

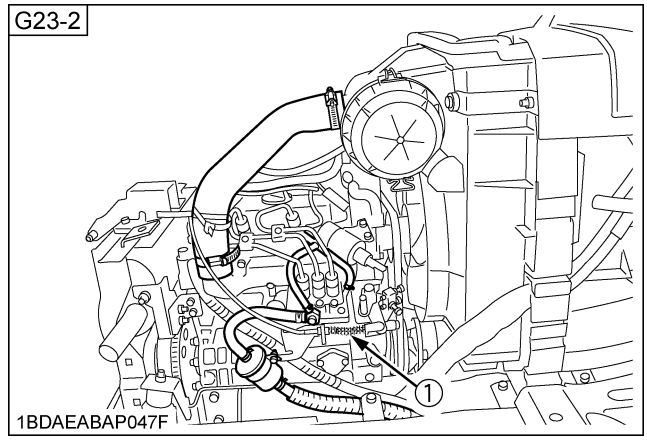
■Oiling

CAUTION

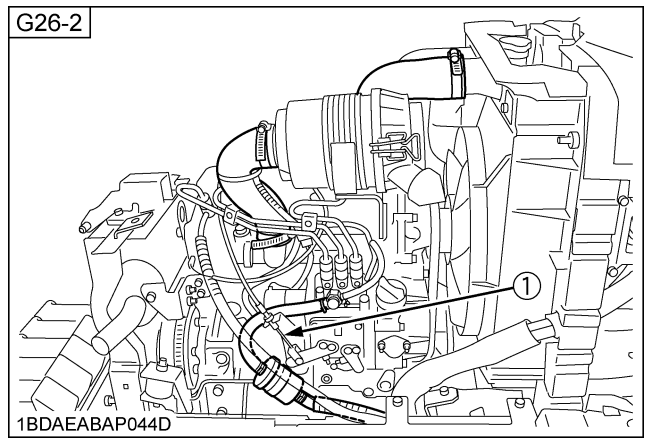
To avoid personal injury:

- **Be sure to stop the engine and remove the key before greasing.**

Oil the following locations.



(1) Throttle cable



(1) Throttle cable

■Battery

DANGER

To avoid the possibility of battery explosion:
For the refillable type battery, follow the instructions below.

- **Do not use or charge the refillable type battery if the fluid level is below the LOWER (lower limit level) mark. Otherwise, the battery component parts may prematurely deteriorate, which may shorten the battery's service life or cause an explosion. Check the fluid level regularly and add distilled water as required so that the fluid level is between the UPPER and LOWER levels.**

DANGER

To avoid serious injury or death:

- **When the battery is being activated, hydrogen and oxygen gases in the battery are extremely explosive. Keep open sparks and flames away from the battery at all times, especially when charging the battery.**

WARNING

To avoid serious injury:

- **Never remove the battery cap while the engine is running.**
- **Keep electrolyte away from eyes, hands and clothes. If you are spattered with it, wash it away completely with water immediately and get medical attention.**
- **Keep open sparks and flames away from the battery at all times. Hydrogen gas mixed with oxygen becomes very explosive.**
- **Wear eye protection and rubber gloves when working around battery.**

The factory-installed battery is of non-refillable type.
If the battery is weak, charge the battery or replace it with new one.

IMPORTANT :

- Mishandling the battery shortens the service life and adds to maintenance costs.
  The original battery is maintenance free, but needs some servicing.
  If the battery is weak, the engine will be difficult to start and the lights will be dim. It is important to check the battery periodically.
- When exchanging an old battery for new one, use battery of equal specification in table below.

Machine Type	Battery Type	Volts (V)	Reserve Capacity (min)	Cold Cranking Amps	Normal Charging Rate(A)
G23-2 G26-2	526RMF	12	80	540	6.5

(For non-accessible maintenance-free type batteries.)
Maintenance-free, non-accessible batteries are designed to eliminate the need to add water. Yet the volume of electrolyte above plates may eventually become depleted due to abnormal conditions such as high heat or improper regulator setting. Use a voltmeter to check the state of charge. (See reference chart below to determine if charging is necessary.)

Battery voltage	Reference state of charge
12.6	100%(Full charge)
12.4	75%
12.2	50%
12.0	25%
11.8	0%

◆ Battery Charging

DANGER

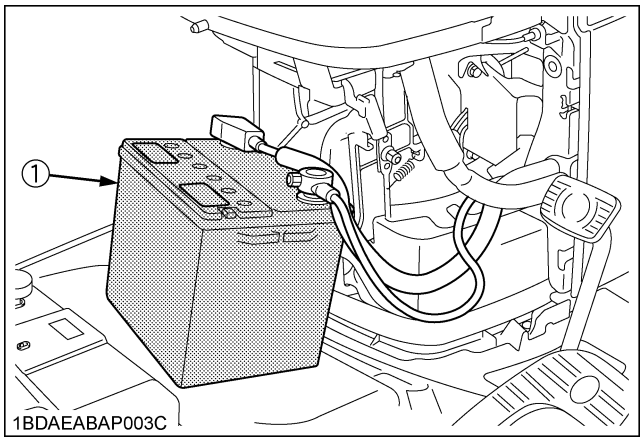
To avoid serious injury or death:

- **When the battery is being activated, hydrogen and oxygen gases in the battery are extremely explosive. Keep open sparks and flames away from the battery at all times, especially when charging the battery.**

WARNING

To avoid serious injury:

- **When disconnecting the cable from the battery, start with the negative terminal first. When connecting the cable to the battery, start with the positive terminal first.**
- **Never check battery charge by placing a metal object across the posts.**
  Use a voltmeter or hydrometer.



(1) Battery

1. To slow charge the battery, connect the battery positive terminal to the charger positive terminal and the negative to the negative, then charge for at least 1 hour at 6.5 amperes.
2. A boost charge is only for emergencies. It will partially charge the battery at a high rate and in a short time.
   When using a boost-charged battery, it is necessary to recharge the battery as early as possible.
   Failure to do this will shorten the battery's service life.
3. When the specific gravity of electrolyte is between 1.27 and 1.29 the charging is completed.

◆ **Battery for storage**

1. When storing the tractor for a long period, remove the battery from tractor, adjust the electrolyte to the proper level and store in a dry place out of direct sunlight.
2. The battery self-discharges while it is stored.
   Recharge it once every three months in hot seasons and once every six months in cold seasons.

■Front PTO Belt Tension

CAUTION

To avoid personal injury:

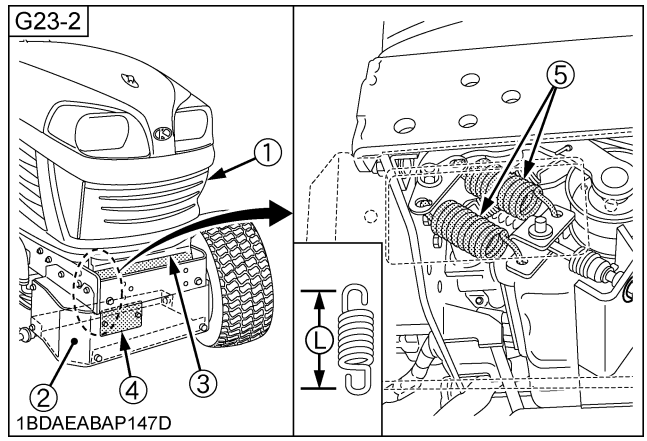
- **Always stop the engine, set the parking brake, remove the key, and disengage the PTO lever before working on the front PTO.**

◆ **Adjusting**

If the front PTO belts slip when the PTO is operating under load, check the front PTO belt tension and adjust the tension spring length, as explained below.

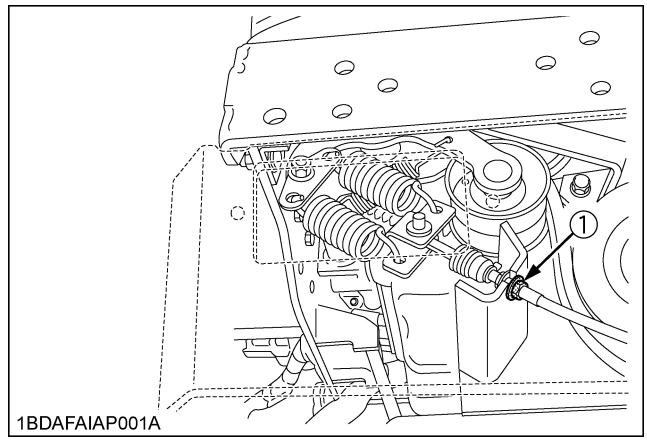
[G23-2]

1. Remove the engine cover. (See "ENGINE COVER" in "PERIODIC SERVICE".)
2. Remove the cover 2 and cover 3.
3. Engage the PTO lever.
4. Measure tension spring length (L).



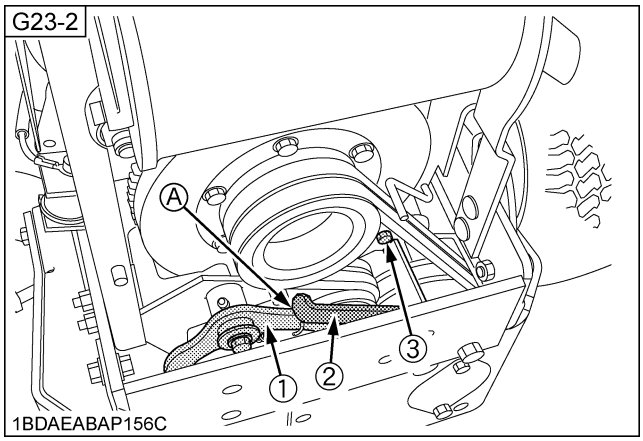
(1) Engine cover
(2) Cover 1
(3) Cover 2
(4) Cover 3
(5) Tension spring

5. If (L) is shorter than 88 mm, remove the cover 1 and adjust it with the tension clutch cable adjusting nut.
   - (L) should be 88 to 91 mm.



(1) Adjusting nut

6. After adjustment, tighten the nut securely.
7. Check the stay is contacting with the tension arm. If not, make the stay contact with the tension arm by loosening the bolt. Then tighten the bolt again.

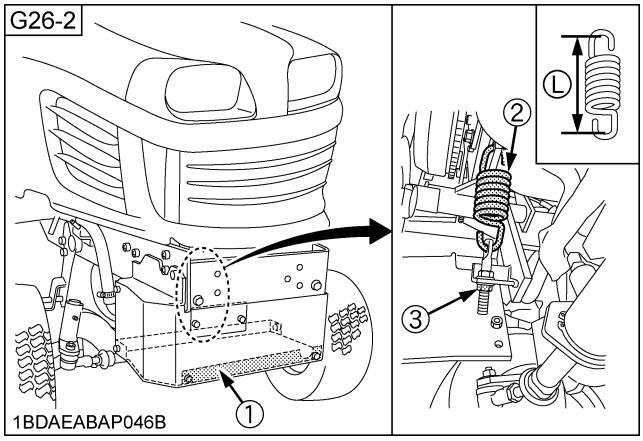


(1) Tension arm
(2) Stay
(3) Bolt
(A) Contacting point

8. Attach the covers and engine cover.
9. Disengage the PTO lever.

[G26-2]

1. Remove the cover.
2. Measure tension spring length (L).
3. If (L) is shorter than 113 mm, adjust it with the tension clutch cable adjusting nut.
   - (L) should be 113 to 117 mm.
4. After adjustment, tighten the nut securely.
5. Attach the cover.



(1) Cover
(2) Tension spring
(3) Adjusting nut

IMPORTANT :

- When replacing the front PTO belts, be sure to replace the complete set. These belts are a matched set.

EVERY 100 HOURS

■Checking Fuel Lines and Fuel Filter

CAUTION

To avoid personal injury:

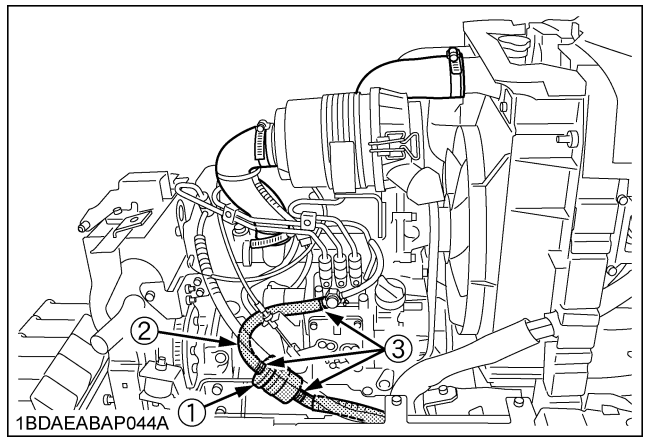
- **Stop the engine and remove the key before checking fuel lines and fuel filter.**
- **Check the fuel lines periodically. The fuel lines are subject to wear and aging. Fuel may leak out onto the running engine, causing a fire.**

The fuel line connections should be checked annually or every 100 service hours, whichever comes first.

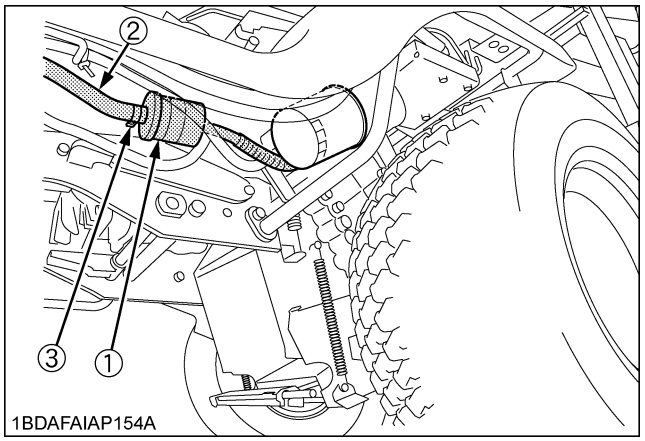
1. The fuel line is made of rubber and ages regardless of service period.
2. After inspection, if the fuel line and clamps are found damaged or deteriorated, replace them.
3. Check fuel filter, if it is clogged by debris or contaminated with water, replace it.

IMPORTANT :

- When the fuel line is disconnected for maintenance or repair, close both ends of the fuel line with clean plug of suitable size to prevent dust and dirt from entering. Particular care must be taken not to admit dust and dirt into the fuel system. Entrance of dust and dirt cause malfunction of the fuel pump.



(1) Fuel filter
(2) Fuel line
(3) Pipe clamp



(1) Fuel pump and filter
(2) Fuel line
(3) Pipe clamp

■Checking Parking Brake

CAUTION

To avoid personal injury:

- **Park the machine on a firm and level surface.**
- **Stop the engine, remove the key, lower the mower and grass catcher to the lowest position, and chock the wheels before checking.**
- **If you are not able to adjust, consult your local KUBOTA Dealer for this service.**

IMPORTANT :

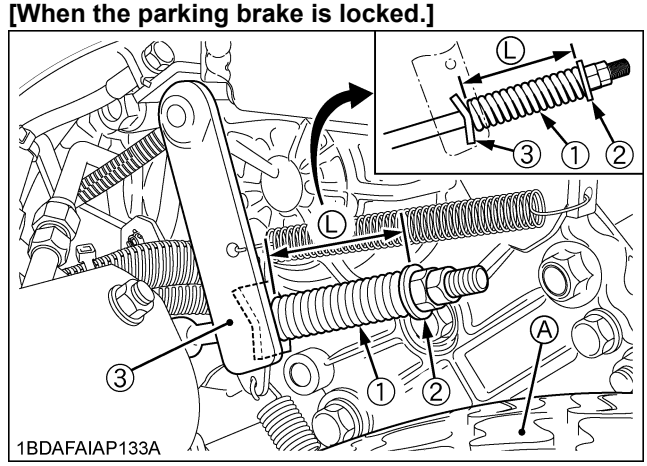
- Wrong adjustment may cause machine damage.

(1) Check brake spring length

1. Park the machine on a level surface.
2. Be sure to chock the rear wheels.
3. Apply the parking brake to the lock position.
4. Check the length of the brake springs on both sides.

(L): Proper brake spring length with the brake applied to the lock position	68 to 69 mm

[When the parking brake is locked.]

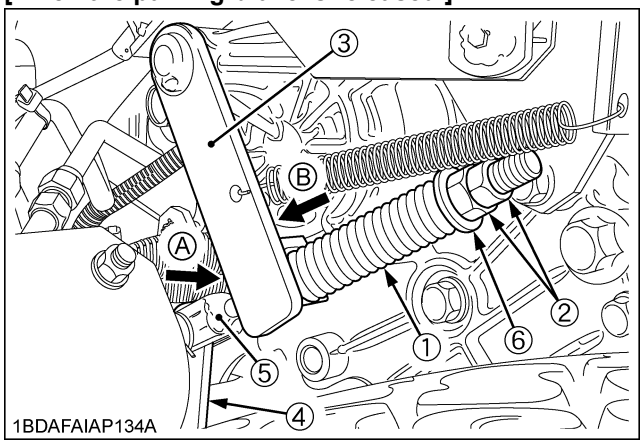


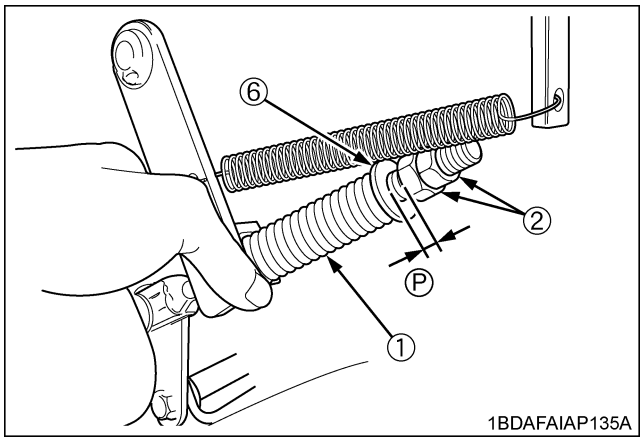
(1) Brake spring
(2) Plain washer
(3) Brake lever
(A) Rear wheel (LH)
(L) "Parking brake spring length"

5. Release the parking brake completely.
6. With a hand at the same time, move the link arm to the direction of the arrow (A) and move the transaxle brake lever to the direction of the arrow (B).
7. Check the brake spring play.

(P): Proper brake spring play	The spring must have play. Reference: 0.5 to 1.5 mm

[When the parking brake is released.]





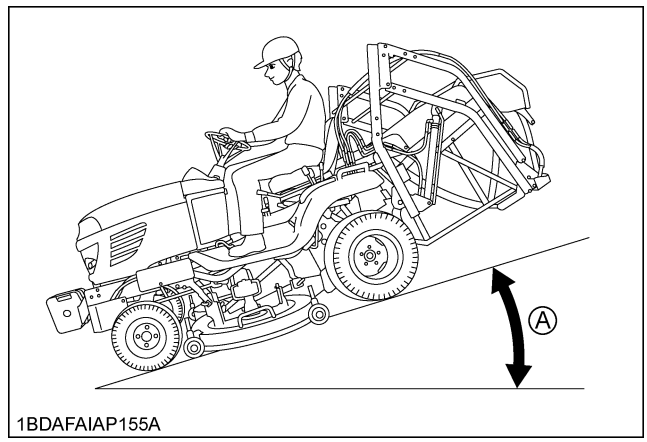
(1) Brake spring
(2) Lock nut
(3) Brake lever
(4) Link arm
(5) Brake rod
(6) Plain washer

(A) "Move the link arm"
(B) "Move the brake lever"
(P) "Parking brake spring play"

8. If the brake spring length or play is not correct, consult your local KUBOTA Dealer for this service.

(2) Check on the slope

1. Place the machine on a 17° ramp (The incline of slope must not exceed 17 degrees.).
2. Apply the parking brake.
3. Shut off the engine.
4. Check that the machine does not move.



(A) 17° ramp (MAX)

NOTE :

- For parking brake test purposes, only use 17° ramp (The incline of slope must not exceed 17 degrees.).

■Adjusting Fan Belt Tension

CAUTION

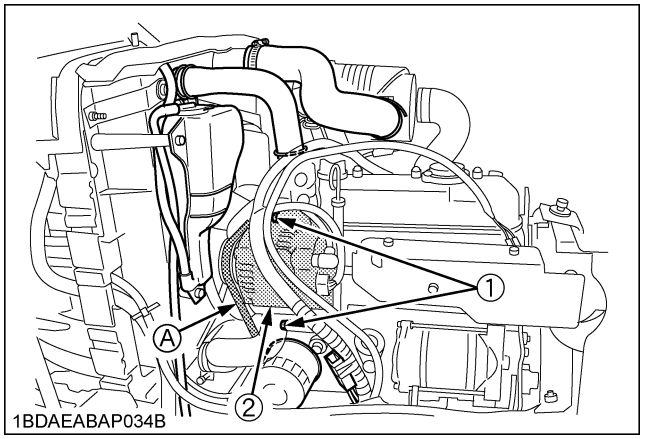
To avoid personal injury:

- **Be sure to stop the engine and remove the key before checking belt tension.**

◆ **Adjusting**

Proper fan belt tension	A deflection of between 7 to 9 mm when the belt is pressed in the middle of the span.

1. Stop the engine and remove the key.
2. Apply moderate thumb pressure to belt between pulleys.
3. If tension is incorrect, loosen the alternator mounting bolts and, using a lever placed between the alternator and the engine block, pull the alternator out until the deflection of the belt falls within the acceptable limits.
4. Replace fan belt if it is damaged.



(1) Bolt *(A) Check the belt tension*
(2) Alternator

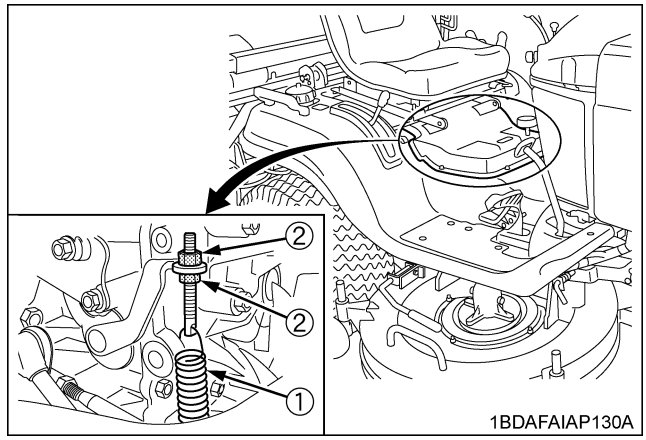
■Adjusting HST Neutral Spring (for Speed Control Pedal)

WARNING

To avoid serious injury:

- **Do not operate if the machine moves on level ground with foot off speed control pedal.**
- **If the machine moves on level ground with foot off the pedal, or, if the pedal is too slow in returning to "NEUTRAL" position when removing the foot from the pedal, consult your local KUBOTA Dealer.**

The HST neutral spring located under the cover on the step can adjust returning speed of speed control pedal. Consult your local KUBOTA Dealer for service.



(1) HST neutral spring
(2) Adjusting nut

EVERY 150 HOURS

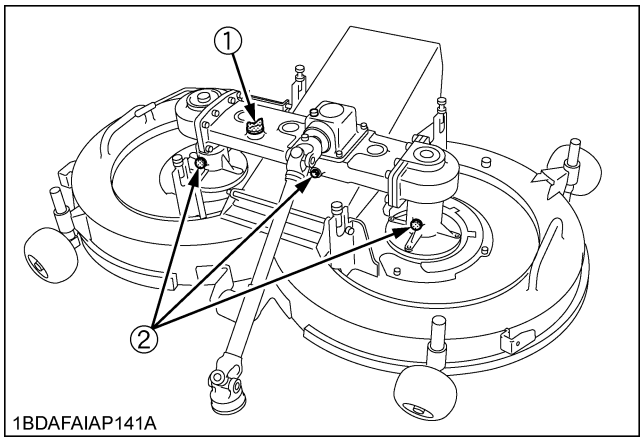
■Changing Gear Box Oil

CAUTION

To avoid personal injury:

- **Be sure to stop the engine and remove the key before changing the oil.**
- **Remove the right and left hand shields from the mower deck.**

1. To drain the used oil, remove the oil level dipstick and the drain plugs at the gear box, tilt the mower deck and drain the oil completely into the oil pan.
2. Reinstall the drain plugs.
3. Fill with the new oil.
   (See "LUBRICANTS, FUEL AND COOLANT" in "MAINTENANCE" section.)
4. After filling reinstall the oil level dipstick.



(1) Oil level dipstick
(2) Drain plug

EVERY 200 HOURS

■Changing Engine Oil

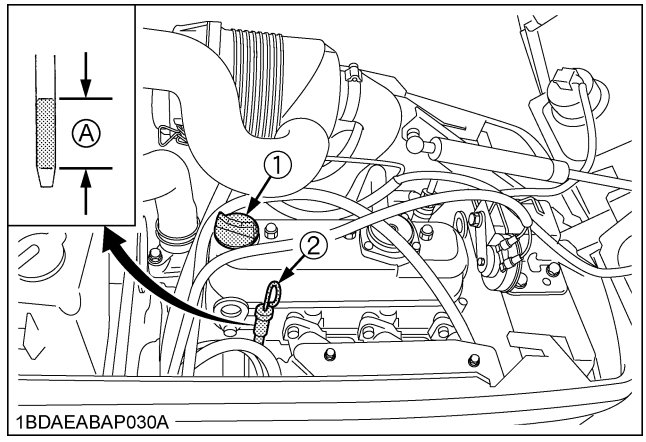
CAUTION

To avoid personal injury:

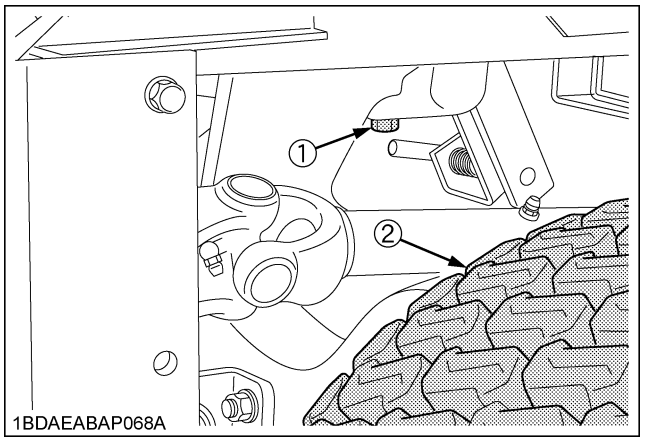
- **Be sure to stop the engine and remove the key before changing the oil.**
- **Allow engine to cool down sufficiently; oil can be hot and may cause burns.**

1. To drain the used oil, remove the drain plug at the bottom of the engine and drain the oil completely into the oil pan.
   All the used oil can be drained out easily when the engine is still warm.
2. After draining reinstall the drain plug.
3. Fill with the new oil up to the upper notch on the dipstick.
   (See "LUBRICANTS, FUEL AND COOLANT" in "MAINTENANCE" section.)
4. Properly dispose of used oil.

Oil capacity with filter	G23-2	3.1 L
	G26-2	3.5 L



(1) Oil inlet
(2) Dipstick
(A) Oil level is acceptable within this range



(1) Drain plug
(2) Front tire (LH)

■Replacing Engine Oil Filter

CAUTION

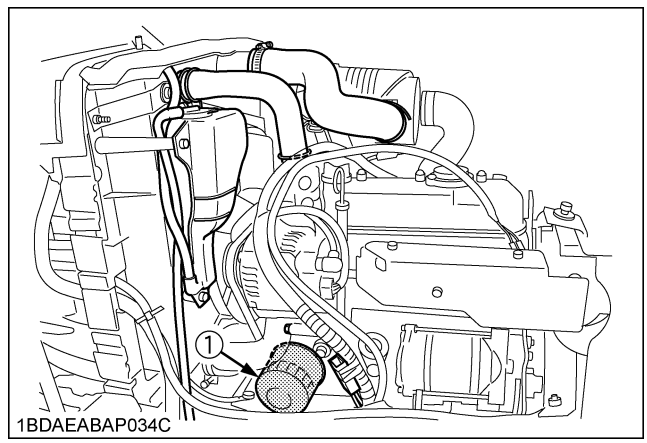
To avoid personal injury:

- **Be sure to stop the engine and remove the key before changing the oil and the oil filter.**
- **Allow engine to cool down sufficiently; oil can be hot and may cause burns.**

1. [Model with the engine filter cover]
   Remove the engine filter cover.
2. Remove the oil filter.
3. Put a film of clean engine oil on the rubber seal of the new filter.
4. Tighten the filter quickly until it contacts the mounting surface.
   Tighten filter by hand an additional 1/2 turn only.
5. After new filter has been replaced, the engine oil normally decreases a little. Make sure that the engine oil does not leak through the seal and be sure to check the oil level on the dipstick. Then, replenish the engine oil up to the prescribed level.
6. [Model with the engine filter cover]
   Install the engine filter cover.
7. Properly dispose of used oil.

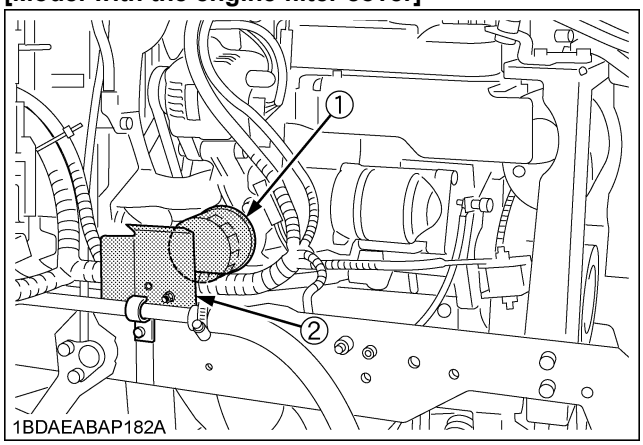
IMPORTANT :

- To prevent serious damage to the engine, use only a KUBOTA genuine filter.



(1) Engine oil filter

[Model with the engine filter cover]



(1) Engine oil filter
(2) Engine filter cover

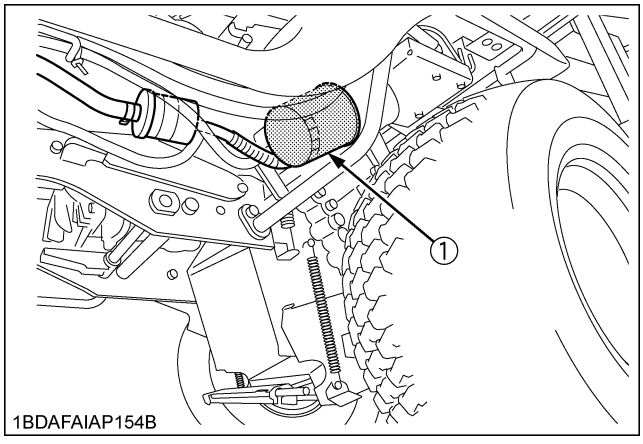
■Replacing Transmission Oil Filter

CAUTION

To avoid personal injury:

- **Allow engine to cool down sufficiently; oil can be hot and can burn.**

1. Remove the oil filter.
2. Put a film of clean transmission oil on rubber seal of new filter.
3. Tighten the filter quickly until it contacts the mounting surface.
   Tighten filter by hand an additional 1/2 turn only.
4. After the new filter has been replaced, the transmission fluid level will decrease a little. Make sure that the transmission fluid does not leak through the seal, and check the fluid level.
   Top off if necessary.
5. Properly dispose of used oil.



(1) Transmission oil filter

IMPORTANT :

- To prevent serious damage to the hydraulic system, use only a KUBOTA genuine filter.

■Checking Radiator Hose and Clamp

CAUTION

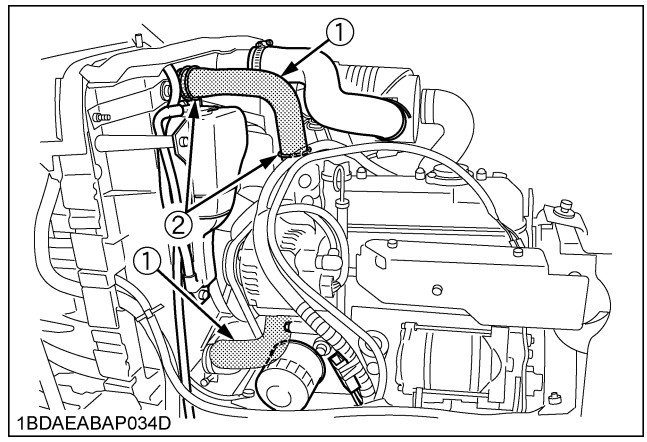
To avoid personal injury:

- **Be sure to stop the engine and remove the key before checking radiator hose and clamps.**

Check to see if radiator hoses are properly secured every 200 hours of operation or six months, whichever comes first.

1. If hose clamps are loose or water leaks, tighten clamps securely.
2. Replace hoses and tighten hose clamps securely, if radiator hoses are swollen, hardened or cracked.
3. Properly dispose of used coolant.

Replace hose and hose clamps every 2 years or earlier if checked and found that hoses are swollen, hardended or cracked.



(1) Radiator hoses (2pcs)
(2) Hose clamps (2 pcs)

◆ Precaution at Overheating

Take the following actions in the event the coolant temperature be nearly or more than the boiling point, what is called "Overheating".

1. Stop the machine operation in a safe place and keep the engine unloaded idling.
2. Don't stop the engine suddenly, but stop it after about 5 minutes of unloaded idling.
3. Keep yourself well away from the machine for further 10 minutes or while the steam blown out.
4. Checking that there is no danger such as burn, get rid of the causes of overheating according to the manual, see "TROUBLESHOOTING" section, and then, start again the engine.

ENGLISH

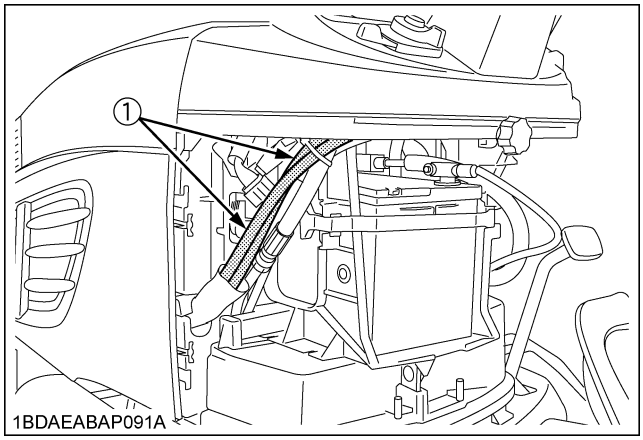
■Checking Hydraulic Hose

CAUTION

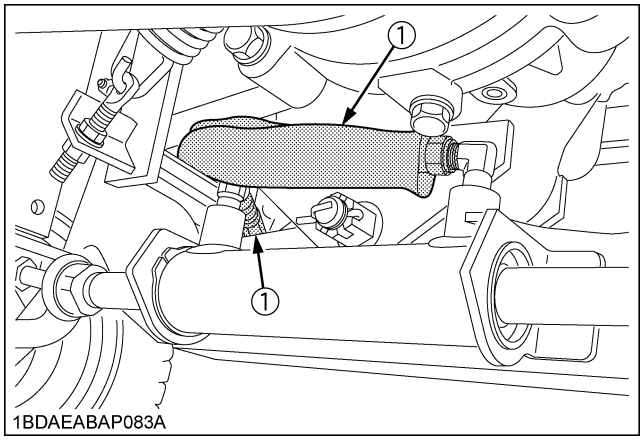
To avoid personal injury:

- **Be sure to stop the engine and remove the key before checking power steeling line.**

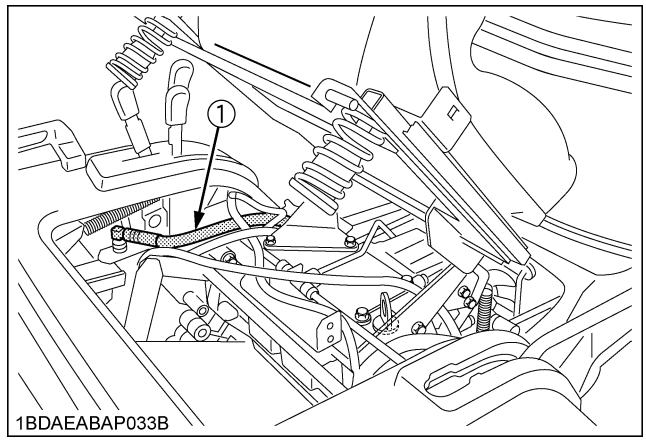
1. Check to see that all lines are tight and not damaged.
2. If hoses are found worn or damaged, replace or repair them at once.



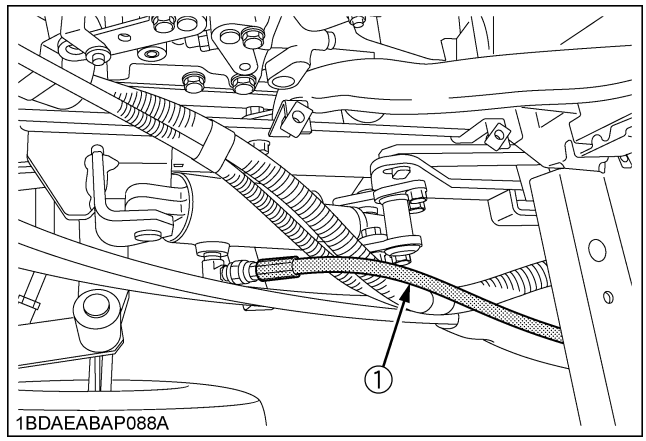
(1) Power steering pressure hose



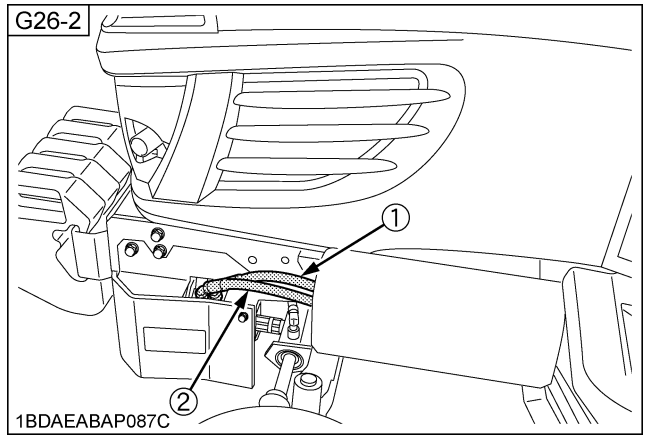
(1) Power steering pressure hose



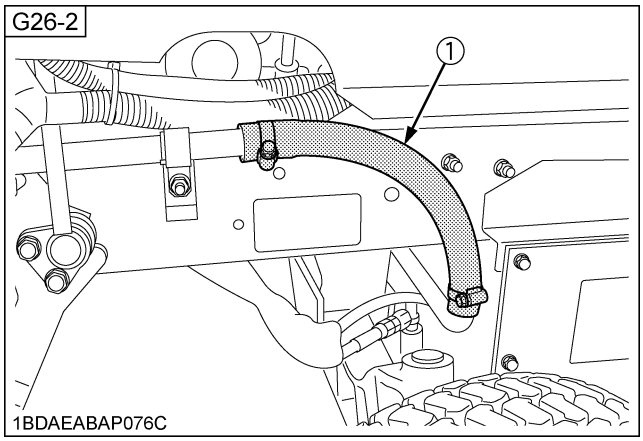
(1) Control valve charge hose



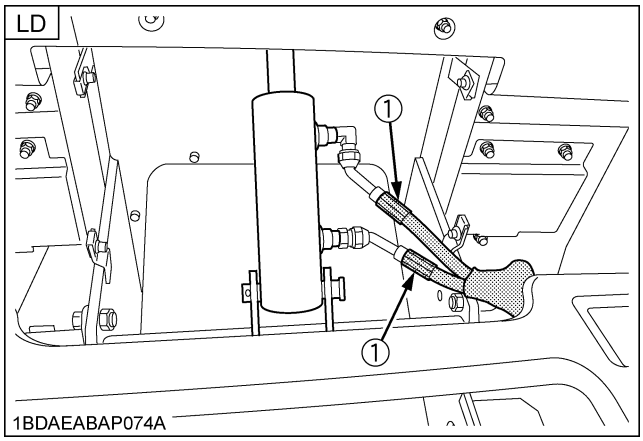
(1) Mower lift cylinder hose



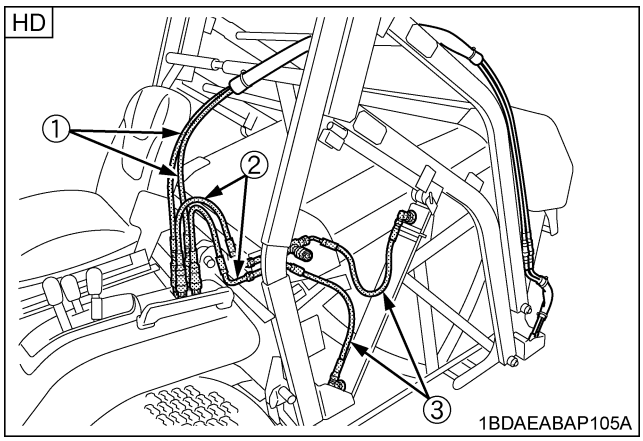
(1) Front PTO clutch pressure hose
(2) Front PTO delivery hose



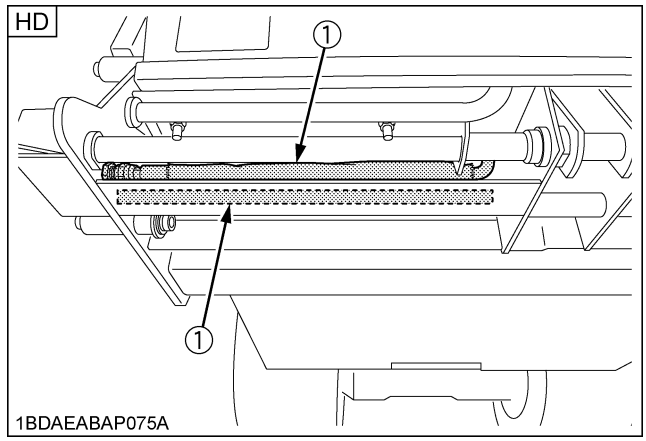
(1) Front PTO return hose



(1) Grass container dump cylinder hose



(1) Grass container dump cylinder hose
(2) Grass container lift cylinder hose
(3) Grass container lift cylinder hose (LH)



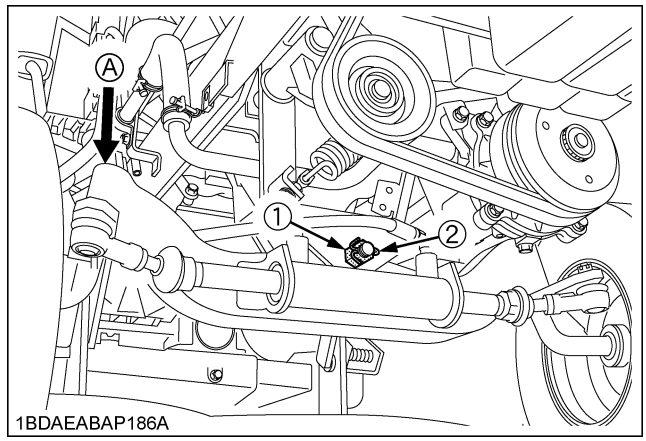
(1) Grass container dump cylinder hose

■Adjusting Front Axle Pivot

If the front axle pivot pin adjustment is not correct, front wheel vibration can occur causing vibration in the steering wheel.

◆ Adjusting procedure

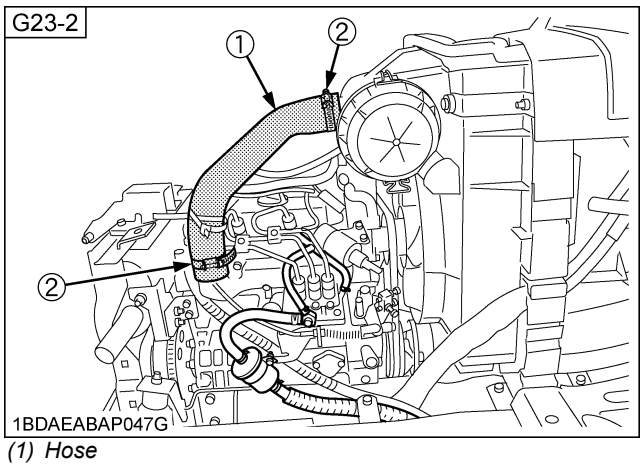
Remove the split pin, tighten the adjusting nut (swing force 20 to 300 N, 2.0 to 30.6 kgf), then make sure that one of the nut slots aligns with the split pin hole, tighten the nut slightly clockwise if necessary to align. Replace the split pin.



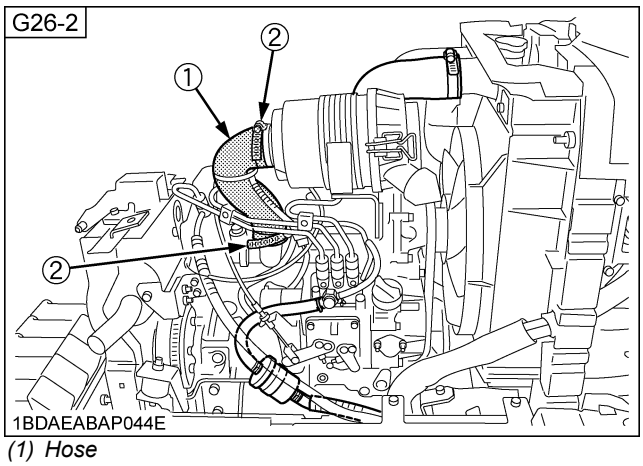
(1) Adjusting nut
(2) Split pin
(A) Swing force

■Checking Intake Air Line

1. Check to see that hoses and hose clamps are tight and not damaged.
2. If hoses and clamps are found worn or damaged, replace or repair them at once.



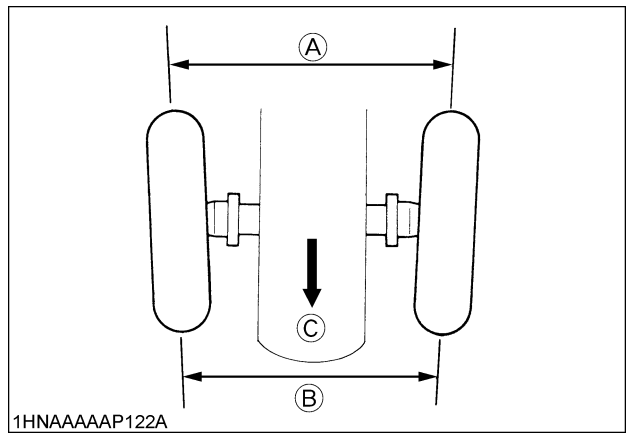
(1) Hose
(2) Hose Clamp



(1) Hose
(2) Hose Clamp

■Adjusting Toe-in

1. Park the machine on a firm and level surface.
2. Turn steering wheel so front wheels are in the straight ahead position.
3. Lower the implement to the ground, lock the parking brake, stop the engine and remove the key.
4. Measure distance between tire beads at front of tire, hub height.
5. Measure distance between tire beads at rear of tire, hub height.
6. Front distance should be 0 to 5 mm less than rear distance. If not, adjust tie rod length.



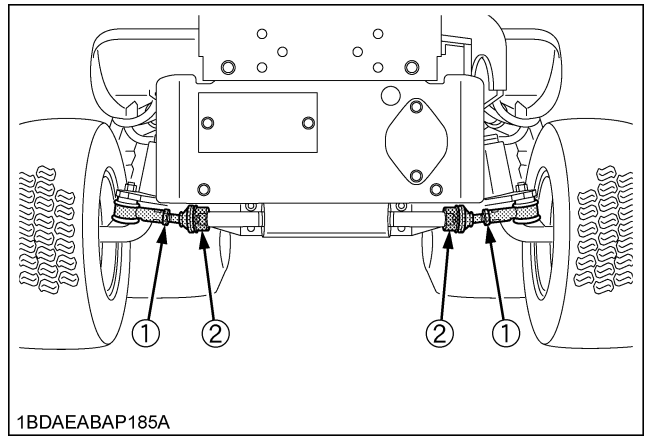
(A) Wheel - to - wheel distance at rear
(B) Wheel - to - wheel distance at front
(C) "FRONT"

◆ Adjusting procedure

1. Loosen the lock nut and turn the tie rod to adjust the rod length until the proper toe-in measurement is obtained.
2. Retighten the lock nut.

NOTE :

- Tightening torque: 74.0 to 84.0 N-m (7.6 to 8.5 kgf-m)



(1) Lock nut
(2) Tie-rod

EVERY 400 HOURS

■Changing Transmission Fluid

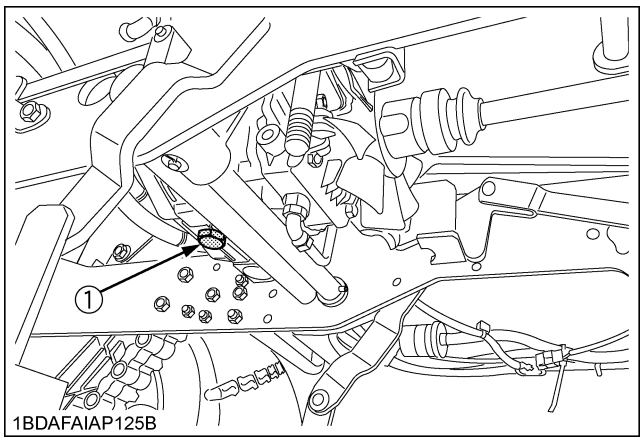
CAUTION

To avoid personal injury:

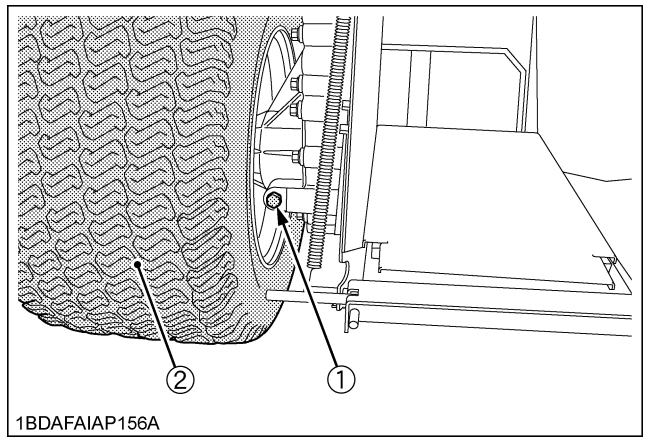
- **Allow engine to cool down sufficiently, oil can be hot and can burn.**

1. To drain the used oil, remove the drain plugs at the bottom of the transmission case and both sides on the rear axle case and drain the oil completely into the oil pan.
2. After draining, reinstall the drain plugs. Clean the transmission strainer. Fill with new KUBOTA SUPER UDT fluid up to the upper notch on the dipstick.
   (See "LUBRICANTS, FUEL AND COOLANT" in "MAINTENANCE" section and "DAILY CHECK " in "PERIODIC SERVICE" section.) After running the engine for a few minutes, stop it and check the oil level again, add oil to prescribed level. Properly dispose of used oil.

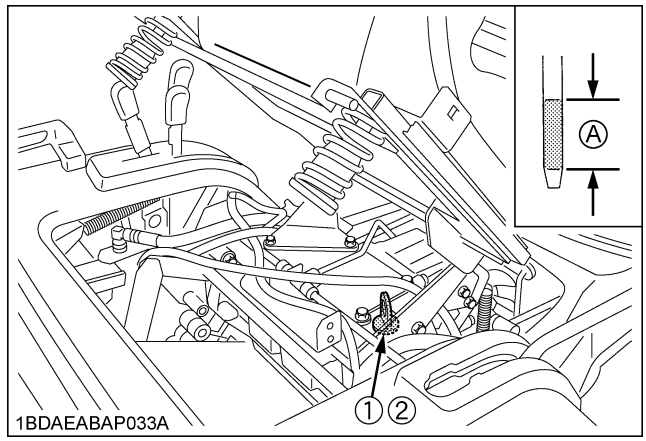
Oil capacity	11 L



(1) Drain plug



(1) Drain plug
(2) Rear tire (LH)



(1) Oil inlet
(2) Dipstick
(A) Oil level is acceptable within this range

NOTE :

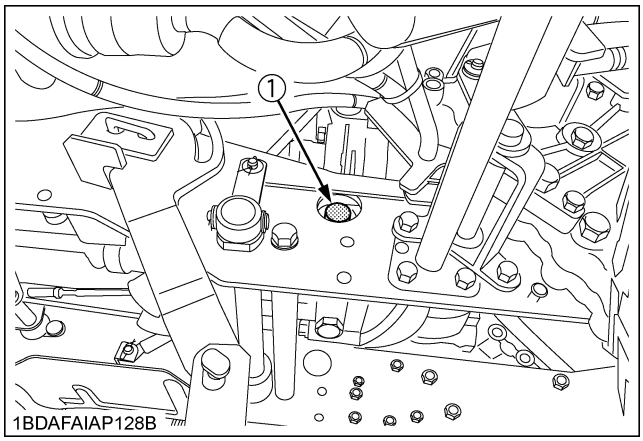
- If oil level is low, do not run the engine.

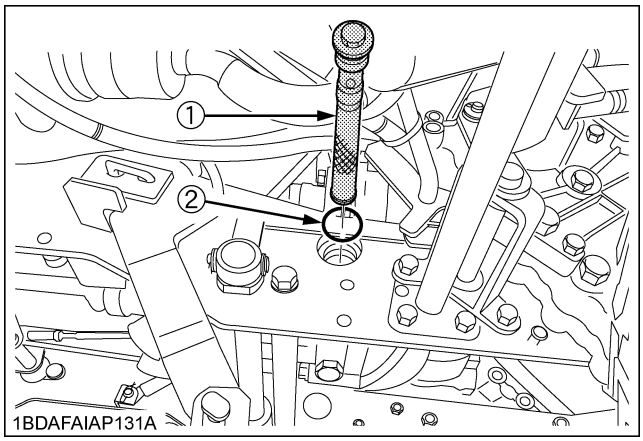
IMPORTANT :

- Do not operate the machine immediately after changing the transmission fluid.
  Run the engine at medium speed for a few minutes to prevent damage to the transmission.

■Cleaning Transmission Strainer

When changing the transmission fluid, disassemble and rinse the strainer with nonflammable solvent to completely clean off fillings.
When reassembling be careful not to damage the parts.





(1) Strainer
(2) O ring

NOTE :

- Since the fine filings in the oil can damage the precision component parts of the hydraulic system, the end of the suction line is provided with an oil strainer.

■Replacing Fuel Filter

Change fuel filter every 400 hours. This should be done by your local KUBOTA Dealer.

EVERY 1500 HOURS

■Checking Fuel Injection Nozzle (Injection Pressure)

Consult your local KUBOTA Dealer for this service.

EVERY 3000 HOURS

■Checking Injection Pump

Consult your local KUBOTA Dealer for this service.

EVERY 1 YEAR

■Replacing Air Cleaner Element

Change the element once a year.

EVERY 2 YEARS

■Flush Cooling System and Changing Coolant

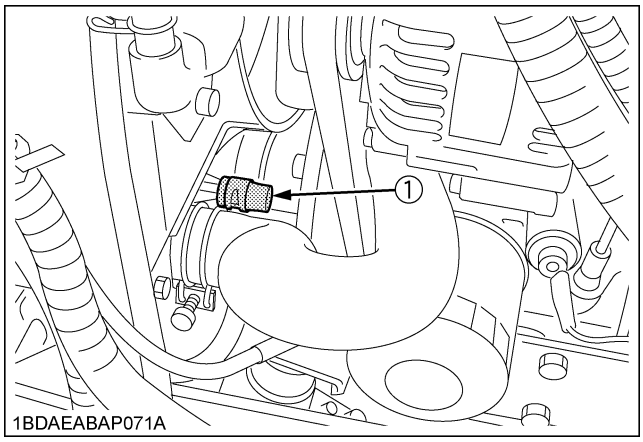
CAUTION

To avoid personal injury:

- **Do not remove the radiator cap while coolant is hot. When cool, slowly rotate cap to the first stop and allow sufficient time for excess pressure to escape before removing the cap completely.**

1. Stop the engine and let cool down.
2. To drain the coolant, remove the radiator hose and the radiator cap. The radiator cap must be removed to completely drain the coolant.
3. After all coolant is drained, install the hose securely.
4. Fill with clean water and cooling system cleaner.
5. Follow directions of the cleaner instruction.
6. After flushing, fill with clean water and anti-freeze until the coolant level is just below the port.
7. Fill with clean water and anti-freeze up to the upper line of recovery tank.
8. Install the radiator cap securely.
9. Start and operate the engine for a few minutes.
10. Stop the engine. Check coolant level and add coolant if necessary.

Coolant capacity (with recovery tank)	G23-2	3.1 L
	G26-2	3.3 L



(1) Drain plug

IMPORTANT :
- Do not start engine without coolant.
- Use clean, fresh water and anti-freeze to fill the radiator.
- When the anti-freeze is mixed with water, the anti-freeze mixing ratio must be less than 50%.
- Securely tighten radiator cap. If the cap is loose or improperly fitted, water may leak out and the engine could overheat.

■Anti-freeze

CAUTION

To avoid personal injury:
- **When using anti-freeze, put on some protection such as rubber gloves (Anti-freeze contains poison.).**
- **If anti-freeze is ingested, induce vomiting at once and seek medical attention.**
- **When anti-freeze comes in contact with the skin or clothing, wash it off immediately.**
- **Do not mix different types of Anti-freeze. The mixture can produce chemical reaction causing harmful substances.**
- **Anti-freeze is extremely flammable and explosive under certain conditions. Keep fire and children away from anti-freeze.**
- **When draining fluids from the engine, place some container underneath the engine body.**
- **Do not pour waste onto the grounds, down a drain, or into any water source.**
- **Also, observe the relevant environmental protection regulations when disposing of anti-freeze.**

If it freezes, coolant can damage the cylinders and radiator. If the ambient temperature falls below 0℃ or before a long-term storage, let out cooling water completely, or mix fresh water with long-life coolant and fill the radiator and reserve tank with the mixture.

1. Long-life coolant (hereafter LLC) comes in several types. Use ethylene glycol (EG) type for this engine.
2. Before employing LLC-mixed cooling water, fill the radiator with fresh water and empty it again. Repeat this procedure 2 or 3 times to clean up the inside.
3. Mixing the LLC
   Put the LLC in cooling water in the percentage (%) for a target temperature. When mixing, stir it up well, and then fill into the radiator.
4. The procedure for the mixing of water and anti-freeze differs according to the make of the anti-freeze and the ambient temperature. Refer to SAE J1034 standard, more specifically also to SAE J814c.

IMPORTANT :
- When the anti-freeze is mixed with water, the anti-freeze mixing ratio must be less than 50%.

Vol% Anti-freeze	Freezing Point	Boiling Point *
	℃	℃
40	-24	106
50	-37	108

* At $1.013X10^5$Pa (760mmHg) pressure (atmospheric). A higher boiling point is obtained by using a radiator pressure cap which permits the development of pressure within the cooling system.

5. Adding the LLC
   (1) Add only water if the mixture reduces in amount by evaporation.
   (2) If there is a mixture leak, add the LLC of the same manufacturer and type in the same mixture percentage.
   *Never add any long-life coolant of different manufacturer. (Different brands may have different additive components, and the engine may fail to perform as specified.)
6. When the LLC is mixed, do not employ any radiator cleaning agent. The LLC contains anti-corrosive agent. If mixed with the cleaning agent, sludge may build up, adversely affecting the engine parts.
7. Kubota's genuine long-life coolant has a service life of 2 years. Be sure to change the coolant every 2 years.

NOTE :
- The above data represent industry standards that necessitate a minimum glycol content in the concentrated anti-freeze.

- When the coolant level drops due to evaporation, add water only to keep the anti-freeze mixing ratio less than 50%. In case of leakage, add anti-freeze and water in the specified mixing ratio before filling in to the radiator.

■Replacing Hydraulic Hose
Replace hoses and hose clamps every 2 years or earlier if checked and found that hoses are swollen, hardened or cracked.

Consult your local KUBOTA Dealer for this service.

■Replacing Fuel Lines
Consult your local KUBOTA Dealer for this service.

■Replacing Engine Breather Hose
Consult your local KUBOTA Dealer for this service.

■Replacing Radiator Hose
Replace hoses and clamp bands every 2 years or earlier if checked and found that hoses are swollen, hardened or cracked.

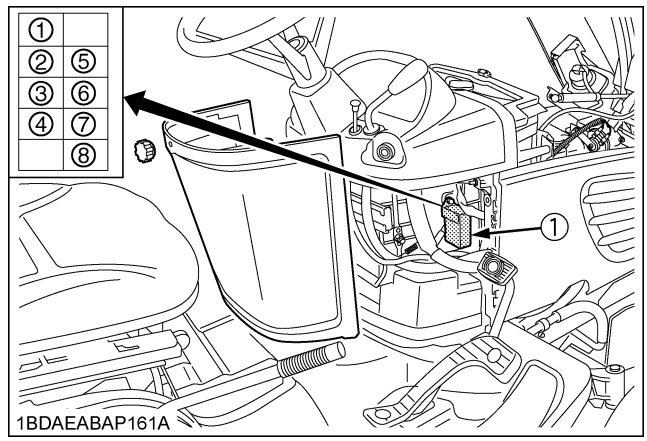
■Replacing Mower Gear Box Oil Seal
Consult your local KUBOTA Dealer for this service.

■Replacing Intake Air Line
(See "Checking Intake Air Line" in every 200 hours maintenance.)

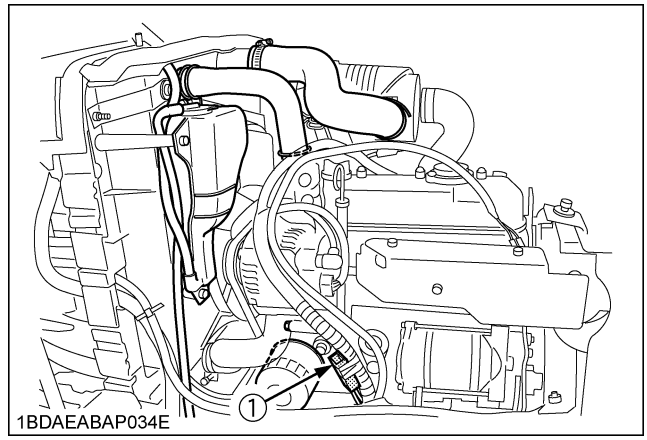
SERVICE AS REQUIRED

■Replacing Fuses
The machine electrical system is protected from potential damage by fuses.
A blown fuse indicates that there is an overload or short-circuit somewhere in the electrical system.
If any of the fuses should blow, replace it with a new one of the same capacity.
If the fuses are positioned differently from the ones in the figure below, check their positions and capacities with the label on the fuse box.

IMPORTANT :
- Before replacing a blown fuse, determine why the fuse blew and make any necessary repairs. Failure to follow this procedure may result in serious damage to the machine electrical system. Refer to the troubleshooting section of this manual or your local KUBOTA Dealer for specific information dealing with electrical problems.



(1) Fuse box



(1) Slow blow fuse

◆ **Protected circuit**

FUSE NO.	SYMBOL	CAPACITY(A)	Protected circuit
(1)		10	POSITION LIGHT (PARKING)
(2)	STOP	15	SOLENOID (ENGINE STOP)
(3)		15	HAZARD LIGHT
(4)		10	ACC
(5)		15	HORN
(6)		15	BEACON
(7)		15	HEAD LIGHT
(8)		10	BRAKE LIGHT

CAPACITY (A)	Protected circuit
Slow blow Fuse (50A)	Check circuit against wrong battery connection

■Replacing bulbs

Head lights:
Take the bulb out of the light body and replace with a new one.

Light	Capacity
Headlights	40W / 50W

■Checking and Replacing Blade

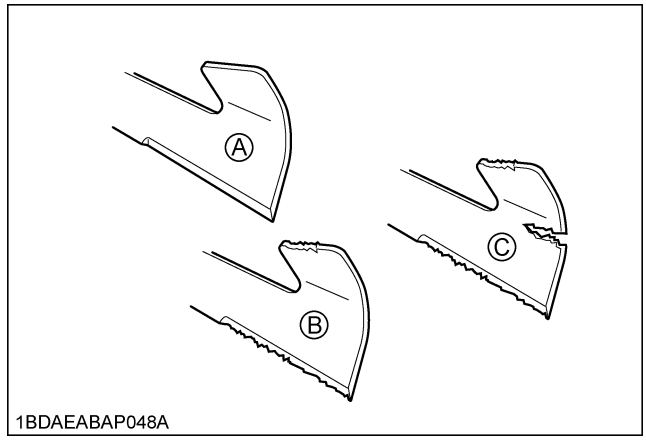
WARNING

To avoid serious injury:

- **Be sure to stop the engine and remove the key.**
- **Blades may be sharp. When you handle blades, wear heavy gloves or wrap end of blade with a rag.**

◆ **Checking**

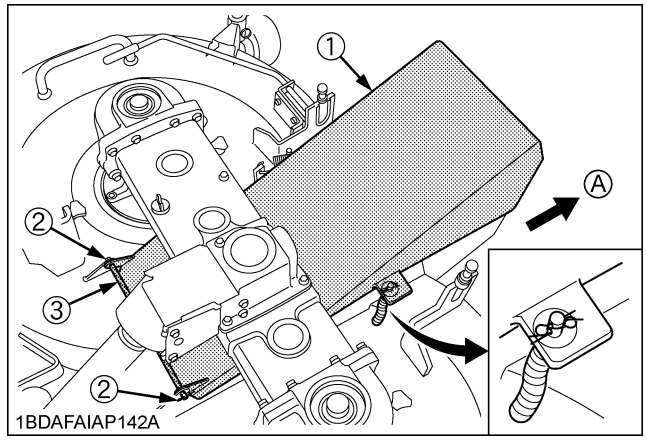
The blade cutting edges should be kept sharp at all times. Sharpen the cutting edges, if they resemble blade (B). Replace the blades if they appear similar to blade (C).



(A) New blade
(B) Worn blade
(C) Cracked blade

◆ **Replacing**

1. Remove the mower deck from the machine.
2. Remove the two snap pins and the shaft, and then remove the mower duct with sliding it.

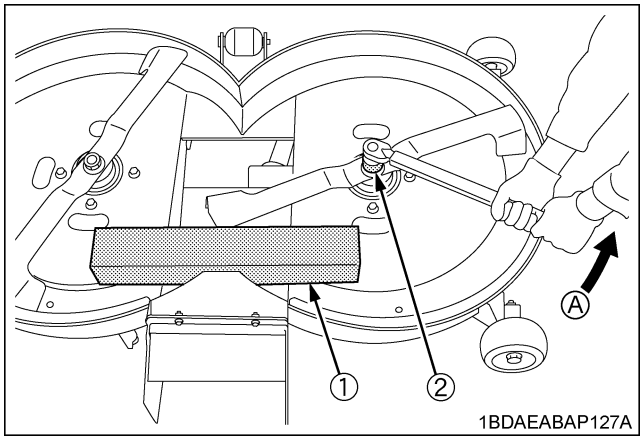


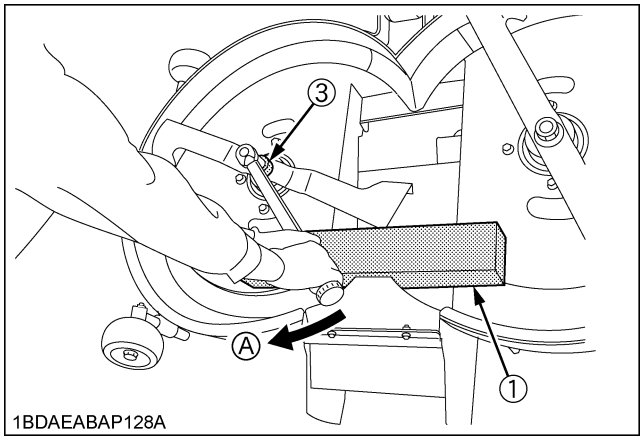
(1) Mower duct
(2) Snap pin
(3) Shaft
(A) "SLIDE"

NOTE :
- When reinstalling the mower duct, make sure that the both stays of the mower cover are set between the two washers.

3. Turn the mower deck over to expose the blades.
4. Wedge a block of wood between the blade and mower housing as illustrated.
5. The blade bolts (2) have right hand threads, turn counterclockwise to loosen.
   The blade bolt (3) has left hand threads, turn clockwise to loosen.

[RCK48, RCK54]





(1) Block
(2) Blade bolt
(3) Blade bolt
(A) "LOOSEN"

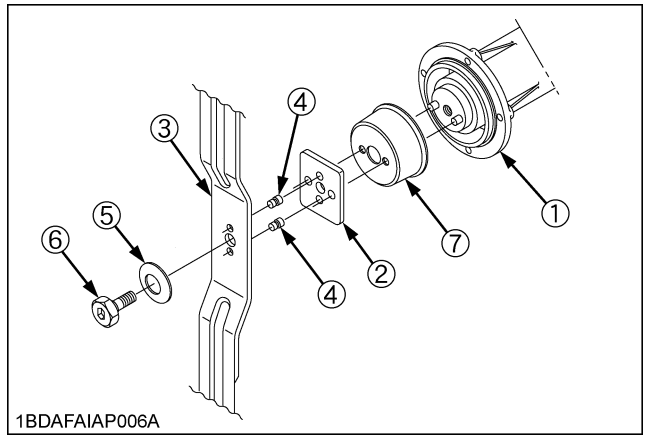
NOTE :
- Use the proper size box or socket wrench to tighten or loosen the blade mounting bolt.

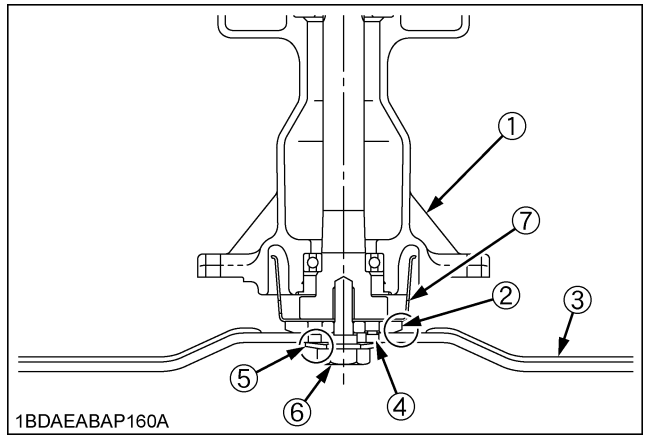
6. To sharpen the blades yourself, clamp the blade securely in a vise.
   Use a large mill file and file along the original bevel until sharp.
7. To check the blade for balance, place a small rod through the center hole. If the blade is not balanced, file the heavy side of the blade until balance is achieved.
8. To attach blades, be sure to install pin holder and shear pin in place, and also install the cup washer between the blade and bolt head.

NOTE :
- Make sure that the cup washer is not flattened out or worn. Replace the cup washer if either is damaged.

9. Before checking or replacing the blade, wipe grass and mud off the top and inside of the mower.

[RCK48, RCK54]





(1) Spindle holder
(2) Pin holder
(3) Blade
(4) 2-Shear pins
(5) Cup washer
(6) Bolt
(7) Spindle guard

NOTE :
- Make sure that the direction of the pin holder and the cup washer is same as shown in the figure.

IMPORTANT :
- Tighten the 2 blade bolts to 98 to 117.6 N-m (10 to 12 kgf-m) of torque.

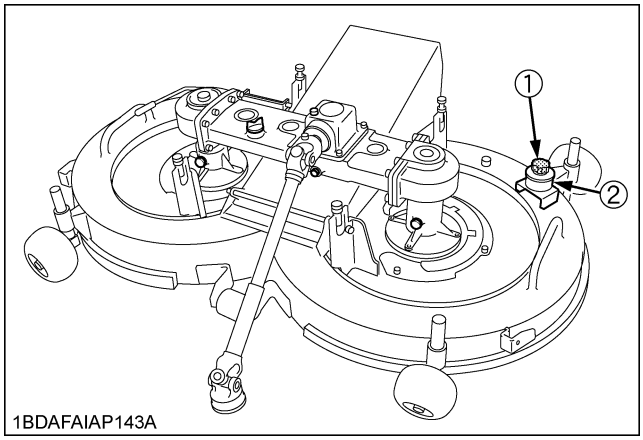
■Replacement to New Shear Pins

1. When shear pins are broken, replace both shear pins and the cup washer with new ones. The said parts are provided as a set in the spare holder on the left side of the mower deck.

IMPORTANT :
- When replacing to new shear pins, be sure to replace with the new cup washer as well.
- To prevent serious damage or premature failure to mower gear case and PTO system, use only genuine KUBOTA shear pins and cup washers.

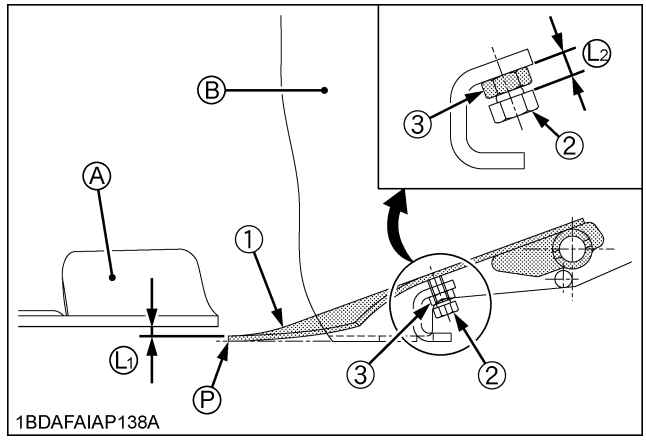
NOTE :
- When a blade hits an obstacle such as a stone or wood etc., shear pins will break to prevent damage to the gear train.

2. When replacing the shear pins, see "Checking and Replacing Blade" in "SERVICE AS REQUIRED" section in the operator's manual.



(1) Knob nut
(2) Spare holder

■Checking and Adjusting Jump Plate



(1) Jump plate
(2) Adjusting bolt
(3) Lock nut
(A) Blade
(B) Duct plate
(L1) 3 to 5 mm
(L2) Ref.=16 mm
(P) "Should not protrude from lower surface of mower deck."

■Bleeding Fuel System

Air must be removed:
1. When the fuel filter or lines are removed.
2. When tank is completely empty.
3. After the machine has not been used for a long period of time.

◆ **Bleeding procedure is as follows:**
1. Fill the fuel tank with fuel.
2. Start the engine and run for about 30 seconds, and then stop the engine.

ENGLISH

ADJUSTMENT

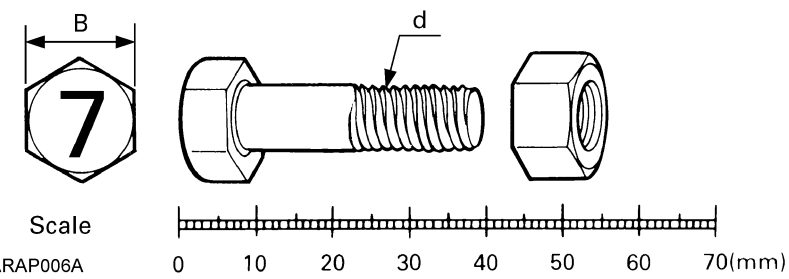
GENERAL TORQUE SPECIFICATION

American standard cap screws with UNC or UNF threads				Metric cap screws			
SAE grade No.		GR.5	GR.8	Property class		Class 8.8	Class 10.9
1/4	(N-m) (kgf-m)	10.7 - 12.9 1.11 - 1.33	16.1 - 19.3 1.66 - 1.99	M6	(N-m) (kgf-m)	9.81 - 11.3 1.0 - 1.15	
5/16	(N-m) (kgf-m)	23.1 - 27.8 2.35 - 2.84	32.5 - 39.3 3.31 - 4.01	M8	(N-m) (kgf-m)	23.6 - 27.4 2.4 - 2.8	29.4 - 34.3 3.0 - 3.5
3/8	(N-m) (kgf-m)	47.5 - 57.0 4.84 - 5.82	61.0 - 73.2 6.22 - 7.47	M10	(N-m) (kgf-m)	48.1 - 55.8 4.9 - 5.7	60.8 - 70.5 6.2 - 7.2
7/16	(N-m) (kgf-m)	75.9 - 89.5 7.74 - 9.12	101.7 - 122 10.37 - 12.44	M12	(N-m) (kgf-m)	77.5 - 90.1 7.9 - 9.2	103 - 117 10.5 - 12.0
1/2	(N-m) (kgf-m)	108.5 - 130.2 11.07 - 13.29	149.2 - 179.0 15.22 - 18.27	M14	(N-m) (kgf-m)	124 - 147 12.6 - 15.0	167 - 196 17.0 - 20.0
9/16	(N-m) (kgf-m)	149.2 - 179.0 15.22 - 18.27	217 - 260.4 22.14 - 26.57	M16	(N-m) (kgf-m)	196 - 225 20.0 - 23.0	260 - 303 26.5 - 31.0
5/8	(N-m) (kgf-m)	203.4 - 244.1 20.75 - 24.91	298.3 - 358.0 30.44 - 36.53				

TIGHTENING TORQUE CHART

Thread size d (mm)	Hexa-Bolt Head size B (mm)	No mark		7T	
		N-m	kgf-m	N-m	kgf-m
M8	12 or 13	**17.8 - 20.6** (19.2 ± 0.6)	**1.9 - 2.1** (2.0 ± 0.1)	**23.5 - 27.5** (25.5 ± 2.0)	**2.4 - 2.8** (2.6 ± 0.2)
M10	14 or 17	**39.3 - 45.1** (42.2 ± 2.9)	**4.0 - 4.6** (4.3 ± 0.3)	**48.1 - 55.9** (52.0 ± 3.9)	**4.9 - 5.7** (5.3 ± 0.4)
M12	17 or 19	**62.8 - 72.6** (67.7 ± 4.9)	**6.4 - 7.4** (6.9 ± 0.5)	**77.6 - 90.2** (83.9 ± 6.3)	**8.0 - 9.2** (8.6 ± 0.6)
M14	19 or 22	**107.9 - 125.5** (116.7 ± 8.8)	**11.0 - 12.8** (11.9 ± 0.9)	**123.6 - 147.0** (135.3 ± 11.7)	**12.6 - 15.0** (13.8 ± 1.2)

NOTE :
- Figure "7" on the top of the bolt indicates that the bolt is of special material.
- Before tightening, check the figure on the top of bolt.



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STORAGE

CAUTION

To avoid personal injury:

- **To reduce fire hazards, allow the engine and exhaust system to cool before storing the machine in an enclosed space or near combustible materials.**
- **To avoid the danger of exhaust fume poisoning, do not operate the engine in a closed building without proper ventilation.**
- **Do not clean the machine with engine running.**
- **To avoid fire hazards, Do not leave grass and leaves in the mower and the grass catcher.**
- **When storing, remove the key from the key switch to avoid operation by unauthorized persons.**

When the machine will not be operated for over two months, clean the machine and perform the following operations before storage.

1. Repair parts as necessary.
2. Check bolts and nuts and tighten as necessary.
3. Apply grease or engine oil to parts most likely to rust.
4. Inflate the tires to a little above the standard pressure levels. (Approximately 110%)
5. Lower the mower to the ground.
6. Remove the battery from the machine, recharge it, adjust the electrolyte to the proper level, and store in a cool dry place.
   The battery discharges over time even while in storage. Recharge it once a month in hot seasons and once every two months in cold seasons.
7. Drain fuel tank, fuel lines.
8. Store the machine where it is dry and sheltered from rain. Cover the machine with a tarpaulin.
9. Moisture content in most grasses can damage the mower and grass catcher if these components are not properly cleaned after use.
   Make sure the mower and the grass catcher are clean and completely empty before storage.
10. Jack the machine up and place blocks under the front and rear axles so that all four tires are off the ground.
    Keep the tires out of direct sunlight and extreme heat.

IMPORTANT :

- When washing the machine, be sure to stop the engine. Allow sufficient time for the engine to cool before washing.
- Cover the machine after the muffler and the engine have cooled down.

REMOVING THE MOWER FROM STORAGE

1. Check the tire inflation pressure and adjust as required.
2. Install the battery. Before installing the battery, be sure it is fully charged.
3. Do daily checking. (See "DAILY CHECK" in "PERIODIC SERVICE" section.)
4. Check all fluid levels. (engine oil, hydrostatic oil)
5. Start the engine. Shut the engine off and walk around the machine and make a visual inspection looking for evidence of oil or other fluids.
6. Run engine a couple of minutes before you put engine under load.
7. With the engine fully warmed up, release the parking brake and test the brakes for proper adjustment as you move forward. Adjust the brakes as necessary.

TROUBLESHOOTING

ENGINE TROUBLESHOOTING

If the engine is not performing correctly, refer to the table below for the cause and its corrective measure.

If	Check
Engine is difficult to start.	● Fuel tank or fuel filter is clogged by dirt.
	● Air or water in the fuel system.
	● In winter, oil viscosity increases, and engine cranks slowly.
	● Battery is discharged.
Insufficient engine power.	● Air cleaner element is clogged. ● Insufficient fuel flow or quality.
Engine stops suddenly.	● Insufficient fuel.
Exhaust fumes are colored.	● Fuel quality is poor.
Black smoke is emitted from the muffler during operation; power output is lowered.	● Air cleaner element clogged.
Bluish white smoke is emitted from the muffler during operation.	● Too much engine oil.
Engine will not idle.	● Fuel filter is clogged.
Engine overheats.	● Low coolant level.
	● Loose or defective fan belt.
	● Coolant flow route corroded.

If you have any questions, contact your KUBOTA Dealer.

BATTERY TROUBLESHOOTING

If	Check
Starter does not function.	● Battery discharged.
	● Poor terminal connection.
	● Battery life expired.
When viewed from top, the top of plates looks whitish.	● Electrolyte level is low.
	● Battery was used too much without recharging.
Recharging is impossible.	● Battery life expired.
Terminals are severely corroded and heat up.	● Poor terminal connection or stained terminal.
Battery electrolyte level drops rapidly.	● There is a crack or pin holes in the electrolytic cells.
	● Charging system trouble.

MACHINE TROUBLESHOOTING

If	Check
Machine operation is not smooth.	● Hydrostatic transmission oil is low.
Machine does not move while engine is running.	● Parking brake is on. ● Transmission oil is insufficient.
Machine moves when speed control pedal is not depressed. (Engine is operated.)	● Hydrostatic neutral system is not correctly adjusted.
PTO belt slipping.	● Belt tension incorrect. ● Worn belt.

If you have any questions, contact your KUBOTA Dealer.

MOWER TROUBLESHOOTING

If	Check
Discharge chute plugged.	● Grass too wet. ● Grass too long. ● Cutting too low. ● Engine rpm too low. ● Ground speed too fast. ● Restricted airflow.
Streaking of uncut grass.	● Ground speed too fast. ● Engine rpm too low. ● Grass too long. ● Blades dull or damaged. ● Debris in mower deck.
Uneven cut.	● Mower deck not level. ● Ground speed too fast. ● Blades dull. ● Blades worn. ● Tire inflation. ● Mower rollers not adjusted correctly.
Blades scalping grass.	● Cutting height too low. ● Blades speed too fast. ● Ridges in terrain. ● Rough or uneven terrain. ● Bent blade(s). ● Low tire inflation. ● Anti-scalp rollers not adjusted correctly.
Excessive vibration.	● Debris on mower deck or in pulleys. ● Blades out of balance.
Mower loads down machine.	● Engine rpm too low. ● Ground speed too fast. ● Debris wrapped around mower spindles.
Grass tips are jagged and turn grayish brown.	● Blades dull. ● Blades worn. ● Mower deck is not level.

If you have any questions, contact your KUBOTA Dealer.

GRASS CATCHER TROUBLESHOOTING

If	Check
Discharge duct plugged.	● Grass too wet. ● Grass too long. ● Cutting too low. ● Engine rpm low. ● Ground speed too fast. ● Grass container full. ● Grass container net clogged.
Dumped and undischarged clippings.	● Duct plugged. ● Grass container full. ● Mower deck plugged. ● Grass container net clogged.

If you have any questions, contact your KUBOTA Dealer.

OPTION

Consult your KUBOTA Dealer for further details.

- Rear Discharge deflector
  The Rear Discharge Deflector is used when both discharging and scattering the grass clippings to the rear of the machine without collecting.
- LD Rear Hitch Kit
- HD Rear Hitch Kit
- Weight Bracket kit
- HD GC Dismount Kit
- Deluxe Seat Kit
- Road Circulation Kit

SOUND AND VIBRATION MEASUREMENTS

◆ **Sound Pressure Level Measured Per EN836-A2**

Model	Engine rated speed	Sound pressure at the operator's position
G23-2 with RCK48-G23-2	3350 rpm	90 dB (A)
G26-2 with RCK54-G26-2	3350 rpm	90 dB (A)

◆ **Hand/Arm Vibration Level Measured Per EN836-A2**

Model	Engine rated speed	Hand/Arm vibration
G23-2 with RCK48-G23-2	3380 rpm	0.98 m/s^2
G26-2 with RCK54-G26-2	3320 rpm	1.20 m/s^2

◆ **Whole Body Vibration Level Measured Per EN836-A2**

Model	Engine rated speed	Whole body vibration
G23-2 with RCK48-G23-2	3380 rpm	0.45 m/s^2
G26-2 with RCK54-G26-2	3320 rpm	0.48 m/s^2

NOTE :

- Measurement were obtained through actual field data according to STD procedure in EN836-A2.
  This value listed above represents the weighted root means square acceleration to which the whole body is subjected on a representative machine during actual mowing and transport conditions.
  The acceleration value depends upon the roughness of the ground, the speed at which the machine is operating and the operator weight and driving habits.

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