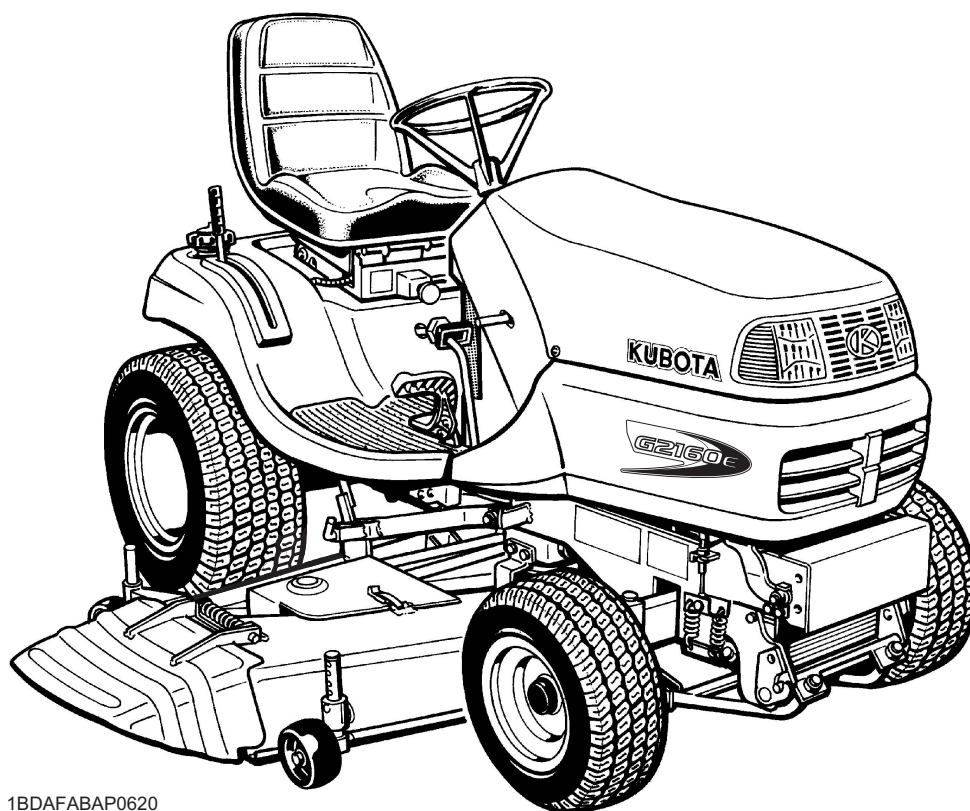


OPERATOR'S MANUAL

KUBOTA RIDING MOWER

MODEL G2160E



1BDAFABAP0620

K2113-7124-2

READ AND SAVE THIS MANUAL
- Original instructions -

Kubota

ABBREVIATION LIST

Abbreviations	Definitions
API	American Petroleum Institute
PTO	Power Take Off
PT	Permanent Type (=Ethylene glycol anti-freeze)
rpm	Revolutions Per Minute
SAE	Society of Automotive Engineers

Intended use

This machine is designed solely for use in customary grass cutting operation. Use in any other way is considered as contrary to the intended use. Compliance with and strict adherence to the conditions of operation, service, and repair as specified by the manufacturer, also constitute essential elements of the intended use.

This machine should be operated, serviced, and repaired only by persons who are familiar with its particular characteristics and who are acquainted with the relevant safety procedures.

Accident prevention regulations, all other generally recognized regulations on safety and occupational medicine, and all road traffic regulations must be observed at all times.

Any arbitrary modifications carried out to this machine may relieve the manufacturer of liability for any resulting damage or injury.

manufacturer or distributor of the machine	Kubota Corporation
the model designation of the machine	G2160E
the name or type of publication	Operator's Manual
the part number or publication number by which the manual may be ordered	K2113-7124-2
the date of issue	Dec. 20, 2012
the publication date	Dec. 17, 2013
the language in which the manual is written	English

UNIVERSAL SYMBOLS

As a guide to the operation of your machine, 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
-  Diesel Fuel
-  Fuel-Level
-  Brake
-  Parking Brake
-  Engine-Stop
-  Preheat
-  Engine-Run
-  Starter Control
-  Power Take-Off Clutch Control-Off Position
-  Power Take-Off Clutch Control-On Position
-  Cutting Height
-  Mower-Lowered position
-  Mower-Raised position
-  Headlight
-  Headlight-ON
-  Headlight-OFF
-  Fast
-  Slow
-  Engine Speed Control
-  Battery
-  Oil Pressure
-  Coolant Temperature

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 machine, please read this manual carefully. It will help you become familiar with the operation of the machine and contains many helpful hints about machine 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.

CONTENTS

▲ SAFE OPERATION	▲ -1
SERVICING OF MACHINE	1
SPECIFICATIONS	2
IMPLEMENT LIMITATIONS	3
Ballast	4
INSTRUMENT PANEL AND CONTROLS	5
MOWER MOUNTING	10
ATTACHING THE MOWER	10
Mounting the Mower Deck	10
ADJUSTING THE PARALLEL LINKAGE	12
ADJUSTING THE MOWER DECK (SIDE-TO-SIDE)	13
OPERATING THE ENGINE	14
STARTING THE ENGINE	14
CHECKING ENGINE START SYSTEM	16
CHECKING OPC SYSTEM	16
CHECK WHILE OPERATING THE ENGINE	17
STOPPING THE ENGINE	17
WARMING UP	17
Warm-up and Transmission Oil in the Low Temperature Range	17
JUMP STARTING	18
DRIVING THE MACHINE	19
DRIVING	19
STOPPING	19
PARKING	19
TOWING	19
OPERATING THE MOWER	20
ADJUSTING CUTTING HEIGHT	20
OPERATING THE MOWER	21
MAINTENANCE	22
SERVICE INTERVALS	22
LUBRICANTS	23
PERIODIC SERVICE	25
HOW TO OPEN THE HOOD	25
DAILY CHECK	25
Checking Engine Oil Level	26
Checking Amount of Fuel and Refueling	26
Checking and Cleaning Radiator to Prevent Overheating	27
Oiling	27
EVERY 50 HOURS	29
Checking Tire Pressure	29
Inflation Pressure	29

Checking Brake Pedal	30
Checking Fan Drive Belt Tension	30
Lubricating All Grease Fittings	31
Battery Condition	32
Cleaning Air Cleaner Element	33
Checking Front PTO Belt Tension	34
EVERY 200 HOURS AFTER 50 HOURS	34
Engine Oil Filter Cartridge Change	34
Changing Engine Oil	35
Transmission Oil Filter Cartridge Change	35
EVERY 100 HOURS	36
Checking Fuel Lines and Fuel Filter	36
Cleaning Radiator Core	36
EVERY 200 HOURS	37
Checking Radiator Hose and Clamp	37
Checking Hydraulic Hose	37
Checking Intake Air Line	37
EVERY 400 HOURS	38
Changing Transmission Fluid	38
Cleaning Transmission Oil Strainer	38
EVERY 500 HOURS	39
Replacing Fuel Filter	39
EVERY 1500 HOURS	39
Checking Fuel Injection Nozzle (Injection Pressure)	39
EVERY 3000 HOURS	39
Checking Injection Pump	39
EVERY 1 YEAR	39
Replacing Air Cleaner Element	39
Checking, Replenishing and Changing Coolant	39
Remedying Coolant Leakage	40
Engine Overheating Precautions	40
Cleaning Cooling System	40
Anti-Freeze	40
EVERY 2 YEARS	41
Replacing Hydraulic Hose	41
Replacing Fuel Lines	41
Replacing Radiator Hose	41
Replacing Intake Air Line	41
SERVICE AS REQUIRED	41
Replacing Fuses	41
Replacing Bulbs	42
Checking and Replacing Blade	43
Mower Belt Replacement	44
GENERAL TORQUE SPECIFICATION	45
TIGHTENING TORQUE CHART	45
STORAGE	46
TROUBLESHOOTING	47
ENGINE TROUBLESHOOTING	47
BATTERY TROUBLESHOOTING	47
MACHINE TROUBLESHOOTING	48

MOWER TROUBLESHOOTING.....	49
APPENDIX.....	50
SOUND AND VIBRATION MEASUREMENTS	50
INDEX.....	51



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")
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 implements 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".
20. It is recommended that your machine be thoroughly inspected at least once a year by an authorized KUBOTA Dealer.

2. OPERATING

◆ Starting

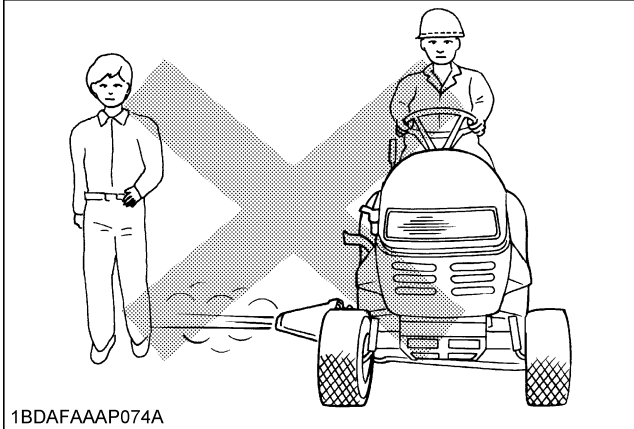
1. Never start engine or operate levers from anywhere other than the seat.
2. Before starting the engine, make sure that all levers (including auxiliary control levers) are in their neutral positions, that the parking brake is engaged, and that both the mower clutch and the Power Take-Off (PTO) are disengaged.
3. Do not start engine by shorting across starter terminals or by bypassing 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.

▲-2 SAFE OPERATION

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.



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. Shut the engine off and wait for all movement to stop before removing grass catcher or unclogging chute.
11. 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.
12. 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.
13. Always inspect the mower after striking any foreign object. This will insure that all mower parts are safe and secure and not damaged.
Repair or replace any damaged parts before re-starting.
14. Use only implements 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.
15. Do not operate the mower without either the entire grass catcher or the guard in place.
Be aware of the mower discharge direction and do not point it at anyone.
16. Watch for traffic when operating near or crossing roadways.
17. Stop the blades rotating before crossing surface other than grass.
18. Never leave a running machine unattended. Always turn off blades, set parking brake, stop engine, and remove the key before dismounting.
19. Be extremely alert for all other traffic when operating the mower and grass catcher near public roads or highways.
20. 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.
21. 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.

◆ 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

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 catcher 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 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 machine.

◆ 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 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. This machine is not allowed to be used on public roads.
4. Use extra care when loading or unloading the machine into a trailer or truck.

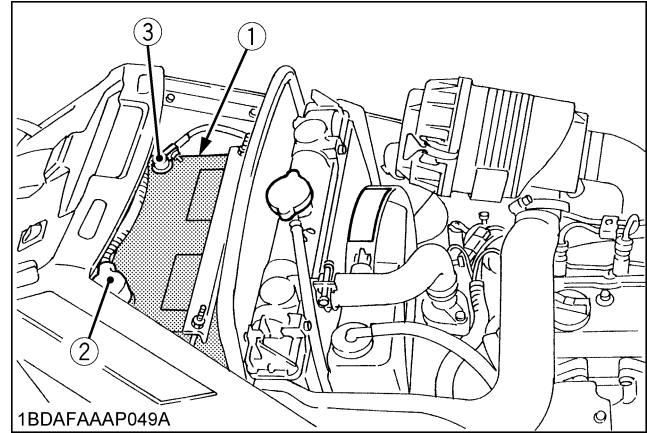
6. SERVICING

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 accidentally lowered.
3. To avoid injury, do not adjust, unclog or service the mower with the engine running. Make sure rotating blades are stopped before dismounting the machine.
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 machine clean. Dirt and grass build-up can cause fires and may lead to serious personal injury. Replace all safety labels that are damaged, lost or have otherwise become illegible. If a part to be replaced has a safety label on it, obtain a new safety label from your KUBOTA Dealer and install it in the same place as on the removed part.

▲-4 SAFE OPERATION

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 circlips, nuts and spring lock washers 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. Properly dispose of used lubricants, filters, batteries, and other such components.
21. Do not attempt to mount a tire on a rim. This should be done by a qualified person with the proper equipment.
22. Always maintain the correct tire inflation pressure. Do not inflate tires above the recommended pressure shown in the Operator's Manual.



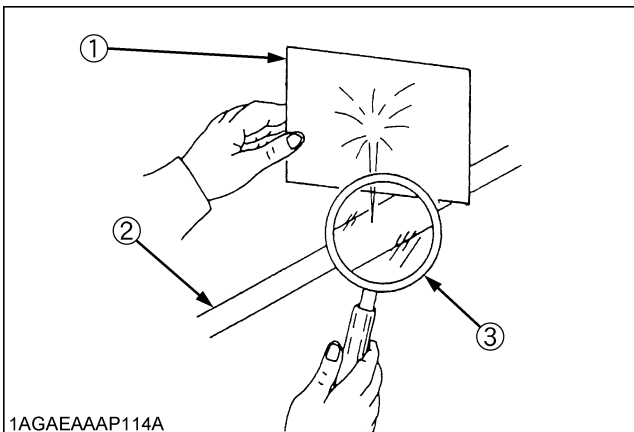
23. Securely support the machine when changing wheels.
24. Make sure that wheel bolts have been tightened to the specified torque.

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.



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.



- (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.

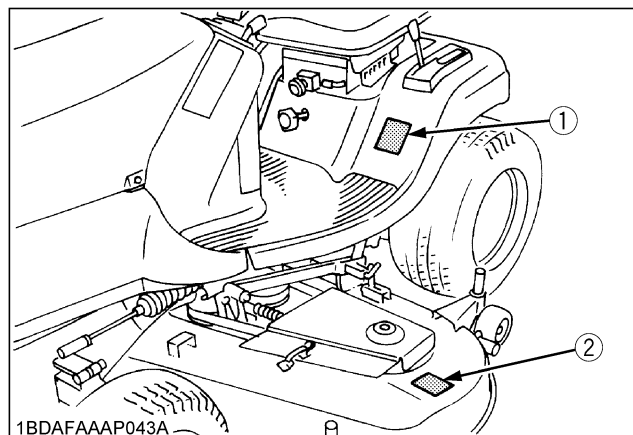
29. See your local Recycling Center or KUBOTA Dealer to learn how to recycle or get rid of waste products.

- 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.

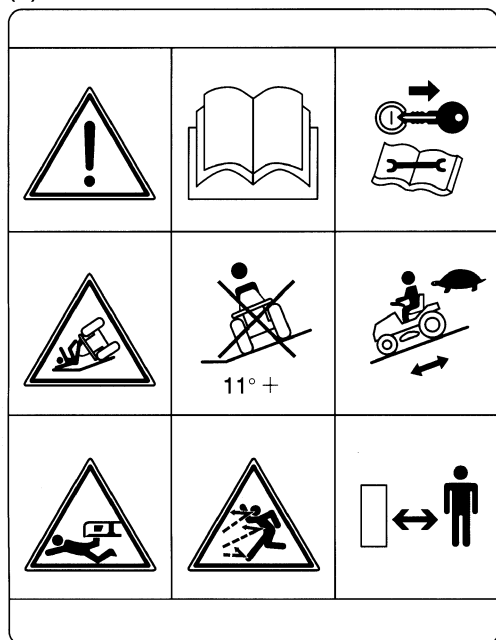
7. STORAGE

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 if it is not properly cleaned after use. Always make sure the mower is clean before storage.

8. PICTORIAL SAFETY LABELS



(1) Part No. K1213-6581-1

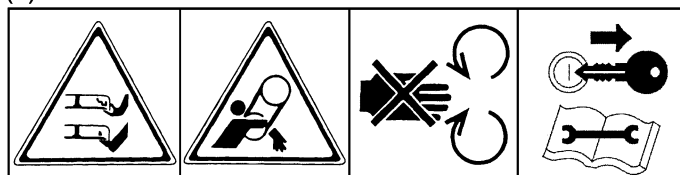


1BDAFAAAP059A

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.

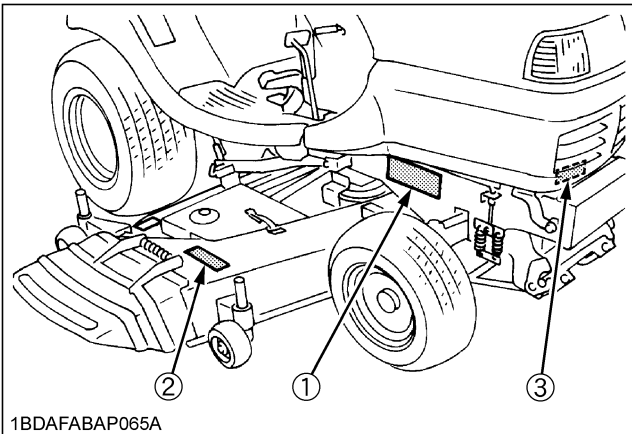
(2) Part No. K5254-7311-1



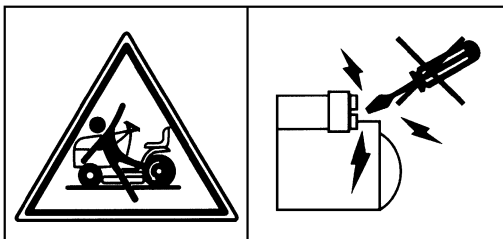
1BDAHAGAP0550

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.



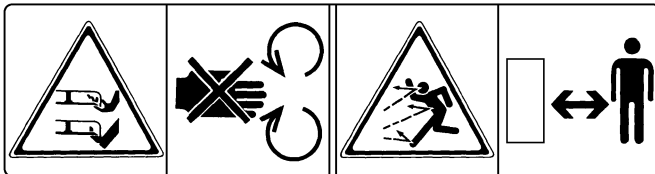
(1) Part No. K1213-6583-1



TO AVOID MACHINE RUNAWAY:

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

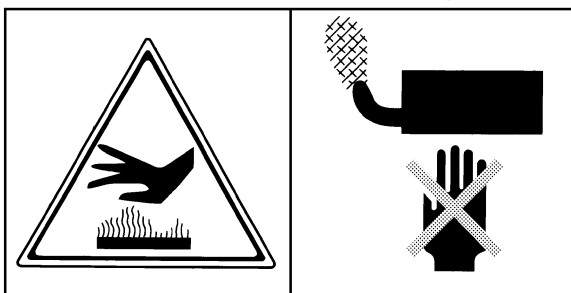
(2) Part No. K5652-4178-2



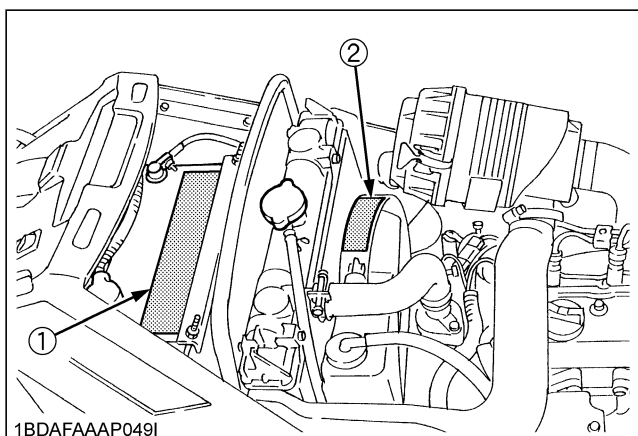
- DO NOT put hands or feet into mower when engine running.
- Stay clear of rotating parts.
- DO NOT allow any bystanders or children around or near machine at all times when the engine is running.

(3) Part No. K2561-6542-1

Do not touch hot surface like muffler, etc.



A-8 SAFE OPERATION



(1) Part No. K3181-6116-1

FLAMMABLES

SHIELD EYES

KEEP OUT OF THE REACH OF CHILDREN

CAUTION OF SULFURIC ACID

READ INSTRUCTION MANUAL CAREFULLY

EXPLOSIVE

SMF 51R
PART No. K3181-61144

NOMINAL VOLTAGE	12V
COLD CRANKING AMPS	430
CRANKING AMPS	540
RESERVE CAPACITY(MINUTES)	80
AMP HOURS(@20 hr Rate)	45

DANGER EXPLOSIVE GASES
CIGARETTES, FLAMES OR SPARKS COULD CAUSE BATTERY TO EXPLODE. ALWAYS SHIELD EYES AND FACE FROM BATTERY. DO NOT CHARGE OR USE BOOSTER CABLES OR ADJUST POST CONNECTIONS WITHOUT PROPER INSTRUCTION AND TRAINING.

POISON CAUSES SEVERE BURNS
CONTAINS SULFURIC ACID. AVOID CONTACT WITH SKIN, EYES OR CLOTHING. IN EVENT OF ACCIDENT FLUSH WITH WATER AND CALL A PHYSICIAN IMMEDIATELY.

KEEP OUT OF REACH OF CHILDREN

CALIFORNIA PROPOSITION 65 WARNING: Batteries, battery posts, terminals and related accessories contain lead and lead compounds, and other chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. WASH HANDS AFTER HANDLING.

FITTING DATE 0 1 2 3 4 5 6 7 8 9 YEAR

1 2 3 4 5 6 7 8 9 10 11 12 MONTH

INDICATOR

OK CHARGE REPLACE

MADE IN KOREA

1BDAHAGAP127A

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.

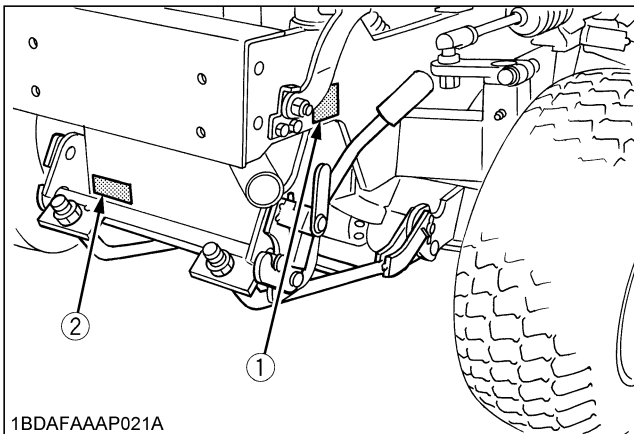
(2) Part No. K1213-6586-1

Do not get your hands close to engine fan and fan belt.



1BDAFAAAP066A

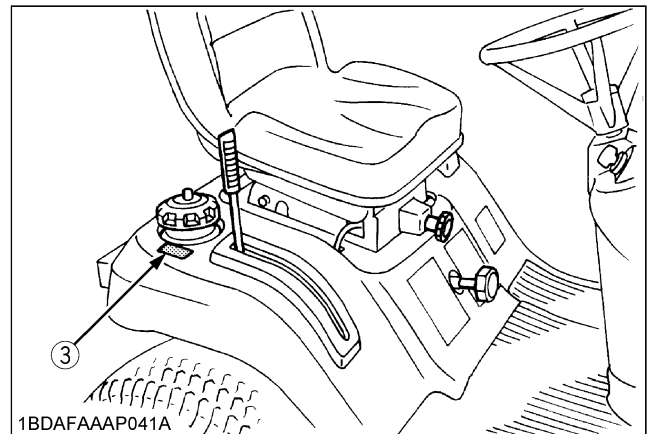
1BDAFABAP063A



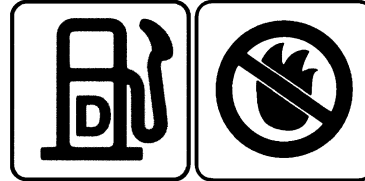
- (1) Part No. K2110-6573-1
HOT SURFACE, DO NOT TOUCH



1BDFAOAP009A

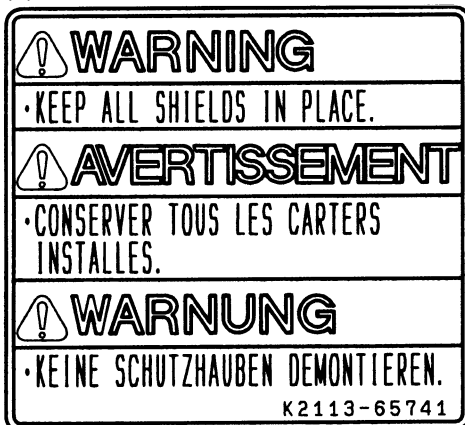


- (3) Part No. K1310-6585-1
Diesel fuel only No fire



1BDFAAAP069A

- (2) Part No. K2113-6574-1



1BDFAAAP068A

1BDAFABAP064A

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 MACHINE

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 machine, engine and mower serial numbers.

Locate the serial numbers now and record them in the space provided.

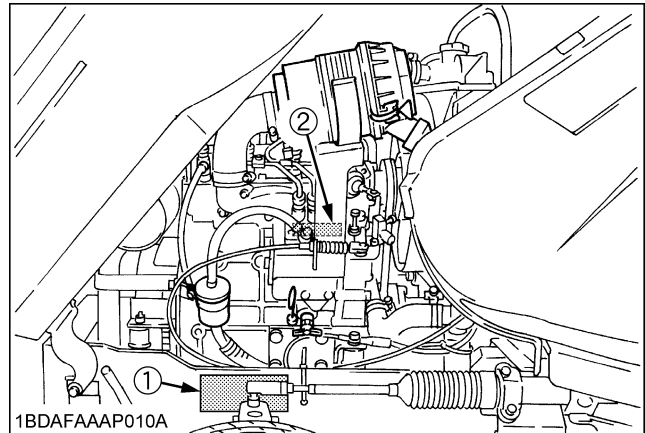
	Type	Serial No.
Machine		
Engine		
Mower		
Date of Purchase		
Name of Dealer (To be filled in by purchaser)		

◆ Warranty

This machine is warranted under the Kubota Limited Express warranty a copy of which may be obtained from your selling dealer. No warranty shall, however, apply if the machine has not been handled according to the instruction given in the Operator's Manual even it is within the warranty period.

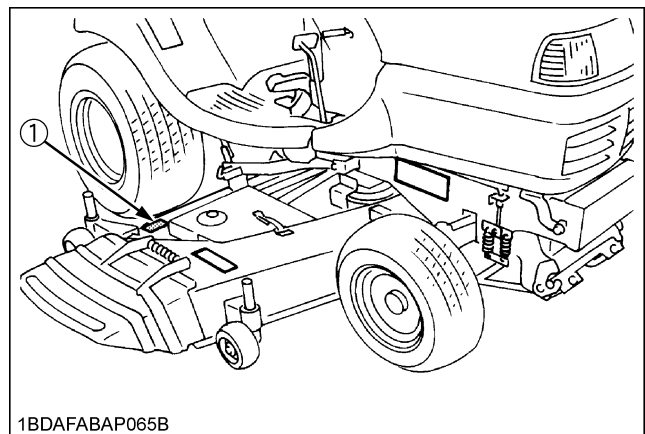
◆ Scrapping the machine and its procedure

To put the machine out of service, correctly follow the local rules and regulations of the country or territory where you scrap it. If you have questions, consult your local KUBOTA Dealer.



(1) Machine serial No.

(2) Engine serial No.



(1) Mower serial No.

SPECIFICATIONS

	Model			G2160-2
Engine	Model			D782
	Type			Water-cooled, Diesel engine
	Total displacement	cm ³		778
	Gross power *1	kW (PS)		15.6 (20.7)
	No. of cylinders			3
	Starter			Electric starter with battery
	Battery			51R (12V, 430CCA)
	Fuel			Diesel fuel No.1 [below -10 °C] Diesel fuel No.2 [above -10 °C]
	Preheating system			Super glow
	Engine stop			Key stop
Capacities	Fuel tank	L		22
	Engine oil	L		2.8
	Radiator coolant	L		2.1
	Hydrostatic transmission oil	L		4.5
Machine	PTO			Shaft drive
	PTO clutch			Belt tension
	PTO Brake			Shoe
	Tires	Front		16 x 6.50-8
		Rear		23 x 10.50-12
	Steering type			Manual
	Brake			Internal expanding brake
	Travel speed control			Foot pedal
	Transmission			Hydrostatic
Dimensions	Traveling speeds	Forward	km/h	0 to 15.0
		Reverse	km/h	0 to 6.0
	Overall length		mm	1885
	Overall width (without mower)		mm	1045
	Overall height		mm	1280
	Wheel base		mm	1290
	Tread	Front	mm	825
		Rear	mm	780
	Weight (without mower)		kg	390

Mower	Type		RCK54-24G	
	Cutting width	mm	1372	
	Cutting height	mm	25 to 102	
	Adjustment of cutting height		Dial gauge	
	Mounting method		Quick joint, Parallel linkage	
	Weight (Approx.)		kg	95
	Dimensions	Total length	mm	946
		Total width	mm	1690
		Total height	mm	273
	Discharge direction		Right side	

NOTE:

*1: Manufacturer's estimate

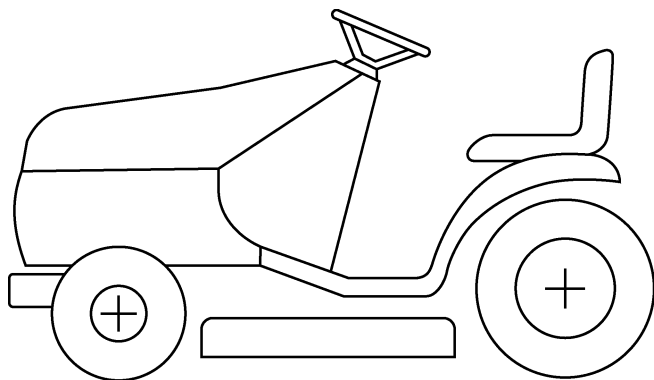
(The company reserves the right to change the specifications without notice.)

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		
Front axle Wf	Rear axle Wr	Total gross machine weight
350 kg	550 kg	700 kg

**Wf**

1BDAFAAAP058B

**Wr**

■ Ballast**CAUTION**

- **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.**

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.

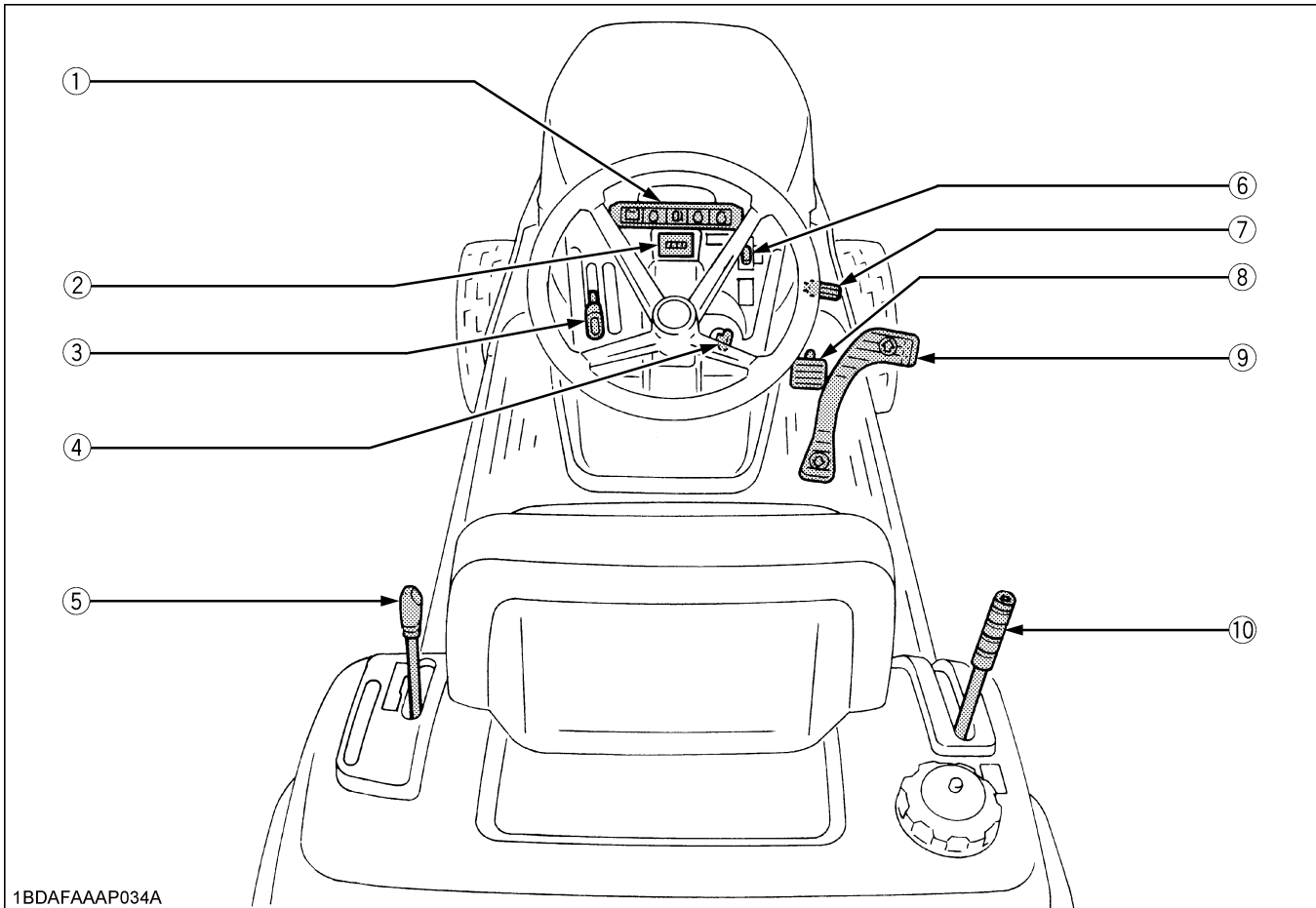
Use care and drive slowly under these conditions.

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 tip-over.

The Attachment's Manual shows how much rear ballast is required for your application. Rear ballast is available from your KUBOTA Dealer.

INSTRUMENT PANEL AND CONTROLS

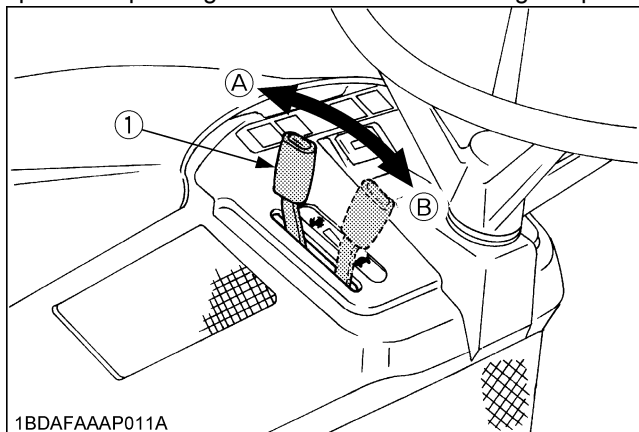


1BDAFAAAP034A

- (1) Easy checker™
- (2) Hour meter
- (3) Throttle lever
- (4) Key switch
- (5) Hydraulic lift lever
- (6) Light switch
- (7) Parking brake pedal
- (8) Brake pedal
- (9) Speed control pedal
- (10) PTO lever

■ Throttle Lever

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

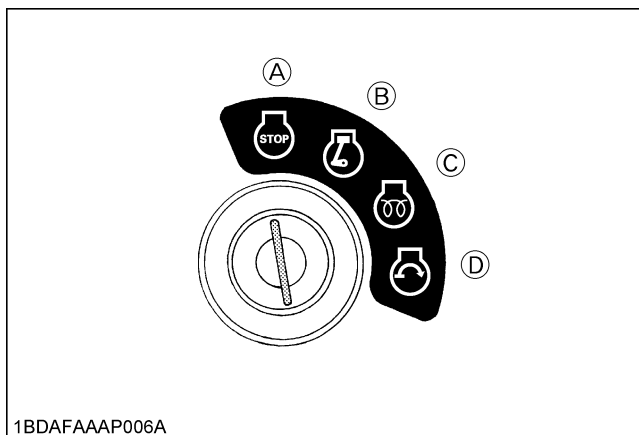


(1) Throttle lever

(A) "FAST" : (B) "SLOW" :

■ Key Switch

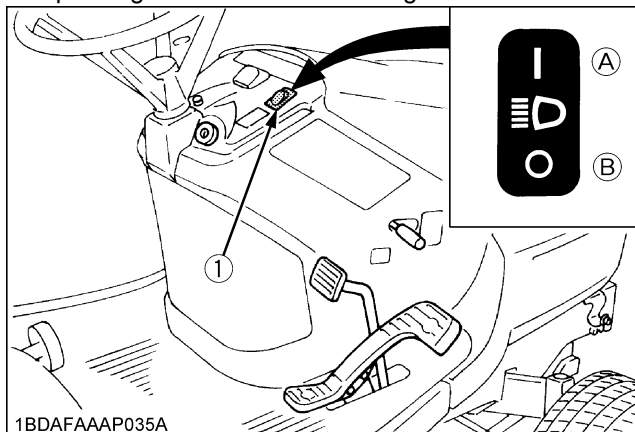
- OFF..... The position where the key can be inserted into or removed from the key switch. [When the key is turned to this position, the engine shuts off.]
- ON..... The engine is running.
- Preheat.... The super glow plug is heated.
- Start..... Depress the brake pedal fully and pull the PTO lever to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



(A) "OFF": (B) "ON": (C) "PREHEAT": (D) "START":

■ Light Switch

Pushing the light switch forward illuminates the headlights and pushing it backward turns the lights off.



(1) Light Switch

(A) "ON": (B) "OFF":

■ Speed Control Pedal

"FORWARD"

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

"REVERSE"

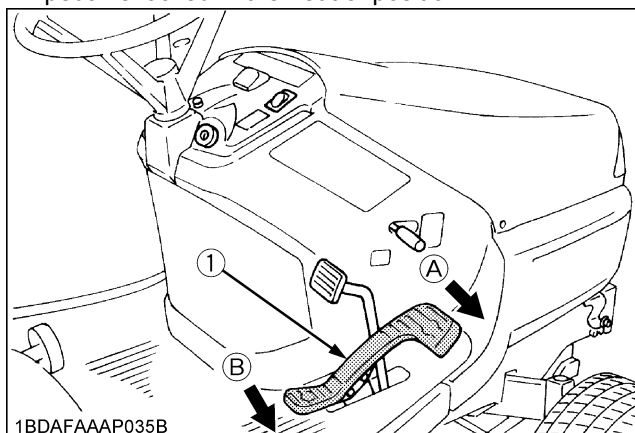
Depress the speed control pedal with the heel of your right foot to move in reverse.

Depress the speed control pedal a little and you can drive slowly.

To increase travel-speed, depress the speed control pedal more until the desired speed is reached.

NOTE :

- When the parking brake is applied, the speed control pedal is locked in the neutral position.

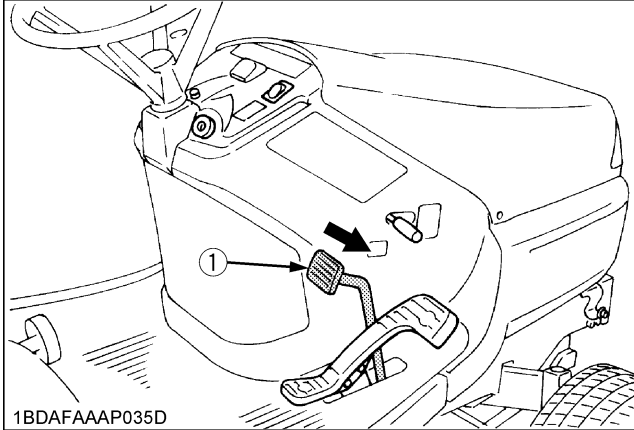


(1) Speed control pedal

(A) "FORWARD" (B) "REVERSE"

■ Brake Pedal

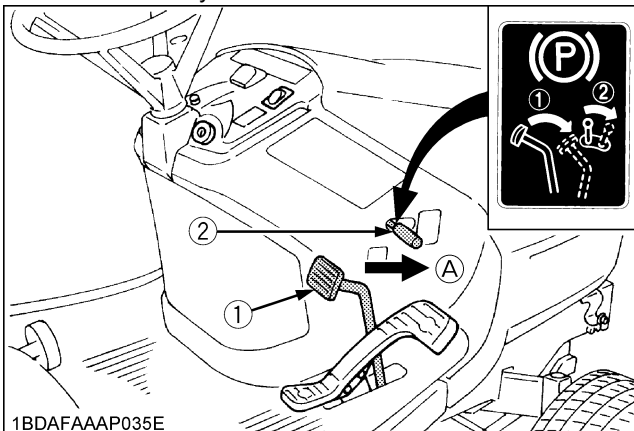
To apply the brakes, depress the brake pedal.



(1) Brake pedal

■ Parking Brake Pedal

To apply the parking brake, depress the brake pedal and the parking brake pedal simultaneously. Then release the brake pedal while holding the parking brake pedal down. To release the parking brake, depress the brake pedal and release slowly.



(1) Brake pedal
(2) Parking brake pedal

(A) "PARKING"

NOTE :

- This machine is equipped with safety devices. If you dismount from the seat and the parking brake is not applied, the engine will stop automatically.

■ Seat



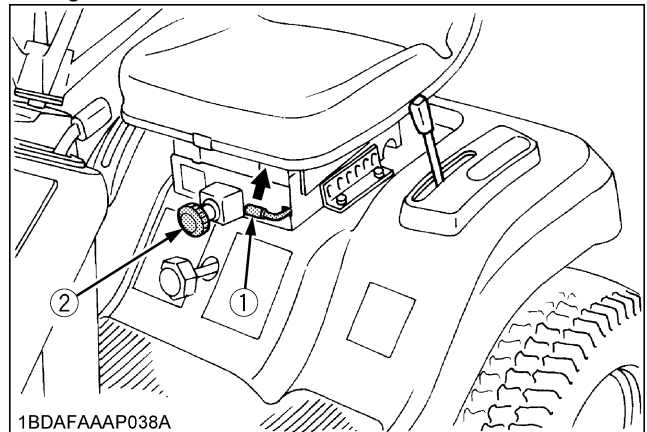
CAUTION

To avoid personal injury:

- Make sure that the seat is completely secured after each adjustment.
- Do not allow any person other than the operator to ride on the machine.

◆ Position adjustment

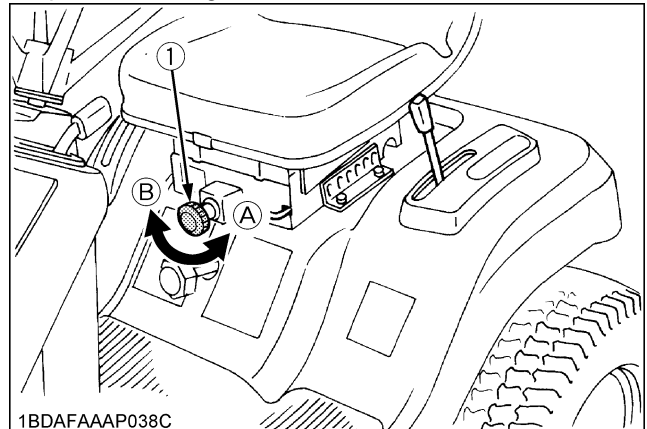
The operator's seat position can be adjusted forward and backward within a 102 mm range by pulling the seat sliding lever.



(1) Seat sliding lever
(2) Suspension adjust knob

◆ Suspension adjustment

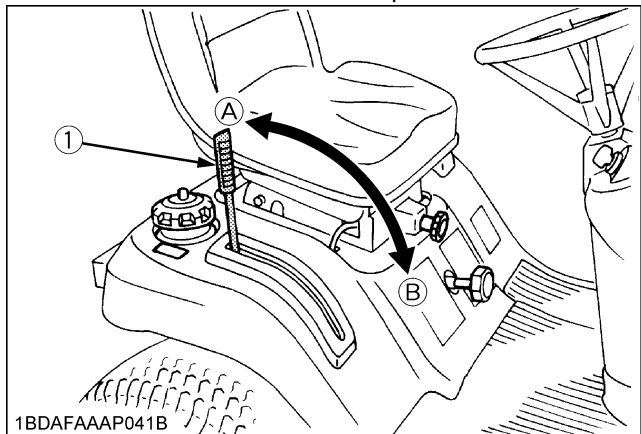
Turn the suspension adjust knob to achieve the optimum suspension setting.



(1) Suspension adjust knob
(A) To decrease tension
(B) To increase tension

■ PTO lever

To engage mower blades, push the PTO lever to the "ENGAGED" position. To stop the mower blades, pull the PTO lever to the "DISENGAGED" position.



(1) PTO lever

(A) "DISENGAGED": 
(B) "ENGAGED": 

NOTE :

This machine is equipped with safety devices.

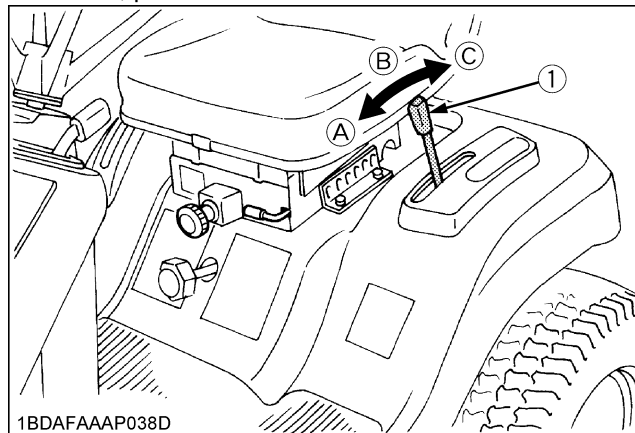
- If you dismount from the seat while the PTO is running, the engine will stop automatically. (Operator presence control)
- Before starting the engine, pull the PTO lever to the disengaged position and depress brake pedal, otherwise, the starter will not operate.

■ Hydraulic lift lever

The hydraulic lift lever is used to raise and lower implement used with the machine (ex.Mower).

To lower implement, push the lever FORWARD.

To raise it, pull the lever BACKWARD.



(1) Hydraulic lift lever

(A) "DOWN"
(B) "NEUTRAL"
(C) "UP"

IMPORTANT :

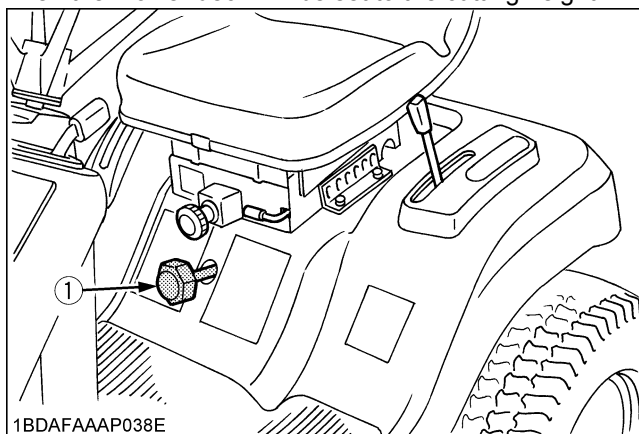
- Do not operate until the engine is warmed up. If operation is attempted when the engine is still cold, the hydraulic system may be damaged.
- Do not operate at slow Engine rpm. Move the throttle lever above 1/2 throttle.
- If noises are heard when implement is lifting after the hydraulic control lever has been activated, the hydraulic mechanism is not adjusted properly. Contact your KUBOTA Dealer for adjustment.

■ Cutting Height Control Dial

Raise the mower deck to the top position by pulling the hydraulic lift lever backward. Turn the cutting height control dial to the desired cutting height.

Lower the mower deck by pushing the hydraulic lift lever forward.

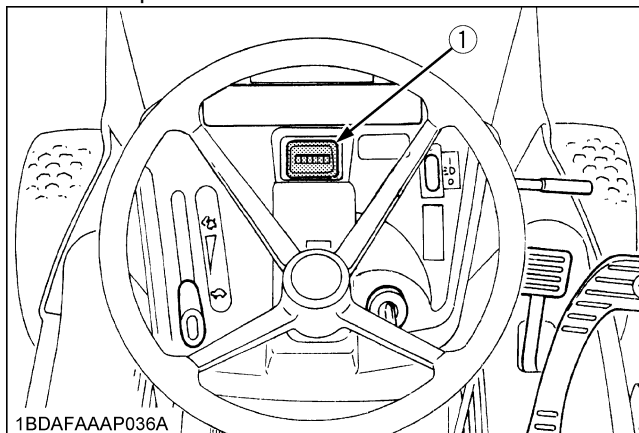
Then the mower deck will be set to the cutting height.



(1) Cutting height control dial

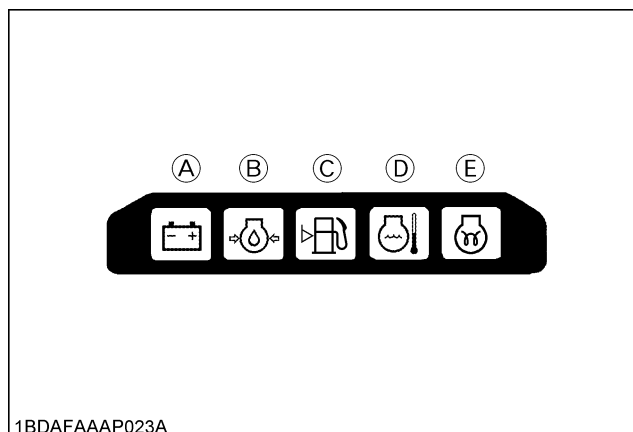
■ Hour meter

The hour meter starts to run when the key switch is turned to the "ON" position.



(1) Hour meter

■ Easy Checker™



- (A) If this warning light comes on during operation, check the electrical charging system or consult your KUBOTA Dealer.
- (B) If this warning light comes on during operation, check level of engine oil.
- (C) If the fuel in the tank goes below the prescribed level, the warning lamp in the Easy Checker™ will come on.
If this should happen during operation, refuel as soon as possible.
- (D) If this warning light comes on during operation, take the actions according to "Engine Overheating Precautions".
- (E) Glow plug Indicator (Pre-heating Indicator)
When the key switch is in the "Preheat" position, the glow plug indicator illuminates.

■ Overheat Alarm

If the temperature of the coolant rises to overheat temperature, the overheat alarm whistles.

Check the machine by referring to "TROUBLE SHOOTING" section.

MOWER MOUNTING

ATTACHING THE MOWER



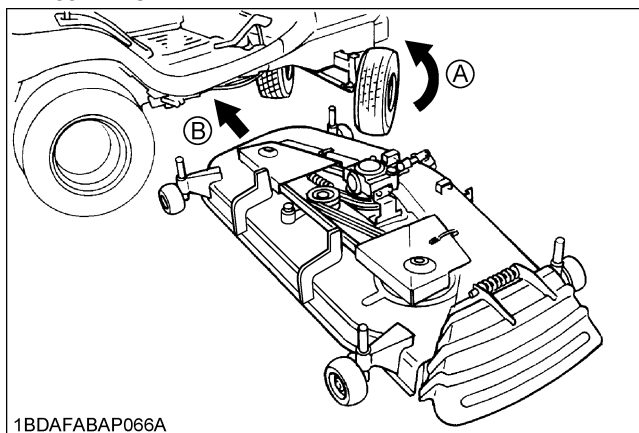
CAUTION

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 right side of the machine.
2. Set the anti-scalp rollers sideways. Turn the front wheel to the left. Pull the hydraulic lift lever to raise rear links.

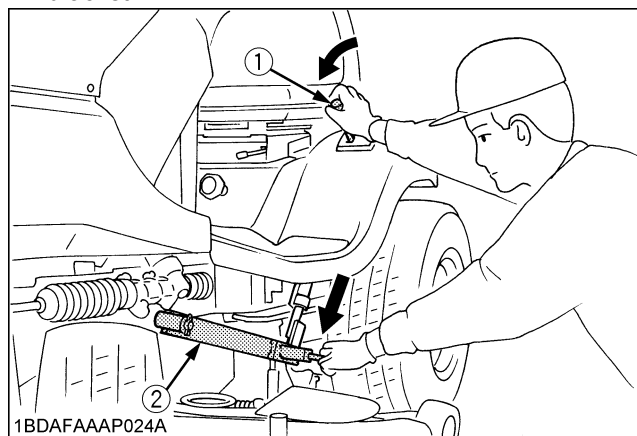


1BDAFABAP066A

(A) "LEFT"
(B) "SLIDE"

3. Slide the mower deck under the machine, then return wheels to straight ahead position.
4. Reset the front anti-scalp rollers to straight ahead position (Refer to ADJUSTING CUTTING HEIGHT section to set the anti-scalp rollers height.)

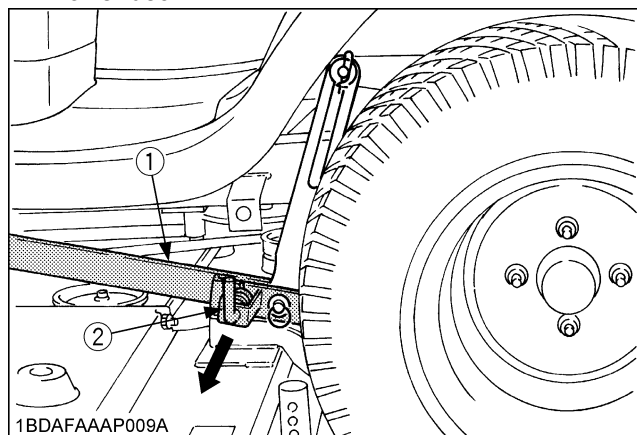
5. Place the hydraulic lift lever in the "DOWN" position. Push down the rear links to align with the mower bracket.



1BDAFAAAP024A

(1) Hydraulic lift lever
(2) Mower's rear link

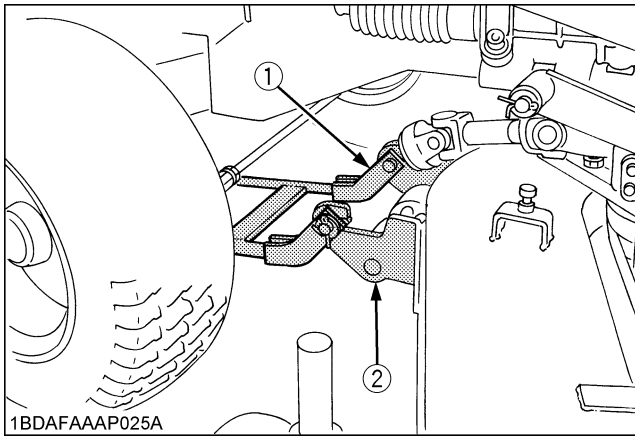
6. Release the L pins lock to attach the rear links to the mower deck.



1BDAFAAAP009A

(1) Mower's rear link
(2) L pin

7. Attach the front links to the front roller brackets.

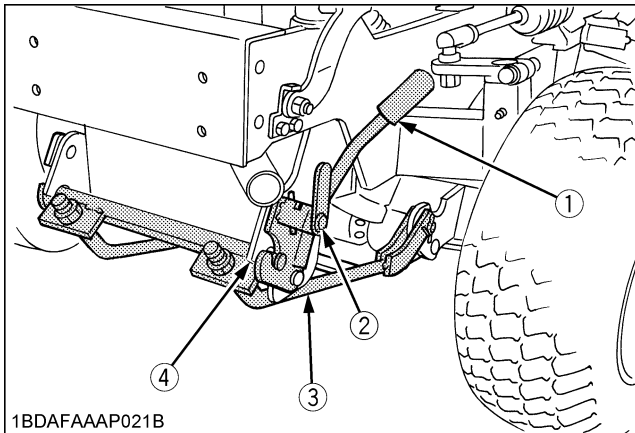


- (1) Front link
(2) Front roller bracket

NOTE :

- Adjust the length (L) of the front link.
(See "Adjusting The Parallel Linkage" section)

8. Pull the lever fulcrum fixing pin and turn it counter clockwise to unlock.
9. Hook and raise the front link with the link fixing lever, then lay the link fixing lever onto the front bracket of the machine.



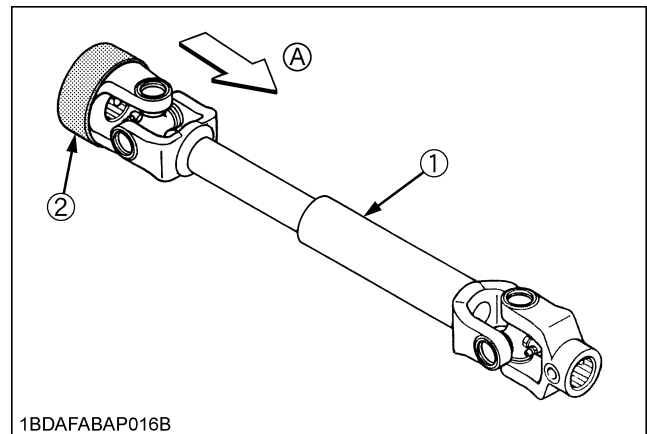
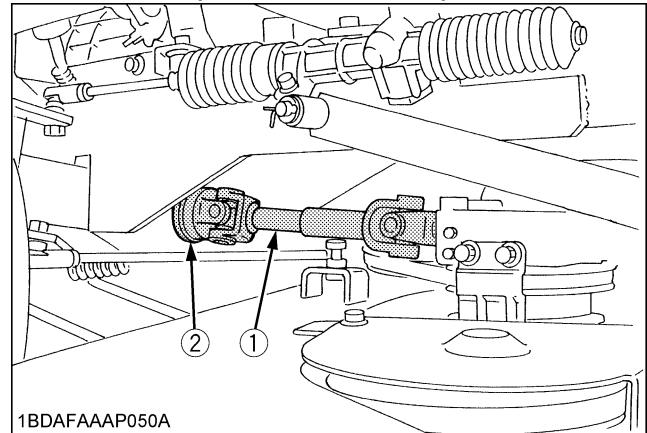
- (1) Link fixing lever
(2) Lever fulcrum fixing pin
(3) Front link
(4) Front bracket

10. Turn the lever fulcrum fixing pin clockwise and push it into position to fix the link fixing lever.

11. 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.



- (1) Universal joint
(2) Coupler

(A) "PULL"

IMPORTANT :

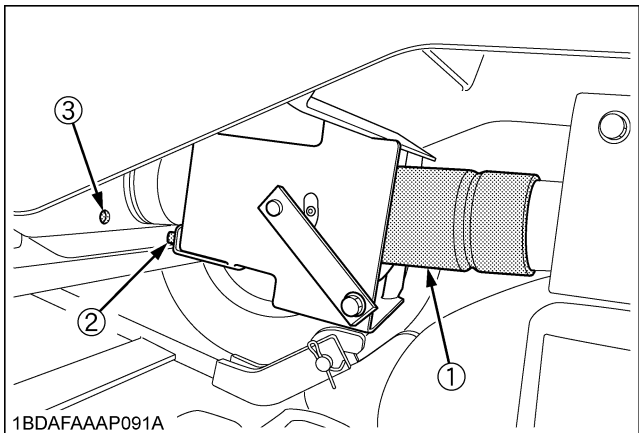
- Finally pull the universal joint to check if it is tight in position.

NOTE :

- For dismounting the mower deck, reverse the above procedures.

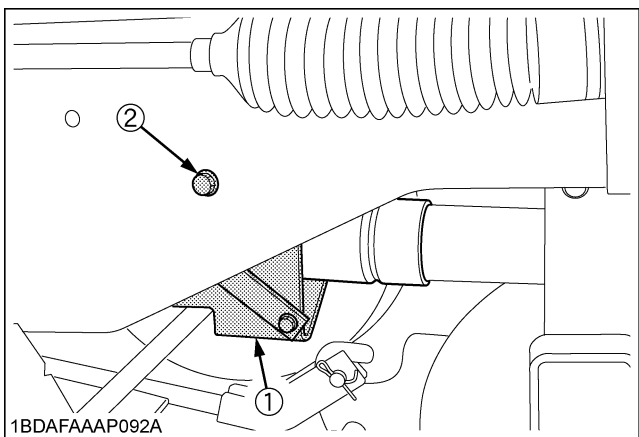
[Model with the universal joint cover]

12. Extend the universal joint cover to the coupler of the universal joint, and then set the projection of the universal joint cover to the hole of the frame.



- (1) Universal joint cover
(2) Projection (Universal joint cover)
(3) Hole (Frame)

13. Attach the stay to the frame with the bolt.



- (1) Stay (Universal joint cover)
(2) Bolt

IMPORTANT :

- Make sure to install the stay to the frame with the bolt.

ADJUSTING THE PARALLEL LINKAGE

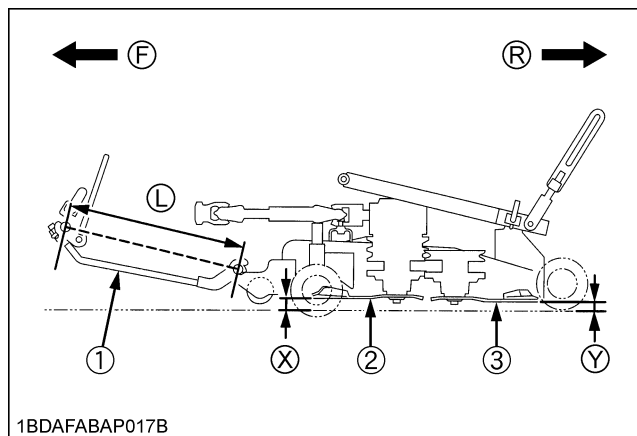
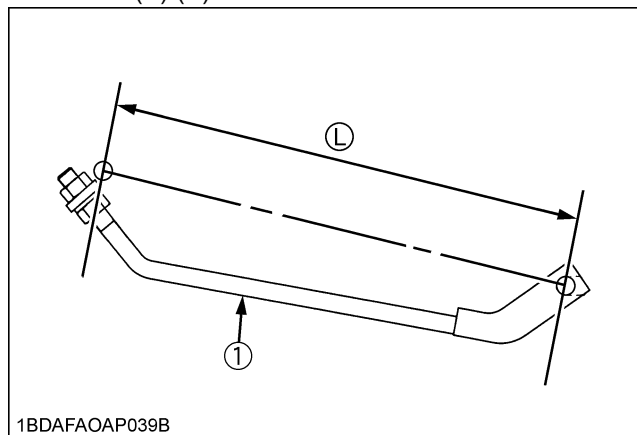


CAUTION

To avoid personal injury:

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

1. Park the machine on a level surface.
2. Make sure the mower blades are level in the way mentioned below. Then tighten the lock nuts securely. Adjust (L) of front links with lock nut so that A is 0 to 5 mm. $A = (Y) - (X)$



- (1) Front link
(2) Blade (front)
(3) Blade (rear)

- (F) Front
(R) Rear

ADJUSTING THE MOWER DECK (SIDE-TO-SIDE)

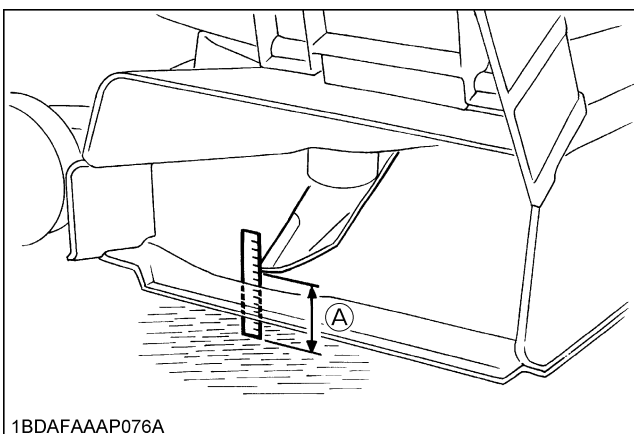
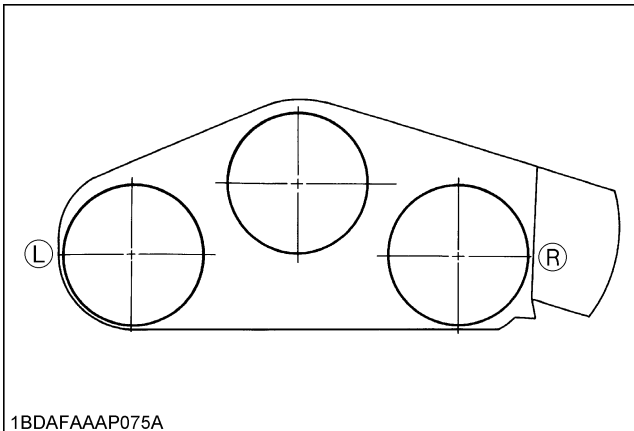


CAUTION

To avoid personal injury:

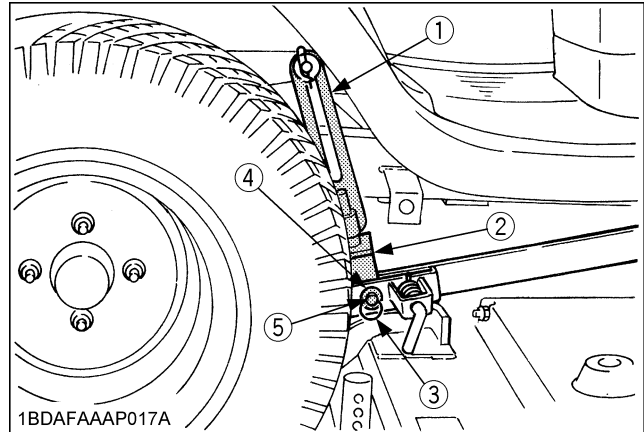
- Shut off the engine and remove the key.
- Set parking brake.
- Allow the blades to stop before making adjustments.
- Blades may be sharp. When you handle blades, wear heavy gloves or wrap end of blade with a rag.

1. Park the machine on a level surface.
2. Tire inflation pressure must be correct. (See "TIRE" section.)
3. Raise the hydraulic 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 hydraulic lift lever forward.
5. Turn the left blade so that it is parallel to rear axle. Hold drive belt and turn the right blade so that it is parallel to axle.
6. Measure from each outside blade tip (L) to (R) to the level surface. The difference between measurements should be less than 3 mm.



(A) "MEASURE THE HEIGHT"

7. Remove the snap ring, plain washer and clevis pin. Adjust the lift link length so that the difference between measurements (L) and (R) is less than 3 mm.
8. Reinstall the snap ring, plain washer and clevis pin.



- (1) Lift link (Upper)
 (2) Lift link (Lower)
 (3) Snap ring
 (4) Plain washer
 (5) Clevis pin

OPERATING THE ENGINE



CAUTION

To avoid personal injury:

- Read "Safe Operation" in the front of this manual.
- 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 engine while standing on ground. Start engine only from operator's seat.

STARTING THE ENGINE

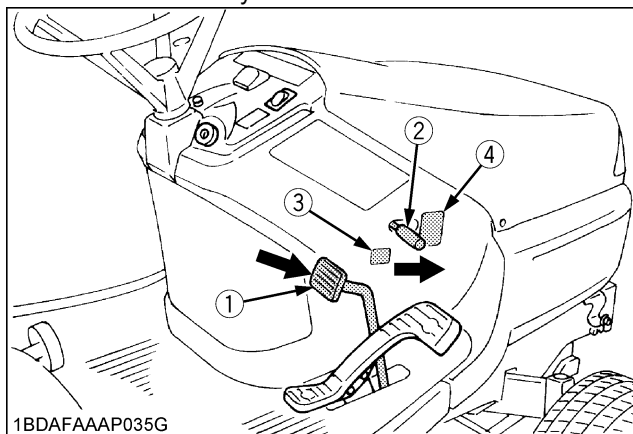
1. Make sure that the hood is closed.

IMPORTANT :

- If the hood is opened, the engine does not start.
- If the hood has been opened while the engine is running, the engine stalls.

2. Set the parking brake.

1. To set the parking brake, depress the brake pedal and the parking brake pedal simultaneously.
2. To release the parking brake, depress the brake pedal and release slowly.

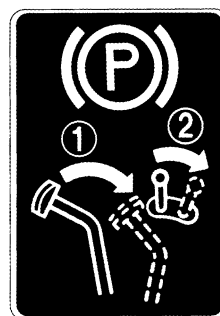


(1) Brake pedal
(2) Parking brake pedal

(3)

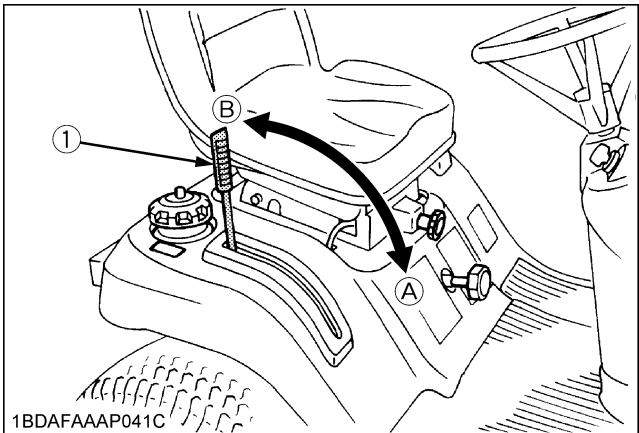


(4)



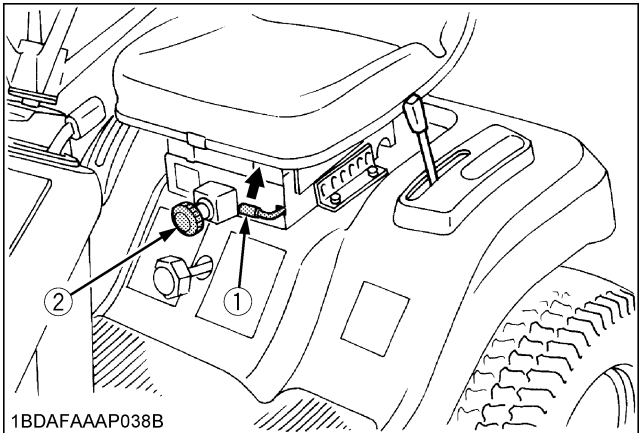
1BDAFAAAP077A

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



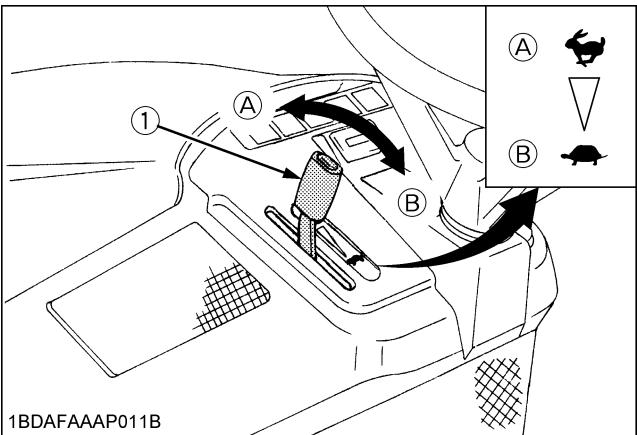
(1) PTO lever
(A) "ENGAGED"
(B) "DISENGAGED"

4. Sit on the operator's seat and adjust the seat position and suspension.



(1) Seat sliding lever
(2) Suspension adjust knob

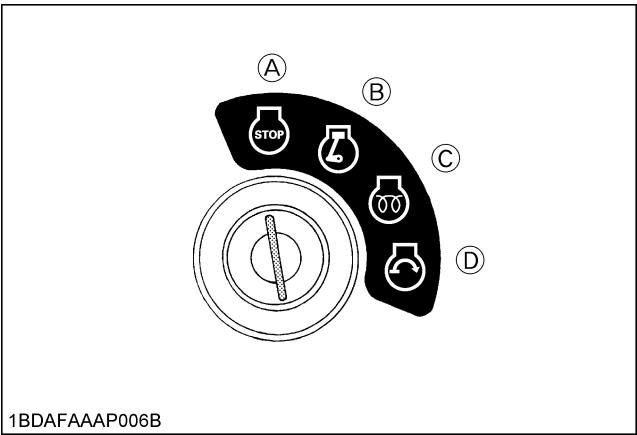
5. Set the throttle lever 1/2 way forward.



(1) Throttle lever
(A) "FAST"
(B) "SLOW"

6. Insert the key into the key switch and turn the key switch to "PREHEAT" position clockwise, and hold it for about 5 seconds.

Temperature	Preheating Time
Over 0 °C	5 sec.
Below 0 °C	10sec.



(A) "OFF"
(B) "ON"
(C) "PREHEAT"
(D) "START"

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

IMPORTANT :

- Do not turn the key switch to the "START" position while the engine is running.
- When the temperature is below 0 °C, run the engine at medium speed to warm up the lubricant of the engine and transmission for at least 10 minutes. If the machine is operated before the lubricant is warm enough, the machine life will be shortened.
- Do not operate the machine under full load until it is sufficiently warmed.
- Do not use starting fluid.
- When the ambient temperature is less than -15 °C, remove the battery from the machine and store it somewhere warm until next operation.

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. It is recommended to check the Engine Start System before daily 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. See your local KUBOTA Dealer.
- Sit on operator's seat for all tests.

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.

Test 1 (Safety Start Control 1)

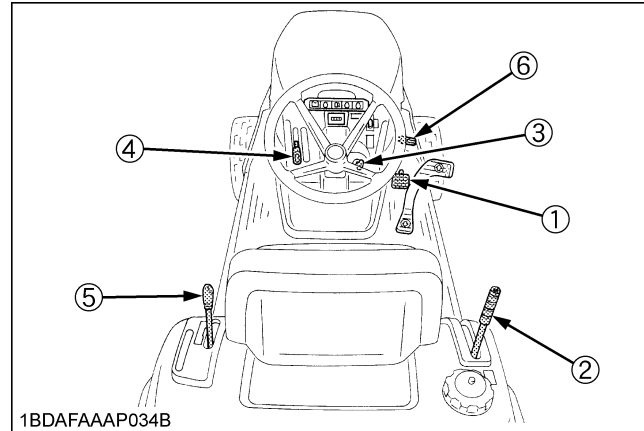
1. Depress the brake pedal fully.
2. Engage the PTO lever.
3. Turn the key switch to the "START" position.
4. The engine should not crank.

Test 2 (Safety Start Control 2)

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

Test 3 (Engine Safety Control)

1. Open the hood.
2. Sit on the operator's seat.
3. Depress the brake pedal fully.
4. Turn the key to the "START" position.
5. The engine should not crank.



- (1) Brake pedal
- (2) PTO lever
- (3) Key switch
- (4) Throttle lever
- (5) Hydraulic lift lever
- (6) Parking brake pedal

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. It is recommended to check the OPC system before dairy 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. See your local KUBOTA Dealer.

IMPORTANT :

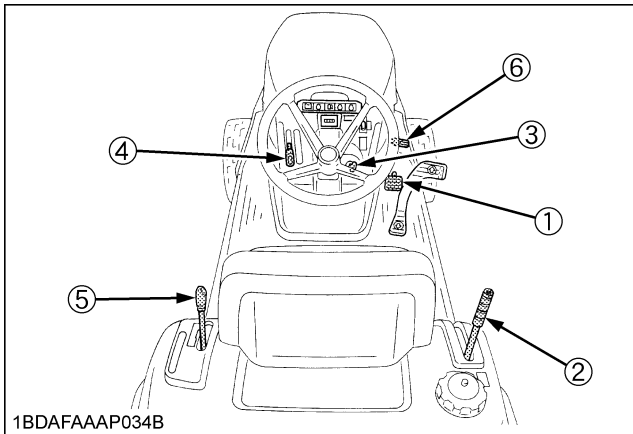
- Check the following tests before operating the machine.
1. Check the following tests before operating the mower. Sit on the operator's seat for all tests.
 2. If the machine does not pass one of the following tests, do not operate the machine. Contact your KUBOTA Dealer.

Test 1 (Seat Safety Control 1)

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

Test 2 (Seat Safety Control 2)

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



- (1) Brake pedal
 (2) PTO lever
 (3) Key switch
 (4) Throttle lever
 (5) Hydraulic lift lever
 (6) Parking brake pedal

CHECK WHILE OPERATING THE ENGINE

- Check color of the exhaust fumes.
- Check the headlights.
- Check performance of the PTO clutch.
- Check Safety Switch, Seat Safety Control, and PTO Safety Control.

If one of these do not operate properly, contact your KUBOTA Dealer immediately.

- Check for abnormal noise and vibration.
- Check Easy Checker™.

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 set 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 engine part. If load should be applied to the engine without this warm-up period, trouble 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 result in trouble in the hydraulic system.

To prevent the above, observe the following instructions: Warm up the engine at about 50% of rated rpm according to the table below:

Ambient temperature	Warm-up time requirement
Higher than 0 °C	Approx. 5 minutes
-10 to 0 °C	5 to 10 minutes
-20 to -10 °C	10 to 15 minutes
Below -20 °C	More than 15 minutes

IMPORTANT :

- Do not operate the machine under full load condition until it is sufficiently warmed up.

JUMP STARTING



CAUTION

To avoid personal injury:

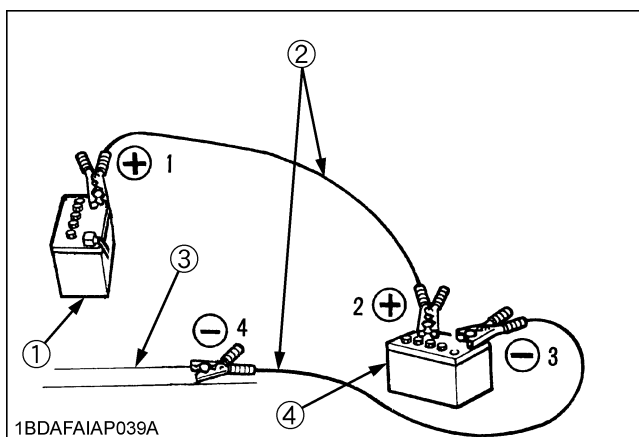
- **Battery gases can explode. Keep cigarettes, sparks, and flames away from battery.**
- **If machine battery is frozen, do not jump start engine.**
- **Do not connect other end of negative (-) jumper cable to negative (-) terminal of machine battery.**

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).

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.



- (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.

DRIVING THE MACHINE

DRIVING

1. Depress the brake pedal to release the parking brake.
2. Depress the speed control pedal with your right foot to move forward or reverse.

To move forward:

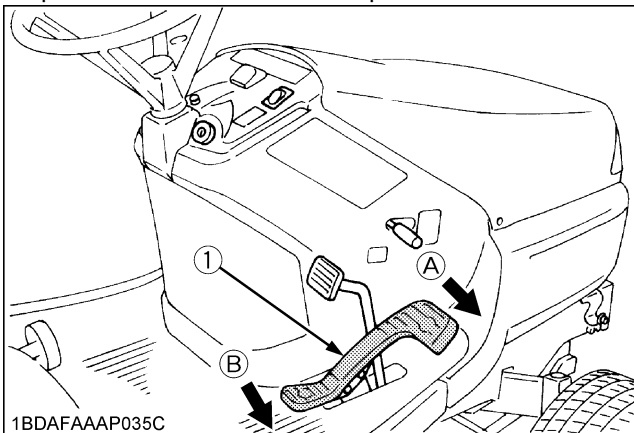
Depress the speed control pedal with the toe of your right foot to move forward.

To move backwards:

Depress the speed control pedal with the heel of your right foot to move in reverse.

NOTE :

- When the parking brake is applied, the speed control pedal is locked in the neutral position.



(1) Speed control pedal

(A) "FORWARD"
(B) "REVERSE"

STOPPING

1. Release the speed control pedal and depress the brake pedal to stop the machine.
2. Push the PTO lever to the "DISENGAGED" position.
3. Slow the engine down.

PARKING



CAUTION

Before leaving the operator's position:

- Set parking brake.
- Lower all implements to the ground.
- Shut off the engine.
- Remove the key.

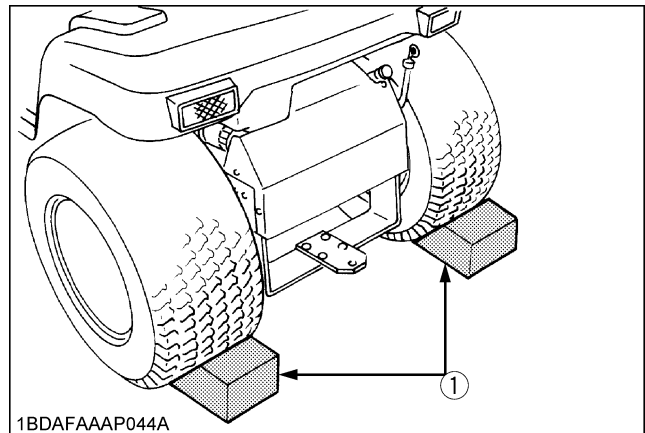
TO LOCK THE PARKING BRAKE

1. Depress the brake pedal and the parking brake pedal simultaneously.
2. Release the brake pedal while holding the parking brake pedal depressed.

TO UNLOCK THE PARKING BRAKE

1. Depress the brake pedal and release slowly.

If it is necessary to park on an incline, be sure to block the wheels on the downhill side to prevent accidental rolling of the machine.



(1) Blocks

TOWING

IMPORTANT :

- Do not tow this machine. Use a suitable truck or trailer when transporting on public roads.

OPERATING THE MOWER



DANGER

To avoid serious injury or death:

- Do not operate mower without deflector shield.



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 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

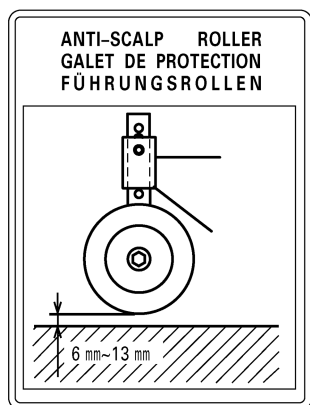


DANGER

To avoid serious injury or death:

- Never engage the PTO and blades in transport position.

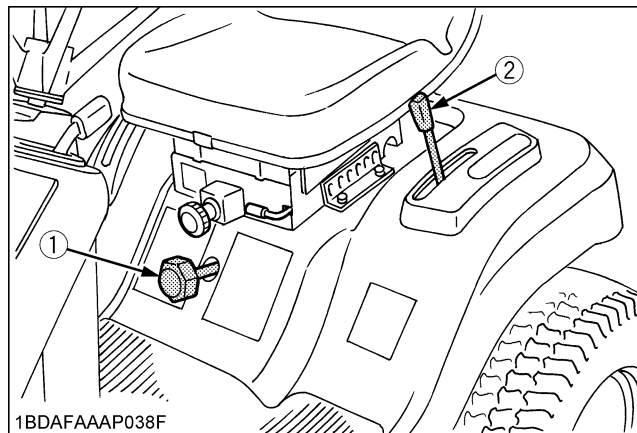
1. To set the cutting height, pull the hydraulic lift lever backward to raise mower deck to the top position. Turn the cutting height control dial to adjust height.
2. Set the anti-scalp rollers' height as shown to keep clearance between rollers and ground more than 6 mm.



1BDAFAAAP070A

3. Lower the mower deck by pushing the hydraulic lift lever downward. This lowers the mower deck from the "Transport" position to the "Operating" position.

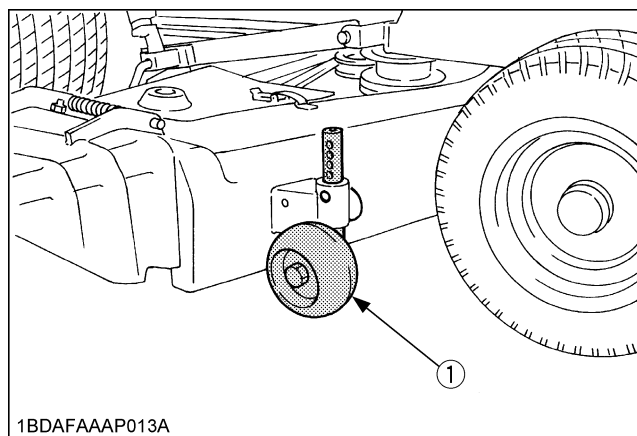
4. Use the higher settings for mowing in a rough area or when mowing tall grass. Lower settings should be used only for smooth lawns where short grass is desired.



1BDAFAAAP038F

(1) Cutting height control dial

(2) Hydraulic lift lever

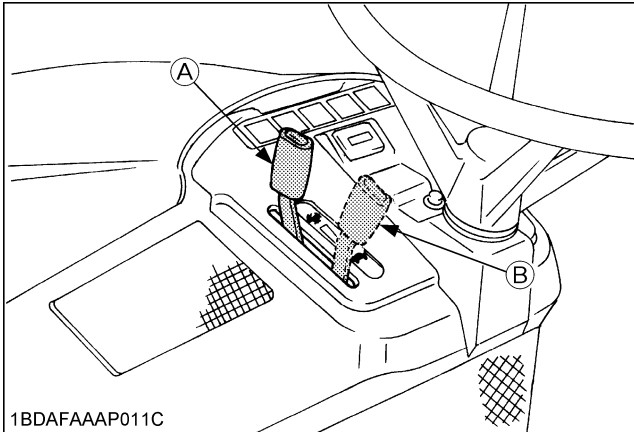


1BDAFAAAP013A

(1) Anti-scalp roller

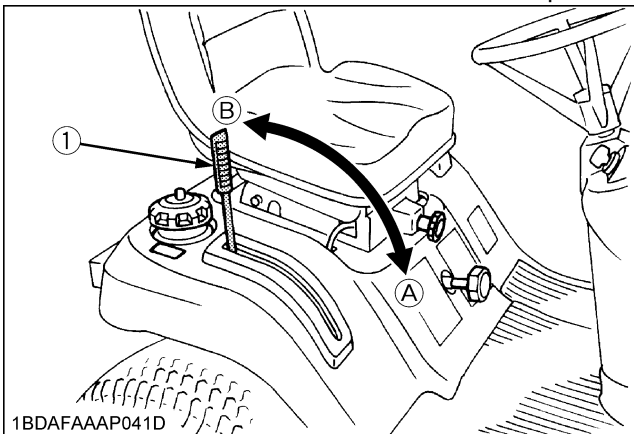
OPERATING THE MOWER

1. Start the engine.
2. Set the throttle lever to the "FAST" position.



(A) "FAST" position
(B) "SLOW" position

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



(1) PTO lever
(A) "ENGAGED"
(B) "DISENGAGED"

NOTE :

- For best cut quality and performance, always mow with the throttle lever in "FAST" position.

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

- (1) During heavy duty use, operate the machine at a slower ground speed or go over the area twice. The first pass should be with the deck at the highest cutting 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.

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

MAINTENANCE

SERVICE INTERVALS

	Items		Every 50 Hr	Hour meter reading									Refer- ence page
				50	100	150	200	300	400	450	500	After	
1	Tires	Check	○									Every 50 Hr	29
2	Battery condition	Check	○									Every 50 Hr	32
3	Engine oil	Change		◎			○		○			Every 200 Hr	35
4	Engine oil filter cartridge	Change		◎			○		○			Every 200 Hr	34
5	Transmission fluid	Change							○			Every 400 Hr	38
6	Transmission oil filter cartridge	Replace		◎			○		○			Every 200 Hr	35
7	Transmission oil strainer	Clean							○			Every 400 Hr	38
8	Hydraulic hose	Check					○		○			Every 200 Hr	37
		Replace										Every 2 Years*	41
9	Fuel lines	Check			○		○	○	○		○	Every 100 Hr	36
		Replace ☆										Every 2 Years*	41
10	Fuel filter	Check			○		○	○	○		○	Every 100 Hr	36
		Replace ☆									○	Every 500 Hr	39
11	Fuel injection nozzle injection pressure	Check										Every 1500 Hr	39
12	Injection pump	Check										Every 3000 Hr	39
13	Intake air line	Check					○		○			Every 200 Hr	37
		Replace										Every 2 Years	41
14	Radiator hose and clamp	Check					○					Every 200 Hr	37
		Replace ☆										Every 2 Years*	41
15	Radiator core	Clean			○		○	○	○		○	Every 100 Hr**	36
16	Cooling system	Clean										Every 1 Year	40
17	Coolant	Change										Every 1 Year	39
18	Air cleaner element	Clean	○**										33
		Replace										Every 1 Year**	39
19	Fan belt tension	Adjust	○										30
20	Front PTO belt tension	Adjust	○***										34
21	Brake play	Adjust ☆	○										30
22	Greasing	---	○										31
23	Mower gear box oil	Change		◎		○		○		○		Every 150 Hr	---
24	Mower gear box oil seal	Replace ★										Every 2 Years*	---

IMPORTANT:

- ◎ The maintenance indicated by ◎ must be done initially.
- * Replace only if necessary.
- ** This maintenance should be done more often in dusty conditions than in normal conditions.
- *** Initial elongation of the front PTO belt may occur prior to 25 hours. Adjust the tension spring length as needed to maintain belt tension.
- ☆ These items should be serviced by an authorized KUBOTA Dealer, unless the owner has the proper tools and is mechanically proficient.
- ★ Consult your local KUBOTA Dealer for this service.

LUBRICANTS

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

Place	Capacity	Lubricants
Engine crankcase	2.8 L *1	● Engine oil: API Service classification CF (or better) Above 25 °C : SAE 30, SAE 10W-30 or SAE 15W-40 0 to 25 °C : SAE 20, SAE 10W-30 or SAE 15W-40 Below 0 °C : SAE 10W, SAE 10W-30 or SAE 15W-40
Transmission (Including HST & CYLINDER)	4.5 L	● KUBOTA UDT or SUPER UDT fluid *2
Mower gear box	0.4 L	● SAE #90 gear oil
King pin Center pin Universal joint Spindle shaft Belt tension pulley Belt tension pivot Balance shaft Tension lever	Until grease over flows	● Multipurpose EP2 Grease (NLGI Grade No.2)
Link fulcrum PTO lever (fulcrum) Front PTO cable Brake pedal shaft Speed control pedal shaft Throttle cable Mower universal joint Front link Mower link	Moderate Amount	● Oil or Spray type grease
Fuel tank	22 L	● No.2-D diesel fuel ● No.1-D diesel fuel if temperature is below -10 °C
Radiator	2.1 L	● Fresh clean water with anti-freeze
Radiator recovery tank	0.25 L	

Note *1 Oil amount when the oil level is at the upper level of the oil level gauge.

*2 KUBOTA original transmission hydraulic fluid

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 [$\geq 0.05\%$ (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	G2160-2	---

◆ **Fuel:**

- Cetane number of 45 minimum. Cetane number greater than 50 is preferred, especially for temperatures below -20°C 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.

PERIODIC SERVICE

HOW TO OPEN THE HOOD

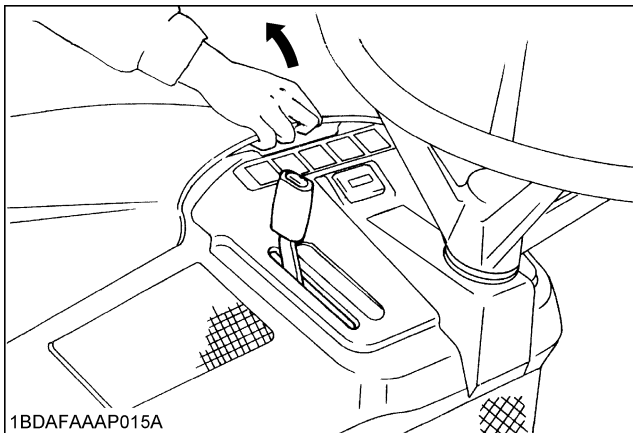


CAUTION

To avoid personal injury:

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

To open the hood, lift the hood as shown in the figure below.



DAILY CHECK

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



CAUTION

To avoid personal 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 "ENGAGED".

	No.	Check item	Reference Page
Walking around the machine	1	Oil and water leak	---
	2	Engine oil level	26
	3	Fuel level	26
	4	Coolant level in the recovery tank	39
	5	Damage of machine body, tightness of all bolts and nuts	---
	6	Radiator screen	27
	7	Panel screen	27
	8	Check air cleaner	---
	9	Oiling	27
Mower	1	Make sure blade bolts are tight.	43
	2	Check blades for wear or damage.	43
	3	Check all hardware.	---
	4	Make sure all pins are in place.	---
Others	1	Check the areas where previous trouble was experienced.	---
While sitting in the Operator's Seat	1	Speed control pedal, Brake pedal	---
	2	Parking brake	---
Turning the key switch on	1	Headlights	---
Starting the engine	1	Color of the exhaust fumes	---
	2	Safety start switch and seat safety control if either of these do not operate properly, contact your KUBOTA Dealer immediately.	16
	3	Check for abnormal noise and vibration	---
	4	Check Easy Checker TM	5

■ Checking Engine Oil Level



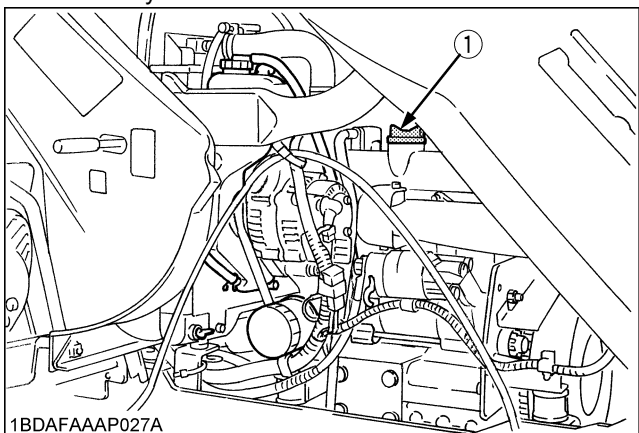
CAUTION

To avoid personal injury:

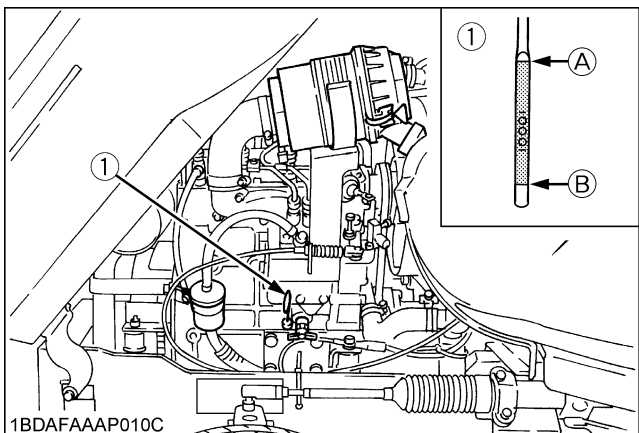
- Always stop the engine and remove the key before checking oil.

◆ Oil level check

1. Check engine oil before starting and 5 minutes or more after the engine has stopped.
2. Wipe dipstick area clean.
3. To check the oil level, remove the dipstick, wipe it clean, replace it, and draw it out again. Check to see that the oil level is between the 2 notches.
4. Add new oil to the prescribed level at the oil port if necessary.



(1) Engine oil port



(1) Oil level dipstick

(A) "UPPER LEVEL"

(B) "LOWER LEVEL"

5. When using a different brand or viscosity oil from the previous one, remove all of the old oil. Never mix 2 different types of oil.
6. Use the proper Engine Oil SAE according to the ambient temperatures. (See "LUBRICANTS".)

■ Checking Amount of Fuel and Refueling



CAUTION

To avoid personal injury:

- 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.



1BDAFAAAP072A

Check the fuel level. Take care that the fuel tank does not become empty.

Fuel tank capacity	22L
--------------------	-----

IMPORTANT :

- Use Diesel Fuel Only.
1. Use No.2 diesel fuel.
 2. Use No.1 diesel fuel if the temperature is below -10 °C .
 3. Always use a strainer when refueling to prevent fuel injection pump contamination.

■ Checking and Cleaning Radiator to Prevent Overheating



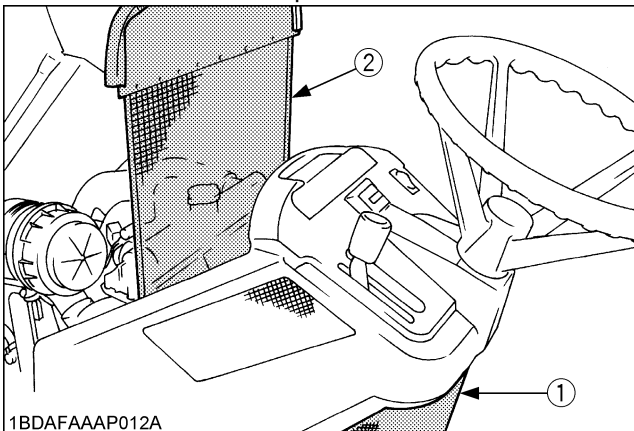
CAUTION

To avoid personal injury:

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

Daily or after every 5 hours of operation, check to be sure the radiator screen and panel screen are clean. Dirt or chaff on the radiator screen or radiator core decreases cooling performance.

1. Remove the radiator screen and remove all foreign material.
2. Remove the dust from between the fins and the tube.
3. If scale forms in the tube, clean with scale inhibitor or its equivalent.
4. Each time the panel screen is covered with grass during operation, wipe off the screen by hand. Check the radiator screen from time to time if grass often gets on it.
5. If dust or chaff is accumulated inside of the panel, clean the inside of the panel.



(1) Panel screen
(2) Radiator screen

■ Oiling

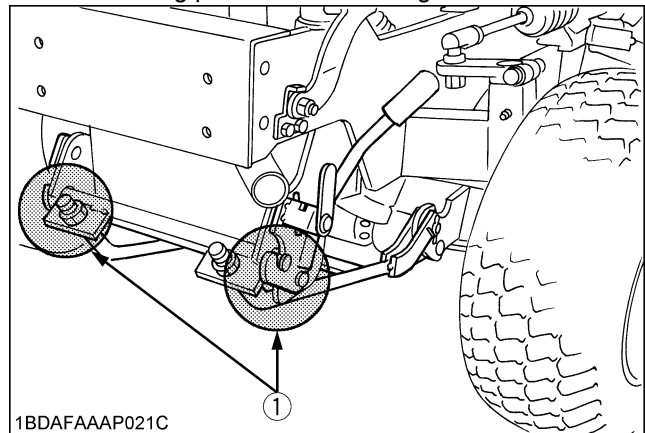


CAUTION

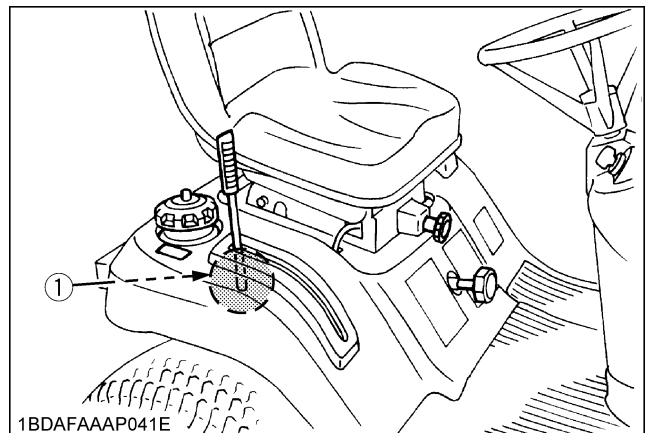
To avoid personal injury:

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

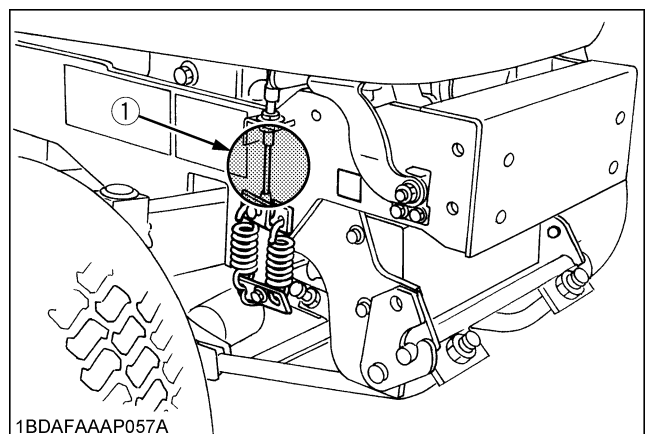
Oil the following points before starting.



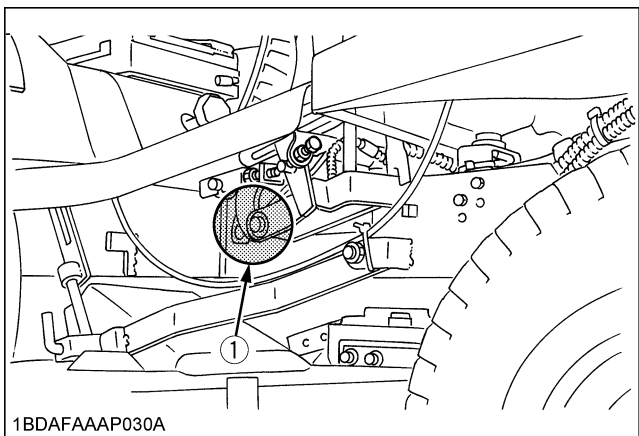
(1) Link fulcrum



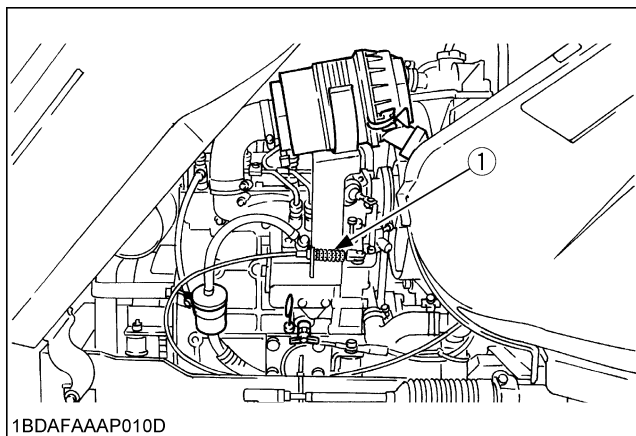
(1) PTO lever (fulcrum)



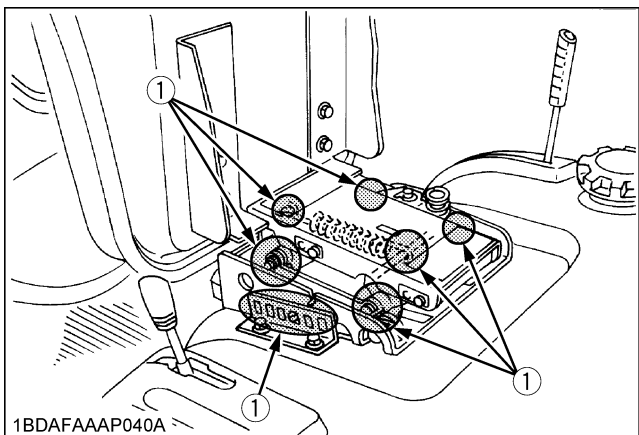
(1) Front PTO cable



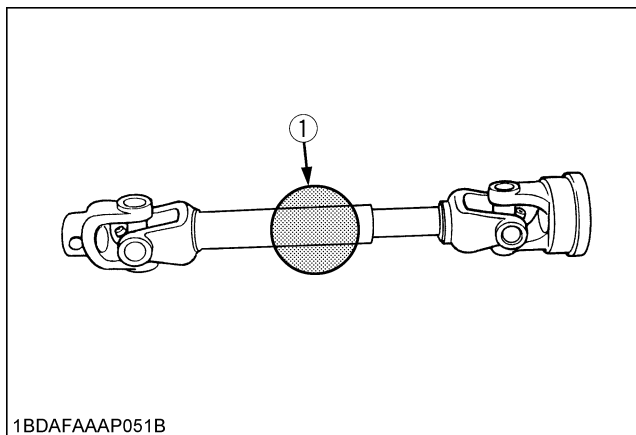
(1) Brake pedal



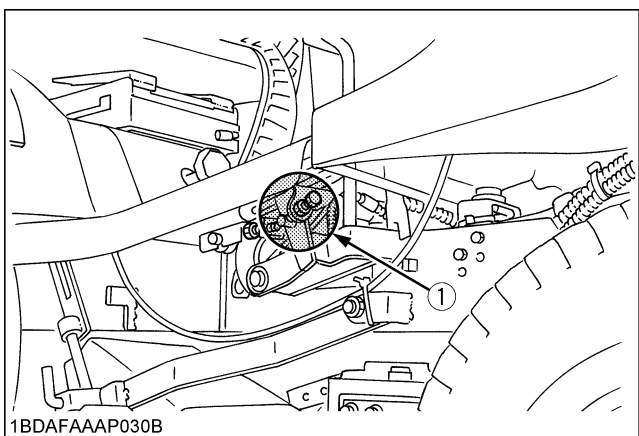
(1) Throttle cable



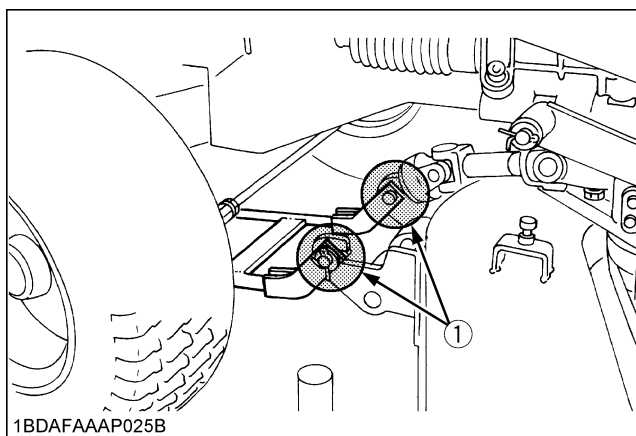
(1) Seat adjuster



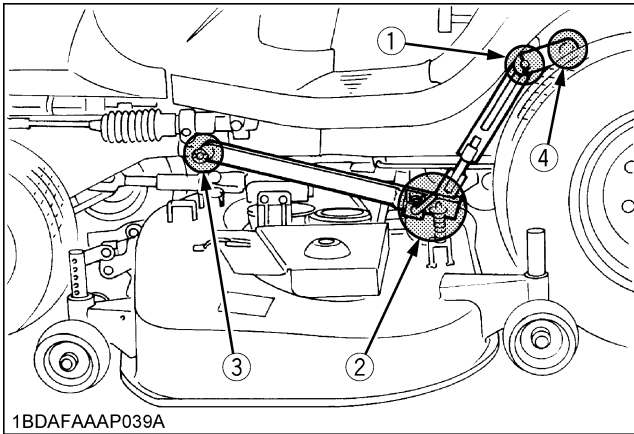
(1) Mower universal joint



(1) Speed control pedal shaft



(1) Front link



- (1) Around the hole of the mower link (3) Pivot of mower link
(2) Around the pin (4) Pivot of lift arm

NOTE :

- Oil these points on both sides of the machine.

EVERY 50 HOURS

■ 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.

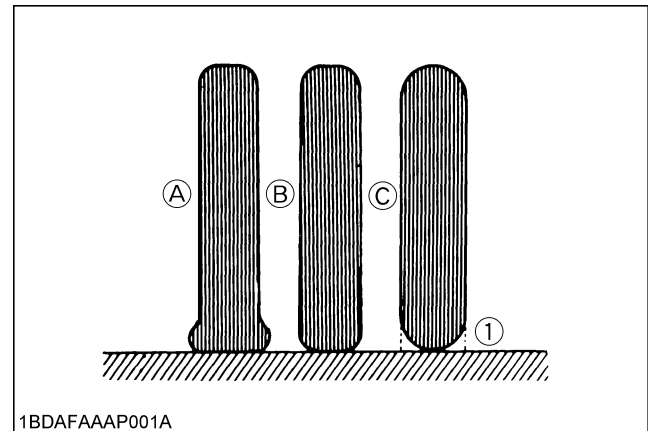
IMPORTANT :

- Do not use tires larger than specified.

■ 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 and inflate as necessary.

	Tire Sizes	Inflation Pressure
Front	16x6.50-8Turf	190kPa (1.9kgf/cm ²)
Rear	23x10.50-12Turf	140kPa (1.4kgf/cm ²)



(1) Ground

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

IMPORTANT :

- When jacking up the rear tires, be sure
 - To block the front tires.
 - To position a jack inside beside either of the supporting plates.

■ Checking Brake Pedal

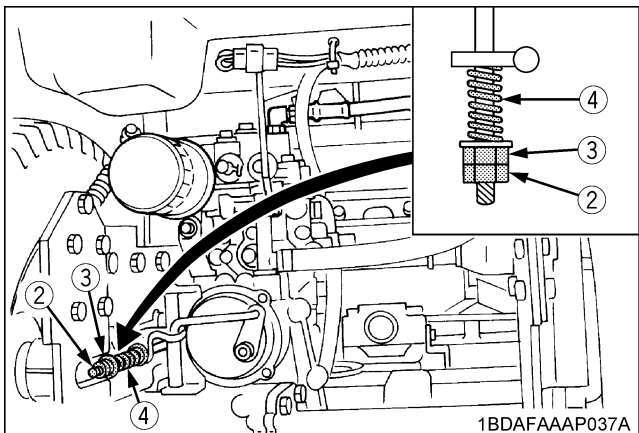
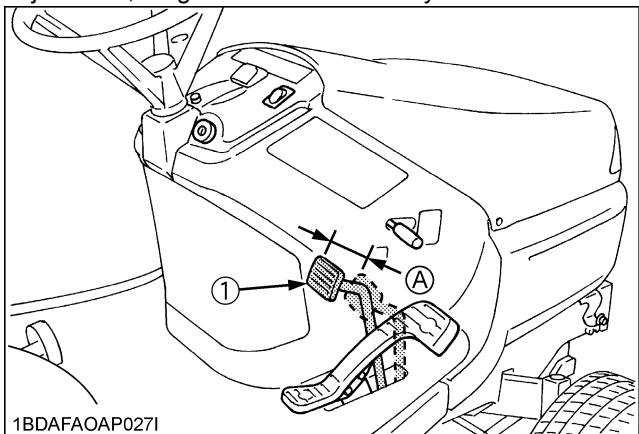


CAUTION

To avoid personal injury:

- When making adjustments, park the machine on a flat area, block wheels, stop engine and remove the key.

Correct play ranges from 15 to 25 mm. If it is not correct, loosen the lock nut (2) and turn the nut (3) in the desired direction until the proper play is achieved. After adjustment, retighten lock nut securely.



- (1) Brake pedal
(2) Lock nut
(3) Nut
(4) Spring

(A) Play 15 to 25 mm

■ Checking Fan Drive Belt Tension



CAUTION

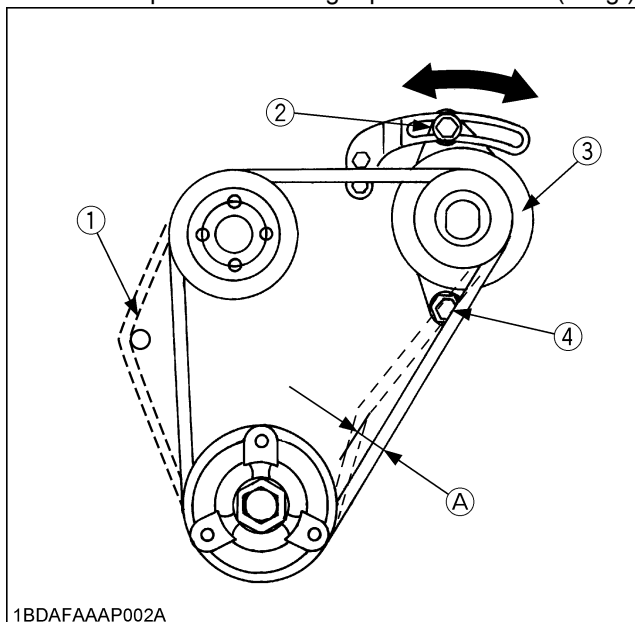
To avoid personal injury:

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

If the fan drive belt becomes loose, the engine may overheat. To adjust, loosen bolts and turn the alternator to tighten the belt. After adjustment, securely tighten the bolts.

Moderate belt tension:

The belt should deflect approx. 10 mm when the center of the belt is depressed with finger pressure of 98N (10kgf).



- (1) Cap
(2) Tension bolt
(3) Alternator
(4) Adjusting bolt

(A) 10 mm

IMPORTANT :

- When replacing fan drive belt, be careful not to catch it on the cap under the water pump. See the illustration to the left.

■ Lubricating All Grease Fittings

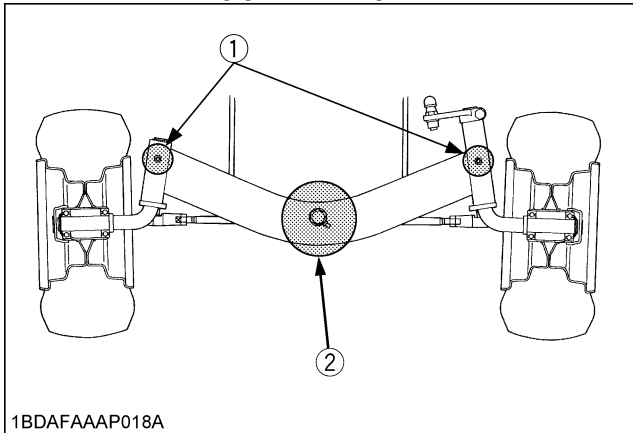


CAUTION

To avoid personal injury:

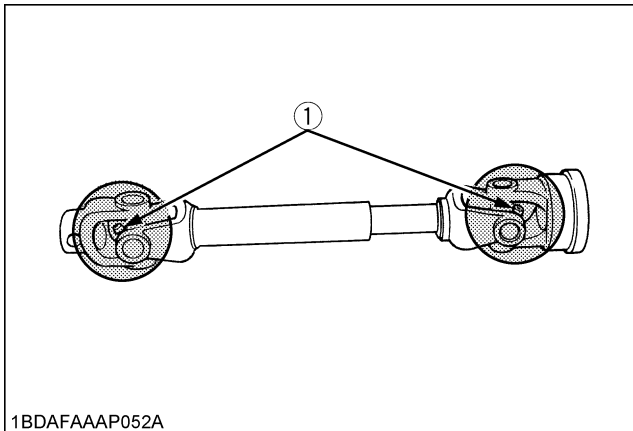
- Be sure to stop the engine and remove the key before greasing.

Grease the following grease fittings.



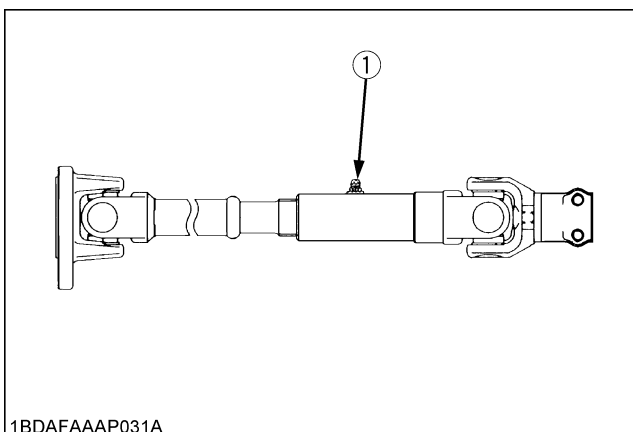
1BDAFAAAP018A

- (1) King pin
(2) Center pin



1BDAFAAAP052A

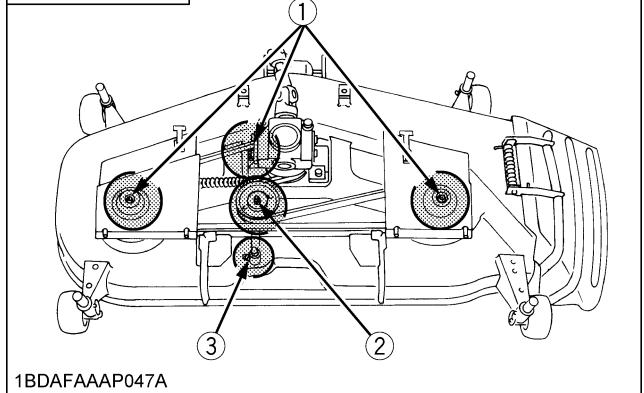
- (1) Mower universal joint



1BDAFAAAP031A

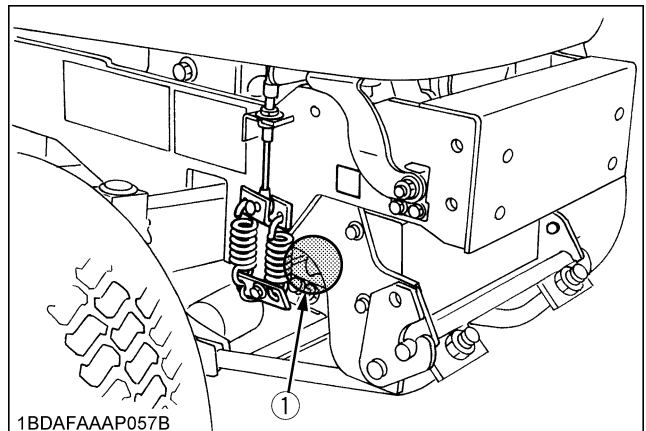
- (1) Machine universal joint

【RCK54-24G】



1BDAFAAAP047A

- (1) Grease fitting (Spindle shaft)
(2) Grease fitting (Belt tension pulley)
(3) Grease fitting (Belt tension pivot)



1BDAFAAAP057B

- (1) Tension lever

■ Battery Condition



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:

- Batteries, battery posts, terminals and related accessories contain lead and lead compounds, and other chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. **WASH HANDS AFTER HANDLING.**
- Never remove the battery cap while the engine is running.
- Keep electrolyte away from eyes, hands and clothes. If you are splattered 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.

Battery Type	Volts (V)	Reserve Capacity (min)	Cold Cranking Amps	Normal Charging Rate(A)
51R	12	80	430	4.5

(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:

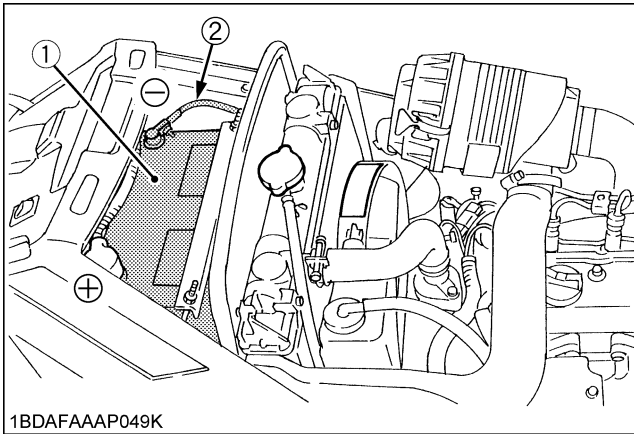
- When the battery is being activated, hydrogen and oxygen gases in the battery are extremely explosive. Keep open sparks and flames away from the battery at all times, especially when charging the battery.



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.



1BDAFAAAP049K

- (1) Battery
(2) Ground cable
- (+): Positive terminal
(-): Negative terminal

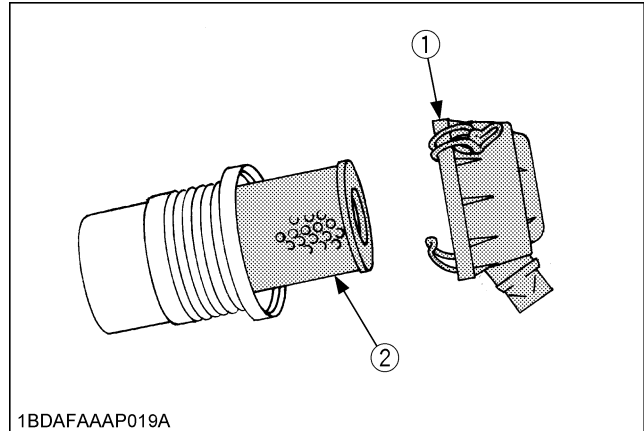
1. To slow charge the battery, connect the battery positive terminal to the charger positive terminal and the negative to the negative, then charge for at least 1 hour at 4.5 amperes.
2. A boost charge is only for emergencies. It will partially charge the battery at a high rate and in a short time. When 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 machine for a long period, remove the battery from machine, 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 3 months in hot seasons and once every 6 months in cold seasons.

■ Cleaning Air Cleaner Element

1. The air cleaner uses a dry element, never apply oil.
2. Do not touch the filter element except where cleaning is required. To clean the element, use clean and dry compressed air on the inside of the element. Air pressure should not exceed 205 kPa (2.1 kgf/cm²).



1BDAFAAAP019A

- (1) Air cleaner cover
(2) Air cleaner element

NOTE :

- Operating in dusty conditions requires frequent maintenance.

■ Checking Front PTO Belt Tension



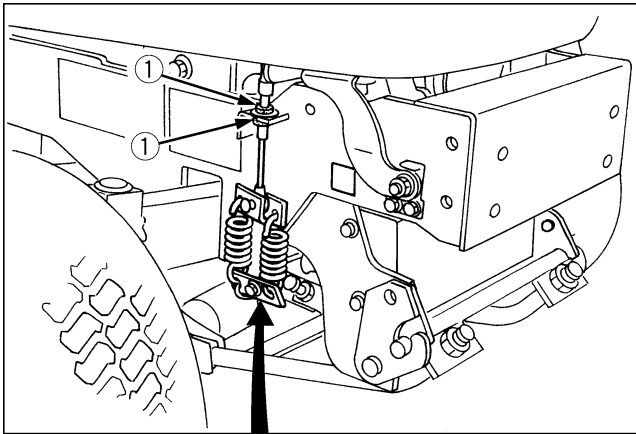
CAUTION

- 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.

1. Engage the PTO lever.
2. Measure tension spring length (L).
3. If (L) is shorter than 87 mm adjust it with the tension clutch cable adjusting nut.
 - (L) should be 88 to 90 mm
4. After adjustment tighten the nut securely.
 - When replacing the new front PTO belts, (L) should be 91 to 92 mm



1BDAFAAAP057C

(1) Adjust nut

IMPORTANT :

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

EVERY 200 HOURS AFTER 50 HOURS

■ Engine Oil Filter Cartridge Change



CAUTION

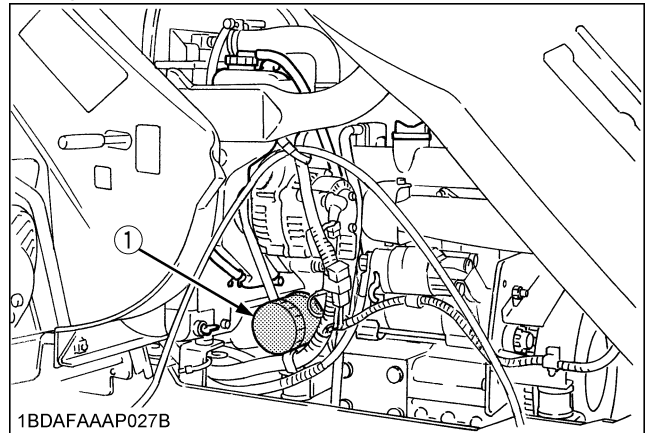
To avoid personal injury:

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

1. The oil filter cartridge must be changed every 200 service hours.
2. Apply a slight coat of oil onto the rubber gasket of new cartridge.
3. To install the new cartridge, screw it in by hand. Over tightening may cause deformation of the rubber gasket.
4. After the new cartridge has been replaced, the engine oil level normally lowers a little. Add engine oil to proper level. Check for oil leaks around filter gasket.

IMPORTANT :

- To prevent serious damage to the engine, replacement element of the recommended type must be used. Use only a genuine KUBOTA filter or its equivalent.



1BDAFAAAP027B

(1) Engine oil filter cartridge

■ Changing Engine Oil

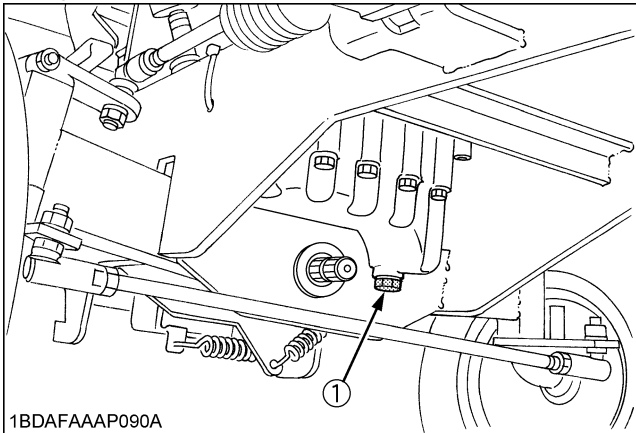


CAUTION

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 change the used oil, remove the drain plug at the bottom of the engine and drain the oil completely. The used oil can be drained out more easily if the engine is warm.
2. Fill with the new oil up to the upper notch on the dipstick.



(1) Drain plug

3. To check the oil level. Remove the dipstick, wipe it clean, insert it and draw it out again. Check to see the oil level is between the 2 marks.

■ Transmission Oil Filter Cartridge Change

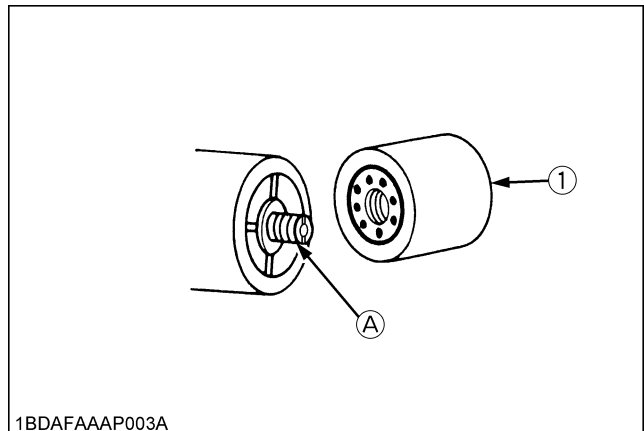
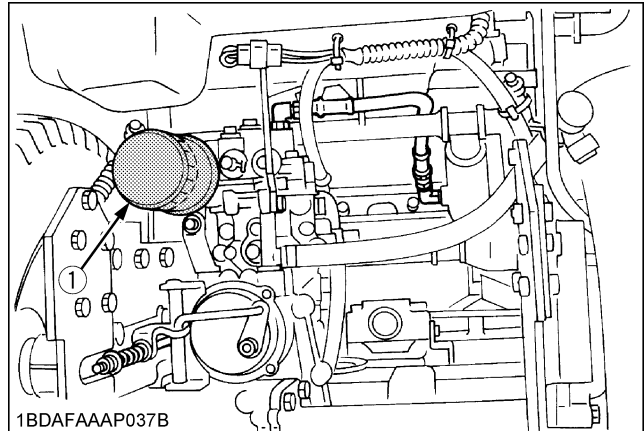


CAUTION

To avoid personal injury:

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

1. The oil filter cartridge must be changed every 200 service hours.



(1) Oil filter cartridge

2. Remove the oil filter cartridge by using the filter wrench.
3. Lightly tighten the screw (A) by using a screwdriver.
4. Apply a slight coat of oil onto the cartridge gasket.
5. To install the new cartridge, screw it in by hand. Over tightening may cause deformation of rubber gasket.
6. After the new cartridge has been replaced, the transmission fluid level normally lowers a little. Add fluid to proper level. Check for oil leaks around filter gasket.

IMPORTANT :

- To prevent serious damage to a hydraulic system, the replacement filter must be a highly efficient, $10\mu\text{m}$ filter. Use only a genuine KUBOTA filter or its equivalent.

EVERY 100 HOURS**■ Checking Fuel Lines and Fuel Filter****CAUTION**

To avoid personal injury:

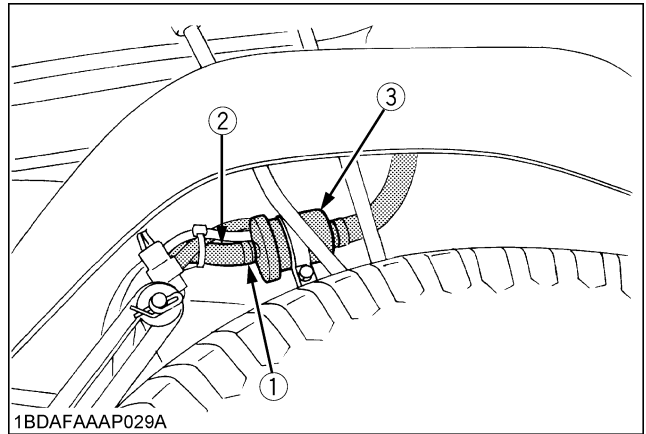
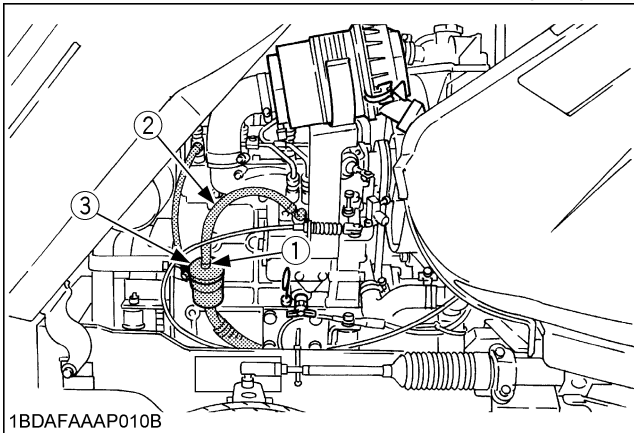
- Be sure to stop the engine and remove the key when attempting to make the following checks and changes.
- Never fail to check the fuel lines periodically. The fuel lines are subject to wear and aging. Fuel may leak out onto the running engine, causing a fire.

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. If the fuel line and clamps are found damaged or deteriorated, replace them.
3. Check fuel filter, if it is clogged by debris, replace it.

IMPORTANT :

- When the fuel line is disconnected for maintenance or repair, close both ends of the fuel line with a piece of clean cloth or paper to prevent dust and dirt from entering. In addition, particular care must be taken not to admit dust and dirt into the fuel pump. Entrance of dust and dirt causes malfunction of the fuel pump.



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

■ Cleaning Radiator Core

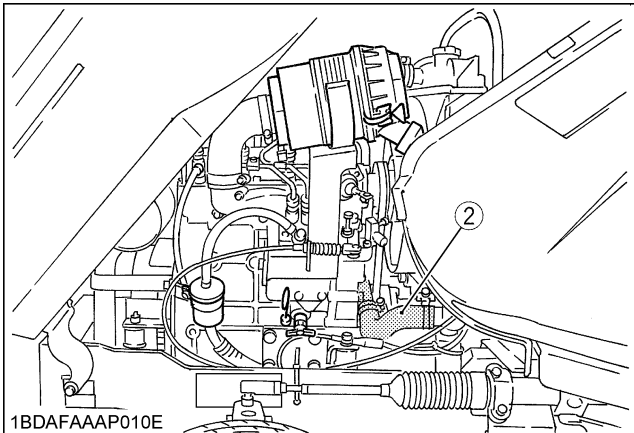
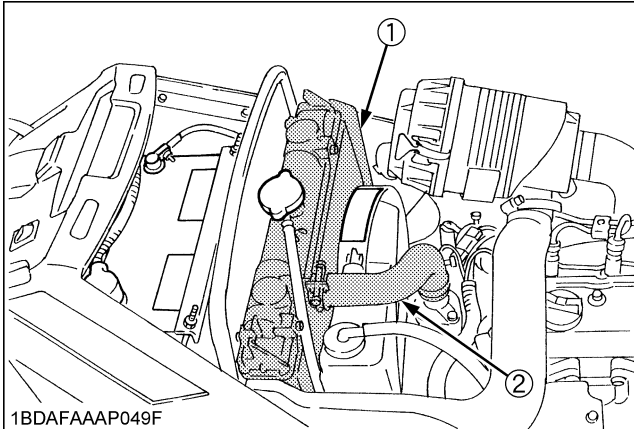
1. The radiator core should be cleaned on the following occasions:
 - (A) Every 100 Hr or 1 year service, whichever comes first.
 - (B) When adding anti-freeze solution.
2. When cleaning the radiator core, the KUBOTA Scale inhibitor No.20 or its equivalent, is recommended to effectively wash away the scale build-up.

EVERY 200 HOURS

■Checking Radiator Hose and Clamp

Check to see if radiator hoses are properly fixed every 200 hours of operation or 6 months, whichever comes first.

1. If clamp bands are loose or water leaks, tighten bands securely.
2. Replace hoses and tighten clamp bands securely, if radiator hoses are swollen, hardened or cracked.



- (1) Radiator core
(2) Radiator hose

■Checking Hydraulic Hose



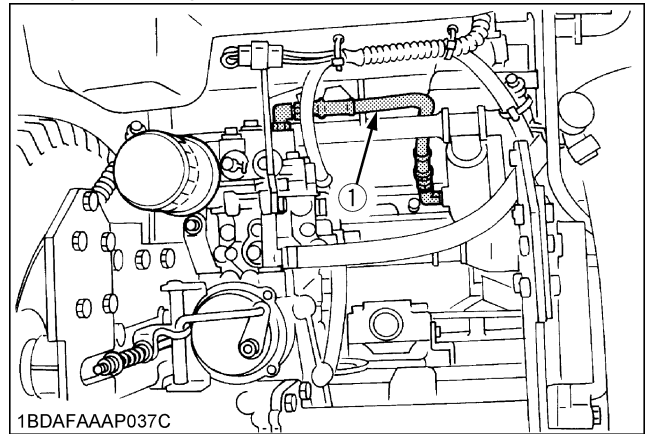
CAUTION

To avoid personal injury:

- Be sure to stop the engine and remove the key before checking and replacing hydraulic hose.
- Allow transmission case to cool down sufficiently; oil can be hot and may cause burns.

Check to see if hydraulic hoses are properly fixed every 200 hours of operation.

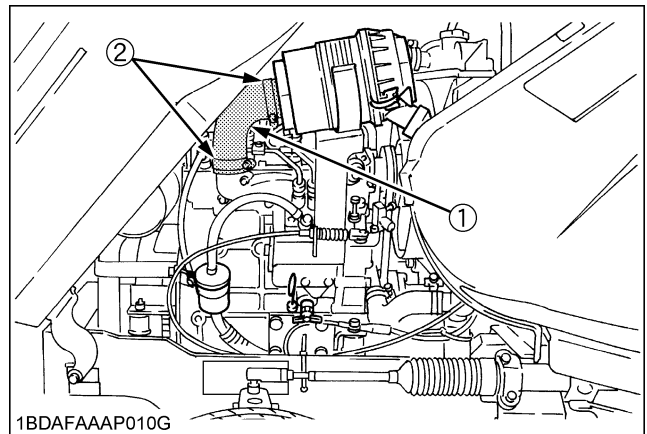
1. Check to see that all lines and hose clamps are tight and not damaged.
2. If hoses and clamps are found worn or damaged, replace or repair them at once.



- (1) Mower lift cylinder hose

■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) Clamp

EVERY 400 HOURS

■ Changing Transmission Fluid

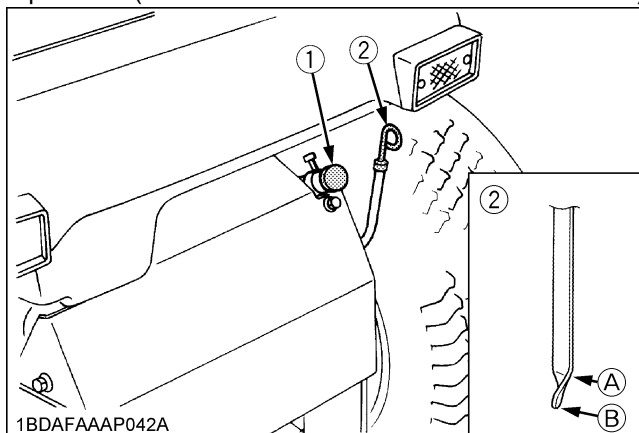


CAUTION

To avoid personal injury:

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

Draw out the dipstick, wipe it clean, replace it, and draw it out again. Check to see that the fluid level is on the upper notch. If low, replenish through the fluid port. Use UDT or SUPER UDT hydrostatic transmission fluid or its equivalent. (See "LUBRICANTS" in Maintenance Section)



(1) Transmission fluid port
(2) Dipstick

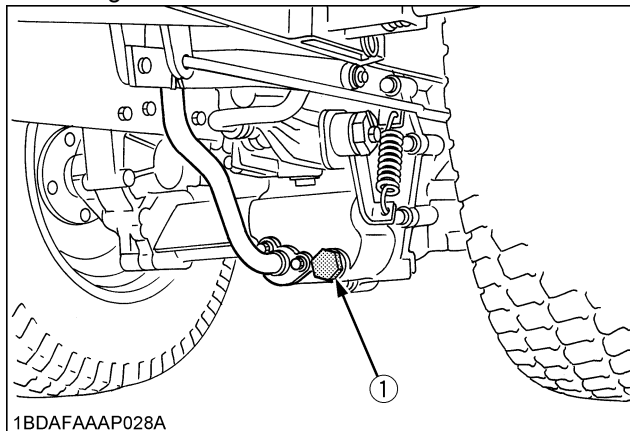
(A) "UPPER LEVEL"
(B) "LOWER LEVEL"

The fluid in the transmission case is also used for the hydrostatic drive system.

1. To drain the transmission case, place oil pan underneath the transmission case and remove the drain plug at the bottom of the transmission case.
2. After draining, disassemble and clean the strainers and change the oil filter cartridge. After reassembling, fill with UDT or SUPER UDT hydrostatic transmission fluid, or its equivalent.
3. After running the engine for a few minutes, stop it and check the oil level again; add oil to the prescribed level.

IMPORTANT :

- Operate only at low RPM's immediately after changing the transmission fluid and filter cartridge. Keep the engine at medium speed for a few minutes to insure proper lubrication of all parts so there is no damage to transmission.



(1) Drain plug

■ Cleaning Transmission Oil Strainer



CAUTION

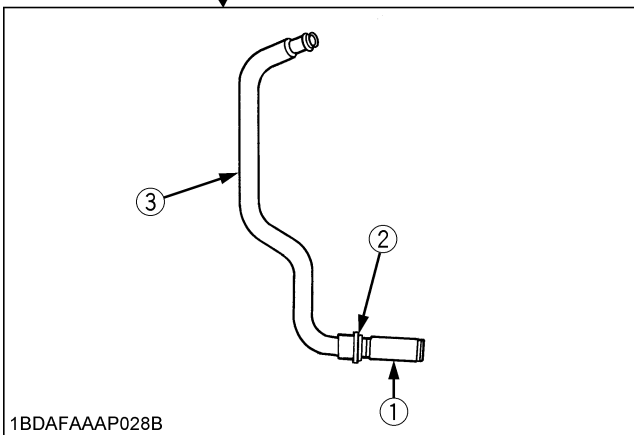
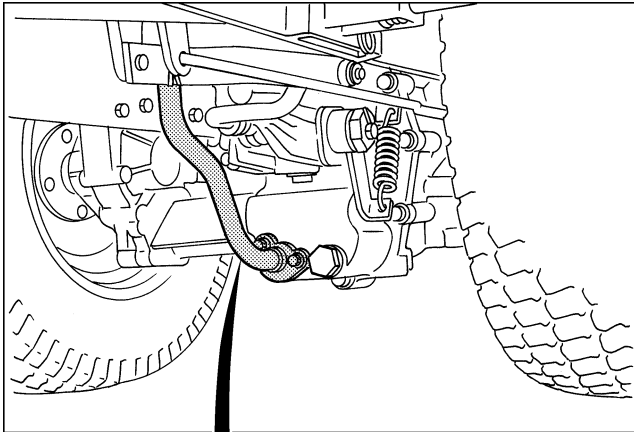
To avoid personal injury:

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

To clean:

1. Remove 2-M8 bolts.
2. Remove the suction pipe strainer with O ring.
3. Clean completely the oil strainer with kerosene with care, to avoid damage to the strainer parts.
4. Install the suction pipe strainer with O ring.

5. Install the bolts.



- (1) Strainer
(2) O ring
(3) Suction pipe

EVERY 500 HOURS

■Replacing Fuel Filter

Change fuel filter every 500 hours. This should be done by your 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.

■Checking, Replenishing and Changing Coolant

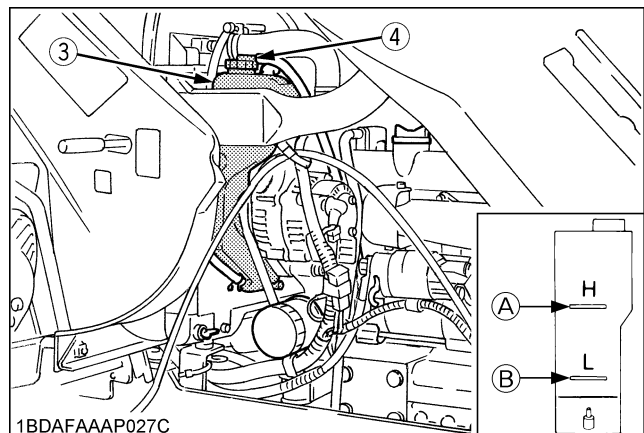
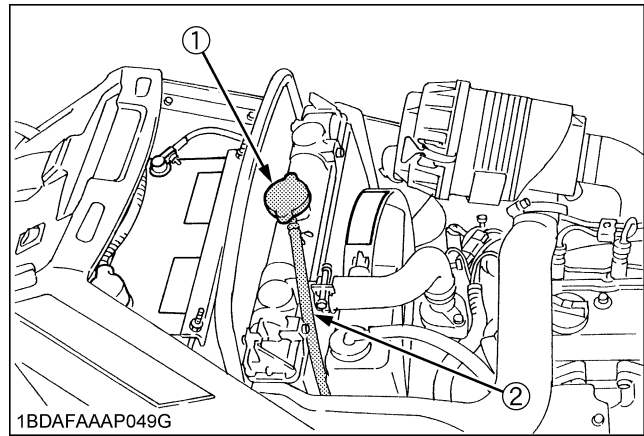


CAUTION

To avoid personal injury:

- Never open radiator cap when engine is hot.
- When opening, loosen cap slightly to the stop to relieve any excess pressure before removing cap completely.

1. The coolant level should be between the Low and High mark. If the level is below the Low mark, remove the recovery tank cap, and add fresh clean water and anti-freeze.



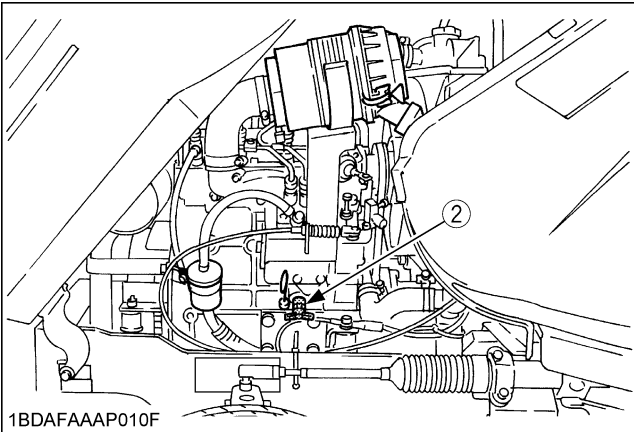
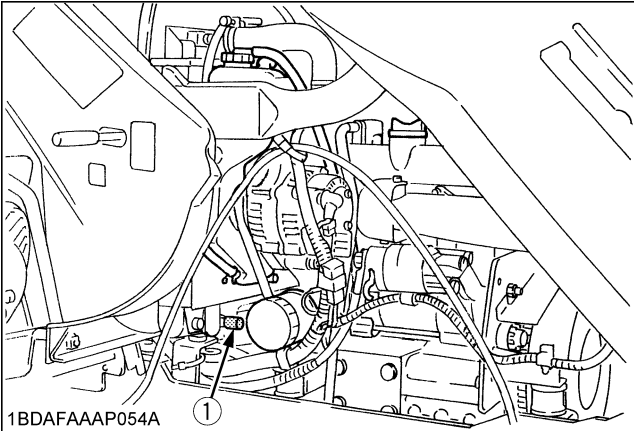
- (1) Radiator cap
(2) Over flow pipe
(3) Recovery tank
(4) Recovery tank cap

- (A) "HIGHEST LEVEL"
(B) "LOWEST LEVEL"

IMPORTANT :

- Use clean, fresh water and anti-freeze to fill the radiator and recovery tank.
 - Securely tighten the radiator cap and recovery tank cap.
2. If the engine is stopped by over-load during operation, allow the engine to idle for a little while, for coolant to return from the recovery tank to the radiator.

3. Remove the radiator pressure cap and check to see that the coolant level is just below the port. If low, add coolant.
4. To drain the used coolant, open the drain plugs and remove radiator cap. The radiator cap must be removed to completely drain the radiator.



- (1) Drain plug (Radiator)
(2) Drain cock plug (Engine)

5. Be sure to close the radiator cap securely. If the cap is loose or improperly closed, water may leak out and the engine could overheat.
6. The Radiator should be filled with part anti-freeze and part water at all times as recommended by the anti-freeze manufacturer. The anti-freeze contains a corrosion inhibitor and will allow a higher operating temperature in the radiator during the hot season.
7. Do not use an anti-freeze and scale inhibitor at the same time.

■Remedying Coolant Leakage

If coolant leakage should become extremely excessive, consult your KUBOTA Dealer.

■Engine Overheating Precautions

If the engine is overheated, take the following actions.

1. Stop machine operation in a safe place, disengage the mower deck and keep the engine idling.
2. Don't stop the engine immediately; stop it after about 5 minutes of unloaded idling.
3. Shut off the engine and keep well away from the machine for 10 minutes or while the steam is blown out.
4. Checking that there is no danger of being burned, get rid of the causes of overheating according to the manual, see "TROUBLESHOOTING" section. Start the engine again.

■Cleaning Cooling System

1. The cooling system should be cleaned on the following occasions:
(A) Every 1 year of service.
(B) When adding anti-freeze solution.
2. When cleaning the cooling system, scale inhibitor is recommended to effectively wash away the scale build-up.

■Anti-Freeze



CAUTION

To avoid personal injury:

- When using anti-freeze, put on some protection such as rubber gloves. (Anti-freeze contains poison.)
- If it is swallowed, seek immediate medical help. Do NOT make a person throw up unless told to do so by poison control or a health care professional. Use standard first aid and CPR for signs of shock or cardiac arrest. Call your local Poison Control Center or your local emergency number for further assistance.
- 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.

Always use a 50/50 mix of long-life coolant and clean soft water in KUBOTA engines.

Consult your local KUBOTA dealer concerning coolant for extreme conditions.

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
Premix 50% LLC with 50% clean soft water. 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 mixing the anti-freeze with water, the anti-freeze mixing ratio is 50%.

Vol % Anti-freeze	Freezing Point °C	Boiling Point* °C
50	-37	108

* At 1.013×10^5 Pa (760 mmHg) 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 coolant level reduces in the cooling system by evaporation.
 - (2) If there is a mixture leak, add the LLC of the same manufacturer and type in the mixing ratio 50%.

* 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.

EVERY 2 YEARS

■ Replacing Hydraulic Hose

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

■ Replacing Fuel Lines

This should be done by your KUBOTA Dealer.

■ 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 Intake Air Line

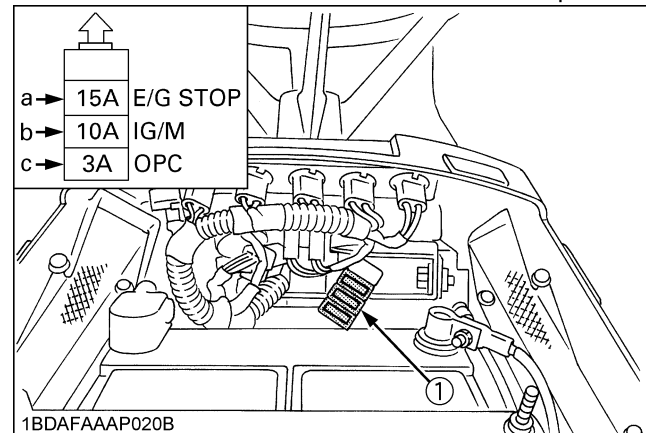
Consult your local KUBOTA Dealer for this service.

SERVICE AS REQUIRED

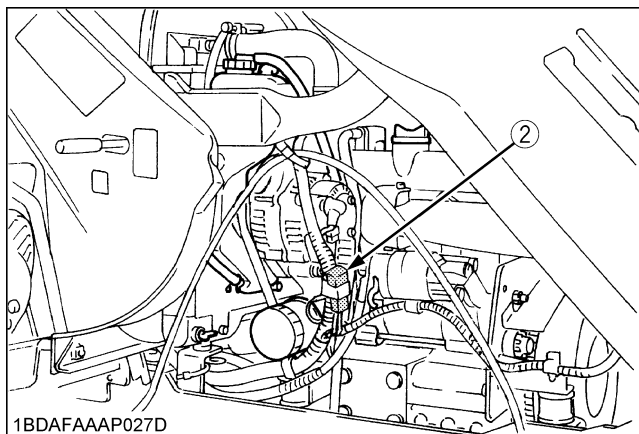
■ Replacing Fuses

Replacement of the fuse

1. Open hood.
2. Remove the blown fuse.
3. Place a new 3A or 10A or 15A or 40A fuse in position.



(1) Fuse location



(2) Slow blow fuse

IMPORTANT :

- If the new fuse happens to blow out within a short time, contact your dealer for inspection and repair. Never "jump" the fuse with wire or foil, etc.

a : Stamp or stick label "E/G STOP"

b : Stamp or stick label "IG/M"

c : Stamp or stick label "OPC"

◆ **Protected circuit**

FUSE NO. (ID LABEL)		CAPACITY (A)	Protected circuit
(1)	E/G STOP	15	Engine stop timer relay
	IG/M	10	Fuel pump, Head light, etc.
	OPC	3	Engine running circuit
(2)	---	Slow blow fuse 40	Check circuit against wrong battery connection

■ **Replacing Bulbs**

(A) Replacement of the headlight bulb

1. Open hood.
2. Turn bulb socket to remove socket from headlight housing.
3. Push bulb down and turn 1 quarter turn to remove bulb from the socket.
4. Install new bulb to the socket.
5. Install the socket in housing.
6. Close hood.

Headlight bulb	12.8 Rated Voltage/1.04 AMP/ 15 MSCP
----------------	---

(B) Replacement of the Indicator light bulb

1. Open hood.
2. Turn bad bulb socket to the left.
And remove it.
3. Pull bulb from the socket.
4. Push new bulb into the socket.
5. Install the socket.
6. Close hood.

Indicator light bulb	14.0 Rated Voltage/0.27 AMP/ 2 MSCP
----------------------	--

Checking and Replacing Blade



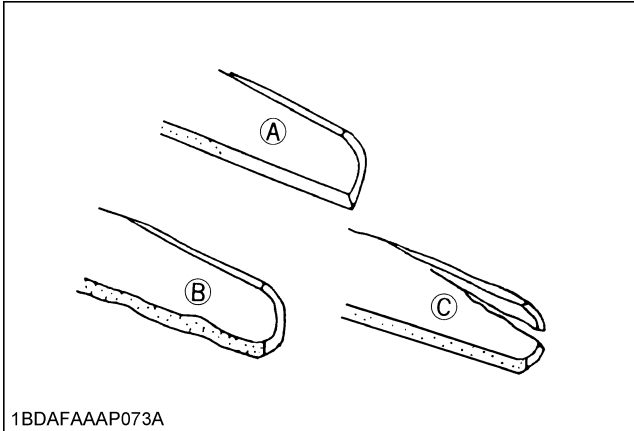
CAUTION

To avoid personal 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).



1BDAFAAAP073A

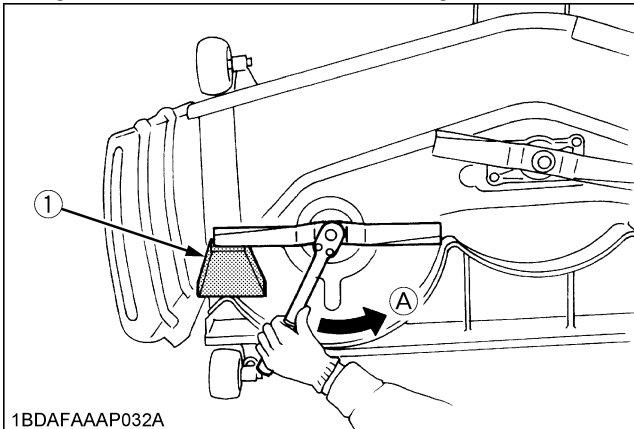
(A) New blade (B) Worn blade (C) Cracked blade

Replacing

1. Remove the mower deck from the machine and turn it over to expose the blades.
2. Wedge a block of wood between the blade and mower housing or use a box wrench over the pulley nut to prevent the spindle from rotating while removing the blade bolts; loosen the blade mounting bolt as illustrated.

IMPORTANT :

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



1BDAFAAAP032A

(1) Block

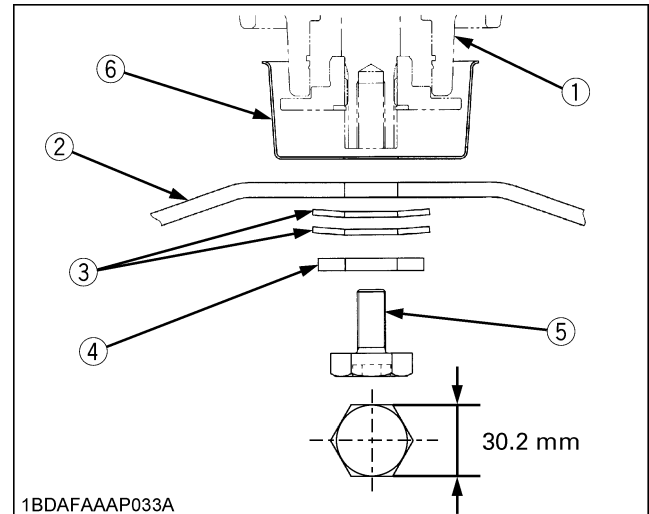
(A) "LOOSEN"

3. 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.
4. 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.
5. Install the blade in position together with the lock washer and the 2 cup washers. Tighten them up with the bolts.

NOTE :

- Make sure that the cup washer is not flattened out or worn; this cause blade to slip excessively. Replace the 2 cup washers if either is damaged.

6. Before checking or replacing the blade, wipe grass and mud off the top and inside of the mower. Especially clean up the inside of the belt cover, because otherwise the belt life will be reduced.

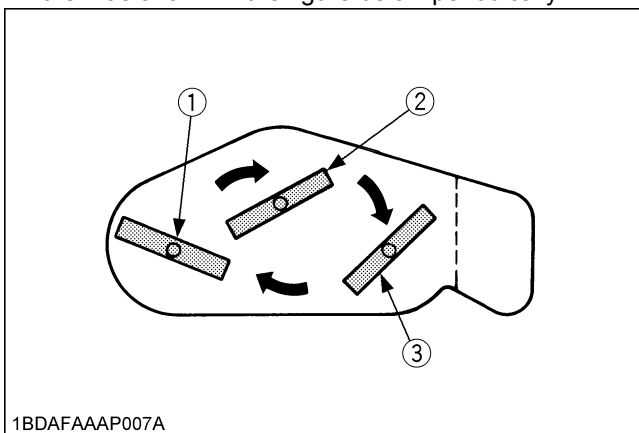


1BDAFAAAP033A

- (1) Spindle holder
- (2) Blade
- (3) 2-Cup washers
- (4) Lock washer
- (5) Bolt
- (6) Spindle guard

IMPORTANT :

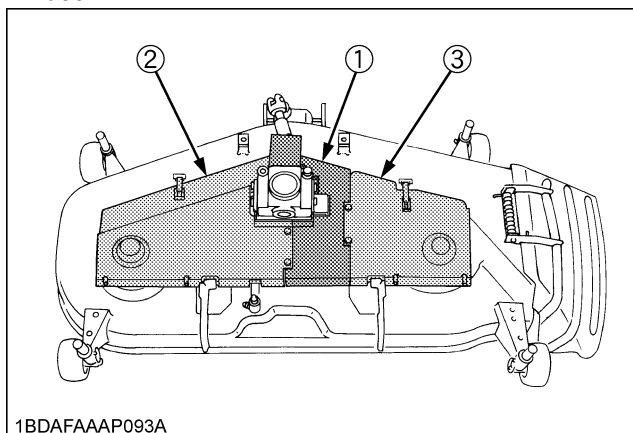
- Tighten the 3 blade bolts to 98 to 117.6 N-m (10 to 12 kgf-m) of torque.
- The blade bolts have Right hand threads. Turn them counterclockwise to loosen.
- To prolong the service life of the blades, reposition them as shown in the figure below periodically.



(1) LH blade (2) Center blade (3) RH blade

Mower Belt Replacement

1. Remove the mower deck from the machine according to the procedure "ATTACHING THE MOWER".
2. **[Only model with the universal joint cover]** Remove the universal joint cover from the mower deck.

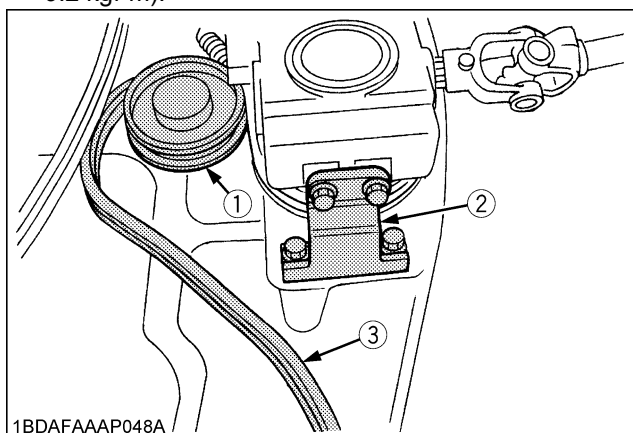


(1) Universal joint cover
(2) Left shield
(3) Right shield

3. Remove the left and right hand shield from the mower deck.
4. Clean around the gear box.
5. Remove the belt from the tension pulley.
6. Remove the right hand bracket which mounts the gear box to the mower deck and slip the belt over the top of the gear box.
7. To install a new belt, reverse the above procedure.

NOTE :

- Tighten bracket bolts securely 77.6 to 90.2 N-m (8.0 to 9.2 kgf-m).



(1) Tension pulley
(2) Bracket (RH)
(3) Belt

GENERAL TORQUE SPECIFICATION

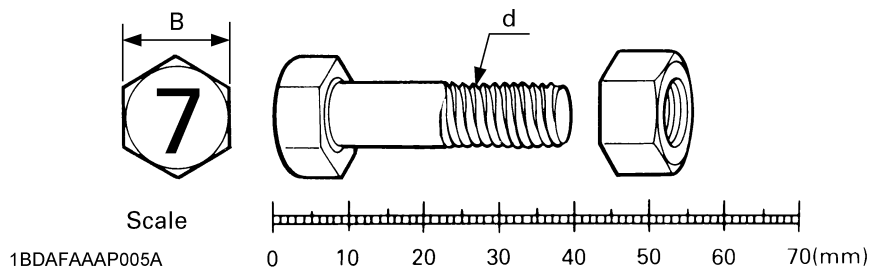
American standard cap screws with UNC or UNF threads			Metric cap screws		
SAE grade No.	GR.5 	GR.8 	Property class	class 8.8 	class 10.9 
1/4 (N-m) (kgf-m)	10.7 - 12.9 1.11 - 1.33	16.1 - 19.3 1.66 - 1.99	M6 (N-m) (kgf-m)	9.81 - 11.3 1.0 - 1.15	
5/16 (N-m) (kgf-m)	23.1 - 27.8 2.35 - 2.84	32.5 - 39.3 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
1/2 (N-m) (kgf-m)	108.5 - 130.2 11.07 - 13.29	149.2 - 179.0 15.22 - 18.27	M12 (N-m) (kgf-m)	77.5 - 90.1 7.9 - 9.2	103 - 117 10.5 - 12.0
9/16 (N-m) (kgf-m)	149.2 - 179.0 15.22 - 18.27	217.0 - 260.4 22.14 - 26.57	M14 (N-m) (kgf-m)	124 - 147 12.6 - 15.0	167 - 196 17.0 - 20.0
5/8 (N-m) (kgf-m)	203.4 - 244.1 20.75 - 24.91	298.3 - 358.0 30.44 - 36.53	M16 (N-m) (kgf-m)	196 - 225 20.0 - 23.0	260 - 303 26.5 - 31.0

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 to 20.6 (19.2 ± 1.4)	19 to 2.1 (2.0 ± 0.1)	23.5 to 27.5 (25.5 ± 2.0)	2.4 to 2.8 (2.6 ± 0.2)
M10	14 or 17	39.3 to 45.1 (42.2 ± 2.9)	4.0 to 4.6 (4.3 ± 0.3)	48.1 to 55.9 (52.0 ± 3.9)	4.9 to 5.7 (5.3 ± 0.4)
M12	17 or 19	62.8 to 72.6 (67.7 ± 4.9)	6.4 to 7.4 (6.9 ± 0.5)	77.6 to 90.2 (83.9 ± 6.3)	8.0 to 9.2 (8.6 ± 0.6)
M14	19 or 22	107.9 to 125.5 (116.7 ± 8.8)	11.0 to 12.8 (11.9 ± 0.9)	123.6 to 147.0 (135.3 ± 11.7)	12.6 to 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.



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 2 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 2 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.

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".)
4. Check all fluid levels. (engine oil, hydrostatic oil)
5. Start the engine. Shut the engine off and walk around 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	Probable cause
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.
	● Dirty panel screen or radiator screen.
	● Coolant flow route corroded.

If you have any questions, contact your KUBOTA Dealer.

BATTERY TROUBLESHOOTING

If	Probable cause
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	Probable cause
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.

If you have any questions, contact your KUBOTA Dealer.

MOWER TROUBLESHOOTING

If	Probable cause
Discharge chute plugged.	● Grass too wet. ● Grass too long. ● Cutting too low. ● Engine rpm too low. ● Ground speed too fast.
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.
Belt slipping.	● Belt tension incorrect. ● Mower deck plugged. ● Debris in pulleys. ● Worn belt.
Excessive vibration.	● Debris on mower deck or in pulleys. ● Damaged drive belt or PTO belt twisted. ● Damaged pulleys. ● Pulleys out of alignment. ● 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.

APPENDIX

SOUND AND VIBRATION MEASUREMENTS

◆ Sound Pressure Level Measured Per EN836

Model	Engine rated speed	Sound pressure at the operator's position
G2160 with RCK54-24G	3200 rpm	89.5 dB (A)

◆ Hand/Arm Vibration Level Measured Per EN836

Model	Engine rated speed	Hand/Arm vibration
G2160 with RCK54-24G	3200 rpm	1.91 m/s ²

◆ Whole Body Vibration Level Measured Per EN836

Model	Engine rated speed	Whole body vibration
G2160 with RCK54-24G	3200 rpm	0.41 m/s ²

NOTE :

- Measurement were obtained through actual field data according to STD procedure in EN836.
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.

INDEX

Air Cleaner Element	33
Air Cleaner Element	39
Amount of Fuel and Refueling	26
Anti-Freeze	40
Ballast	4
Battery Condition	32
Blade	43
Brake Pedal	30
Bulbs	42
Cooling System	40
Engine Oil	35
Engine Oil Filter Cartridge Change	34
Engine Oil Level	26
Engine Overheating Precautions	40
Fan Drive Belt Tension	30
Front PTO Belt Tension	34
Fuel Filter	39
Fuel Injection Nozzle (Injection Pressure)	39
Fuel Lines	41
Fuel Lines and Fuel Filter	36
Fuses	41
Hydraulic Hose	37
Hydraulic Hose	41
Inflation Pressure	29
Injection Pump	39
Intake Air Line	37
Intake Air Line	41
Lubricating All Grease Fittings	31
Mounting the Mower Deck	10
Mower Belt Replacement	44
Oiling	27
Radiator Core	36
Radiator Hose	41
Radiator Hose and Clamp	37
Radiator to Prevent Overheating	27
Remedying Coolant Leakage	40
Replenishing and Coolant	39
Tire Pressure	29
Transmission Fluid	38
Transmission Oil Filter Cartridge Change	35
Transmission Oil Strainer	38
Warm-up and Transmission Oil in the Low Temperature Range	17

EC-DECLARATION OF CONFORMITY
DECLARATION CE DE CONFORMITE
EG-KONFORMITÄTSERKLÄRUNG



Manufacture :

Fabricant : **KUBOTA Manufacturing of America Corporation**

Hersteller :

Address :

Adresse : Industrial Park North, 2715 Ramsey Road, Gainesville, GA, 30501 U.S.A.

Adresse :

Authorized Representative and responsible person in
the Community :

Masashi OSUGA

Représentant autorisé et personne responsable dans
la Communauté :

Kubota Technical Center Europe
19 a 25 rue Jules Vercey

Bevollmächtigter Repräsentant und zuständige Person
in der Gemeinschaft :

95101 Argenteuil
France

Model:

Modèle:

Modell:

G2160

Lawn mower:

Tondeuse à gazon:

Mähwerk:

RCK54

Serial No.:

N° de série:

Serien-Nr.:

10001~99999

Lawn mower combination	Engine		Measured sound power level dB(A)	Guaranteed sound power level dB(A)	Cutting width cm	Blade speed rpm
	Type	RPM				
G2160 RCK54	D782	3200	103	105	137	3263

Kubota Corporation keeps technical documentation.

64, Ishizu-Kitamachi, Sakai-City, Osaka, Japan 590-0823

**Société Nationale de Certification
et d'Homologation**

Notified Body:

Organisme notifié:

Benannte Stelle:

**11, route de Luxembourg
L-5230 Sandweiler**

This machine complies with the essential health and safety requirements relating to design and construction of machinery, according to EC directive 2006/42/EC and conform to the directive 2000/14/EC amended by 2005/88/EC (ANNEX VI) and also complied with the electromagnetic compatibility according to EC directive 2004/108/EC.

Cette machine est conforme aux exigences essentielles de santé et de sécurité relatives au design et à la construction de machines selon la directive CE 2006/42/CE et la directive 2000/14/CE modifiée par 2005/88/CE (ANNEXE VI) et satisfait également la compatibilité électromagnétique de la directive CE 2004/108/CE.

Entwurf und Konstruktion dieser Maschine entsprechen den erforderlichen, grundlegenden Gesundheits- und Sicherheitsanforderungen der Richtlinien 2006/42/EG, sowie der Richtlinie 2000/14/EG, die entsprechend 2005/88/EG (ANHANG VI) geändert wurde; ebenso entspricht das Gerät den Vorschriften in Bezug auf elektromagnetische Kompatibilität, wie in der Richtlinie 2004/108/EG festgelegt.

December 17, 2013

Hironobu Kubota

President

Président

Geschäftsführer

KUBOTA Manufacturing of America Corporation

Industrial Park North, 2715 Ramsey Road, Gainesville, GA, 30501 U.S.A.