

Kubota

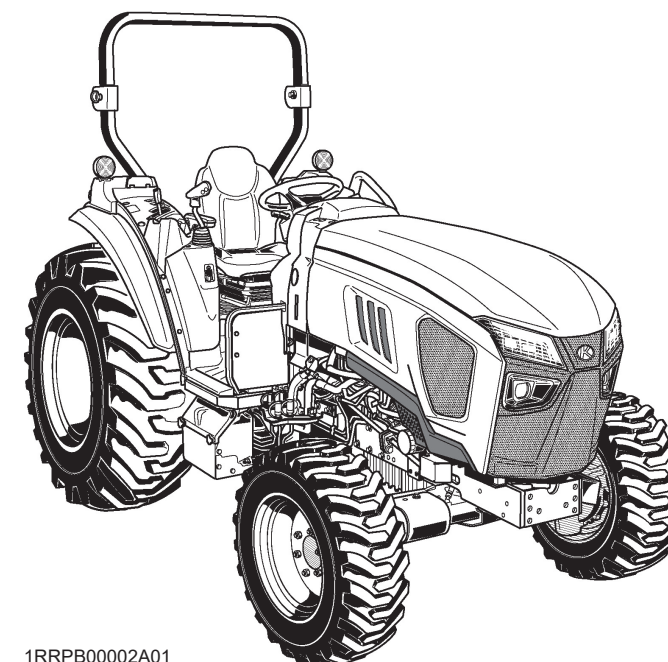
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English (U.S.A.)
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OPERATOR'S MANUAL

KUBOTA TRACTOR

MODELS L3770 L4270
L3970 L4470
L5070 L6070



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READ AND SAVE THIS MANUAL

Kubota

ABBREVIATION LIST

Abbreviations	Definitions
2WD	2 Wheel Drive
4WD	4 Wheel Drive
API	American Petroleum Institute
ASABE	American Society of Agricultural and Biological Engineers, USA
ASTM	American Society for Testing and Materials, USA
DIN	Deutsches Institut für Normung, GERMANY
DT	Dual Traction [4WD]
fpm	Feet Per Minute
GST	Glide Shift Transmission
Hi-Lo	High Speed-Low Speed
HST	Hydrostatic Transmission
m/s	Meters Per Second
PTO	Power Take Off
RH/LH	Right-hand and left-hand sides are determined by facing in the direction of forward travel
ROPS	Roll-Over Protective Structures
rpm	Revolutions Per Minute
r/s	Revolutions Per Second
SAE	Society of Automotive Engineers, USA
SMV	Slow Moving Vehicle

California Proposition 65

 WARNING

Engine exhaust, some of its constituents, certain vehicle components and fluids, contain or emit chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

Canadian Electromagnetic Compatibility (EMC):
This machine complies with Industry Canada ICES-002.

UNIVERSAL SYMBOLS

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

■ General



Safety alert symbol



Master system warning



System abnormality



Service



Fast



Slow



Lock



Unlock



On (engaged)



Off (disengaged)



Read operator's manual



Enter



Back



Home



Tractor - forward movement -
overhead view of machine



Tractor - rearward movement -
overhead view of machine

■ Engine-related



Diesel fuel



Fuel level



Hour meter / elapsed operating hours



Engine coolant - temperature



Engine intake/combustion air-filter



Engine oil - pressure



Water separator



Engine - warning



Engine - rotational speed



Engine - rev limiter



Engine - rpm memory A



Engine - rpm memory B



Engine speed control



Engine - rpm increase



Engine - run



Engine - start



Engine - stop



Diesel preheat / glow plugs (low
temperature start aid)



Emission control



Regeneration



Regeneration (switch)



Regeneration inhibit (switch)



Parked regeneration

ASH



Ash cleaning indicator

■ Vehicle body-related



4-wheel drive - on



4-wheel drive - off



Cruise control



Operator presence control



Clutch



Brake system



Parking brake



Differential lock



Steering wheel - tilt



Steering wheel - telescope

■ PTO-related



Power take-off clutch control - off position



Power take-off clutch control - on position



PTO - mid



PTO - rear



Stationary PTO

■ Hydraulic-related



Position control - raised position



Position control - lowered position



3-point lowering speed control



Remote cylinder - retract



Remote cylinder - extend

■ Electric-related



Battery charging condition



Master lighting switch



Work light



Headlight - low beam



Headlight - high beam



Turn signal



Hazard warning lights



Audible warning device



Windshield wiper and washer



Rear wiper and washer



Rear window defroster

■ K-command display related



Bluetooth



Telephone



Volume up



Volume down

FOREWORD

Thank you for the purchase of a Kubota product.

Before using this product, read this manual carefully and use the product correctly. After reading, keep the manual in a safe and easy-to-access place for future reference. Note that product specifications are subject to change without prior notice. The product delivered to you may differ slightly from the product described in the manual.



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, could result in minor or moderate injury.

IMPORTANT:

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

NOTE:

Gives helpful information.

OTHERS

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SAFE OPERATION

Careful operation is your best insurance against an accident.

Read and understand this manual carefully before operating the tractor.

All operators, no matter how much experience they may have, should read this and other related manuals before operating the tractor or any implement attached to it. It is the owner's obligation to instruct all operators in safe operation.

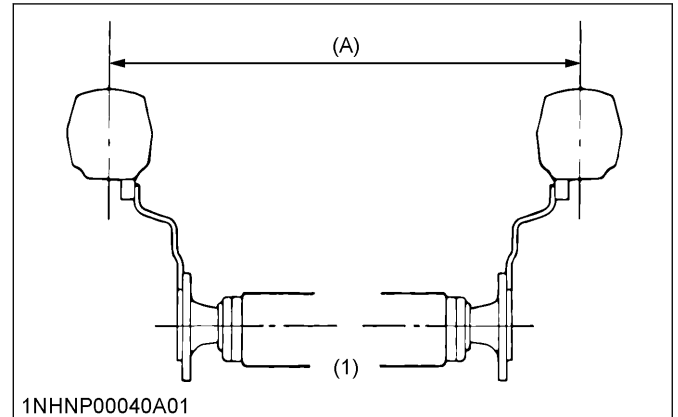
BEFORE OPERATING THE TRACTOR

1. General

- Pay special attention to the safety labels on the tractor.
- Do not operate the tractor or any implement attached to it while under the influence of alcohol, medication, controlled substances or while fatigued.
- Before allowing other people to use your tractor, explain how to operate and have them read this manual before operation.
- Never wear loose, torn, or bulky clothing around the tractor. Such clothing may get caught on moving parts or controls, leading to the risk of an accident. Use additional safety items, such as a hard hat, safety boots or shoes, eye and hearing protection, gloves and so on, as appropriate or required.
- Do not allow passengers to ride on any part of the tractor at any time. The operator must remain in the tractor seat during operation.
- Check brakes, clutch, linkage pins and other mechanical parts for improper adjustment and wear. Replace worn or damaged parts promptly. Check the tightness of all nuts and bolts regularly. (See MAINTENANCE on page 174.)
- Keep your tractor clean. Dirt, grease, and trash buildup may contribute to fires and lead to personal injury.
- Use only implements meeting the specifications listed in this manual or implements approved by Kubota. (See IMPLEMENT LIMITATIONS on page 32.)
- Use proper weights on the front or rear of the tractor to reduce the risk of upsets. When using the front loader, put an implement or ballast on the 3-point hitch to maintain proper balance and braking. Follow the safe operating procedures specified in the implement or attachment manual.
- The narrower the tread, the greater the risk of a tractor upset. For maximum stability, adjust the

wheels to the widest practical tread width for your application.

(See TIRES, WHEELS, AND BALLAST on page 159.)



(1) Rear wheels

(A) Tread width

- Do not modify the tractor. Unauthorized modification may affect the function of the tractor, which may result in personal injury.
- Do not make any modifications to the engine or emission components as they may result in damage and malfunctions such as:
 - Damage to the powertrain from excessive engine output.
 - Engine overheating caused by exceeding the engine cooling performance capabilities.
 - Malfunctions of the exhaust gas aftertreatment control devices.

Modifications to the engine and its emission components may violate emission regulations and are subject to fines and penalties.

Kubota and its affiliates are not liable for any damage, malfunction or accidents caused by modifications to the engine or emission components.

2. CAB and ROPS

- Kubota recommends the use of a CAB or roll over protective structures (ROPS) and seat belt in almost all applications. This combination will reduce the risk of serious injury or death, should the tractor be upset. Check for overhead clearance which may interfere with a CAB or ROPS.
- Set the parking brake and stop the engine. Remove any obstructions that may prevent the ROPS from raising or folding. Do not allow any bystanders near the tractor. Always perform the adjustment from a stable position at the rear of the tractor. Hold the

SAFE OPERATION

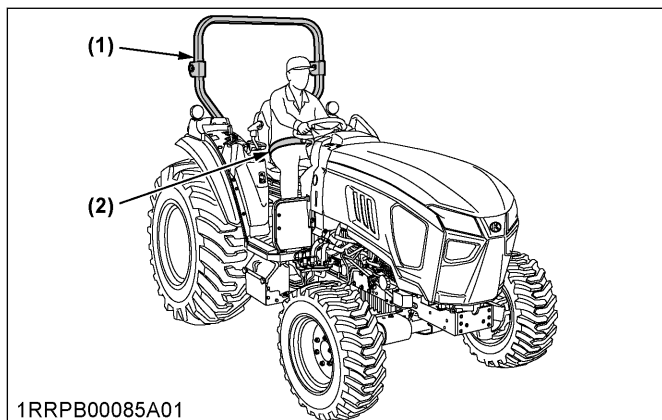
top of the ROPS securely when raising or folding. Make sure that all pins are installed and locked.

- If the CAB or ROPS is loosened or removed for any reason, make sure that all parts are reinstalled correctly before operating the tractor.
- Never modify or repair any structural member of a CAB or ROPS because welding, bending, drilling, grinding, or cutting may weaken the structure.
- If any structural member of the CAB or ROPS is damaged, replace the entire structure at your local Kubota dealer.
- If the tractor is equipped with a foldable ROPS, it may be temporarily folded down only when absolutely necessary for areas with height constraints.

There is no operator protection provided by the ROPS in the folded position. For operator safety, the ROPS should be placed in the upright and locked position and the seat belt fastened for all other operations.

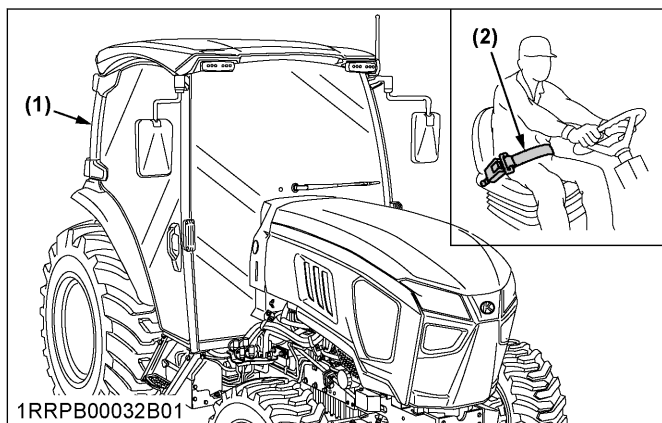
- Always use the seat belt if the tractor has a CAB or ROPS. Do not use the seat belt if a foldable ROPS is down. Check the seat belt regularly and replace if frayed or damaged.

[ROPS model]



- (1) ROPS
(2) Seat belt

[CAB model]



- (1) CAB
(2) Seat belt

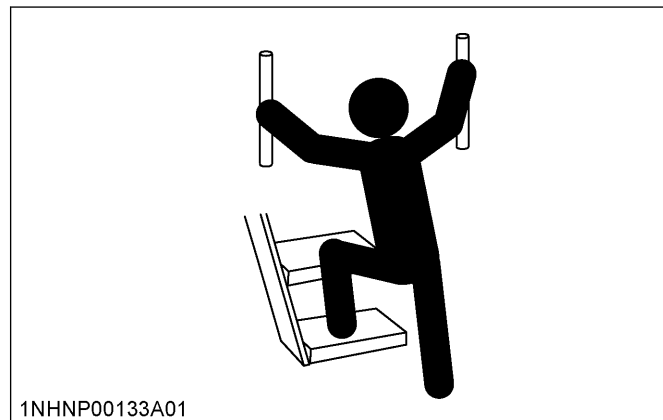
OPERATING THE TRACTOR

Operator safety is a priority. Safe operation, specifically with respect to overturning hazards, entails understanding the equipment and environmental conditions at the time of use.

Some prohibited uses which can affect overturning hazards include traveling and turning with implements, loads carried too high and so on. This manual sets forth some of the obvious risks, but the list is not, and cannot be, exhaustive. It is the operator's responsibility to be alert for any equipment or environmental condition that could compromise safe operation.

1. Starting to operate the tractor

- Never try to get on or off a moving tractor or jump off the tractor to exit.
- Face the tractor when getting into or out of the tractor. Do not use the controls as hand holds to prevent inadvertent machine movements.
- Always keep the steps and floor clean to avoid slippery conditions.



- Always sit in the operator's seat when starting engine or operating levers or controls. Adjust seat per instructions in the operating the tractor section. Never start engine while standing on the ground.
- 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 clutch and the power take-off (PTO) are disengaged or "OFF". Fasten the seat belt if the tractor has a CAB or a foldable ROPS in the upright and locked position.

[Deluxe CAB model]

Kubota recommends that you get on and off the tractor from the left side only. However, in the event of an emergency, you may exit using the right-side-door.

Be cautious when using the emergency-right-side-door, as there are no steps from the CAB to the ground on the right side.

- Do not start engine by shorting across starter terminals or bypassing the safety start switch. The

machine may start in gear and move if the normal starting circuitry is bypassed.

- Do not operate or idle the engine in a non-ventilated area. Carbon monoxide gas is colorless, odorless, and deadly.
- Check that the operator presence control (OPC) system is functioning correctly before each time you use the tractor.

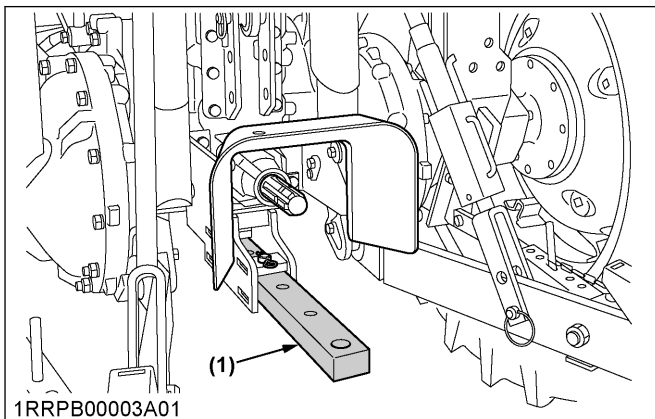
Test the safety systems.

(See Checking the operator presence control (OPC) system on page 195.)

Do not operate unless they are functioning correctly.

2. Working the tractor

- Pull only from the drawbar. Never hitch to axle housing or any other point except the drawbar. Such arrangements will increase the risk of serious personal injury or death due to a tractor upset.



(1) Drawbar

- For trailing PTO-driven implements, set the drawbar to the towing position.
- Attach pulled or towed loads to the drawbar only.
- Keep all shields and guards in place. Replace any that are missing or damaged.
- Avoid sudden starts. To avoid upsets, slow down when turning, on uneven ground, and before stopping.
- The tractor cannot turn with the differential locked and attempting to do so could be dangerous.
- Do not operate near ditches, holes, embankments, or other ground surface features which may collapse under the tractor's weight. The risk of tractor upset is even higher when the ground is loose or wet. Tall grass can hide obstacles. Walk the area first to be sure.
- Watch where you are going at all times. Watch for and avoid obstacles. Be alert at row ends, near trees, and other obstructions.
- When working in groups, always let the others know what you are going to do before you do it.
- Never try to get on or off a moving tractor.

- Always sit in the operator's seat when operating levers or controls.
- Do not stand between tractor and implement or trailed vehicle unless the parking brake is applied.
- Whenever the tractor is operated in reverse, confirm visibility to the rear.

3. Safety for children

Tragedy can occur if the operator is not alert to the presence of children. Children generally are attracted to machines and the work the machines do.

- Never assume that children will remain where you last saw them.
- Keep children out of the work area and under the watchful eye of another responsible adult.
- Be alert and shut down your machine if children enter the work area.
- Never carry children on your machine. There is no safe place for children to ride. Children may fall off and be run over or interfere with your control of the machine.
- Never allow children to operate the machine even under adult supervision.
- Never allow children to play on the machine or on the implement.
- Use extra caution when backing up. Look behind and down to make sure that the area is clear before moving.

4. Operating 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.

- To avoid upsets, always back up steep slopes. If you cannot back up the slope or if you feel uneasy on it, do not operate on it. Stay off slopes too steep for safe operation.
- Driving forward out of a ditch, mired condition or up a steep slope increases the risk of rear rollovers. Always back out of these situations. Extra caution is required with 4-wheel drive models because their increased traction can give the operator false confidence in the tractor's ability to climb slopes.
- Keep all movement on slopes slow and gradual. Do not make sudden changes in speed, direction or braking, nor make sudden motions with the steering wheel.
- Avoid changing gears speed when climbing or going down a slope. If on a slope changing gears to neutral could cause loss of control.
- Special attention should be paid to the weight and location of implements and loads as such will affect the stability of the tractor.
- To improve stability on slopes, set the widest possible wheel tread.

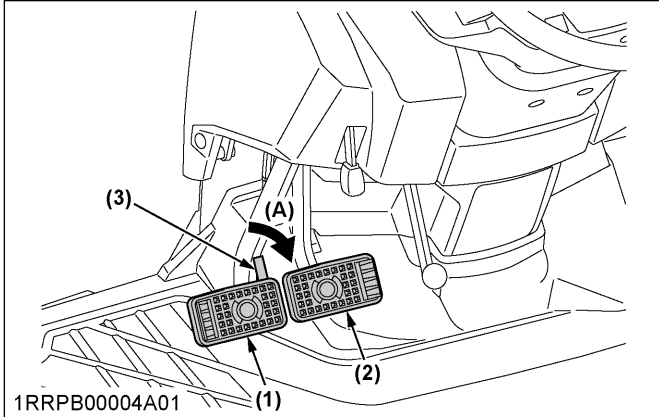
SAFE OPERATION

(See TIRES, WHEELS, AND BALLAST on page 159.)

Follow the recommendations for proper ballasting.

5. Driving the tractor on the road

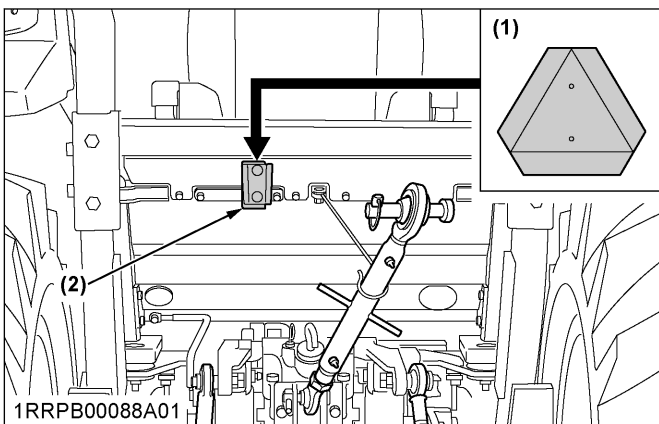
- Lock the 2 brake pedals together to help assure straight-line stops. Uneven braking at road speeds could cause the tractor to tip over.



- (1) Brake pedal (LH) (A) Lock the brake pedals when ever traveling on the road
 (2) Brake pedal (RH)
 (3) Brake pedal lock

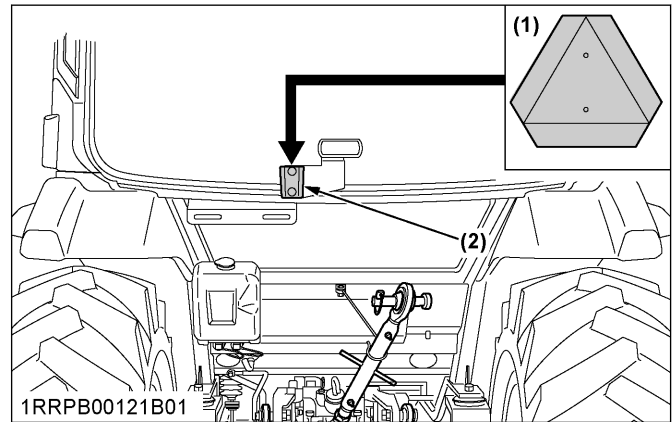
- Check the front wheel engagement. The braking characteristics are different between 2 and 4-wheel drive. Be aware of the difference and use carefully.
- When driving down a slope, ensure that the 4-wheel drive (if equipped) is engaged to increase traction and braking efficacy.
- Always slow down the tractor before turning. Turning at high speed may tip over the tractor.
- Make sure that the slow moving vehicle (SMV) sign is clean and visible. Use hazard lights and turn signals as required.

[ROPS model]



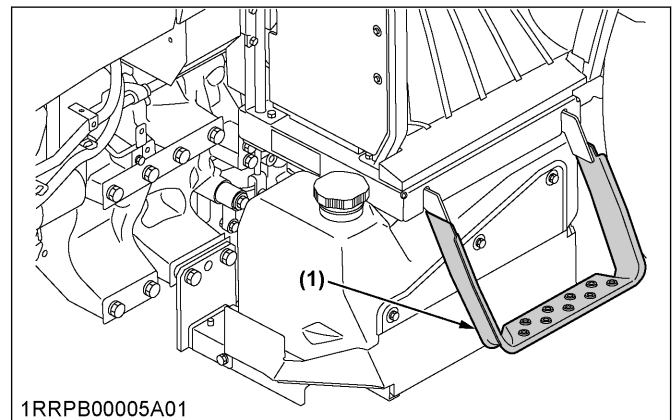
- (1) SMV emblem
 (2) Bracket

[CAB model]



- (1) SMV emblem
 (2) Bracket

- Observe all local traffic and safety regulations.
- Turn the headlights on. Dim them when meeting another vehicle.
- Drive at speeds that allow you to maintain control at all times.
- Do not apply the differential lock while traveling at road speeds. The tractor may run out of control.
- Avoid sudden motions of the steering wheel as they can lead to a dangerous loss of stability. The risk is especially great when the tractor is traveling at road speeds.
- Keep the ROPS in the upright position and wear the seat belt when driving the tractor on the road. Otherwise, you will not be protected in the event of a tractor roll-over.
- Do not operate an implement while the tractor is on the road. Lock the 3-point hitch in the raised position.
- Do not ride or stand on the step during operation. Riding or standing there could result in being crushed under the rear tire due to slippage or the step fracturing or displacing due to unintended loading.



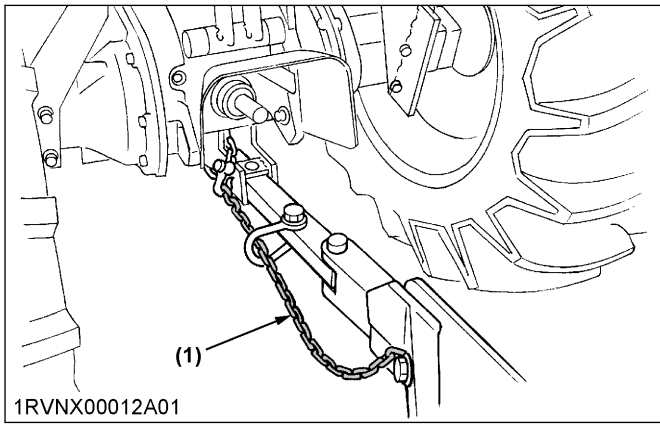
- (1) Step

- When towing other equipment, use a safety chain and place an SMV emblem on it as well.

! SAFE OPERATION

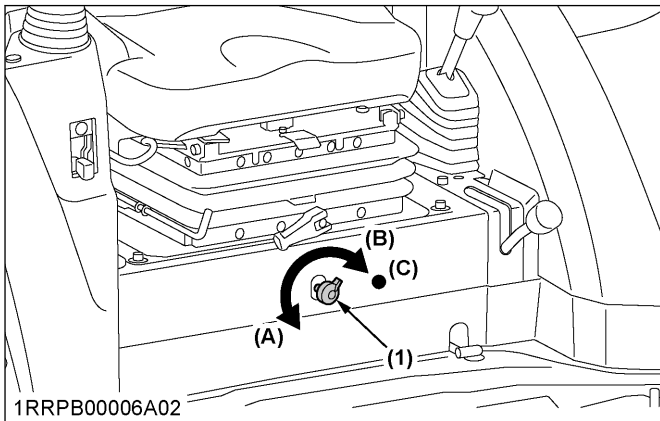
OPERATING THE PTO

- Wait until all moving components have completely stopped before getting off the tractor, connecting, disconnecting, adjusting, cleaning, or servicing any PTO driven equipment.
- Keep the PTO shaft cover in place at all times. Put the PTO shaft cap back on when not in use.



(1) Safety chain

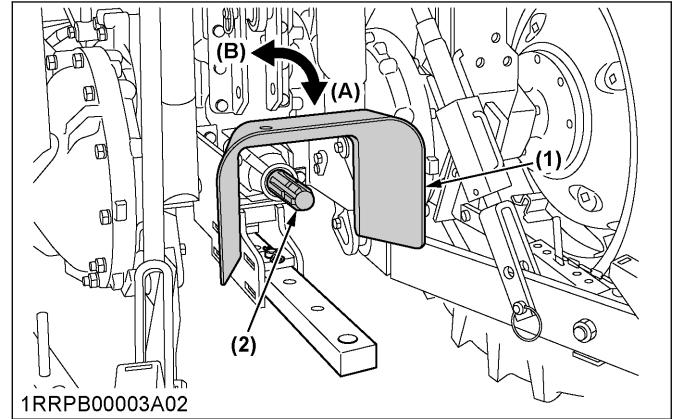
- Set the 3-point hitch lowering speed knob in the "LOCK" position to hold the implement in the raised position.



(1) 3-point hitch lowering speed knob
(A) Fast
(B) Slow
(C) Lock

PARKING THE TRACTOR

- Disengage the PTO, lower all implements to the ground, place all control levers in their neutral positions, set the parking brake, stop the engine, remove the key from the ignition and lock the CAB door (if equipped).
Leaving transmission in gear with the engine stopped will not prevent tractor from rolling.
- Make sure that the tractor has come to a complete stop before dismounting.
- Avoid parking on steep slopes. If at all possible, park on a firm and level surface. If not, park across a slope and chock the wheels.
Failure to comply with this warning may allow the tractor to move and could cause injury or death.
- Do not stop the machine on top of straw chaff or dried grass.



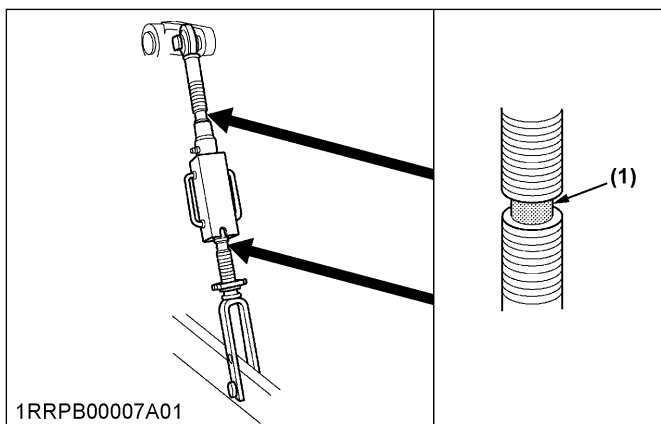
(1) PTO shaft cover
(2) PTO shaft cap
(A) Normal position
(B) Raised position

- Before installing or using PTO driven equipment, read the manufacturer's manual and review the safety labels attached to the equipment.
- When operating stationary PTO driven equipment, always apply the tractor parking brake and place chocks behind and in front of the rear wheels. Stay clear of all rotating parts. Never step over rotating parts.

USING 3-POINT HITCH

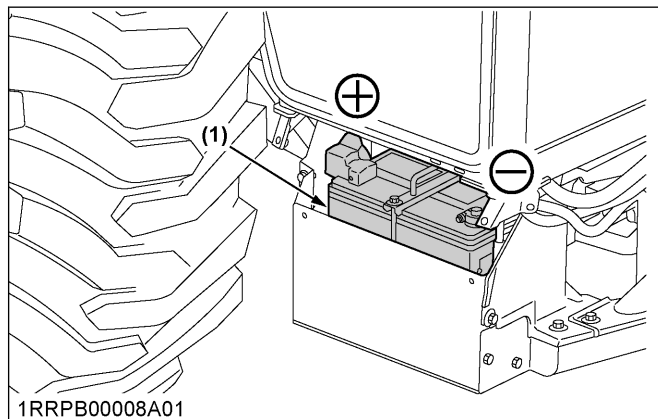
- Use the 3-point hitch only with equipment designed for the appropriate category of 3-point hitch usage.
- When using a 3-point hitch mounted implement, install the proper counterbalance weight on the front of the tractor.
- To avoid injury from separation:
Do not extend the lift rod beyond the groove on the threaded rod.

SAFE OPERATION



(1) Groove

[Premium model]



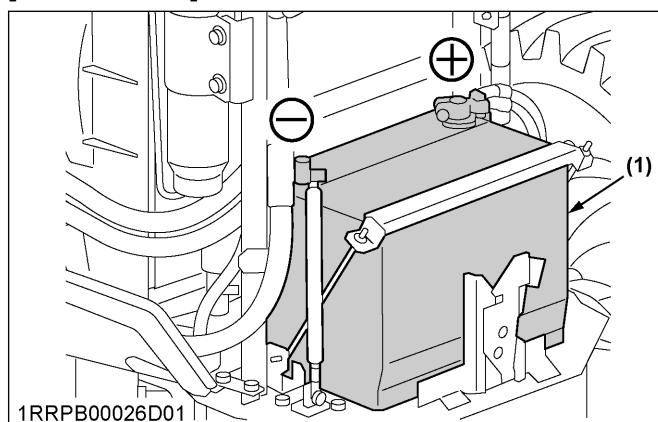
(1) Battery

SERVICING THE TRACTOR

Before servicing the tractor, park it on a firm, flat and level surface, set the parking brake, lower all implements to the ground, place the gear shift lever in neutral, stop the engine and remove the key.

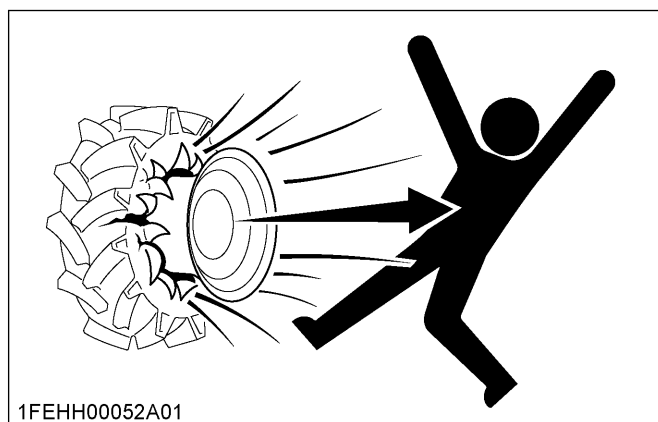
- Allow the tractor time to cool off before working on or near the engine, muffler, radiator and so on.
- Do not remove radiator cap while coolant is hot. When cool, slowly rotate cap to the first stop and allow sufficient time for excess pressure to escape before removing the cap completely. If the tractor has a coolant recovery tank, add coolant or water to the coolant recovery tank, not the radiator. (See Checking the coolant level on page 188.)
- Always stop the engine before refueling. Avoid spills and overfilling. Use only approved fuels.
- Do not smoke when working around the battery or when refueling. Keep all sparks and flames away from battery and fuel tank. The battery presents an explosive hazard because it gives off hydrogen and oxygen especially when recharging.
- Before “jump starting” a dead battery, read and follow all of the instructions. (See JUMP STARTING THE ENGINE on page 105.)
- Keep first aid kit and fire extinguisher handy at all times.
- Disconnect the battery's ground cable before working on or near electric components.
- To avoid the possibility of battery explosion, do not use or charge the refillable type battery if the fluid level is below the **[LOWER]** (lower limit level) mark. Check the fluid level regularly and add distilled water as required so that the fluid level is between the **[UPPER]** and **[LOWER]** levels.
- To avoid sparks from an accidental short circuit, always disconnect the battery's ground cable (-) first and reconnect it last.

[Deluxe model]



(1) Battery

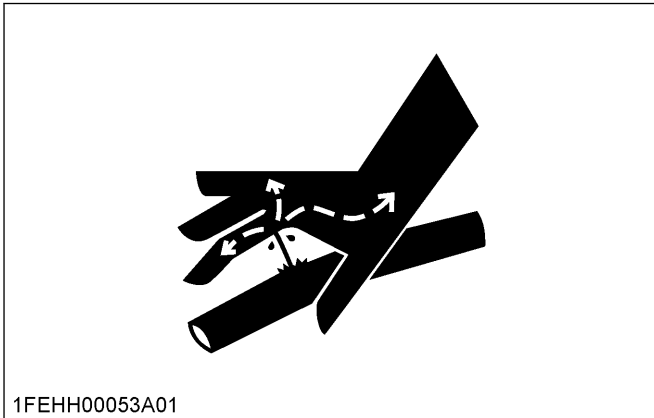
- Do not attempt to mount a tire on a rim. Tires should be mounted by a qualified person with the proper equipment.
- Always maintain the correct tire pressure. Do not inflate tires above the recommended pressure shown in the operator's manual.



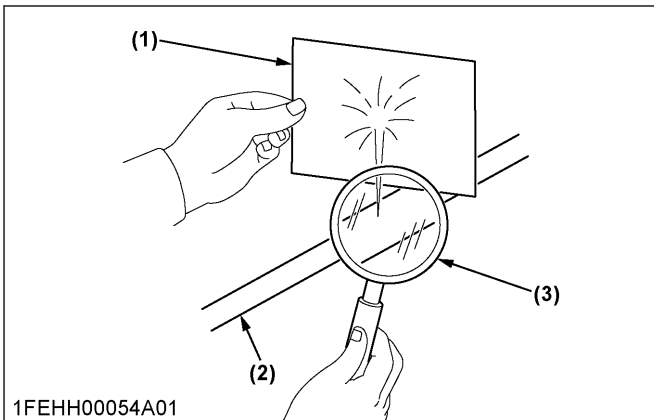
- Securely support the tractor when either changing wheels or adjusting the wheel tread width.
- Make sure that wheel bolts have been tightened to the specified torque.
- Do not work under any hydraulically supported devices. They can settle, suddenly leak down, or be

accidentally lowered. If it is necessary to work under the tractor or any machine elements for servicing or adjustment, securely support them with stands or suitable blocking beforehand.

- Escaping hydraulic fluid under pressure has sufficient force to penetrate the skin, causing serious personal injury. Before disconnecting hydraulic lines, release all residual pressure. Before applying pressure to the hydraulic system, make sure that all connections are tight and that all lines, pipes, and hoses are free of damage.



- Fluid escaping from pinholes may be invisible. Do not use your hands to search for suspected leaks, instead use a piece of cardboard or wood. Use of safety goggles or other eye protection is also highly recommended. If injured by escaping fluid, see a medical doctor at once. This fluid will produce gangrene or severe allergic reactions.



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

- Do not open the high-pressure fuel system. High-pressure fluid remaining in fuel lines can cause serious injury. Do not disconnect or attempt to repair fuel lines, sensors, or any other components between the high-pressure fuel pump and injectors on engines with high pressure common rail fuel system.
- To avoid hazardous high voltage, turn the key switch to the "OFF" position if it is necessary to

check or repair the computer, harness or connectors.

- During diesel particulate filter (hereinafter called DPF) regenerating operations, exhaust gases and exhaust filter components reach temperatures hot enough to burn people, or ignite or melt common materials.
- Keep the tractor away from people, animals or structures which may be susceptible to harm or damage from hot exhaust gases.
- To prevent fires, keep the DPF muffler and its surroundings clear of anything flammable and keep clean at all times.
- To avoid fire hazard:
After use and pressure-washing, make sure that there is nothing flammable near the exhaust pipe. Grass or twigs under the hood may cause fire.
- During regeneration, white exhaust gas may be visible. Do not allow regeneration in a non-ventilated space.
- During regeneration, do not leave the tractor.
- The improper disposal or burning of waste causes environmental pollution and can be punishable by your local laws and regulations.
 - When draining fluids from the tractor, place a container underneath the drain port.
 - Do not pour waste onto the ground, down a drain, or into any water source (such as rivers, streams, lakes, marshes, seas and oceans).
 - Waste products such as used oil, fuel, coolant, hydraulic fluid, aqueous urea solution (DEF (AdBlue)), refrigerant, solvent, filters, rubber, batteries and harmful substances, can harm the environment, people, pets and wildlife. Please dispose properly.
- See your local recycling center or Kubota dealer to learn how to recycle or get rid of waste products.
- Meaning of symbols on batteries regarding management of waste batteries:

	Separate collection symbol : batteries must not be disposed of with the household waste.
Pb	Pb symbol : batteries contain more than 0.004 % lead.

SAFE OPERATION

SAFETY LABELS

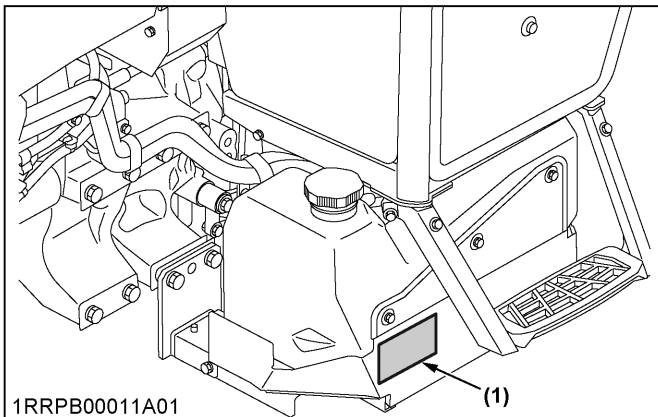
(1) Part No. TC420-4956-1

Diesel fuel only.

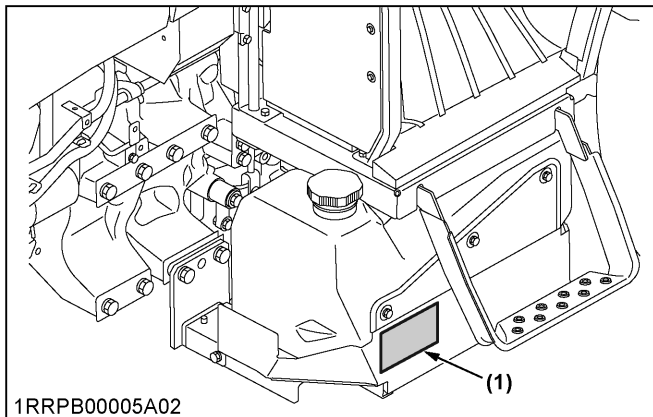
No fire.



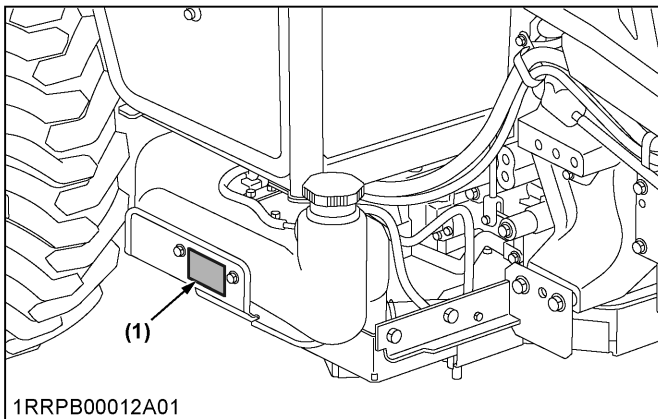
[Premium CAB model]



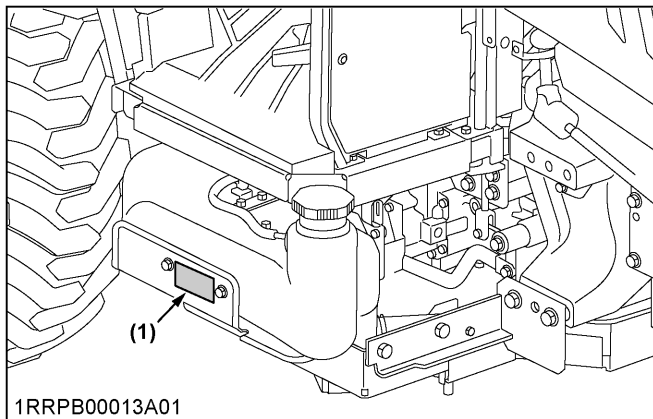
[Premium ROPS model]



[Deluxe CAB model]



[Deluxe ROPS model]



1RRPB00436A01enUS

! SAFE OPERATION

(1) Part No. 3J080-3822-3



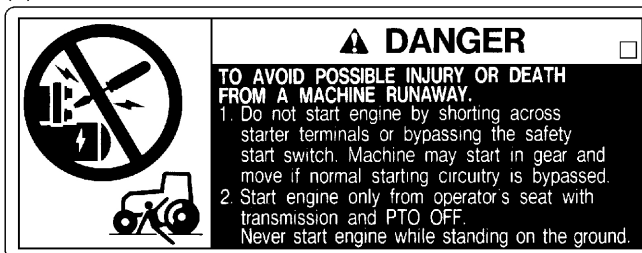
(3) Part No. TD540-9801-1 [ROPS model]



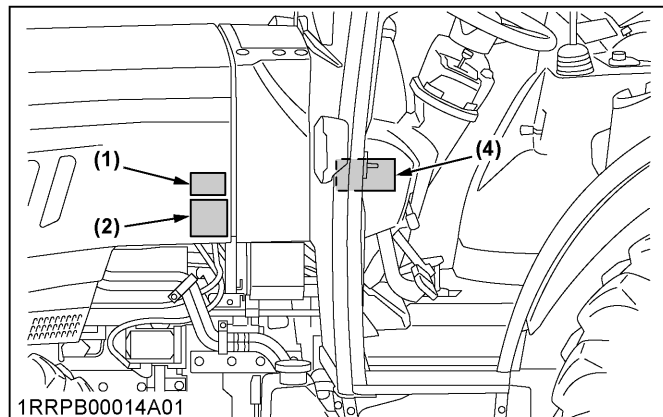
(2) Part No. TD540-4958-2



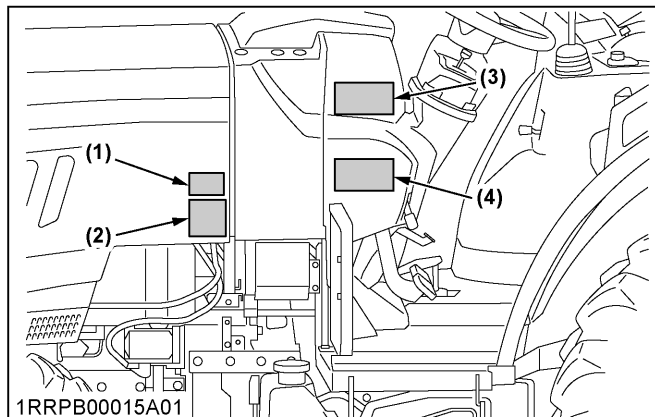
(4) Part No. 3C581-9858-3



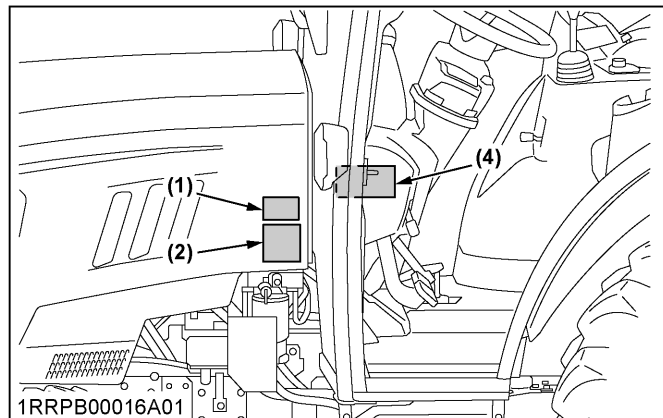
[Premium CAB model]



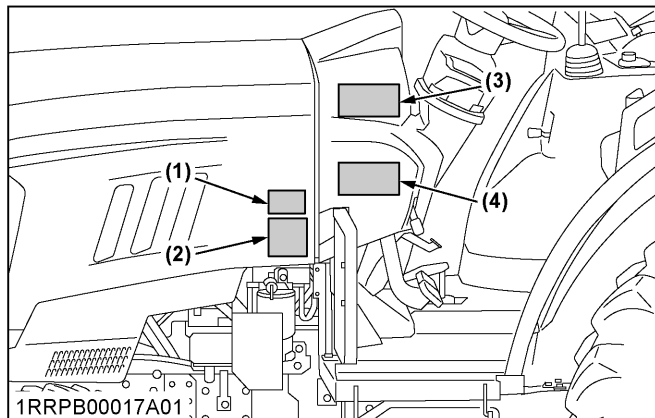
[Premium ROPS model]



[Deluxe CAB model]



[Deluxe ROPS model]



1RRPB00437A01enUS

SAFE OPERATION

(1) Part No. 6F170-4742-1

WARNING

TO AVOID PERSONAL INJURY OR DEATH :

1. Read and understand the operator's manual before operation.
2. Before starting the engine, make sure that everyone is at a safe distance from the tractor and that the PTO is OFF.
3. Do not allow passengers on the tractor at any time.
4. Before allowing other people to use the tractor, have them read the operator's manual.
5. Check the tightness of all nuts and bolts regularly.
6. Keep all shields in place and stay away from all moving parts.
7. Lock the two brake pedals together before driving on the road.
8. Slow down for turns, or rough roads, or when applying individual brakes.
9. On public roads use SMV emblem and hazard lights, if required by local traffic and safety regulations.
10. Pull only from the drawbar.
11. Before dismounting, lower the implement to the ground, set the parking brake, stop the engine and remove the key.
12. Securely support tractor and implements before working underneath.



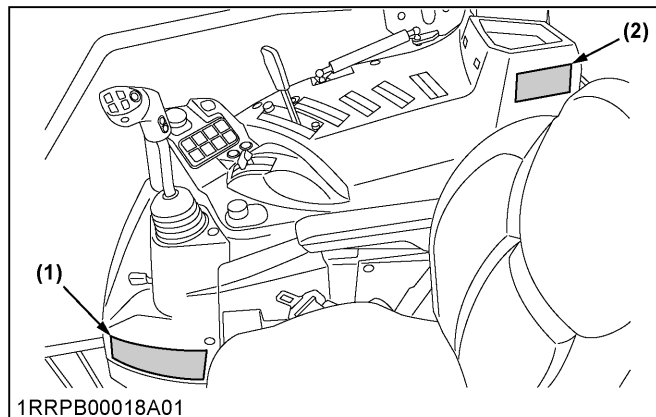
(2) Part No. TC650-6597-1

California Proposition 65

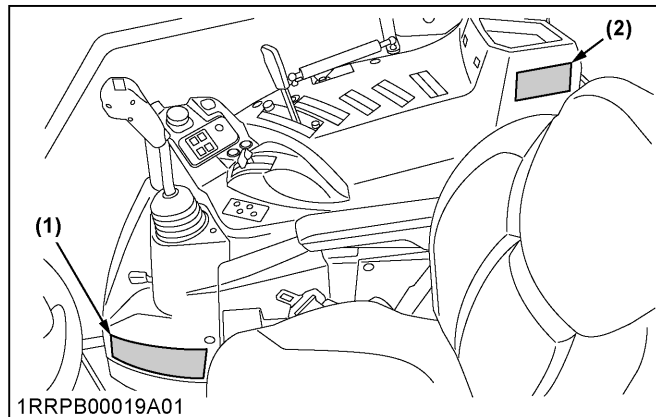
WARNING

Engine exhaust, some of its constituents, certain vehicle components and fluids, contain or emit chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

[Premium model]

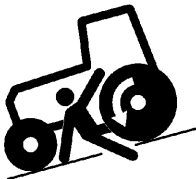


[Deluxe model]



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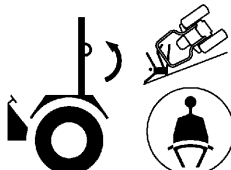
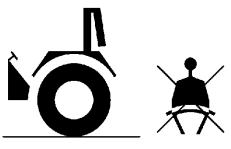
(1) Part No. 6F170-4743-1

	! WARNING BEFORE DISMOUNTING TRACTOR: 1.ALWAYS SET PARKING BRAKE. Leaving transmission in gear with the engine stopped will not prevent tractor from rolling. 2.PARK ON LEVEL GROUND WHENEVER POSSIBLE. If parking on a slope, position tractor across the slope. 3.LOWER ALL IMPLEMENTS TO THE GROUND. Failure to comply to this warning may allow the wheels to slip, and could cause injury or death. 4.LOCK SHUTTLE SHIFT LEVER IN NEUTRAL POSITION (if equipped) AND STOP THE ENGINE.
	☐

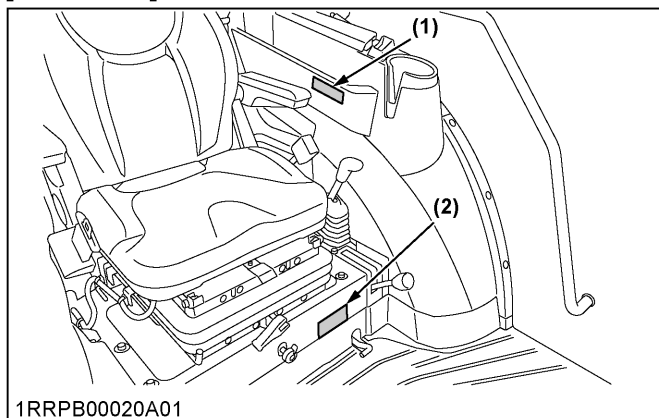
(2) Part No. TA040-4934-2 [Mid-PTO model]

! WARNING TO AVOID PERSONAL INJURY : Do not operate rear-PTO driven implements and mid-PTO driven implements at the same time except when the implements are specially designed to be used together.
--

(3) Part No. TD540-9848-1 [ROPS model]

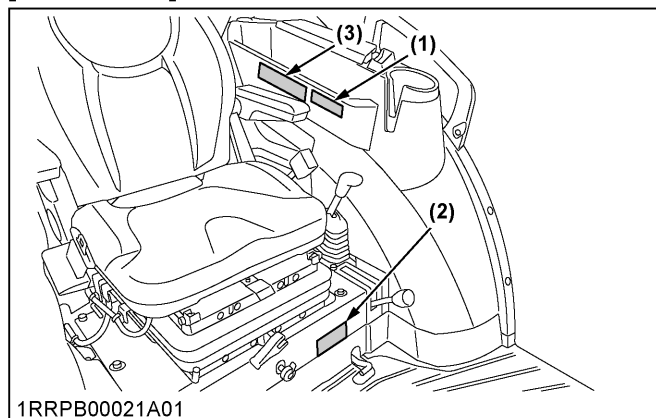
	! WARNING TO AVOID INJURY OR DEATH FROM ROLL-OVER: ·Keep Roll-Over Protective Structures(ROPS) in the upright and locked position. ·Fasten SEAT BELT before operating.
	THERE IS NO OPERATOR PROTECTION WHEN THE ROPS IS IN THE FOLDED POSITION: ·Check the operating area and fold the ROPS only when absolutely necessary. ·Do not wear SEAT BELT if ROPS is folded. ·Raise and lock ROPS as soon as vertical clearance allows. ·Read ROPS related instructions and warnings.

[CAB model]



1RRPB00439A01enUS

[ROPS model]



SAFE OPERATION

[CAB model]

(1) Part No.
6F170-4753-1

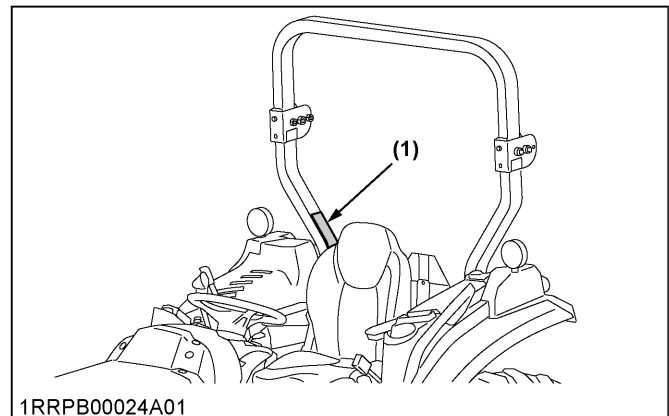
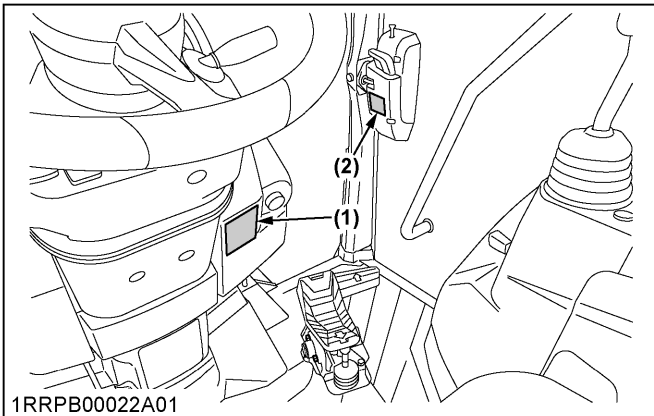
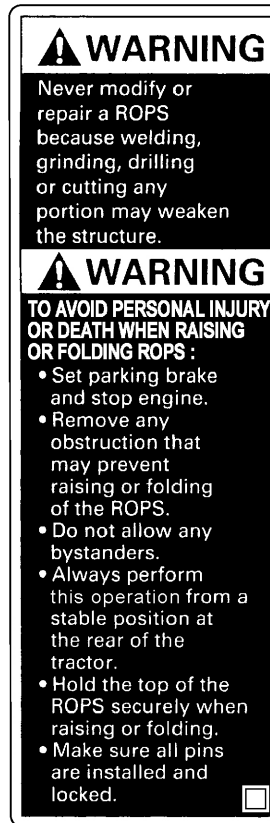


(2) Part No.
3S223-9839-2 [Deluxe model]



[ROPS model]

(1) Part No. TC860-9554-3



1RRPB00440A01enUS

! SAFE OPERATION

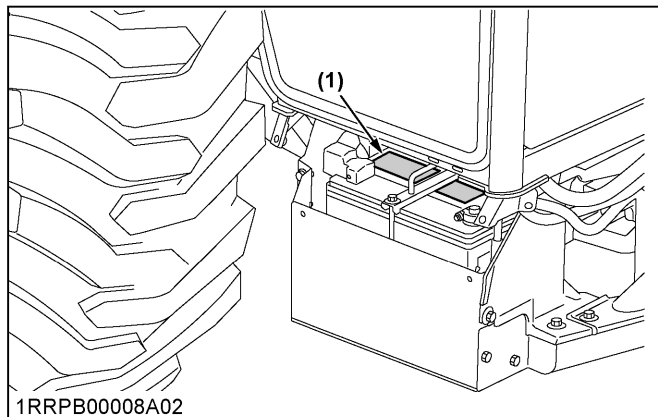
(1) Part No. TD459-3022-1 [Except premium model for cold climate]

FLAMMABLES SHIELD EYES KEEP OUT OF THE REACH OF CHILDREN CAUTION OF SULFURIC ACID READ INSTRUCTION MANUAL CAREFULLY EXPLOSIVE DANGER *DUE TO HYDROGEN GAS GENERATED FROM BATTERY, HANDLING WITHOUT CARE CAN CAUSE FIRE AND EXPLOSION. *THIS 12V BATTERY IS ONLY FOR STARTING ENGINE. DO NOT APPLY THIS PRODUCT FOR OTHER USES. *CHARGE THIS BATTERY ONLY AT WELL VENTILATED PLACES, AND AVOID SHORTS OR SPARKS. *REFER TO THE INSTRUCTION MANUAL OF VEHICLE OR BATTERY BEFORE USING BOOSTER CABLE. SULFURIC ACID MAY CAUSE BLINDNESS OR SEVERE BURN IN CASE EYES, SKIN, CLOTHES OR ANY ARTICLES ARE STAINED WITH ACID. FLUSH OBJECTS IMMEDIATELY WITH WATER. IF ACID BEING SWALLOWED, DRINK PLENTY OF WATER PROMPTLY. IN CASE OF ACCIDENTAL CONTACT, CONSULT A DOCTOR IMMEDIATELY. *BATTERY FILLED WITH ACID(DO NOT TILT OR SPILL) *FLAMMABLE. DO NOT CHARGE NEAR FIRE OR SPARKS *DO NOT CHARGE RAPIDLY *DO NOT DISASSEMBLE THE BATTERY(SEALED TYPE)	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: THIS PRODUCT CAN EXPOSE YOU TO CHEMICALS INCLUDING LEAD, WHICH IS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER AND BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM. FOR MORE INFORMATION GO TO WWW.P65WARNINGS.CA.GOV FEETED 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	S.O.C Indicator OK Charge Replace BATTERY MUST BE RECYCLED Clarios Delkor Corporation : 13, Okgye2gongdan-ro, Gumi-si, Gyeongsangbuk-do, Korea. Rep www.delkor.com Pb DK206681
Delkor 80D26R 12V 70Ah (20HR) RC 133 (MIN) 582CCA (SAE) 550CCA (EN)		

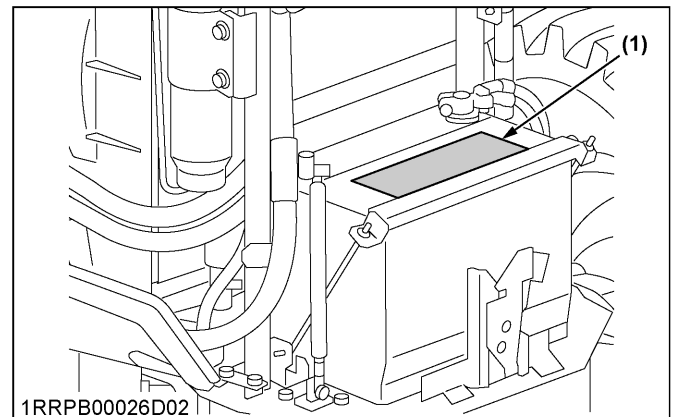
(1) Part No. TD543-3013-1 [Premium model for cold climate]

FLAMMABLES SHIELD EYES KEEP OUT OF THE REACH OF CHILDREN CAUTION OF SULFURIC ACID READ INSTRUCTION MANUAL CAREFULLY EXPLOSIVE DANGER *DUE TO HYDROGEN GAS GENERATED FROM BATTERY, HANDLING WITHOUT CARE CAN CAUSE FIRE AND EXPLOSION. *THIS 12V BATTERY IS ONLY FOR STARTING ENGINE. DO NOT APPLY THIS PRODUCT FOR OTHER USES. *CHARGE THIS BATTERY ONLY AT WELL VENTILATED PLACES, AND AVOID SHORTS OR SPARKS. *REFER TO THE INSTRUCTION MANUAL OF VEHICLE OR BATTERY BEFORE USING BOOSTER CABLE. SULFURIC ACID MAY CAUSE BLINDNESS OR SEVERE BURN IN CASE EYES, SKIN, CLOTHES OR ANY ARTICLES ARE STAINED WITH ACID. FLUSH OBJECTS IMMEDIATELY WITH WATER. IF ACID BEING SWALLOWED, DRINK PLENTY OF WATER PROMPTLY. IN CASE OF ACCIDENTAL CONTACT, CONSULT A DOCTOR IMMEDIATELY. *BATTERY FILLED WITH ACID(DO NOT TILT OR SPILL) *FLAMMABLE. DO NOT CHARGE NEAR FIRE OR SPARKS *DO NOT CHARGE RAPIDLY *DO NOT DISASSEMBLE THE BATTERY(SEALED TYPE)	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: THIS PRODUCT CAN EXPOSE YOU TO CHEMICALS INCLUDING LEAD, WHICH IS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER AND BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM. FOR MORE INFORMATION GO TO WWW.P65WARNINGS.CA.GOV FEETED 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	S.O.C Indicator OK Charge Replace BATTERY MUST BE RECYCLED Clarios Delkor Corporation : 13, Okgye2gongdan-ro, Gumi-si, Gyeongsangbuk-do, Korea. Rep www.delkor.com Pb DK207543
Delkor 90D26R 12V 80Ah (20HR) RC 150 (MIN) 680CCA (SAE)		

[Premium model]



[Deluxe model]



1RRPB00441A01enUS

SAFE OPERATION

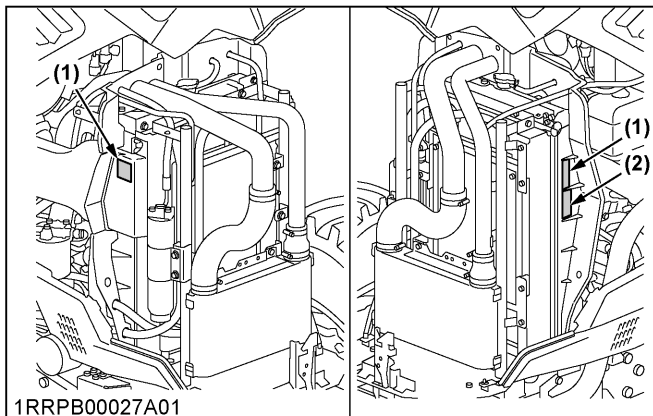
(1) Part No. 6C952-4958-3
Do not get your hands close
to engine fan and fan belt.



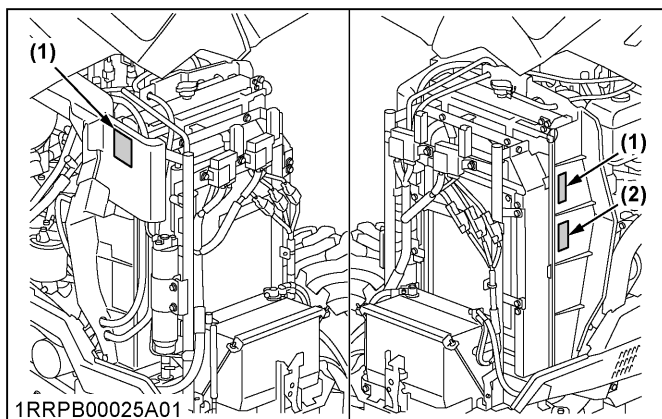
(2) Part No. 6C952-4959-3
Do not touch hot surfaces
like muffler, and so on.



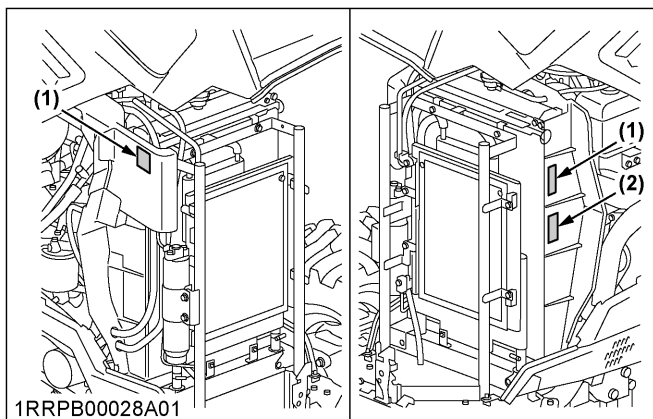
[L6070]



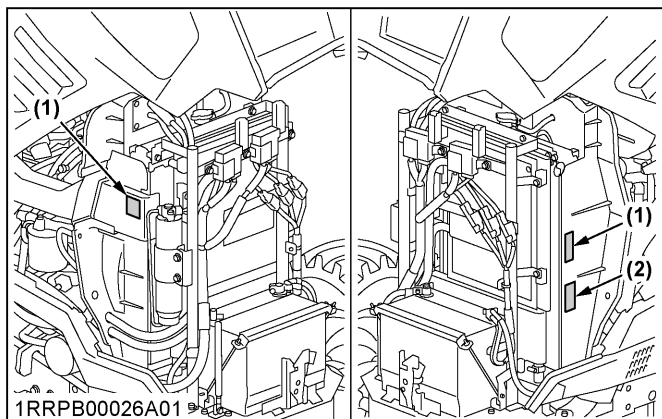
[L4270]



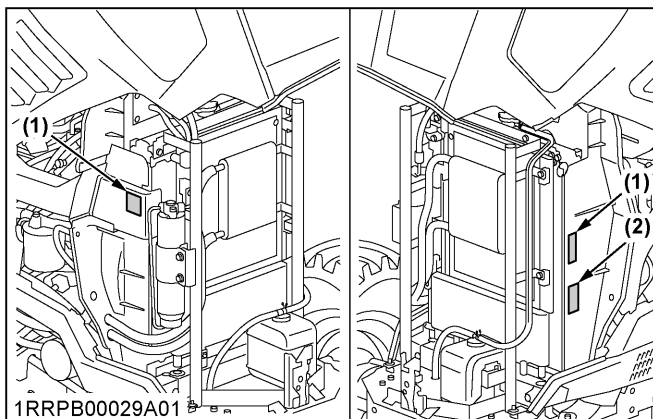
[L5070, L4470]



[L3770]

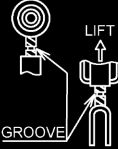


[L3970]



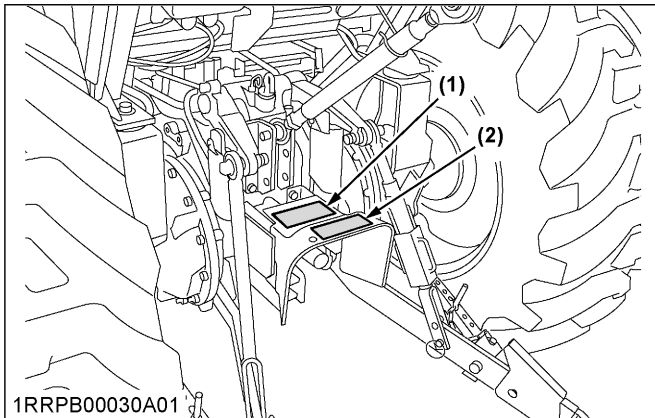
! SAFE OPERATION

(1) Part No. TC660-4935-1

! WARNING TO AVOID PERSONAL INJURY OR DEATH: 1. Attach pulled or towed loads to the drawbar only. 2. Use the 3-point hitch only with equipment designed for 3-point hitch usage.	! WARNING TO AVOID PERSONAL INJURY OR DEATH FROM SEPARATION: Do not extend lift rod beyond the groove on the threaded rod. 
---	---

(2) Part No. TA040-4959-4

	! WARNING TO AVOID PERSONAL INJURY. 1. Keep PTO shield in place at all times. 2. Do not operate the PTO at speeds faster than the speed recommended by the implement manufacturer. 3. For trailing PTO-driven implements, set drawbar at towing position. (See operator's manual)
--	---



1RRPB00443A01enUS



SAFE OPERATION

CARE OF THE SAFETY LABELS

- Keep the safety labels clean and free from obstructing material.
- Clean the safety labels with soap and water, dry with a soft cloth.
- Replace damaged or missing safety labels with new labels from your local Kubota dealer.
- If a component with safety label(s) affixed is replaced with new part, make sure that the new label(s) is (are) attached in the same location(s) as the replaced component.
- Attach new safety labels by applying on a clean dry surface and pressing any bubbles to outside edge.

SERVICING OF TRACTOR

Your dealer has knowledge of your new machine and has the desire to help you get the most value from it. After reading this manual thoroughly, you will find that you can do some of the regular maintenance yourself. However, when in need of parts or major service, contact your local Kubota dealer.

For service, contact your local Kubota dealer.

When in need of parts, be prepared to give your dealer the product identification number (PIN), the CAB/ROPS serial number, and the engine serial number.

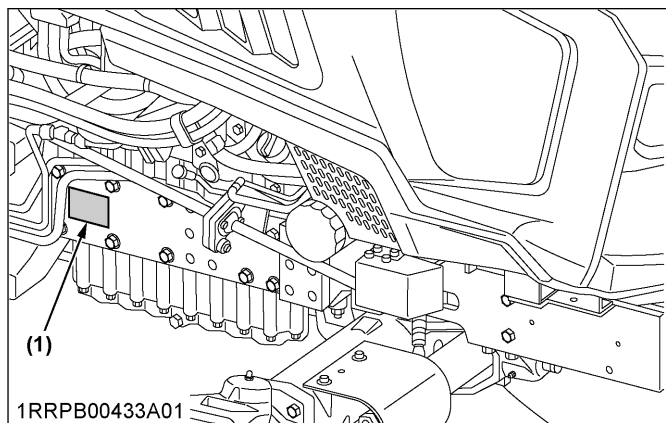
Locate the PIN and serial numbers now and fill in the following tables.

Date of purchase	
Name of dealer	

Tractor type	
PIN	

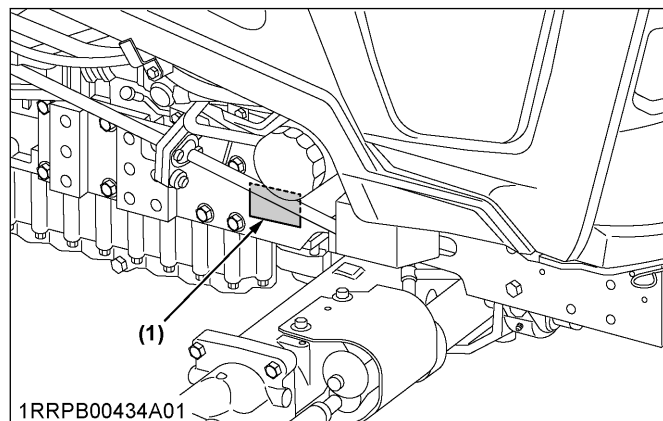
	Type	PIN / Serial no.
CAB/ROPS		
Engine		

[L3770, L3970]



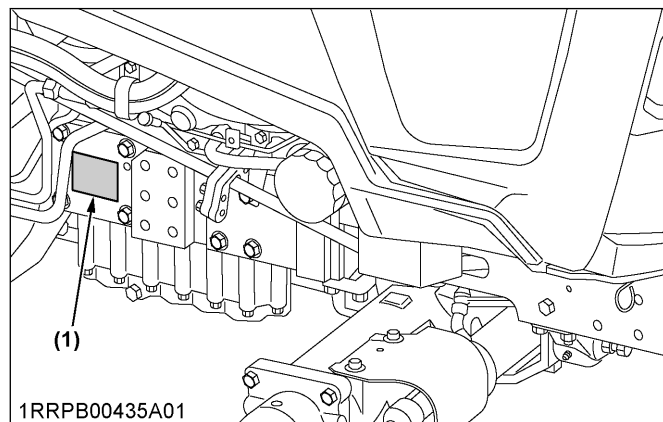
(1) Identification plate

[L4270, L4470]



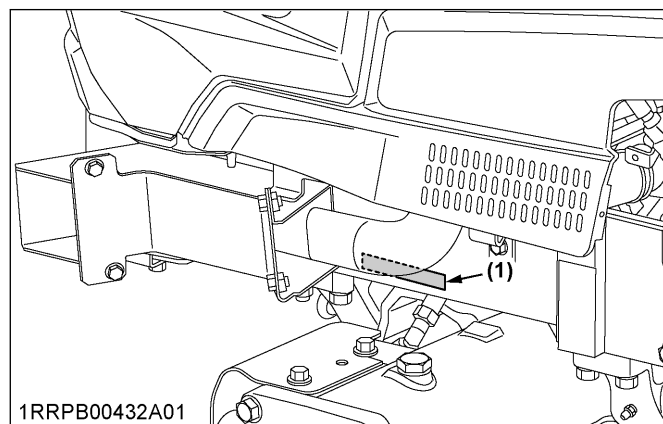
(1) Identification plate

[L6070, L5070]

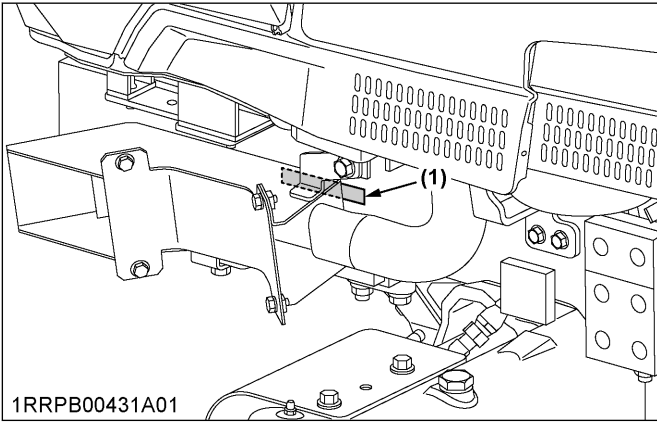


(1) Identification plate

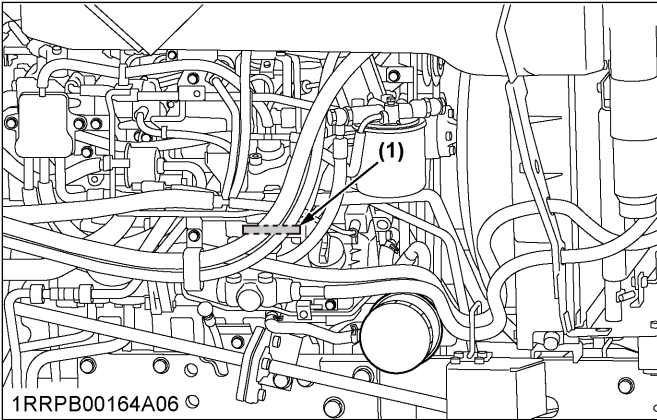
[L3770, L3970]



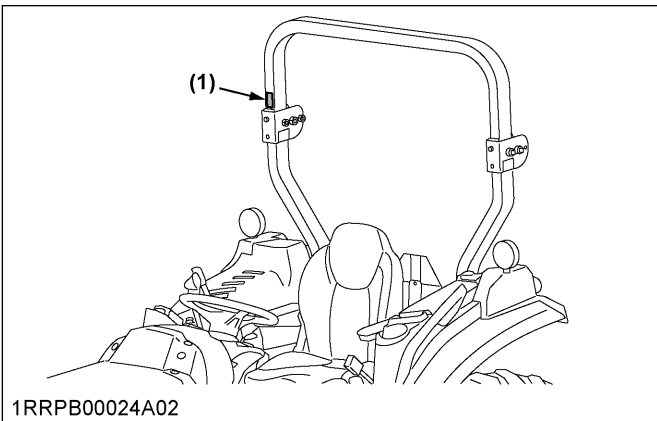
(1) Product identification number

[L4270, L4470, L5070, L6070]

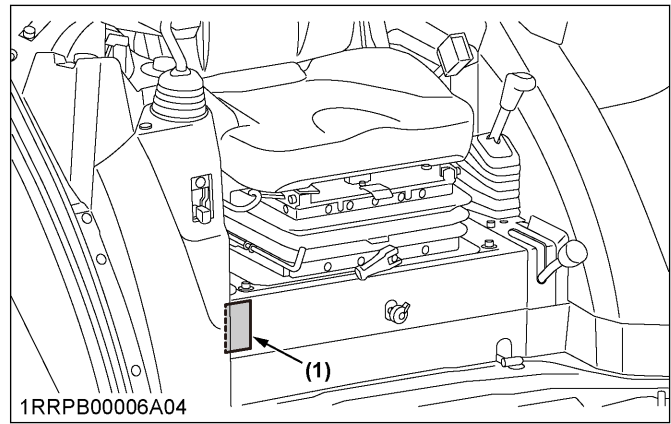
(1) Product identification number



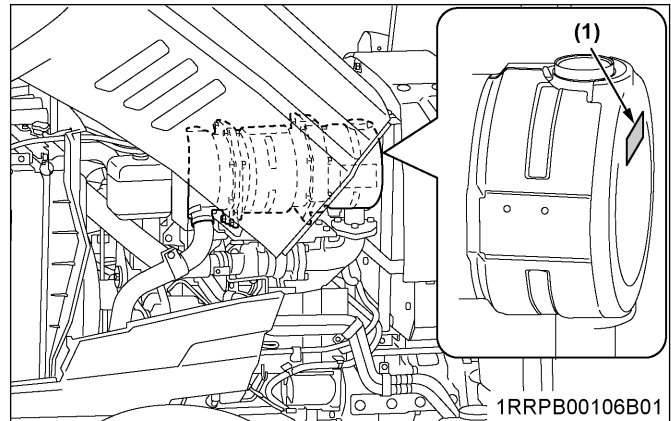
(1) Engine serial number



(1) ROPS identification plate (ROPS serial number)



(1) CAB identification plate (CAB serial number)



(1) Diesel particulate filter (DPF) serial number

WARRANTY OF THE TRACTOR

This tractor 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 tractor has not been serviced and maintained according to the instruction given in the operator's manual, even if it is within the warranty period.

SCRAPPING THE TRACTOR

To put the tractor out of service, follow the local rules and regulations of the country or territory where you scrap it.

If you have questions, contact your local Kubota dealer.

SPECIFICATIONS

SPECIFICATION TABLE

ROPS model

Model			Deluxe		Premium			
			L3770	L4270	L3970	L4470	L5070	L6070
			4WD					
Engine	Model		D1803-CR-E5	V2403-CR-E5	D1803-CR-TE5	V2403-CR-TE5		V2403-CR-TIE5
	Type		Direct injection, water-cooled 4 cycle diesel, common rail system		Direct injection, water-cooled 4 cycle diesel, common rail system, turbocharger			Direct injection, water-cooled 4 cycle diesel, common rail system, turbocharger, inter-cooler
	Number of cylinders		3	4	3	4		
	Total displacement	L (cu. in.)	1.826 (111.4)	2.434 (148.5)	1.826 (111.4)	2.434 (148.5)		
	Bore and stroke	mm (in.)	87 × 102.4 (3.4 × 4.0)					
	Rated revolution	rpm	2600		2300			
	Low idling revolution	rpm	800					
	Engine gross power *1	kW (HP)	27.6 (37.0)	31.3 (42.0)	29.1 (39.0)	32.8 (44.0)	37.3 (50.0)	44.7 (60.0)
	PTO power *1	kW (HP)/rpm	20.9 (28.0)/2600	24.2 (32.5)/2600	23.0 (30.9)/2300	27.0 (36.2)/2300	29.7 (39.8)/2300	39.5 (53.0)/2300
	Maximum torque	N·m (lbf·ft)	114.1 (84.2)	133.5 (98.5)	148.3 (109.4)	177.0 (130.5)	195.6 (144.3)	245.0 (180.7)
	Battery capacity		12 V, RC: 133 min, CCA: 582 A		Non-cold climate model: 12 V, RC: 133 min, CCA: 582 A Cold climate model: 12 V, RC: 150 min, CCA: 680 A			
Capacities	Fuel tank	L (U.S.gals.)	51 (13.5)		48 (12.7)			
	Engine crankcase (with filter)	L (U.S.qts.)	6.4 (6.7)	8.4 (8.9)	6.4 (6.7)	8.4 (8.9)		
	Engine coolant	L (U.S.qts.)	6.8 (7.2)	8.2 (8.7)	6.8 (7.2)	8.2 (8.7)		
	Transmission case	L (U.S.gals.)	46 (12.1)	45 (11.9)	46 (12.1)	45 (11.9)		47 (12.4)
Dimen-sions	Overall length (without 3p)	mm (in.)	2945 (115.9)	3140 (123.6)	3095 (121.9)	3290 (129.5)		3400 (133.9)
	Overall width (minimum tread)	mm (in.)	1520 (59.8)	1690 (66.5)	1520 (59.8)	1690 (66.5)		1710 (67.3)

(Continued)

SPECIFICATIONS

Model				Deluxe		Premium			
				L3770	L4270	L3970	L4470	L5070	L6070
				4WD					
Dimen- sions	Overall height (with ROPS)		mm (in.)	2500 (98.4)	2445 (96.3)	2435 (95.9)	2445 (96.3)		2455 (96.7)
	Wheel base		mm (in.)	1805 (71.1)	1895 (74.6)	1955 (77.0)	2045 (80.5)		2065 (81.3)
	Minimum. ground clear- ance		mm (in.)	360 (14.2)		342 (13.5)	360 (14.2)		392 (15.4)
	Tread	Front	mm (in.)	1155 (45.5)		1155 (45.5)		1285 (50.6)	1325 (52.2)
		Rear	mm (in.)	1200 (47.2)	1285 (50.6)	1200 (47.2)	1285 (50.6)		1325 (52.2) 1430 (56.3)
1300 (51.2)				1435 (56.5)	1300 (51.2)	1435 (56.5)			
1385 (54.5)	1530 (60.2)			1385 (54.5)	1530 (60.2)				
Weight (with ROPS)			kg (lbs.)	1690 (3726)	1785 (3935)	1840 (4057)	1935 (4266)		1990 (4387)
Traveling system	Standard tire size	Front		7-16	8.3-16	7-16	8.3-16		9.5-16
		Rear		12.4-24	14.9-24	12.4-24	14.9-24		14.9-26
	Clutch			-					
	Steering			Hydrostatic power steering					
	Transmission			Hydrostatic transmission (3 speeds)					
	Braking system			Wet disk type					
	Minimum. turning radius (with brake)		m (feet)	2.7 (8.9)		2.9 (9.5)			
Hydraulic unit	Hydraulic control system			Position control					
	Pump capacity		L (U.S.gals)/ min.	30.4 (8.0)	35.6 (9.4)	37.2 (9.8)			
	3-point hitch			SAE category 1					SAE cate- gory 1, 2
	Maximum. lift force	At lifting points	kg (lbs.)	1700 (3748)	1750 (3858)	1700 (3748)	1750 (3858)		
		24 in. be- hind lift points	kg (lbs.)	1200 (2646)	1250 (2756)	1200 (2646)	1250 (2756)		1350 (2976)
	System pressure		MPa (kgf/cm ²)	17.7 (180)					
PTO	Rear PTO			SAE 1-3/8, 6 splines					
		PTO/ engine speed	rpm	540/2491		540/2299			540/2258

*1 Manufacturer's estimate

CAB model

Model			Deluxe		Premium				
			L3770	L4270	L3970	L4470	L5070	L6070	
			4WD						
Engine	Model		D1803-CR-E5	V2403-CR-E5	D1803-CR-TE5	V2403-CR-TE5		V2403-CR-TIE5	
	Type		Direct injection, water-cooled 4 cycle diesel, common rail system		Direct injection, water-cooled 4 cycle diesel, common rail system, turbocharger			Direct injection, water-cooled 4 cycle diesel, common rail system, turbocharger, inter-cooler	
	Number of cylinders		3	4	3	4			
	Total displacement	L (cu. in.)	1.826 (111.4)	2.434 (148.5)	1.826 (111.4)	2.434 (148.5)			
	Bore and stroke	mm (in.)	87 × 102.4 (3.4 × 4.0)						
	Rated revolution	rpm	2600		2300				
	Low idling revolution	rpm	800						
	Engine gross power *1	kW (HP)	27.6 (37.0)	31.3 (42.0)	29.1 (39.0)	32.8 (44.0)	37.3 (50.0)	44.7 (60.0)	
	PTO power *1	kW (HP)/rpm	20.9 (28.0)/2600	24.2 (32.5)/2600	23.0 (30.9)/2300	27.0 (36.2)/2300	29.7 (39.8)/2300	39.5 (53.0)/2300	
	Maximum torque	N·m (lbf·ft)	114.1 (84.2)	133.5 (98.5)	148.3 (109.4)	177.0 (130.5)	195.6 (144.3)	245.0 (180.7)	
	Battery capacity		12 V, RC: 133 min, CCA: 582 A		Non-cold climate model: 12 V, RC: 133 min, CCA: 582 A Cold climate model: 12 V, RC: 150 min, CCA: 680 A				
Capacities	Fuel tank	L (U.S.gals.)	51 (13.5)		48 (12.7)				
	Engine crankcase (with filter)	L (U.S.qts.)	6.4 (6.7)	8.4 (8.9)	6.4 (6.7)	8.4 (8.9)			
	Engine coolant	L (U.S.qts.)	6.8 (7.2)	8.2 (8.7)	6.8 (7.2)	8.2 (8.7)			
	Transmission case	L (U.S.gals.)	46 (12.1)	45 (11.9)	46 (12.1)	45 (11.9)		47 (12.4)	
Dimensions	Overall length (without 3p)		mm (in.)	2945 (115.9)	3140 (123.6)	3095 (121.9)	3290 (129.5)		3400 (133.9)
	Overall width (minimum tread)		mm (in.)	1520 (59.8)	1690 (66.5)	1520 (59.8)	1690 (66.5)		1710 (67.3)
	Overall height		mm (in.)	2320 (91.3)	2335 (91.9)	2320 (91.3)	2335 (91.9)		2370 (93.3)
	Wheel base		mm (in.)	1805 (71.1)	1895 (74.6)	1955 (77.0)	2045 (80.5)		2065 (81.3)
	Minimum. ground clearance		mm (in.)	360 (14.2)		342 (13.5)	360 (14.2)		392 (15.4)
	Tread	Front	mm (in.)	1155 (45.5)		1155 (45.5)		1285 (50.6)	1325 (52.2)
		Rear	mm (in.)	1200 (47.2) 1300 (51.2) 1385 (54.5) 1480 (58.3)	1285 (50.6) 1435 (56.5) 1530 (60.2)	1200 (47.2) 1300 (51.2) 1385 (54.5) 1480 (58.3)	1285 (50.6) 1435 (56.5) 1530 (60.2)		1325 (52.2) 1430 (56.3)

(Continued)

SPECIFICATIONS

Model				Deluxe		Premium			
				L3770	L4270	L3970	L4470	L5070	L6070
				4WD					
Weight (with CAB)			kg (lbs.)	1830 (4034)	1945 (4288)	1990 (4387)	2115 (4663)		2160 (4762)
Traveling system	Standard tire size	Front		7-16	8.3-16	7-16	8.3-16		9.5-16
		Rear		12.4-24	14.9-24	12.4-24	14.9-24		14.9-26
	Clutch			-					
	Steering			Hydrostatic power steering					
	Transmission			Hydrostatic transmission (3 speeds)					
	Braking system			Wet disk type					
	Minimum. turning radius (with brake)		m (feet)	2.7 (8.9)		2.9 (9.5)			
	Hydraulic unit	Hydraulic control system			Position control				
Pump capacity		L (U.S.gals)/ min.	30.4 (8.0)	35.6 (9.4)	37.2 (9.8)				
3-point hitch			SAE category 1					SAE cate- gory 1, 2	
Maximum. lift force		At lifting points	kg (lbs.)	1700 (3748)	1750 (3858)	1700 (3748)	1750 (3858)		
		24 in. be- hind lift points	kg (lbs.)	1200 (2646)	1250 (2756)	1200 (2646)	1250 (2756)		1350 (2976)
System pressure		MPa (kgf/cm ²)	17.7 (180)						
PTO		Rear PTO			SAE 1-3/8, 6 splines				
	PTO/ engine speed		rpm	540/2491		540/2299		540/2258	
	Mid PTO (if equipped)			USA No.5 (Kubota 10-tooth) involute spline					
		PTO/ engine speed	rpm	-		2000/2285		2000/2244	

*1 Manufacturer's estimate

TRAVELING SPEEDS

Model			Deluxe				Premium					
			L3770		L4270		L3970		L4470, L5070		L6070	
Tire size (rear)			12.4-24		14.9-24		12.4-24		14.9-24		14.9-26	
Speed control pedal	H-DS lever	Range gear shift lever	km/h	mph	km/h	mph	km/h	mph	km/h	mph	km/h	mph
Forward	L	L	3.3	2.1	3.4	2.1	3.0	1.8	3.3	2.1	3.0	1.9
		M	6.8	4.2	7.0	4.4	6.5	4.0	6.8	4.2	6.6	4.1
		H	16.6	10.3	17.1	10.6	18.4	11.5	18.0	11.2	18.7	11.6
	H	L	5.6	3.5	5.8	3.6	4.9	3.1	5.6	3.5	5.0	3.1
		M	11.4	7.1	11.7	7.3	10.9	6.8	11.4	7.1	11.0	6.8
		H	27.7	17.2	28.5	17.7	29.4	18.3	28.8	17.9	29.8	18.4
Reverse	L	L	3.0	1.9	3.1	1.9	2.7	1.7	3.0	1.9	2.7	1.7
		M	6.1	3.8	6.3	3.9	5.9	3.6	6.1	3.8	5.9	3.7
		H	14.9	9.3	15.4	9.5	16.6	10.3	16.2	10.1	16.8	10.5
	H	L	5.0	3.1	5.2	3.2	4.4	2.8	5.0	3.1	4.5	2.8
		M	10.3	6.4	10.6	6.6	9.8	6.1	10.3	6.4	9.9	6.2
		H	24.9	15.5	25.7	16.0	26.5	16.5	25.9	16.1	26.9	16.7

At rated engine rpm

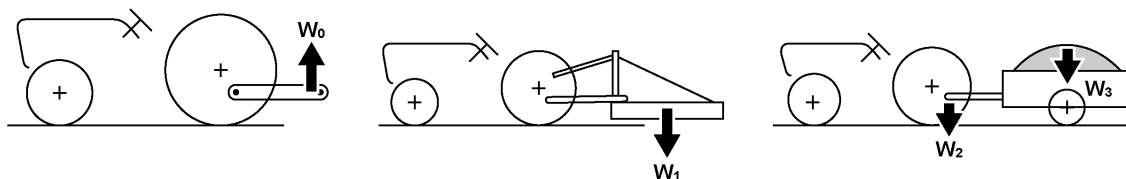
The company reserves the right to change the specifications without notice.

IMPLEMENT LIMITATIONS

The tractor has been thoroughly tested for proper performance with implements sold or approved by Kubota. Use with implements which are not sold or approved by Kubota and which exceed the maximum specifications listed in the following table, or which are otherwise unfit for use with the tractor may result in malfunctions or failures of the tractor, damage to other property and injury to the operator or others. Any malfunctions or failures of the tractor resulting from use with improper implements are not covered by the warranty.

	Tread (max. width) with farm tire		Lower link end max. lifting capacity: W0
	Front	Rear	
L3770, L3970	1155 mm (45.5 in.)	1480 mm (58.3 in.)	1700 kg (3750 lbs.)
L4270, L4470		1530 mm (60.2 in.)	1750 kg (3860 lbs.)
L5070	1285 mm (50.6 in.)		
L6070	1325 mm (52.2 in.)	1430 mm (56.3 in.)	

Actual figures			
Implement weight and/or size W1	Implement weight and/or size W1	Max. drawbar load: W2	Trailer loading weight max. capacity W3
L3770, L3970	As in the following list (See IMPLEMENT SPECIFICATION TABLE on page 34.)	650 kg (1430 lbs.)	2000 kg (4400 lbs.)
L4270, L4470			2500 kg (5500 lbs.)
L5070, L6070			3000 kg (6600 lbs.)



1RVNX00001A01

W0 Lower link end max. hydraulic lifting capacity

W1 Implement weight-the implement's weight which can be put on the lower link

W2 Max. drawbar load

W3 Trailer loading weight-the max. loading weight for trailer

NOTE :

- Implement size may vary depending on soil operating conditions.
- Strictly follow the instructions outlined in the operator's manual of the mounted or trailed machinery or trailer, and do not operate the combination tractor-machine or tractor-trailer unless all instructions have been followed
- Forestry application
Following hazards exist:
 - toppling trees, primarily in case a rear-mounted tree grab-crane is mounted at the rear of the tractor.

- penetrating objects in the operator's enclosure, primarily in case a winch is mounted at the rear of the tractor.

Optional equipments such as operator protective structure (OPS), falling object protective structure (FOPS), etc. to deal with these hazards and other related hazards are not available for this tractor. Without such optional equipment use is limited to tractor specific applications like transport and stationary work.

IMPLEMENT SPECIFICATION TABLE

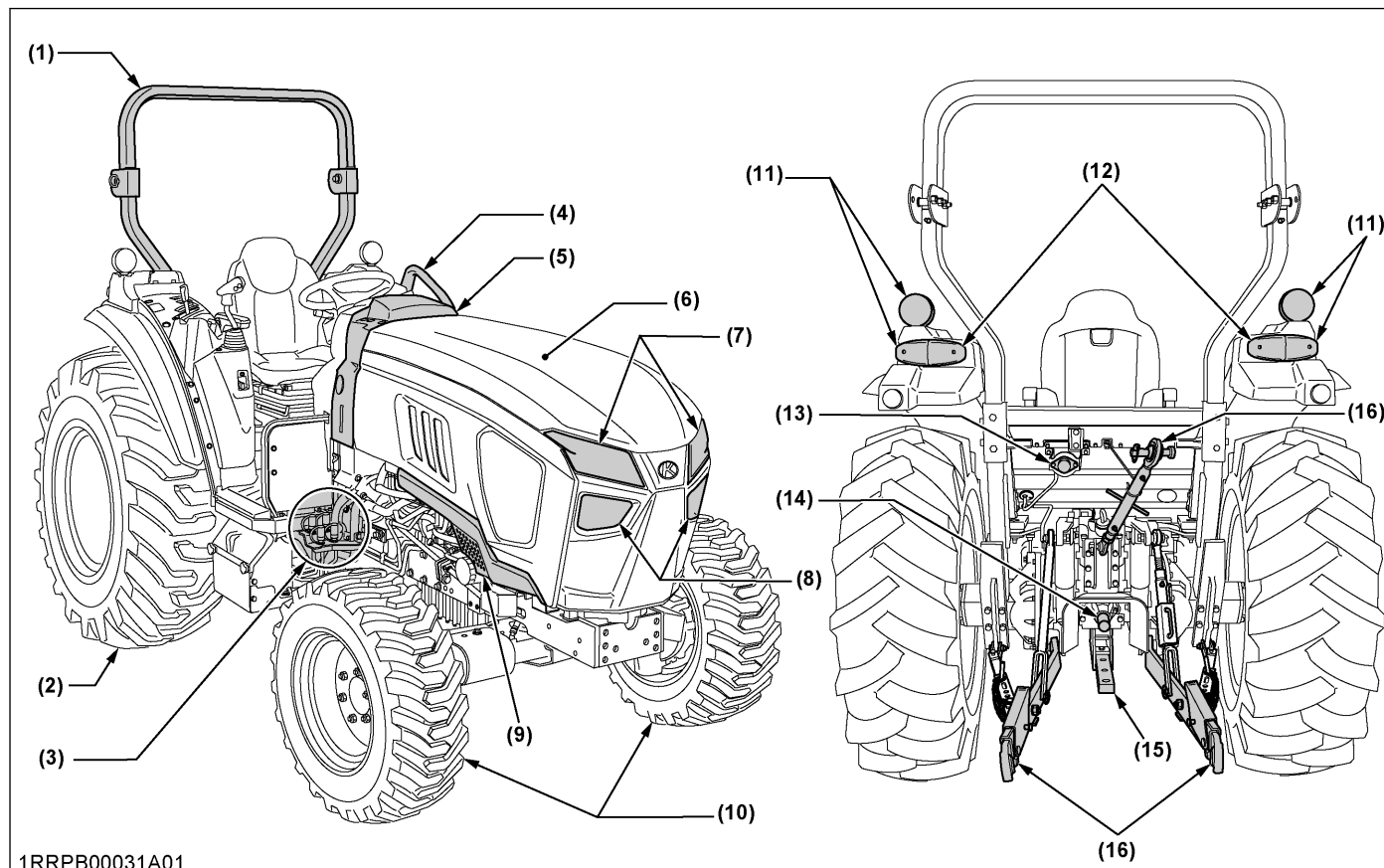
No.	Implement		Remarks		L3770, L3970	L4270, L4470	L5070	L6070
1	Trailer		Max. load capacity	kg (lbs.)	2000 (4400)	2500 (5500)	3000 (6600)	
			Max. drawbar load	kg (lbs.)	650 (1430)			
2	Mower	Rotary-cutter	Max. cutting width	mm (in.)	1829 (72)			2134 (84)
			Max. weight	kg (lbs.)	350 (770)	420 (926)		480 (1058)
		Flail mower	Max. cutting width	mm (in.)	1524 (60)			1829 (72)
			Max. weight	kg (lbs.)	400 (880)			500 (1100)
		Sickle bar	Max. cutting width	mm (in.)	2134 (84)			
			Max. weight	kg (lbs.)	500 (1100)			
3	Sprayer	Rear mounted	Max. tank capacity	L (gal.)	300 (80)	400 (106)		500 (132)
		Pull type	Max. tank capacity	L (gal.)	1000 (264)	1200 (317)		2000 (528)
4	Rotary tiller		Max. tilling width	mm (in.)	1524 (60)			1829 (72)
5	Bottom plow		Max. size	Max. size	12 in. × 2 16 in. × 1	14 in. × 2		16 in. × 2
6	Disk harrow: pull type		Max. harrowing width	mm (in.)	1829 (72)	1981 (78)		2134 (84)
			Max. weight	kg (lbs.)	350 (770)	400 (880)		
7	Chisel plow		Max. width	mm (in.)	1829 (72)			
			Max. weight	kg (lbs.)	350 (770)			
8	Broad caster		Max. tank capacity	L (gal.)	250 (66)	300 (80)		
			Max. weight	kg (lbs.)	100 (220)			
9	Manure spreader		Max. capacity	kg (lbs.)	1500 (3300)	2000 (4400)		
10	Cultivator		Max. width	mm (in.)	1829 (72)	2134 (84)		2438 (96)
			Number of rows	Number of rows	1	2		4
			Max. weight	kg (lbs.)	350 (770)	400 (880)		
11	Front blade		Max. cutting width	mm (in.)	1829 (72)		2134 (84)	
			Max. oil pressure	kgf/cm ² (psi.)	175 (2490)			
			Sub frame		Necessary			
12	Rear blade		Max. cutting width	mm (in.)	1829 (72)			
			Max. oil pressure	kgf/cm ² (psi.)	175 (2490)			
13	Front-end loader		Max. lifting capacity	kg (lbs.)	720 (1590)		850 (1880)	
			Max. oil pressure	kgf/cm ² (psi.)	180 (2560)			
			Sub frame		Necessary			
14	Box blade		Max. cutting width	mm (in.)	1651 (65)		1829 (72)	
			Max. weight	kg (lbs.)	400 (880)		470 (1040)	
15	Back hoe		Max. digging depth	mm (in.)	2286 (90)			
			Max. weight	kg (lbs.)	450 (990)			
			Sub frame		Necessary			
16	Snow blade		Max. width	mm (in.)	1829 (72)		2134 (84)	
			Max. weight	kg (lbs.)	350 (770)		400 (880)	
17	Snow blower		Max. working width	mm (in.)	1702 (67)		1829 (72)	
			Max. weight	kg (lbs.)	280 (620)		330 (730)	

NOTE :

Implement size may vary depending on soil operating conditions.

OVERVIEW OF TRACTOR PARTS

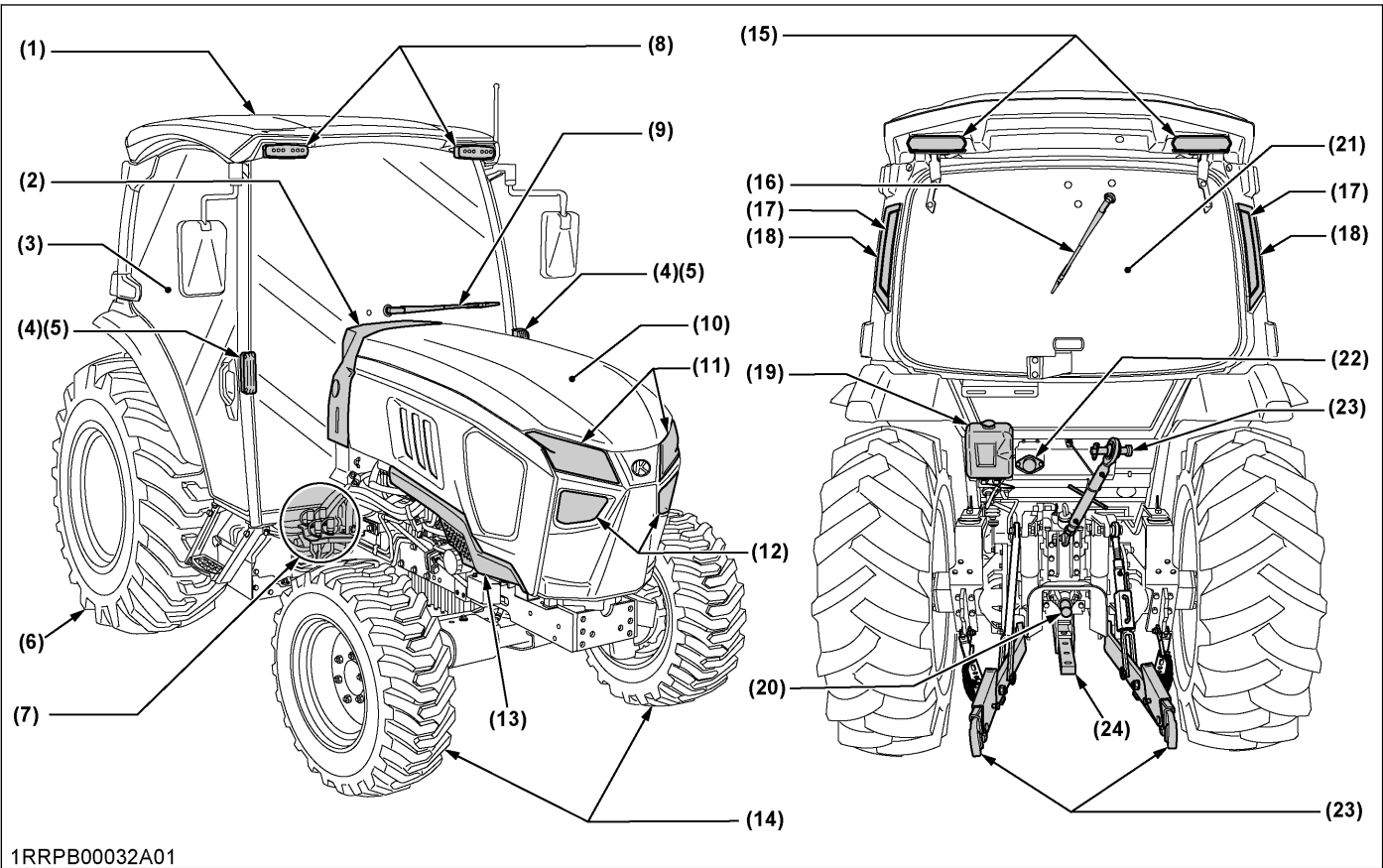
[ROPS model]



1RRPB00031A01

(1) ROPS.....	106	(9) Side cover	
(2) Rear tire	162	(10) Front tire	160
(3) Remote control valve coupler	156	(11) Turn signal and hazard light.....	110
(4) Hand rail		(12) Tail light	110
(5) Rear hood (except L3770, L4270)		(13) Trailer electrical outlet.....	141
(6) Hood		(14) PTO.....	143
(7) Front work light	110	(15) Drawbar	150
(8) Headlight.....	110	(16) 3-point hitch	148

[CAB model]

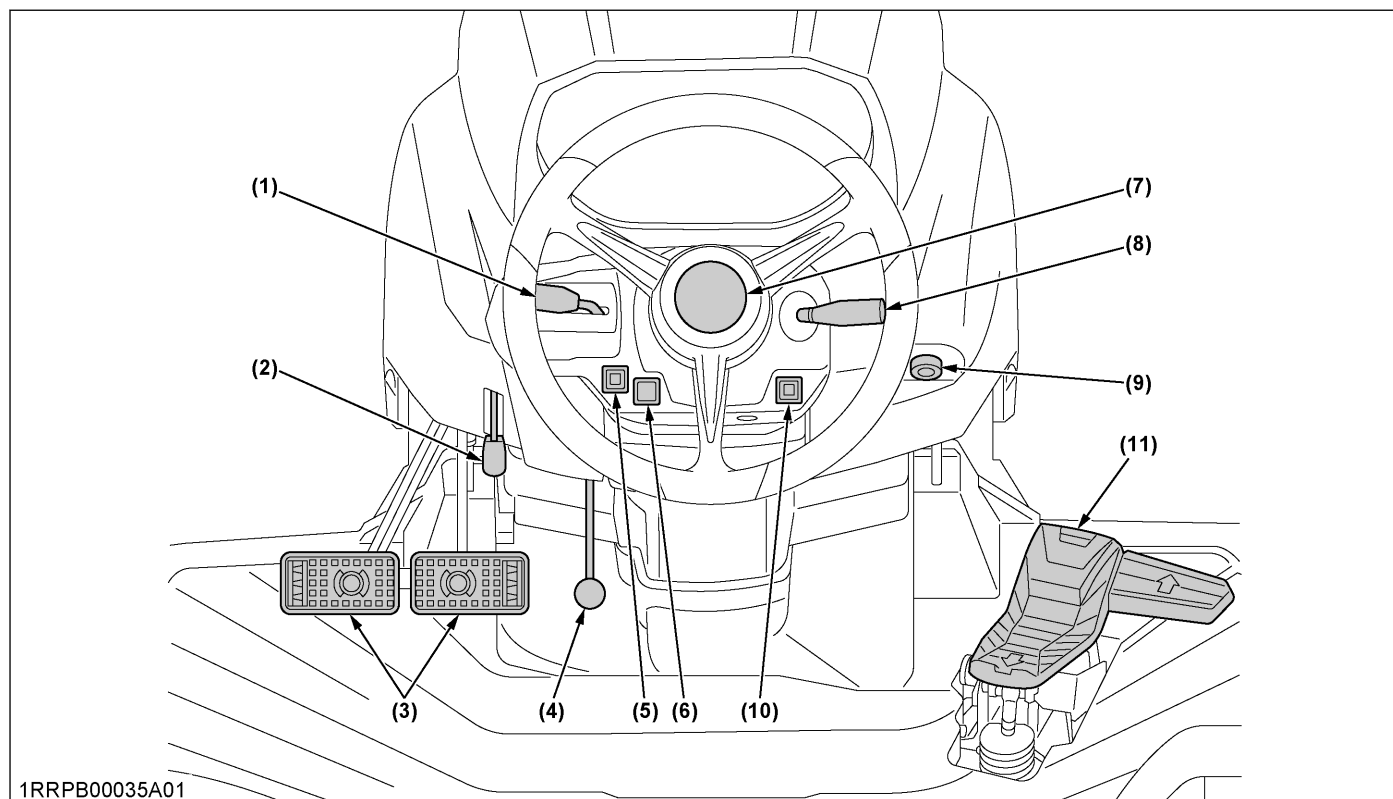


1RRPB00032A01

(1) CAB	166	(13) Side cover	160
(2) Rear hood (except L3770, L4270)	166	(14) Front tire	160
(3) Door	166	(15) Rear work light (if equipped)	110
(4) Turn signal and hazard light	110	(16) Rear wiper (if equipped)	168
(5) Side marker light	110	(17) Turn signal and hazard light	110
(6) Rear tire	162	(18) Tail light	110
(7) Loader or remote control valve	155	(19) Washer liquid tank	167
(8) Front work light	110	(20) PTO	143
(9) Front wiper	167	(21) Rear window	166
(10) Hood	112	(22) Trailer electrical outlet (if equipped)	141
(11) Front work light	112	(23) 3-point hitch	148
(12) Headlight	110	(24) Drawbar	150

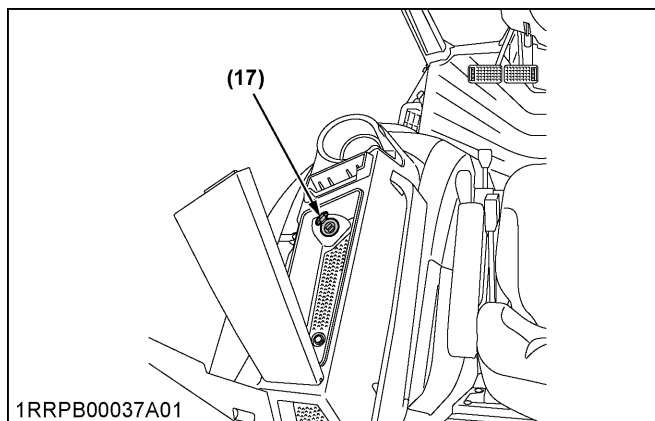
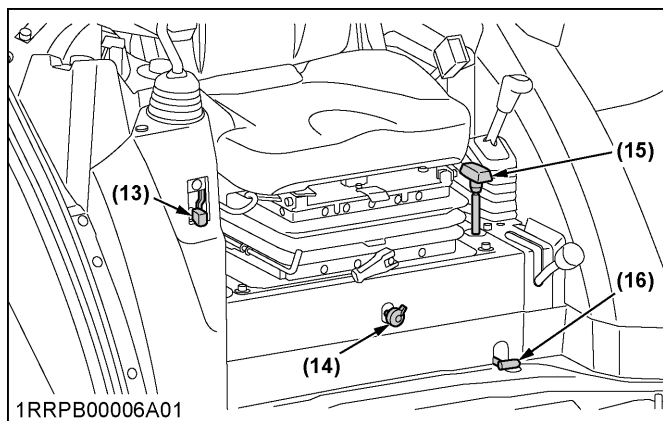
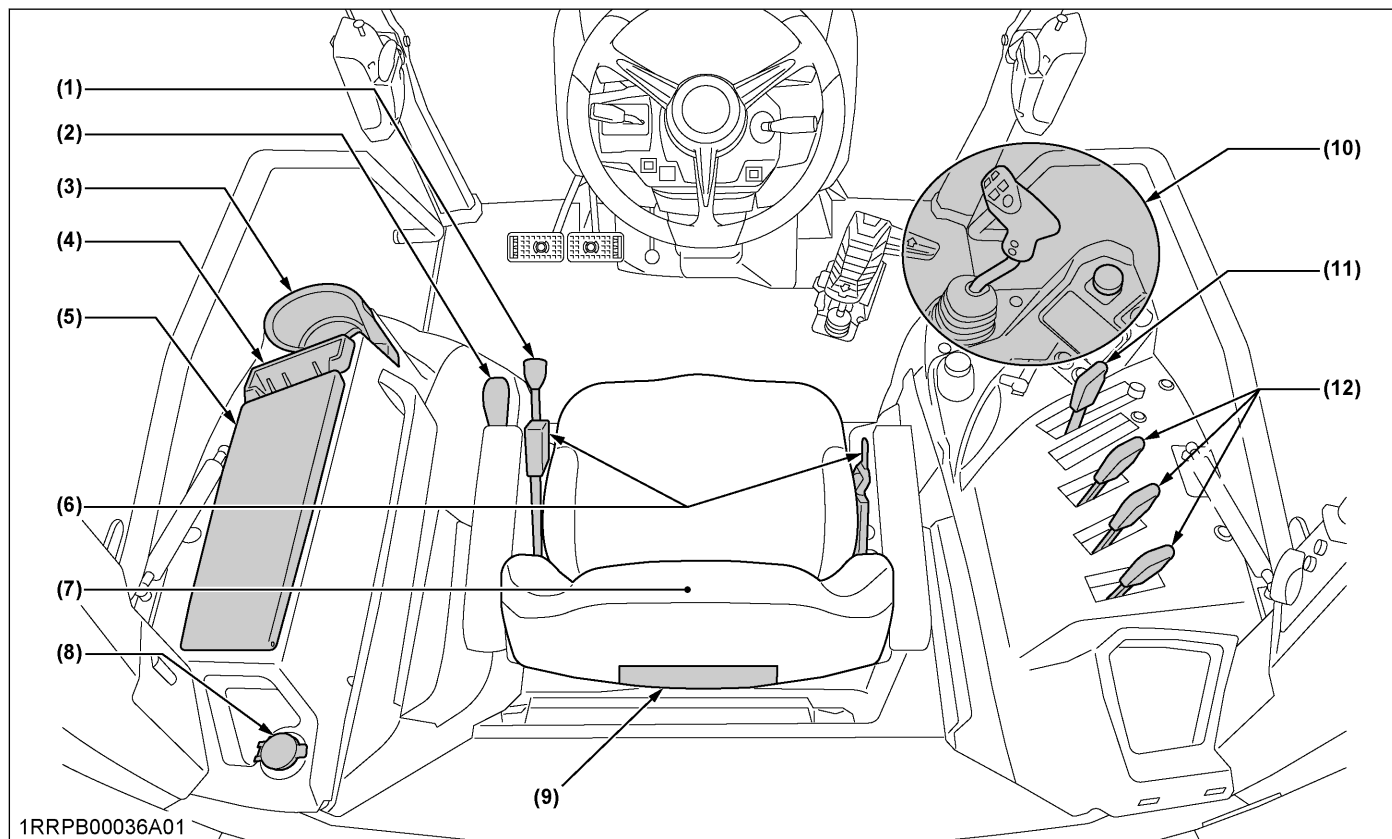
INSTRUMENT PANEL AND CONTROLS

CONTROLS AROUND THE STEERING WHEEL



(1) H-DS lever [Premium model]	118	(7) Horn button (if equipped)	113
(2) Parking brake lever	113	(8) Turn signal light and headlight switch	111
(3) Brake pedal	113		111
(4) Steering wheel lock pedal	110	(9) Key switch	99
(5) Parked regeneration switch	97	(10) Hazard light switch	111
(6) Regeneration inhibit switch	95	(11) Speed control pedal	125

CONTROLS AROUND THE SEAT AND THE RIGHT HAND CONSOLE FOR CAB MODEL

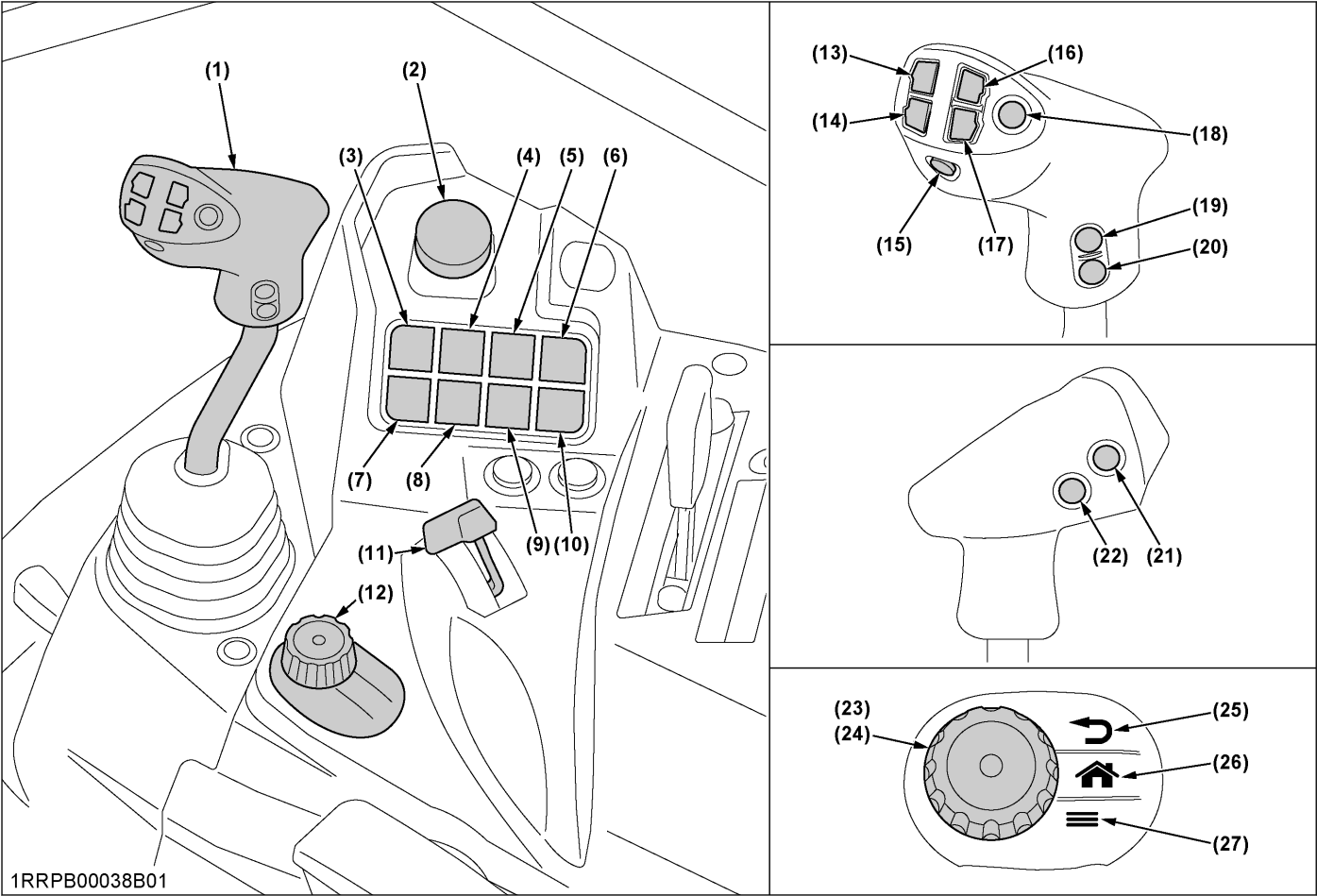


(1) Front wheel drive lever	124	(10) Front control section	152
(2) Range gear shift lever (L-M-H)	124	(11) Position control lever	152
(3) Cup holder		(12) Remote control valve lever (if equipped)	155
(4) Phone holder		(13) Lock lever	154
(5) Storage		(14) 3-point hitch lowering speed knob	152
(6) Seat belt	109	(15) Mid-PTO lever (if equipped)	144
(7) Operator's seat	108	(16) Differential lock pedal	139
(8) Electrical outlet	140	(17) USB Type-A socket [Premium model]	140
(9) Glove box	109		

NOTE :

The front control section varies depending on the model. Refer to the following illustrations for details.

[Premium model]



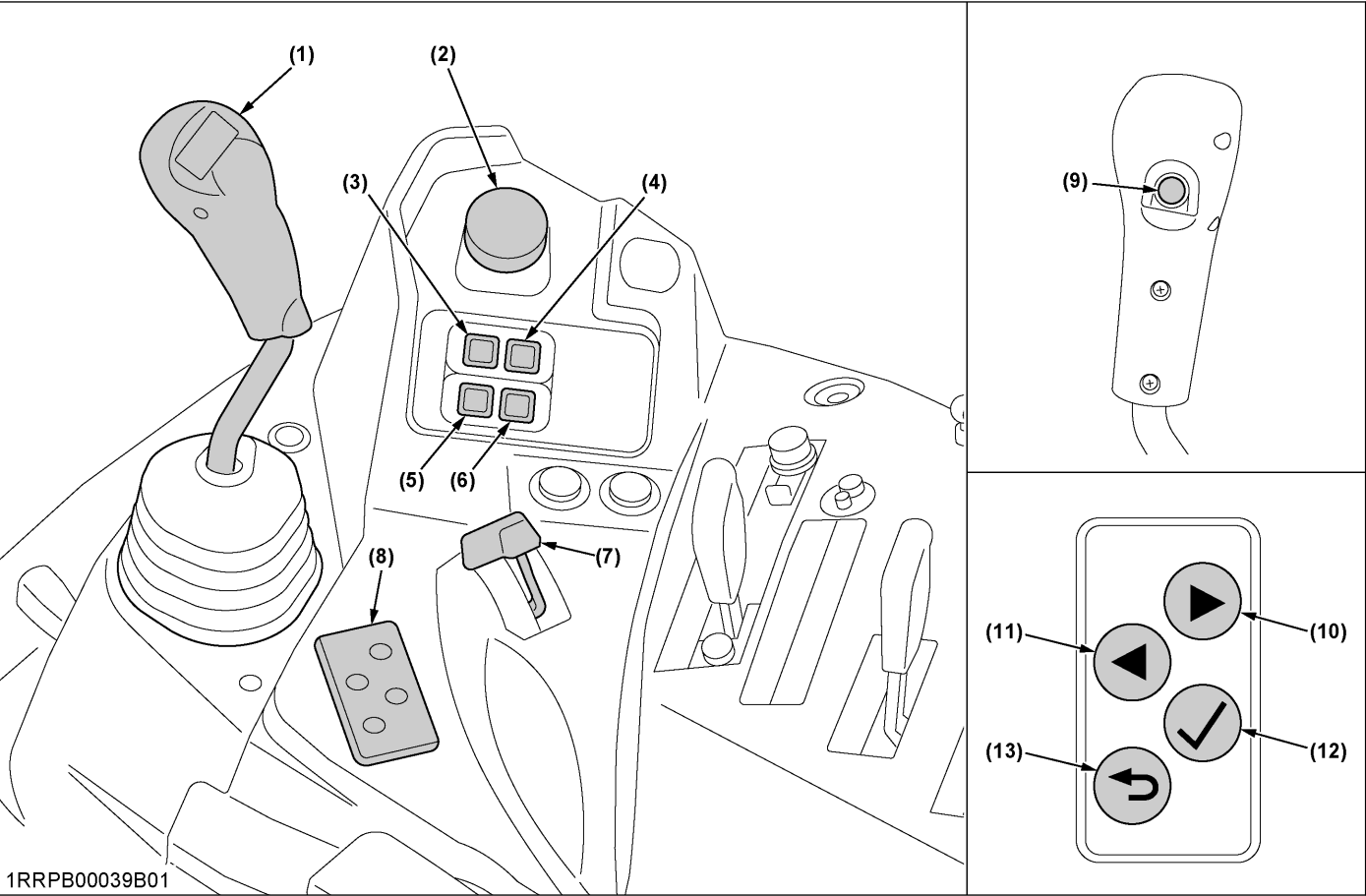
1RRPB00038B01

(1) Multi-function lever.....	154	(15) iHST drive mode select button.....	116
(2) PTO clutch control switch	143	(16) Cruise speed button (increase).....	126
(3) Front work light switch	112	(17) Cruise speed button (decrease)	126
(4) Stationary PTO switch	145	(18) ATA (auto throttle advance) switch	128
(5) Hands-free switch.....	52	(19) iHST response button (fast).....	117
(6) Volume up switch.....	59	(20) iHST response button (slow)	117
(7) Front wiper and washer switch	167	(21) Throttle-up button	122
(8) RPM memory switch (A)	136	(22) Cruise control ready button.....	126
(9) RPM memory switch (B)	136	(23) Jog dial	48
(10) Volume down switch	59	(24) Jog dial push button.....	48
(11) Hand throttle lever	125	(25) Back button	48
(12) Display control device.....	48	(26) Home button	48
(13) 3rd function button (extend) (option)		(27) Menu button.....	48
(14) 3rd function button (retract) (option)			

NOTE :

The 3rd function buttons are designed to function only when the optional 3rd function valve kit is installed.

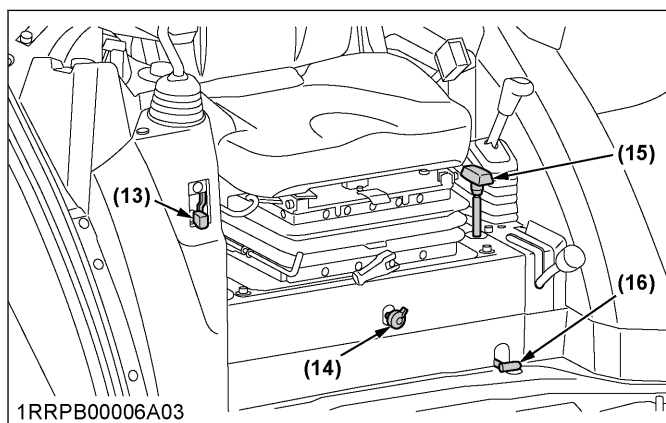
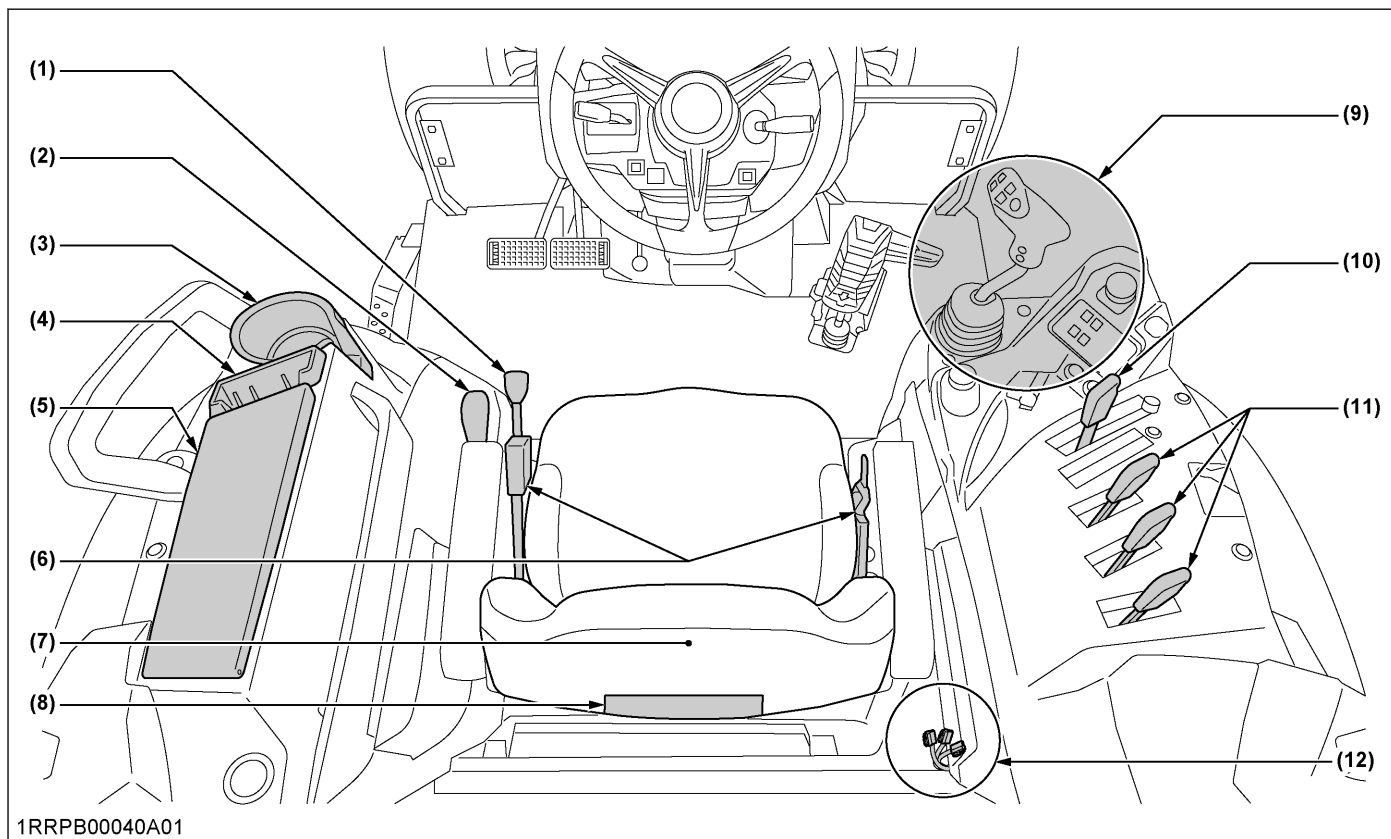
[Deluxe model]



1RRPB00039B01

(1) Loader and remote control valve lever	154	(8) Display control device	48
(2) PTO clutch control switch	143	(9) Throttle-up button	122
(3) Front work light switch	112	(10) Next button	48
(4) Stationary PTO switch	145	(11) Previous button	48
(5) Front wiper and washer switch	167	(12) Enter button	48
(6) Cruise control switch	126	(13) Back button	48
(7) Hand throttle lever	125		

CONTROLS AROUND THE SEAT AND THE RIGHT HAND CONSOLE FOR ROPS MODEL

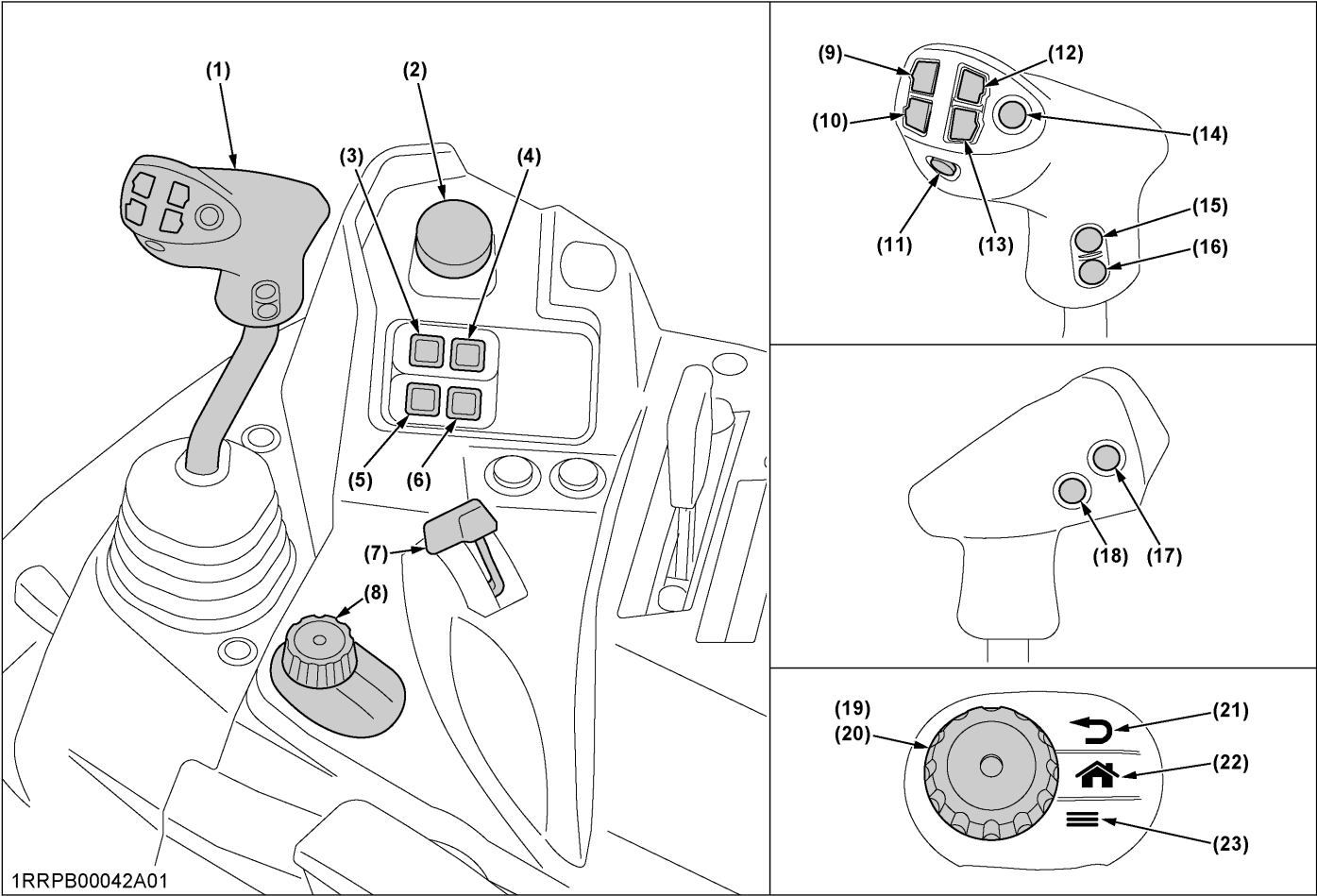


(1) Front wheel drive lever	124
(2) Range gear shift lever (L-M-H)	124
(3) Cup holder	
(4) Phone holder	
(5) Storage	
(6) Seat belt.....	109
(7) Operator's seat	108
(8) Glove box.....	109
(9) Front control section	
(10) Position control lever	152
(11) Remote control valve lever (if equipped)	155
(12) Electrical outlet	140
(13) Lock lever	154
(14) 3-point hitch lowering speed knob	152
(15) Mid-PTO lever (if equipped).....	144
(16) Differential lock pedal	139

NOTE :

The front control section varies depending on the model. Refer to the following illustration for details.

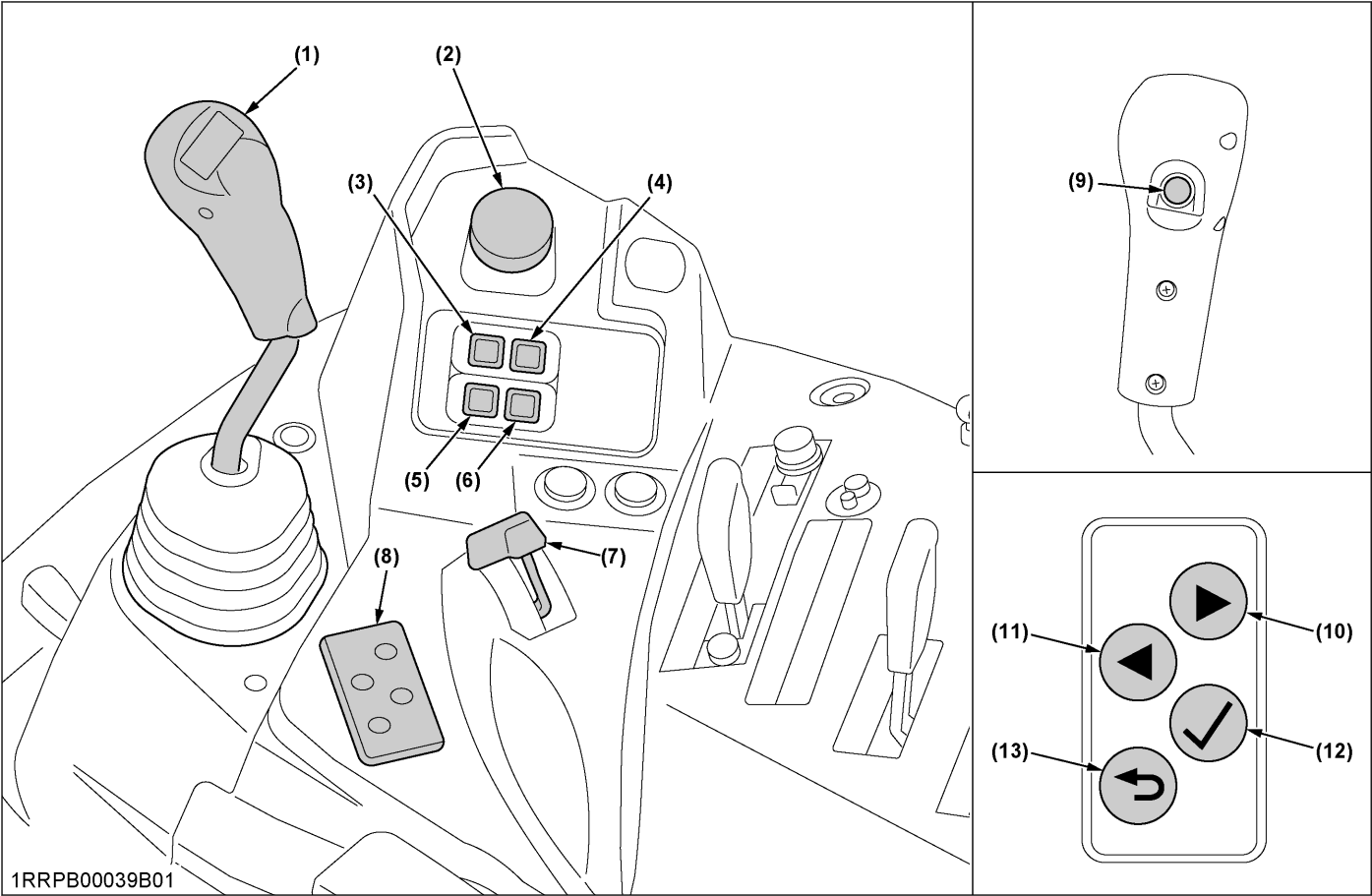
[Premium model]



1RRPB00042A01

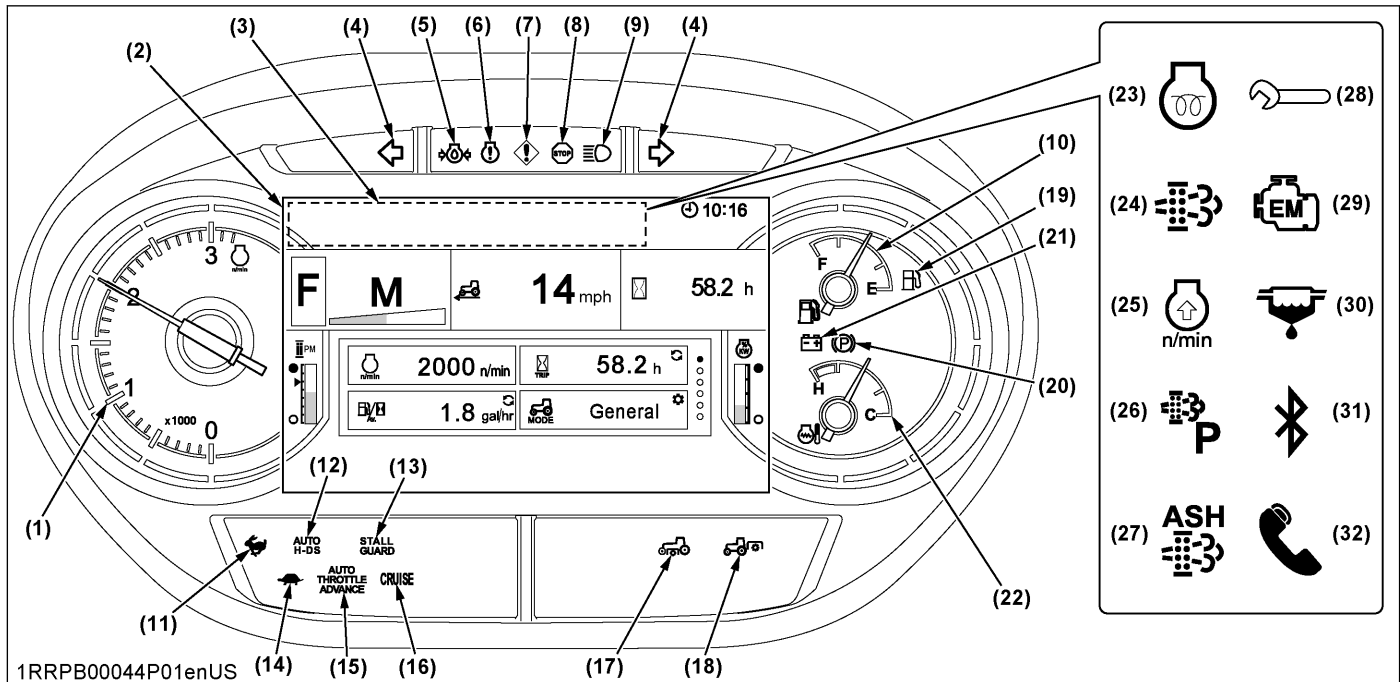
(1) Multi-function lever.....	154	(12) Cruise speed button (increase).....	126
(2) PTO clutch control switch	143	(13) Cruise speed button (decrease)	126
(3) Front work light switch	112	(14) ATA (auto throttle advance) switch	128
(4) Stationary PTO switch	145	(15) iHST response button (fast)	117
(5) RPM memory switch (A).....	136	(16) iHST response button (slow)	117
(6) RPM memory switch (B).....	136	(17) Throttle-up button	122
(7) Hand throttle lever	125	(18) Cruise control ready button.....	126
(8) Display control device.....	48	(19) Jog dial	48
(9) 3rd function button (extend) (option)		(20) Jog dial push button.....	48
(10) 3rd function button (retract) (option)		(21) Back button.....	48
(11) iHST drive mode select button.....	116	(22) Home button	48
		(23) Menu button.....	48

[Deluxe model]



(1) Loader and remote control valve lever	154	(8) Display control device.....	48
(2) PTO clutch control switch	143	(9) Throttle-up button	122
(3) Front work light switch	112	(10) Next button	48
(4) Stationary PTO switch	145	(11) Previous button.....	48
(5) Blank		(12) Enter button	48
(6) Cruise control switch.....	126	(13) Back button	48
(7) Hand throttle lever	125		

INSTRUMENT PANEL AND INDICATOR



(1) Tachometer..... 132	(12) AUTO H-DS indicator..... 119	(23) Heater indicator 99
(2) K-Command display 45	(13) STALL GUARD indicator..... 119	 104
(3) Indicator display area in K-Command display 45	(14) H-DS low speed range indicator 118	(24) Regeneration indicator..... 93
(4) Turn signal and hazard light indicator ... 111	(15) ATA (AUTO THROTTLE ADVANCE) indicator..... 128	(25) Engine RPM increase indicator 97
(5) Engine oil pressure warning indicator... 130	(16) Cruise control indicator 126	(26) Parked regeneration indicator..... 97
(6) Engine warning indicator 130	(17) Mid PTO indicator (if equipped) 144	(27) Ash cleaning indicator..... 132
(7) System abnormality indicator..... 130	(18) Rear PTO indicator 143	(28) Service inspection indicator 130
(8) Master system warning indicator 130	(19) Fuel level indicator..... 130	(29) Emission indicator..... 130
(9) High-beam indicator..... 111	(20) Parking brake warning indicator 130	(30) Water separator indicator..... 130
(10) Fuel gauge..... 131	(21) Electrical charge warning indicator 130	(31) Bluetooth activated indicator..... 83
(11) H-DS high speed range indicator..... 118	(22) Coolant temperature gauge 132	(32) Telephone indicator

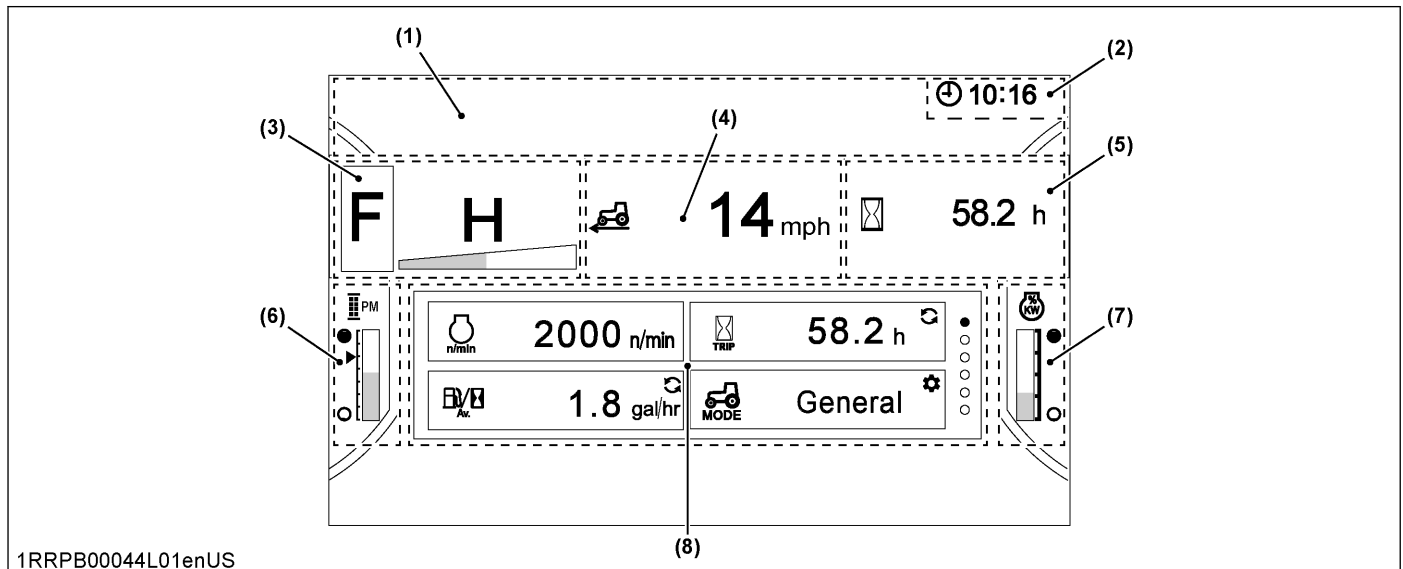
NOTE :

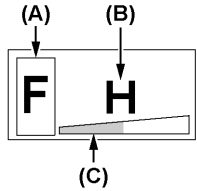
Most indicators light up in the following 3 colors for identification.

- **Green indicator**
This color indicates that the operation-related control switches and levers are enabled or disabled.
- **Amber indicator**
This color means that the tractor's operating condition is being monitored.
If amber indicator lights up or starts blinking, resolve the cause of the trouble as required.
- **Red indicator**
This color identifies issues that require immediate attention.
If red indicator lights up or starts blinking, immediately resolve the cause of the trouble.

1. K-command display

This display provides the operator with a variety of information necessary to operate the tractor. Further, part of the display can be customized by the operator as required.

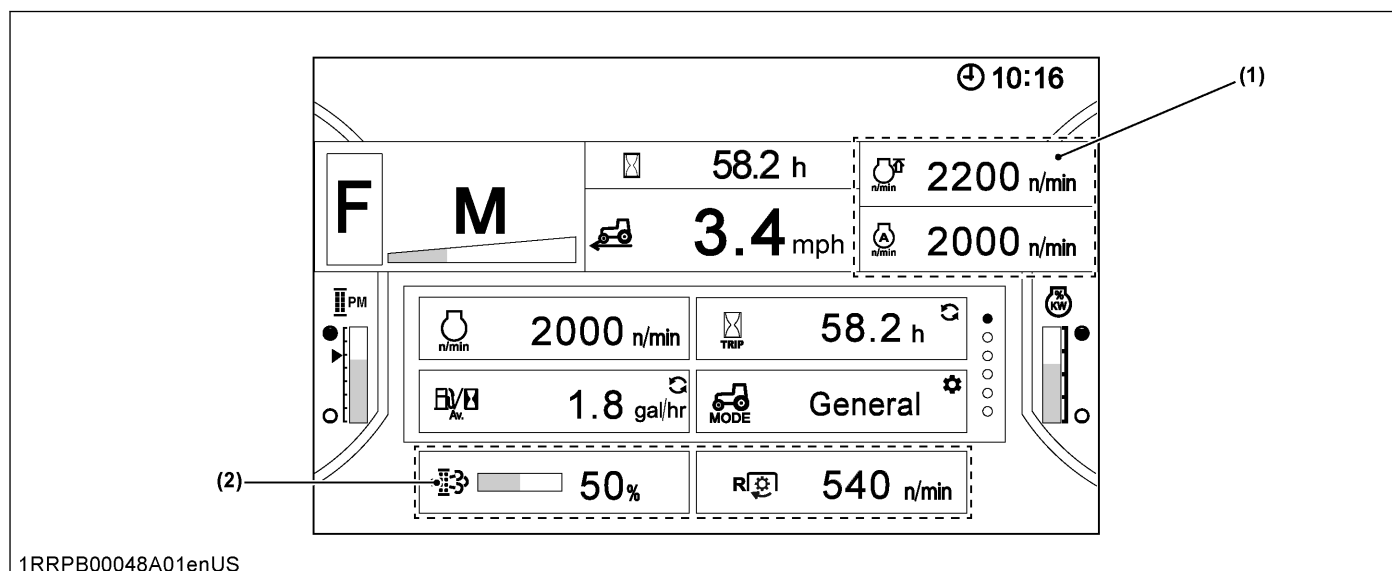


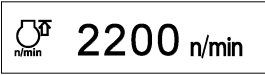
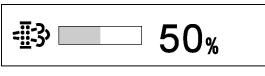
No.	Description	
(1)	Indicator display area (See K-COMMAND DISPLAY CONTROL on page 48.)	
(2)	Clock [Premium model] NOTE : The clock can be switched between 12-hour and 24-hour display formats. (See DATE AND TIME SETTINGS SCREEN [PREMIUM MODEL] on page 77.)	
(3)	 1RRPB00048H01enUS	(A) Direction Display [F] is displayed when the forward side of the speed control pedal is pressed. [R] is displayed when the reverse side of the speed control pedal is pressed. [N] is displayed when the foot is lifted off the speed control pedal and returned to the neutral position. (B) Range gear shift lever position [H] is displayed when the range gear shift lever is in the high position. [M] is displayed when the range gear shift lever is in the middle position. [L] is displayed when the range gear shift lever is in the low position. [N] is displayed when the range gear shift lever is in the neutral position. (C) Speed control pedal press rate
(4)	Travel speed	
(5)	Elapsed time (hour meter)	
(6)	PM buildup gauge The PM buildup inside the DPF muffler is displayed. The display color changes according to the accumulation level: 0 %–70 %: Blue 71 %–85 %: Amber 86 %–100 %: Red When the PM accumulation reaches the triangle mark, DPF regeneration is needed	
(7)	Engine loading factor gauge The engine load is displayed. The display will appear when the engine load percentage exceeds 30 %.	

(Continued)

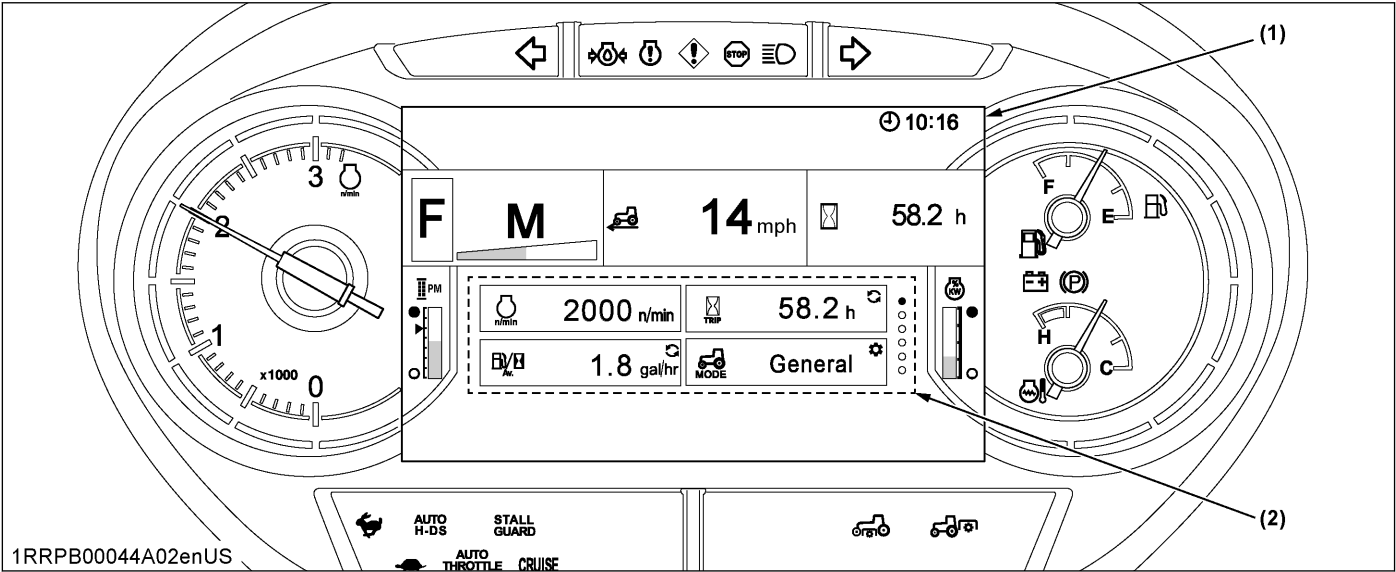
No.	Description
(8)	Various display screens The screen of the display area can be changed using the display control device. This display area has the following screens. • Performance monitor • Shortcut menu [Premium model] • Function menu [Deluxe model] • Input for camera (Optional for the Premium model) • Audio control [Premium CAB model] • Incoming call notification [Premium CAB model] • Maintenance notification • Troubleshooting notification (See VARIOUS DISPLAY SCREENS WITHIN THE K-COMMAND DISPLAY on page 52.)

1.1 Dynamic performance monitor



No.	Description	
(1)	Dynamic performance monitor small (DPM small) DPM1 is displayed when any of the following functions are activated.	
	Rev-limiter control [Premium model]  1RRPB00048B01enUS	When the engine RPM exceeds the set maximum limit, the rev-limiter control is displayed. The engine speed settings for rev-limiter control can be customized. (See Rev-limiter control on page 135.)
	Engine RPM memory [Premium model]  1RRPB00048C01enUS	When the RPM memory switch (A) or (B) is pressed, the RPM memory is displayed. The engine speed settings for RPM memory switch (A) or (B) can be customized. (See RPM dual memory on page 136.)
(2)	Dynamic performance monitor large (DPM large) DPM2 is displayed when any of the following functions are activated.	
	DPF regeneration  1RRPB00048D01enUS	When DPF regeneration is activated, the DPF regeneration states will be displayed.
	Rear PTO  1RRPB00048E01enUS	When the rear PTO is activated, the rear PTO speed will be displayed.
	Mid PTO (if equipped)  1RRPB00048F01enUS	When the mid PTO is activated, the mid PTO speed will be displayed.

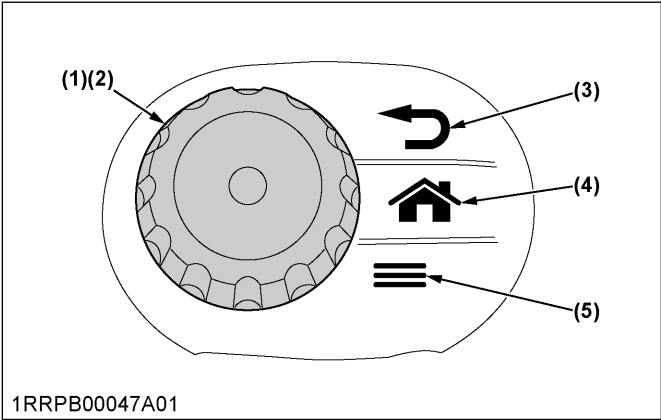
K-COMMAND DISPLAY CONTROL



- 1RRPB00044A02enUS
- (1) K-Command display
(2) Various display screens

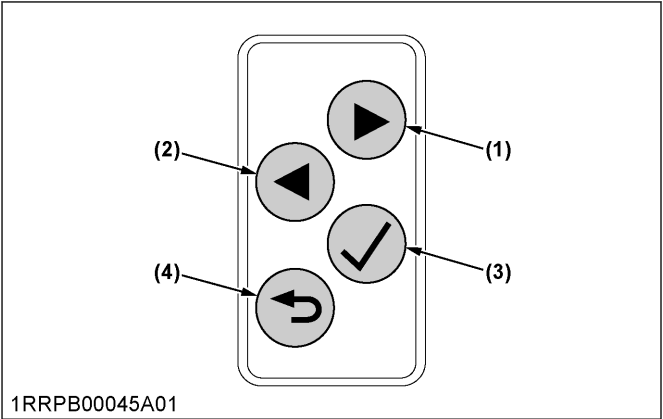
Display control device

[Premium model]



No.	Name	Function
(1)	Jog dial	The operation varies depending on the displayed screen. On the home screen, the screen switches. On a screen with a cursor, the cursor moves. On a screen where a number is selected, the number changes.
(2)	Jog dial push button	Press the jog dial to confirm the selected item or finalize the number.
(3)	Back button	Return to the previous screen.
(4)	Home button	Return to the home screen.
(5)	Menu button	Display the menu screen.

[Deluxe model]

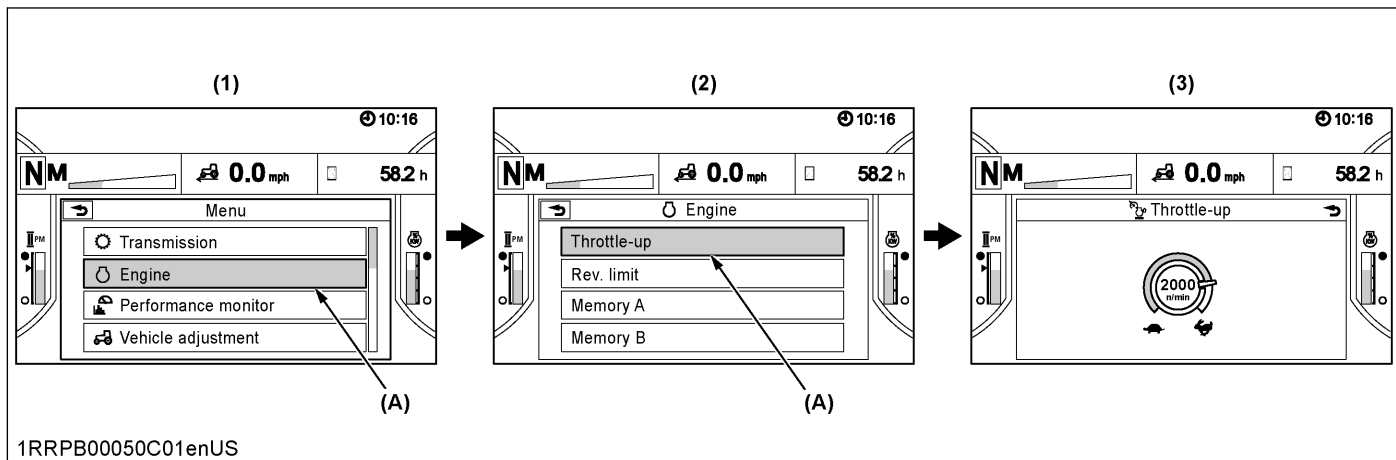


No.	Name	Function
(1)	Next button	The operation varies depending on the displayed screen. On the home screen, the screen switches. On a screen with a cursor, the cursor moves. On a screen where a number is selected, the number changes.
(2)	Previous button	NOTE : The next button or previous button changes incrementally with a short press and changes continuously with a long press.
(3)	Enter button	Pressing the enter button confirms the selected item or finalizes the number.
(4)	Back button	Returns to the previous screen.

EXAMPLE OF OPERATING THE DISPLAY CONTROL DEVICE

Procedure to display the throttle-up screen

Displaying from the “Menu” screen [Premium model]



(1) Menu screen

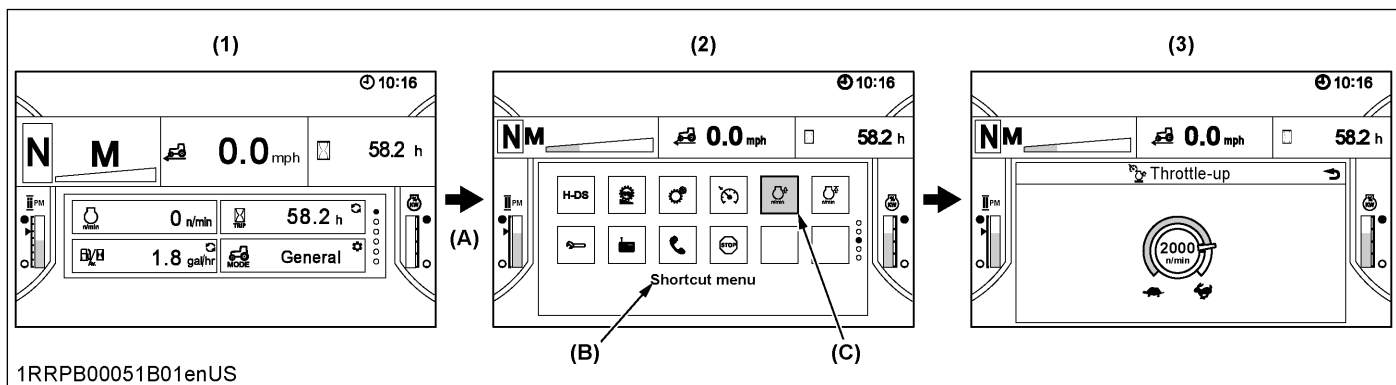
(2) Engine screen

(3) Throttle-up screen

(A) Select

1. Press the menu button to display the “Menu” screen.
2. Rotate the jog dial to select “Engine”, then press the jog dial push button to display the “Engine” screen.
3. Rotate the jog dial to select “Throttle-up”, then press the jog dial push button to display the “Throttle-up” screen.
4. Rotate the jog dial to adjust throttle-up value, then press the jog dial push button to confirm your selection.

Displaying from the “Shortcut menu” screen [Premium model]



(1) Performance monitor screen

(2) Shortcut menu screen

(3) Throttle-up screen

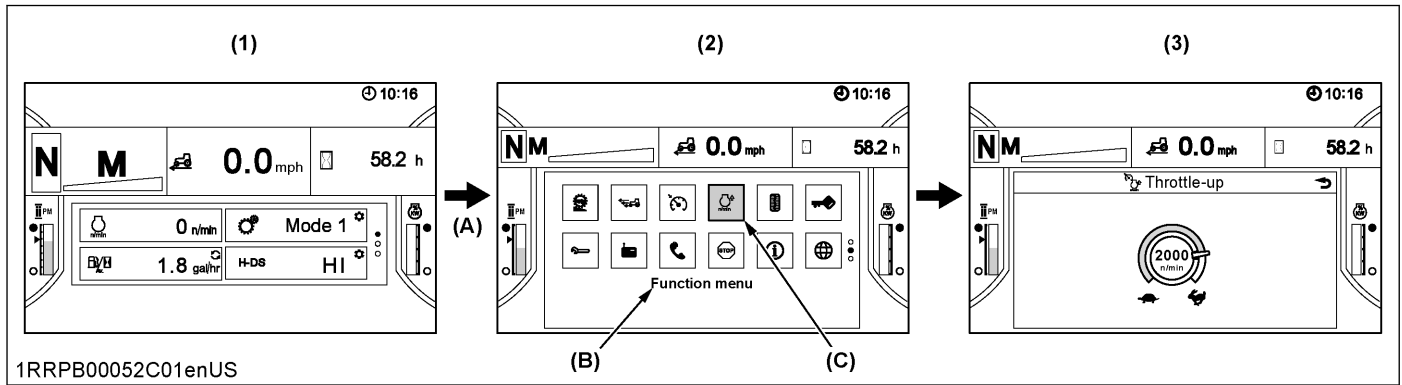
(A) Rotate the jog dial

(B) Press the jog dial push button

(C) Select the “Throttle-up” icon

1. Press the home button to display the performance monitor screen.
2. Rotate the jog dial to display the “Shortcut menu” screen.
3. Press the jog dial push button to switch to the shortcut menu operation screen, where the cursor will appear. This will allow you to select icons.
4. Rotate the jog dial to select the “Throttle-up” icon, then press the jog dial push button to display the “Throttle-up” screen.
5. Rotate the jog dial to adjust throttle-up value, then press the jog dial push button to confirm your selection.

Displaying from the “Function menu” screen [Deluxe model]



- (1) Performance monitor screen
 (2) Function menu screen
 (3) Throttle-up screen

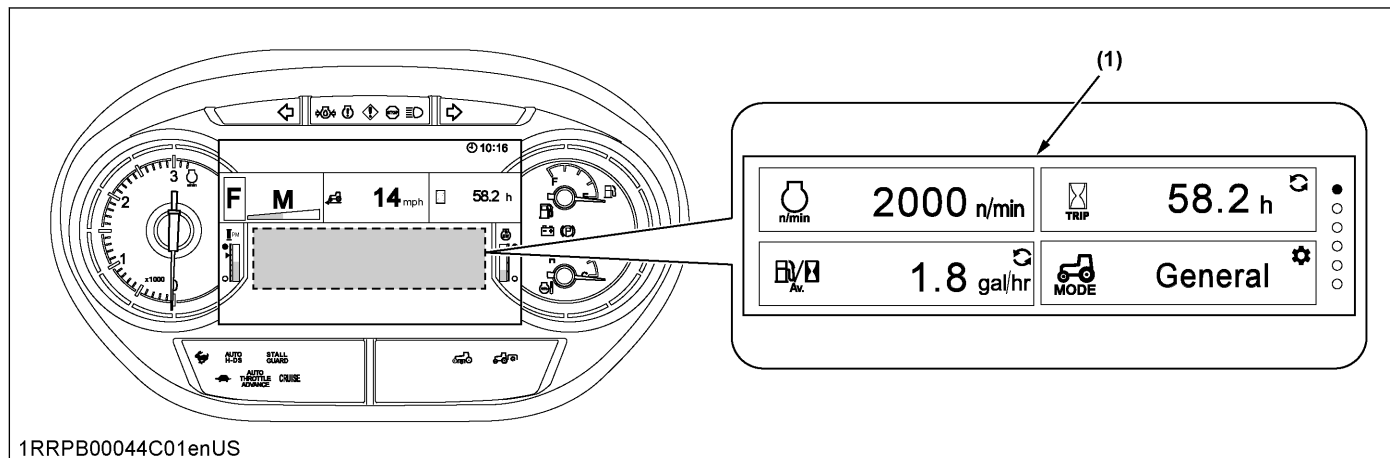
- (A) Press the next button
 (B) Press the enter button when displayed function menu.
 (C) Select the “Throttle-up” icon

1. Display the performance monitor screen.
2. Press the next button to display the “Function menu” screen.
3. Press the enter button to switch to the function menu operation screen, where the cursor will appear, allowing you to select icons.
4. Press the next button or previous button to select the “Throttle-up” icon, then press the enter button to display the “Throttle-up” screen.
5. Press the next button or previous button to adjust the throttle-up value and press the enter button to confirm your selection.

VARIOUS DISPLAY SCREENS WITHIN THE K-COMMAND DISPLAY

The screen of the display area can be changed using the display control device.

Notification screens are displayed when each function is activated.



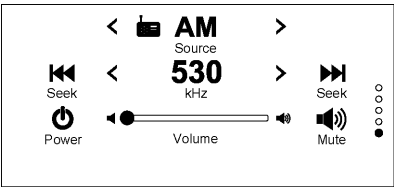
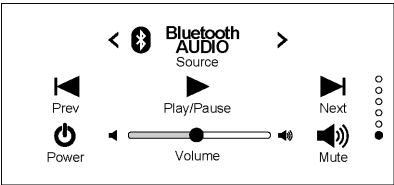
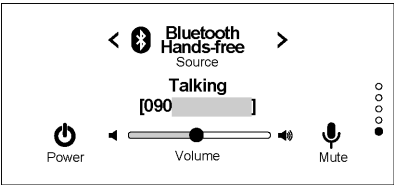
1RRPB00044C01enUS

(1) Various display screens

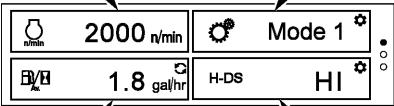
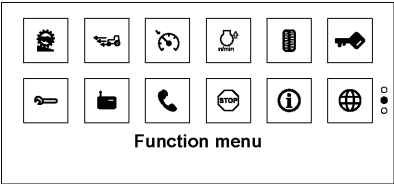
Various display screens [Premium model]

No.	Screen	Description
(1)	Performance monitor 1RRPB00044H01enUS 1RRPB00044M01enUS	Selected information from the display information list can be displayed. (See Setting the display items on performance monitor on page 66.) The performance monitor has 2 screens, and each screen can display 4 types of information. Operations related to the selected information can be performed. (See Operating the performance monitor screen on page 57.) NOTE : The screens are set to the factory settings.
(2)	Shortcut menu Shortcut menu 1RRPB00054B01enUS	The “Shortcut menu” screen provides access to the settings screen for each function. Selecting an icon will open the settings screen for that function. (See Operating the “Shortcut menu” screen [Premium model] on page 57.) NOTE : The displayed icons cannot be changed. For functions without icons in the “Shortcut menu”, open them from the “Menu” screen. (See MENU SCREEN on page 60.)
(3)	Input for the camera (option) 1RRPB00055B01	The camera input screen has “Input for Camera 1” and “Input for Camera 2”. The displayed camera input image can be scaled and overlaid with a grid. (See Operating the camera input screen (option) on page 58.) NOTE : - When the optional camera 1 or 2 kit is installed, the camera 1 or 2 screen can be displayed. If the optional camera 1 and 2 kits are installed, the selector kit is required. - To display the camera input screen, configure the camera display settings in “input for camera”. (See Setting the camera input (option for the premium model) on page 85.)

(Continued)

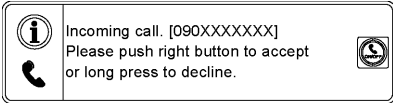
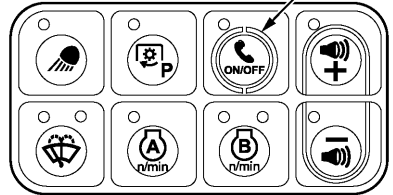
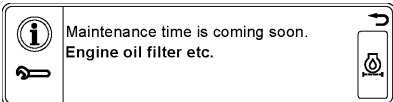
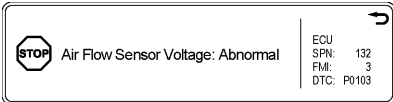
No.	Screen	Description
(4)	Radio screen  1RRPB00056B01enUS	The operator can use "AM", "FM", "WeatherBand", "Bluetooth Audio", and "Bluetooth Hands-free" on the audio control screen. (See Operating the audio control screen on page 59.) NOTE : - In the "Audio" screen, setting the audio display to "OFF" will deactivate the audio function, and the audio control screen will not be displayed. (See Setting the Bluetooth connection and audio [CAB model] (if equipped) on page 83.) - Hands-free calling is possible even if the power is turned off on the audio control screen. - The Bluetooth Hands-free screen is only displayed during a hands-free call. - On the Bluetooth Hands-free screen, the volume can be adjusted and the microphone can be muted.
	Bluetooth audio screen  1RRPB00063B01enUS	
	Bluetooth Hands-free screen  1RRPB00057B01enUS	

Various display screens [Deluxe model]

No.	Screen	Description
(1)	Performance monitor  1RRPB00052E01enUS	The performance monitor displays the following information: (A) Engine RPM - Displays the current engine RPM. (B) Average fuel consumption - Displays the average fuel consumption since the last reset. - Selecting this display allows you to reset the average fuel consumption. (C) iHST mode - Displays the selected iHST mode. - Selecting this display allows you to change the mode. (See Setting the iHST mode on page 62.) (D) Hydro dual speed (H-DS) - Displays the HI/LO status of H-DS. - Selecting this display allows you to change the HI/LO status. (See Setting the hydro dual speed on page 62.) Operations related to the selected information can be performed. (See Operating the performance monitor screen on page 57.) NOTE : The information displayed on the performance monitor cannot be changed.
(2)	Function menu  1RRPB00058B01enUS	The "Function menu" is the menu screen for selecting the settings of each function. Selecting an icon will open the settings screen for that function. (See Operating the "Function menu" screen [Deluxe model] on page 58.) NOTE : - The displayed icons can not be changed. - The icons differ depending on whether the optional kit is equipped or not.

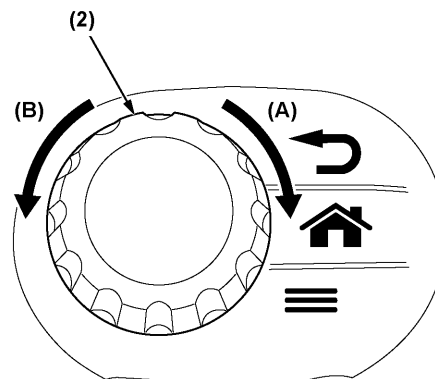
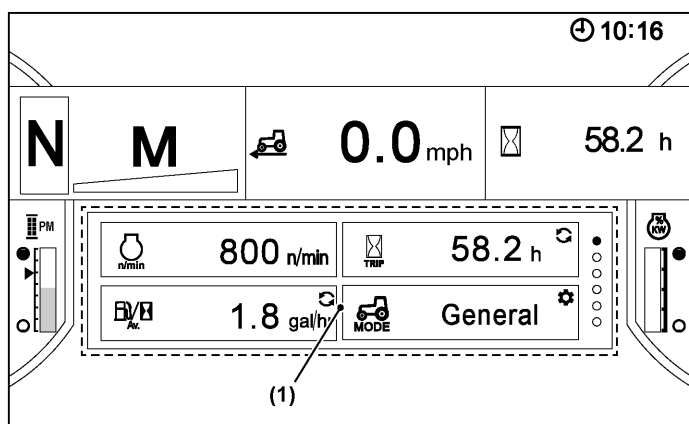
NOTE :**[Deluxe CAB model]****When the optional CAN radio kit is installed, the audio controls can be used.**

Notifications screen

No.	Screen	Description
(1)	Incoming call notification [Premium CAB model]  1RRPB00059A01enUS  1RRPB00060B02enUS (A) Hands-free switch	When the hands-free function is turned on and there is an incoming call, a notification will be displayed on the screen. When there is an incoming call, a short press of the hands-free switch answers the call. When there is an incoming call, a long press of the hands-free switch rejects the call. When there is an ongoing call, a short press of the hands-free switch ends the call. (For operating the hands-free, see Operating the "Bluetooth Hands-free" screen on page 60.) NOTE : When making a hands-free call, please make the call from your own mobile device.
(2)	Maintenance notification  1RRPB00061A01enUS	An upcoming maintenance alert will be displayed when the remaining time for maintenance reaches 20 hours. A maintenance alert will be displayed when the remaining time for maintenance reaches 0 hours. Press the back button to hide the notification. The hidden maintenance notification can be checked in the "Maintenance log". (For checking the maintenance log screen, see MAINTENANCE LOG SCREEN on page 78.) NOTE : • If two or more parts reach their maintenance time, the notifications will be displayed together in a single message. • The maintenance alert will appear each time the engine is restarted. • The upcoming maintenance alert will not reappear if it is hidden.
(3)	Trouble notification  1RRPB00062A01enUS	A trouble notification with a beep sound appears when a failure occurs. The trouble notification disappears when the fault is cleared. Press the back button to hide the trouble notification. NOTE : • If two or more failures occur, up to 16 failures will be displayed at 2-second intervals. • The hidden trouble notification can be checked in the "Active error list" screen. (For checking the "Active error list" screen, see Checking the active error list on page 86.)

1. Changing the various display screens [Premium model]

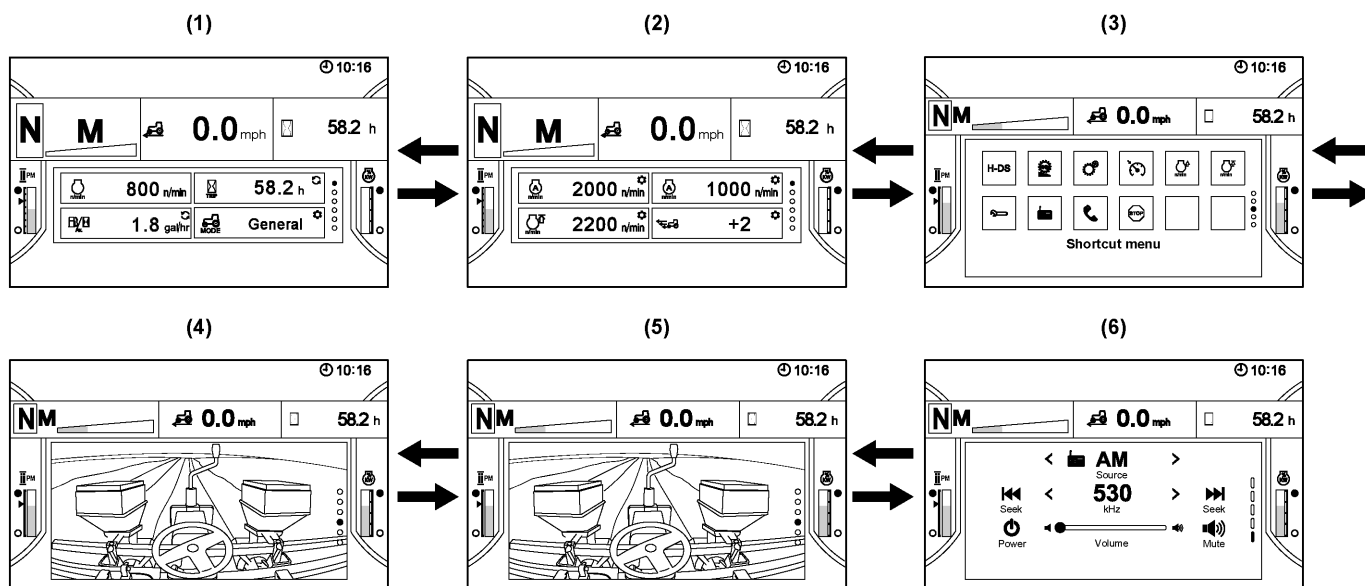
The displayed screen can be changed by turning the jog dial.



1RRPB00051C01enUS

- (1) Various display screens
(2) Jog dial

- (A) Rotate clockwise
(B) Rotate counterclockwise



1RRPB00051D01enUS

- (1) Performance monitor 1
(2) Performance monitor 2
(3) Shortcut menu

- (4) Input for camera 1 (option)
(5) Input for camera 2 (option)
(6) Audio control [Premium CAB model]

NOTE :

When the optional camera 1 or 2 kit is installed, the camera 1 or 2 screen can be displayed.

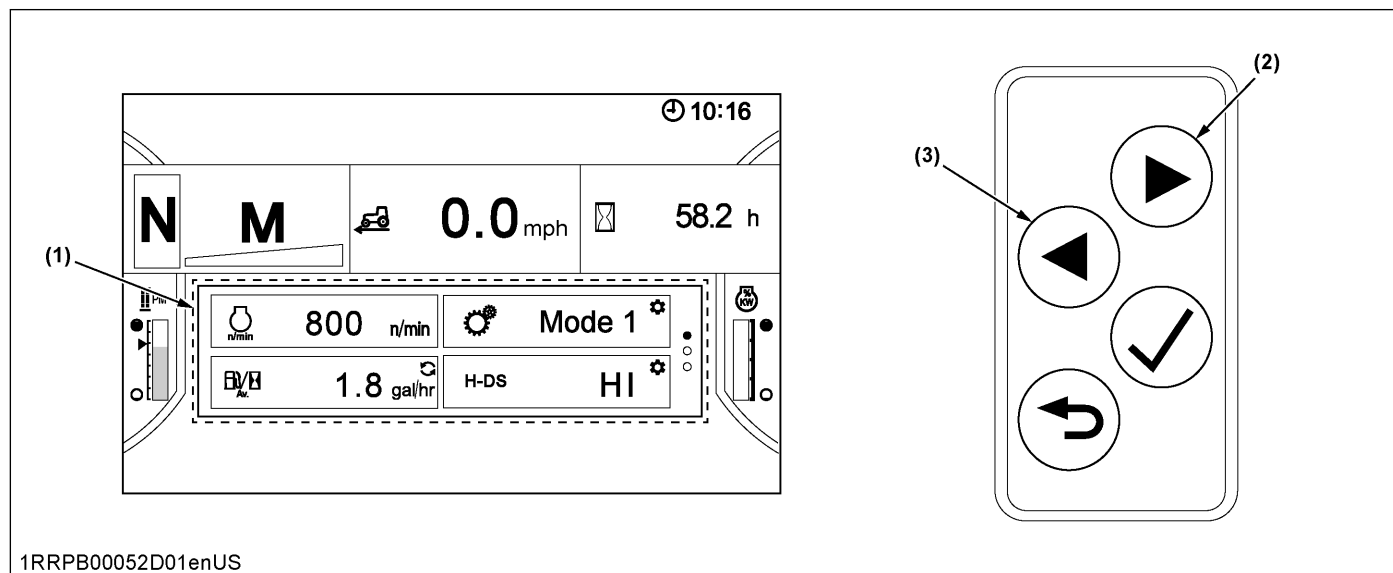
The premium CAB model can accommodate two camera kits.

If both optional camera kits are installed, the selector kit is required.

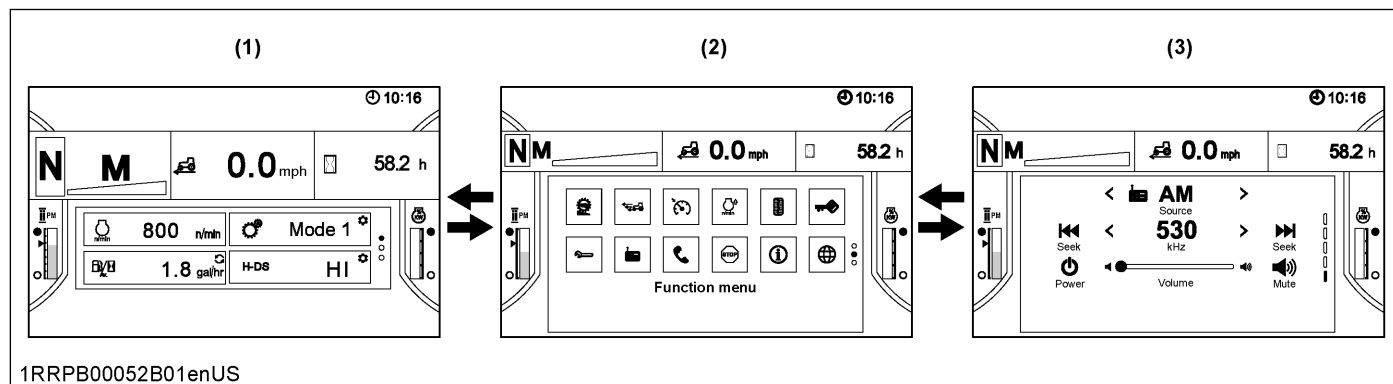
The premium ROPS model can accommodate one camera kit on the front side of the tractor.

2. Changing the various display screens [Deluxe model]

The screen displayed can be changed by pressing the next button or the previous button.



- (1) Various display screens
- (2) Next button
- (3) Previous button



- (1) Performance monitor
- (2) Function menu
- (3) Audio control (optional)

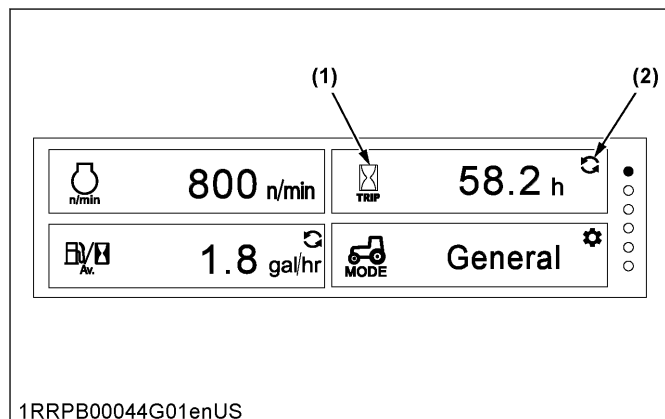
NOTE :

[Deluxe CAB model]

When the optional CAN radio kit is installed, the audio controls can be used.

3. Operating the performance monitor screen

Performance monitor screen



(1) Item

(2) Icon

Icon	Corresponding action
	Display the setting screen.
	Reset the numbers.

NOTE :

For items where an icon is not displayed, no actions can be performed.

[Premium model]

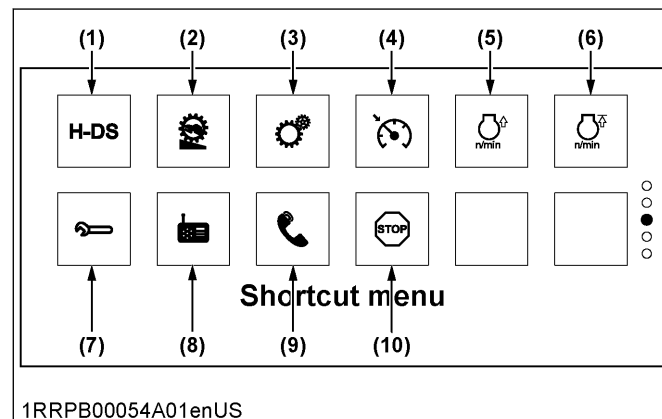
1. Display the performance monitor screen.
2. Press the jog dial push button to switch to the performance monitor operation screen, where the cursor will appear, allowing you to select items.
3. Rotate the jog dial to select an item, then press the jog dial push button to perform the operation corresponding to the selected item's icon.

[Deluxe model]

1. Display the performance monitor screen.
2. Press the enter button to switch to the performance monitor operation screen, where the cursor will appear, allowing you to select items.
3. Press the next button or previous button to select an item, then press the enter button to perform the operation corresponding to the selected item's icon.

4. Operating the "Shortcut menu" screen [Premium model]

Shortcut menu screen

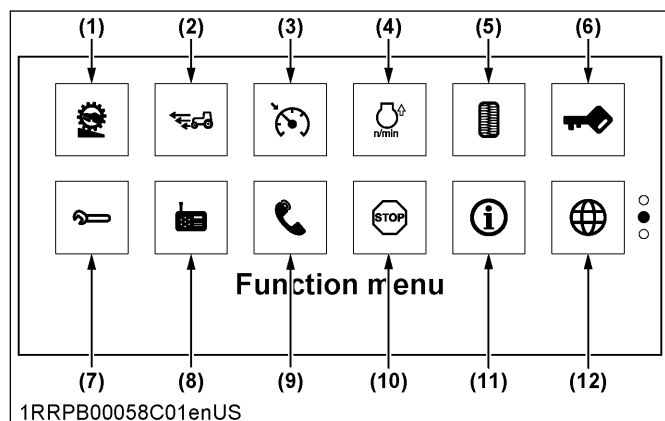


No.	Name	Ref. page
(1)	Hydro dual speed	62
(2)	Auto throttle advance (ATA)	62
(3)	iHST mode	62
(4)	Cruise control	63
(5)	Throttle-up	64
(6)	Rev-limit	65
(7)	Maintenance log	78
(8)	Audio [CAB model]	83
(9)	Audio hands-free [CAB model]	84
(10)	Active error list	86

1. Display the "Shortcut menu" screen.
2. Press the jog dial push button to switch to the function menu operation screen, where the cursor will appear, allowing you to select icons.
3. Rotate the jog dial to select an icon, then press the jog dial push button to display the icon's settings screen.

5. Operating the "Function menu" screen [Deluxe model]

Function menu screen



No.	Name	Ref. page
(1)	Auto throttle advance (ATA)	62
(2)	iHST response	63
(3)	Cruise control	63
(4)	Throttle-up	64
(5)	Tire circumference	70
(6)	Engine start security	71
(7)	Maintenance log	78
(8)	Audio (optional for CAB model)	83
(9)	Audio hands-free (optional for CAB model)	84
(10)	Active error list	86
(11)	About meter	-
(12)	Language	85

1. Display the "Function menu" screen.
2. Press the enter button to switch to the function menu operation screen, where the cursor will appear, allowing you to select icons.
3. Press the next button or the previous button to select an icon, then press the enter button to display the icon's settings screen.

NOTE :

[Deluxe CAB model]

When the optional CAN radio kit is installed, the audio and the audio hands-free can be used.

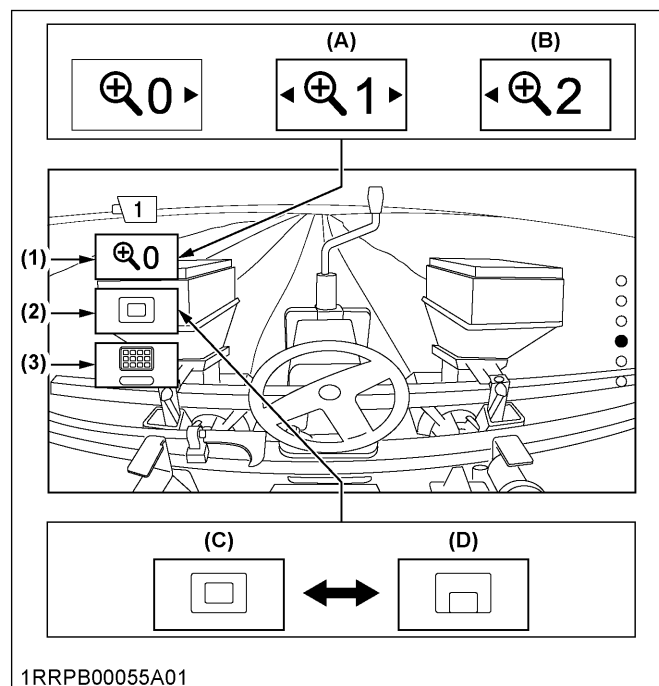
6. Operating the camera input screen (option)



WARNING

To avoid personal injury or death, always check the operating area and surroundings before using the camera.

Camera input screen



- | | |
|--------------------|------------------------------|
| (1) Zoom icon | (A) Magnification 1 (Lower) |
| (2) Zoom area icon | (B) Magnification 2 (Higher) |
| (3) Grid icon | (C) Center of screen |
| | (D) Bottom of screen |

Zooming in and out of camera input image

1. Display the camera input screen.
2. Press the jog dial push button to display the scale command list.
3. Select the magnification and zoom area.
 - Select the magnification
 - a. Select the zoom icon with the jog dial, then press the jog dial push button.
 - b. Select the "magnification 1 (Lower)" or the "magnification 2 (Higher)" with the jog dial, then press the jog dial push button.
 - Select the zoom area
 - a. Select the zoom area icon with the jog dial, then press the jog dial push button.
 - b. Select the "center of screen" or the "bottom of screen" with the jog dial, then press the enter button.

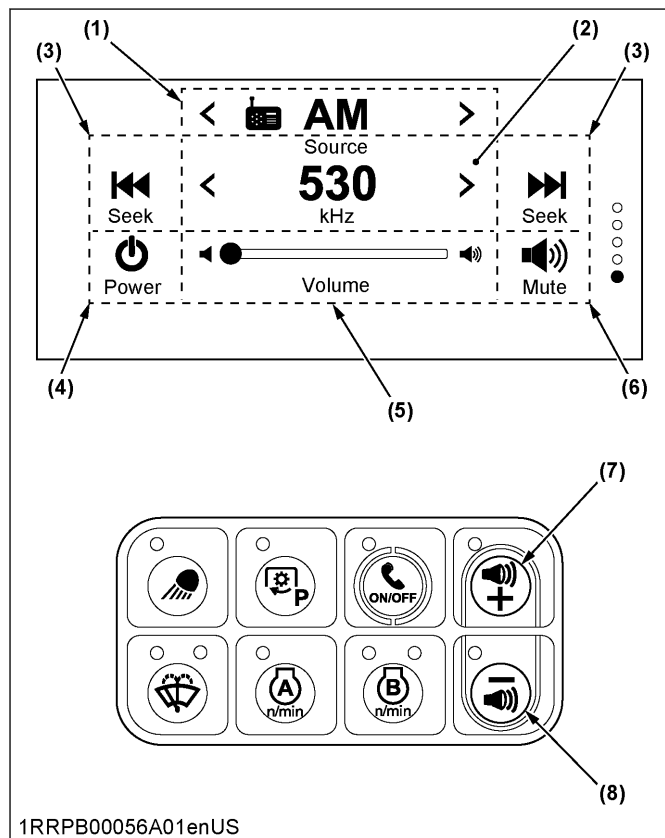
Displaying grid on camera input image

1. Display the camera input screen.
2. Press the jog dial push button to display the scale command list.

3. Select the grid icon with the jog dial, then press the jog dial push button to change the grid display on and off.

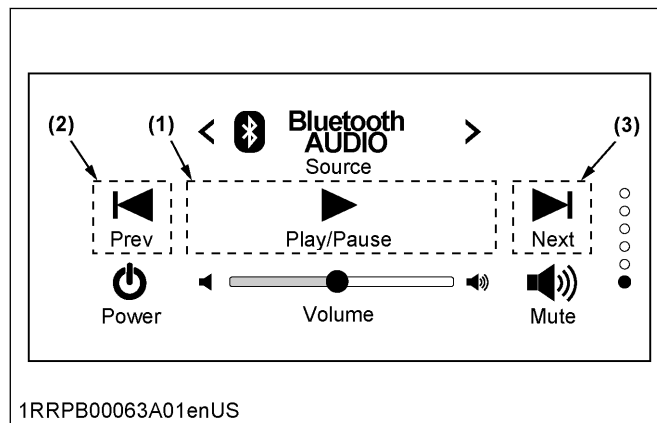
7. Operating the audio control screen

Audio control screen



No.	Section	Function
(1)	Audio source	Displays the currently selected audio source. Select the section to enable the change of the audio source. "AM" → "FM" → "Weather Band" → "Bluetooth audio" → "Bluetooth Hands-free" → "AM" NOTE : When answering an incoming call, "Bluetooth Hands-free" is added to the audio sources.
(2)	Frequency	Displays the radio frequency. Select the section to enable the frequency change.
(3)	Seek	Searches for receivable frequencies. Select "Seek" to automatically search for radio stations emitting strong signals.
(4)	Power	Turns the audio control function on or off.
(5)	Volume	Displays the audio volume. Select the section to enable the change of the audio volume.
(6)	Mute	Mutes the tractor's speaker.
(7)	Volume up switch	Press the volume up switch to raise the volume.
(8)	Volume down switch	Press the volume down switch to lower the volume.

Bluetooth audio screen



No.	Section	Function
(1)	Play/ Pause	Play or pause an audio source.
(2)	Previous	Skip to the previous track.
(3)	Next	Skip to the next track.

[Premium model]

1. Display the audio control screen.
2. Press the jog dial push button to switch to the audio control operation screen, where the cursor will appear, allowing you to select sections.

3. Rotate the jog dial to select a section, then press the jog dial push button to perform the operation corresponding to the section.

[Deluxe CAB model]

1. Display the audio control screen.
2. Press the enter button to switch to the audio control operation screen, where the cursor will appear, allowing you to select sections.
3. Press the next button or the previous button to select a section, then press the enter button to perform the operation corresponding to the section.

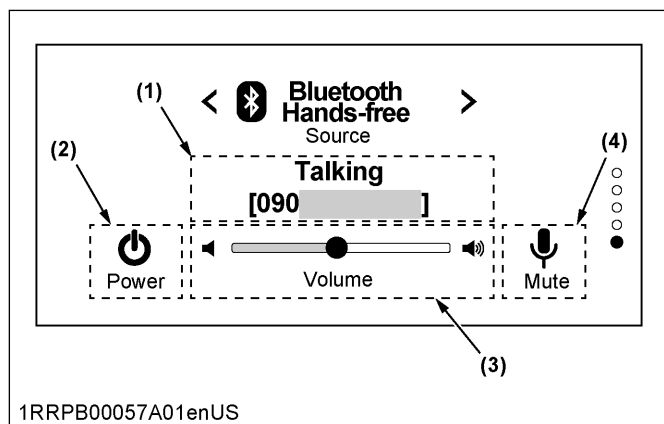
[Deluxe CAB model]

1. Display the "Bluetooth Hands-free" screen.
2. Press the enter button to switch to the Bluetooth hands-free operation screen, where the cursor will appear, allowing you to select sections.
3. Press the next button or the previous button to select a section, then press the enter button to perform the operation corresponding to the section.

NOTE :

Hands-free calling is possible even if the power is turned off on the audio control screen.

8. Operating the "Bluetooth Hands-free" screen

Bluetooth hands-free screen

No.	Section	Function
(1)	Telephone number	Displays the phone number of the person you are calling.
(2)	Power	This indicates whether the audio control function is on or off. During hands-free calls, the power cannot be turned off.
(3)	Volume	Displays the audio volume. Select the section to enable the change of the audio volume.
(4)	Mute	Mutes your phone's microphone. NOTE : The tractor's speaker will not be muted.

The "Bluetooth Hands-free" screen can be displayed by switching to the various display screen during a hands-free call.

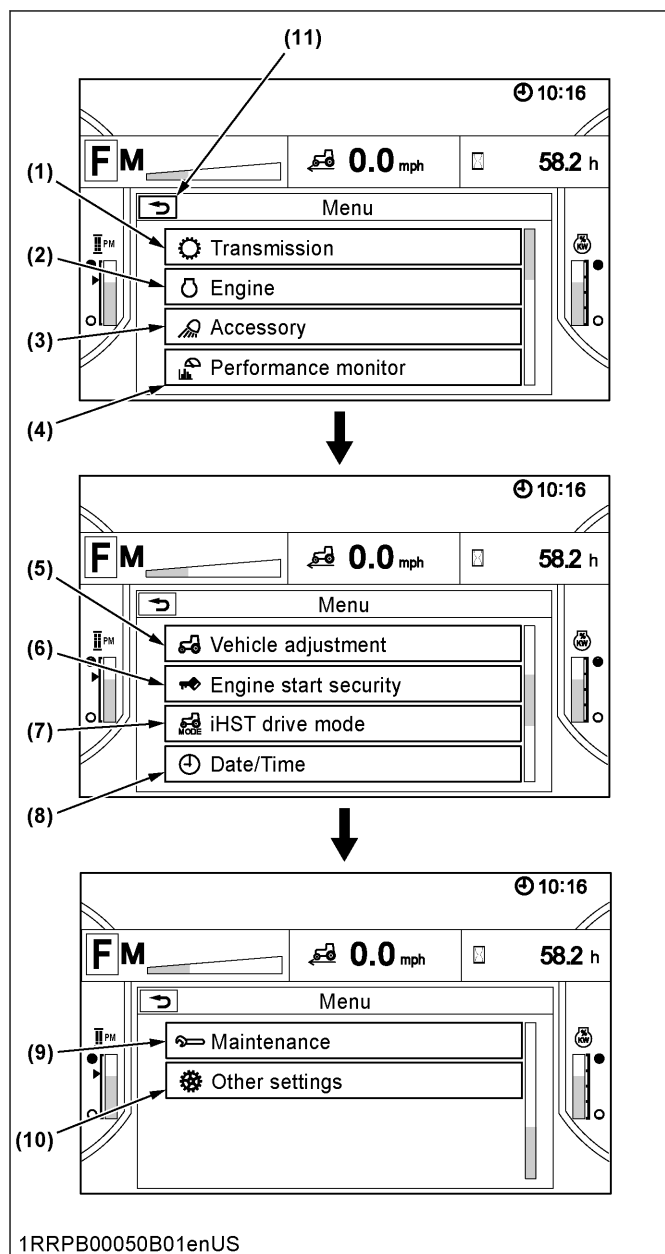
[Premium model]

1. Display the "Bluetooth Hands-free" screen.
2. Press the jog dial push button to switch to the Bluetooth hands-free operation screen, where the cursor will appear, allowing you to select sections.
3. Rotate the jog dial to select a section, then press the jog dial push button to perform the operation corresponding to the section.

MENU SCREEN

Press the menu button to display the "Menu" screen. Rotate the jog dial to select an item, then press the jog dial push button to display your selected item.

Menu screen



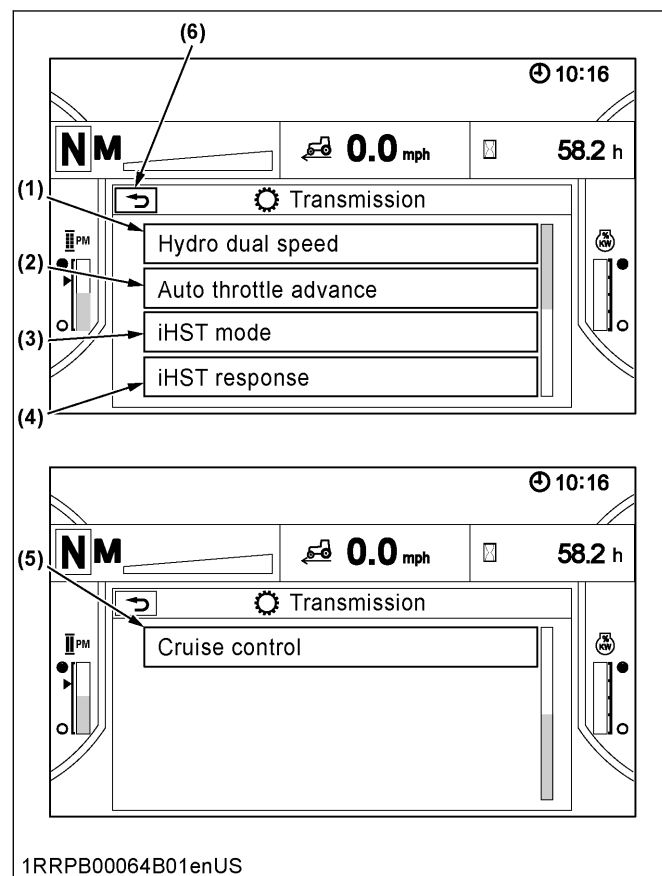
(1) Transmission.....	61
(2) Engine.....	64
(3) Accessory [Premium CAB model].....	66
(4) Performance monitor	66
(5) Vehicle adjustment.....	70
(6) Engine start security	71
(7) iHST drive mode	74
(8) Date/Time	77
(9) Maintenance log	78
(10) Other settings	82
(11) Back icon	

NOTE :

The deluxe model does not have the “Menu” screen. Display the various settings screens from the “Function menu” screen.

TRANSMISSION MENU SCREEN

The following items can be set on the “Transmission” screen. Modify these settings as required. The “Transmission” screen can be displayed from the “Menu” screen.



No.	Description	Ref. page
(1)	Hydro dual speed The hydro dual speed can be switched to “HI” or “LO”.	62
(2)	Auto throttle advance (ATA) The auto throttle advance can be switched to “ON” or “OFF”.	62
(3)	iHST mode The following modes can be selected: • MANUAL • STALL GUARD • AUTO H-DS/STALL GUARD	62
(4)	iHST response The HST response value can be adjusted.	63
(5)	Cruise control The following settings can be configured: • Switch the cruise control function to “ON” or “OFF”. • Adjust the cruise set speed.	63
(6)	Back icon Returns to the “Menu” screen.	-

NOTE :

The deluxe model does not have the “Transmission” screen. Display the settings screens from the “Function menu” screen or the performance monitor screen.

1. Setting the hydro dual speed

1. Display the “Hydro dual speed” screen.

[Premium model]

- “Menu” → “Transmission” → “Hydro dual speed”
- “Performance monitor” → “Shortcut menu” → “Hydro dual speed”

(For details on accessing the screens, see EXAMPLE OF OPERATING THE DISPLAY CONTROL DEVICE on page 50.)

[Deluxe model]

“Performance monitor” → “Hydro dual speed”

(For details on accessing the screens, see Hydro dual speed (H-DS) on page 118.)

2. Switch to “HI” or “LO”.

[Premium model]

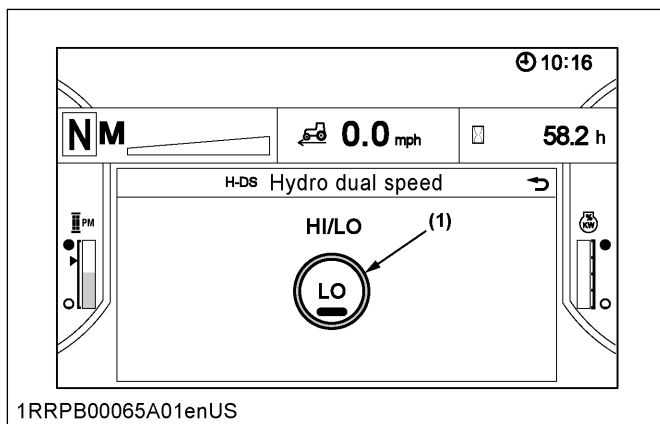
Press the jog dial push button to switch to “HI” or “LO”.

[Deluxe model]

Press the enter button to switch to “HI” or “LO”.

3. After switching, the screen will return to the previous display screen.

Hydro dual speed screen



(1) Hydro dual speed HI/LO switch

2. Setting the auto throttle advance (ATA)

1. Display the “Auto throttle advance” screen.

[Premium model]

- “Menu” → “Transmission” → “Auto throttle advance”
- “Performance monitor” → “Shortcut menu” → “Auto throttle advance”

[Deluxe model]

“Performance monitor” → “Function menu” → “Auto throttle advance”

(For details on accessing the screens, see EXAMPLE OF OPERATING THE DISPLAY CONTROL DEVICE on page 50.)

2. Switch to “ON” or “OFF”.

[Premium model]

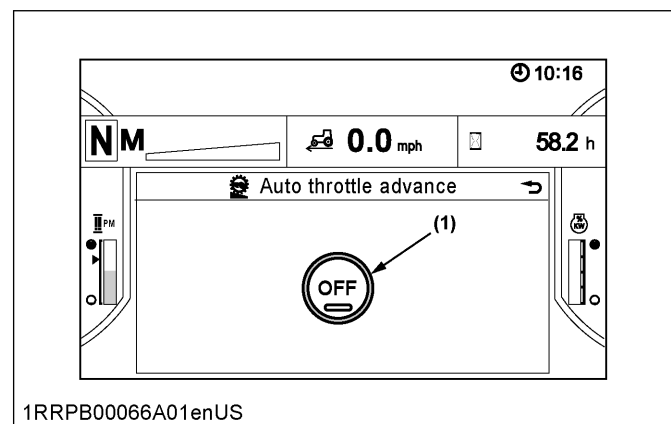
Press the jog dial push button to switch to “ON” or “OFF”.

[Deluxe model]

Press the enter button to switch to “ON” or “OFF”.

3. After switching, the screen will return to the previous display screen.

Auto throttle advance screen



(1) Auto throttle advance ON/OFF switch

3. Setting the iHST mode

1. Display the “iHST mode” screen.

[Premium model]

- “Menu” → “Transmission” → “iHST mode”
- “Performance monitor” → “Shortcut menu” → “iHST mode”

(For details on accessing the screens, see iHST mode on page 119.)

[Deluxe model]

“Performance monitor” → “iHST mode”

(For details on accessing the screens, see iHST mode on page 119.)

2. Select one of the modes: “1”, “2”, or “3”.

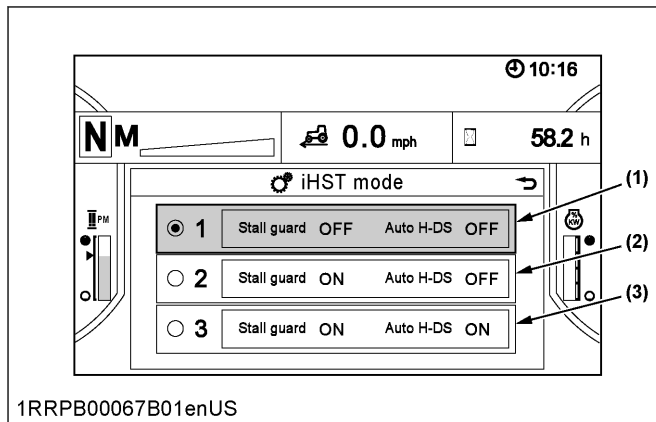
[Premium model]

Rotate the jog dial to select a mode and press the jog dial push button to confirm your selection.

[Deluxe model]

Press the next button or the previous button to select a mode and press the enter button to confirm your selection.

3. After the confirmation, the screen will return to the previous screen.

iHST mode screen

- (1) Manual mode
 (2) Stall guard mode
 (3) Auto H-DS or stall guard mode

NOTE :

For details on the iHST mode, see iHST mode on page 119.

4. Setting the iHST response

1. Display the "iHST response" screen.

[Premium model]

- "Menu" → "Transmission" → "iHST response"
- "Performance monitor" → "Shortcut menu" → "iHST response"

[Deluxe model]

"Performance monitor" → "Function menu" → "iHST response"

(For details on accessing the screens, see EXAMPLE OF OPERATING THE DISPLAY CONTROL DEVICE on page 50.)

2. Adjust the iHST response value.

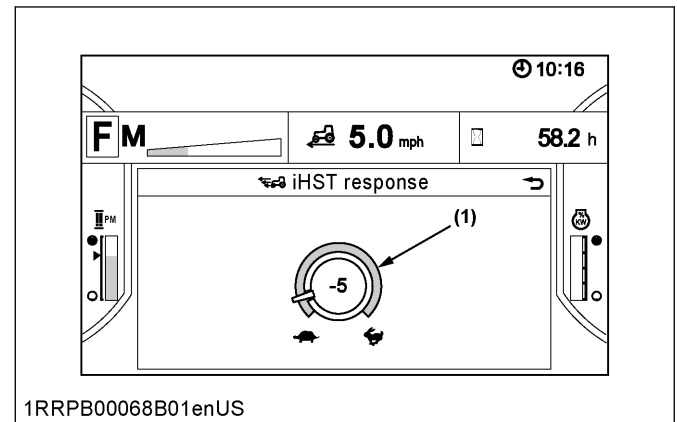
[Premium model]

Rotate the jog dial to adjust the response value and press the jog dial push button to confirm your selection.

[Deluxe model]

Press the next button or the previous button to adjust the response value and press the enter button to confirm your selection.

3. After the confirmation, the screen will return to the previous screen.

iHST response screen

- (1) iHST response dial

NOTE :

[Premium model]

Adjustments can be made using the iHST response button on the multi-function lever.

5. Setting the cruise control

1. Display the "Cruise control" screen.

[Premium model]

- "Menu" → "Transmission" → "Cruise control"
- "Performance monitor" → "Shortcut menu" → "Cruise control"

[Deluxe model]

"Performance monitor" → "Function menu" → "Cruise control"

(For details on accessing the screens, see EXAMPLE OF OPERATING THE DISPLAY CONTROL DEVICE on page 50.)

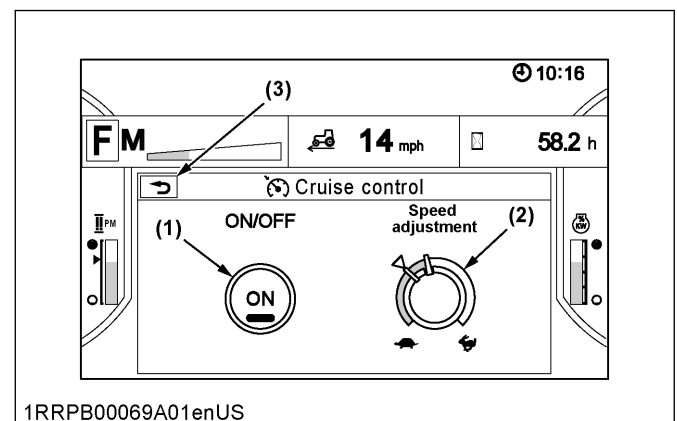
2. Select the desired function.

[Premium model]

Rotate the jog dial to select a function.

[Deluxe model]

Press the next button or the previous button to select a function.

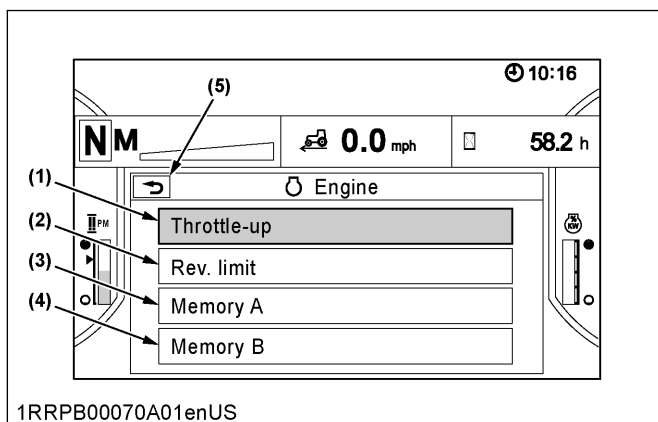
Cruise control screen

No.	Name	Function
(1)	Cruise control ON/OFF switch	The cruise control can be switched to activation (ON) or deactivation (OFF). [Premium model] Press the jog dial push button to switch to "ON" or "OFF". [Deluxe model] Press the enter button to switch to "ON" or "OFF". NOTE : • Cruise control cannot be activated while the tractor is stopped. • [Premium model] The cruise control ready button on the multi-function lever can also be used to turn the cruise control function "ON" or "OFF". (See Cruise control on page 126.) • [Deluxe model] The Cruise control switch on the right console can also be used to turn the cruise control function "ON" or "OFF".
(2)	Speed adjustment dial	The cruise speed can be changed. [Premium model] Rotate the jog dial to adjust the cruise set speed and press the jog dial push button to confirm your selection. [Deluxe model] Press the next button or the previous button to adjust the cruise set speed and press the enter button to confirm your selection.
(3)	Back icon	Return to the previous screen.

ENGINE MENU SCREEN

The following items can be set on the "Engine" screen. Modify these settings as required.

The "Engine" screen can be displayed from the "Menu" screen.



No.	Name	Ref. page
(1)	Throttle-up The engine speed can be set while the throttle-up button is pressed.	64
(2)	Rev-limit The engine speed limit can be set.	65
(3)	Memory A The following items can be configured: • Switch the RPM memory A to "ON" or "OFF" • Adjust the engine speed when the RPM memory switch (A) is pressed.	65
(4)	Memory B The following items can be configured: • Switch the RPM memory B to "ON" or "OFF" • Adjust the engine speed when the RPM memory switch (B) is pressed.	65
(5)	Back icon Returns to the "Menu" screen.	-

NOTE :

The deluxe model does not have the "Engine" screen. Display the settings screens from the "Function menu" screen.

1. Setting the throttle-up

1. Display the "Throttle-up" screen.

[Premium model]

- "Menu" → "Engine" → "Throttle-up"
- "Performance monitor" → "Shortcut menu" → "Throttle-up"

[Deluxe model]

"Performance monitor" → "Function menu" → "Throttle-up"

(For details on accessing the screens, see EXAMPLE OF OPERATING THE DISPLAY CONTROL DEVICE on page 50.)

2. Adjust the throttle-up value.

[Premium model]

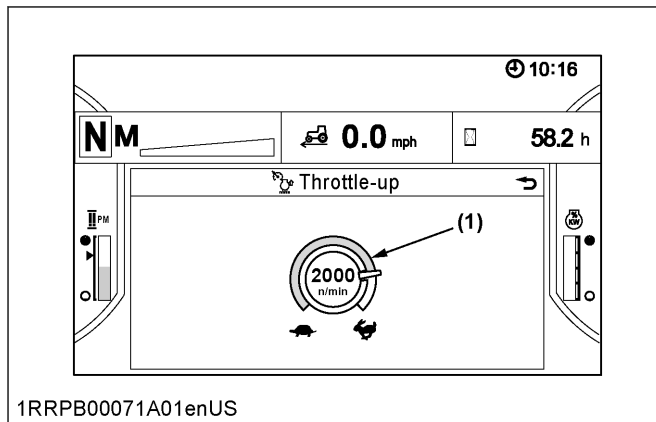
Rotate the jog dial to adjust the throttle-up value and press the jog dial push button to confirm your selection.

[Deluxe model]

Press the next button or the previous button to adjust the throttle-up value and press the enter button to confirm your selection.

3. After the confirmation, the screen will return to the previous screen.

Throttle-up screen



(1) Throttle-up dial

NOTE :

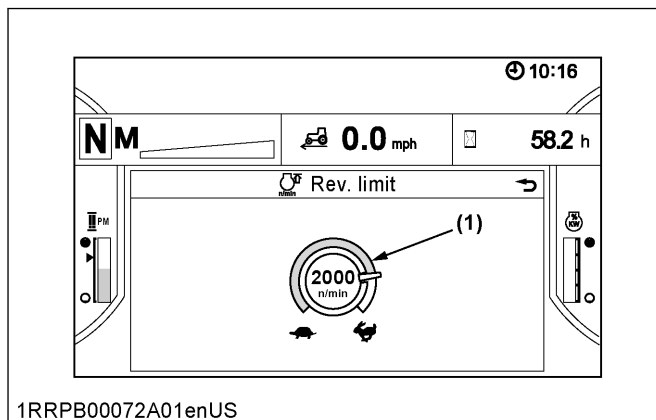
[Deluxe model]

The next button or previous button changes incrementally with a short press and changes continuously with a long press.

2. Setting the rev-limit [Premium model]

- Display the "Rev-limit" screen.
 - "Menu" → "Engine" → "Rev-limit"
 - "Performance monitor" → "Shortcut menu" → "Rev-limit"
 (For details on accessing the screens, see EXAMPLE OF OPERATING THE DISPLAY CONTROL DEVICE on page 50.)
- Rotate the jog dial to adjust the rev-limit value and press the jog dial push button to confirm your selection.
- After confirmation, the screen will return to the previous screen.

Rev-limit screen



(1) Rev-limit dial

NOTE :

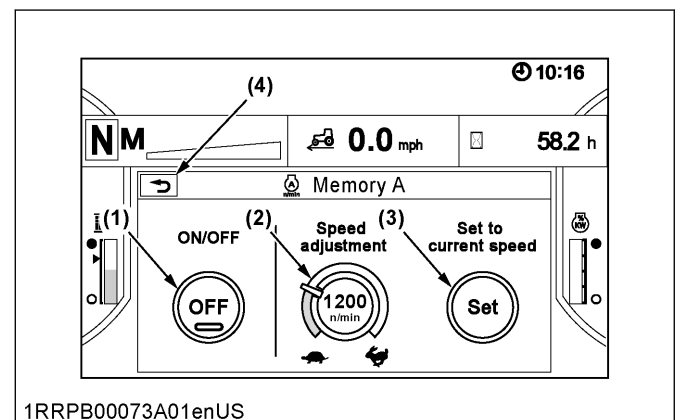
When the rev-limit dial is turned all the way to the right, to the rabbit mark position, the restriction is canceled.

3. Setting the RPM memory [Premium model]

Premium model is equipped with RPM memory function. Different engine speeds can be set for RPM memory A and RPM memory B. The method for setting RPM memory A and RPM memory B is the same. The setting method for RPM memory A will be explained as an example.

- Display the "Memory A" screen.
 - "Menu" → "Engine" → "Memory A"
 (For details on accessing the screens, see EXAMPLE OF OPERATING THE DISPLAY CONTROL DEVICE on page 50.)
- Rotate the jog dial to select the desired function.

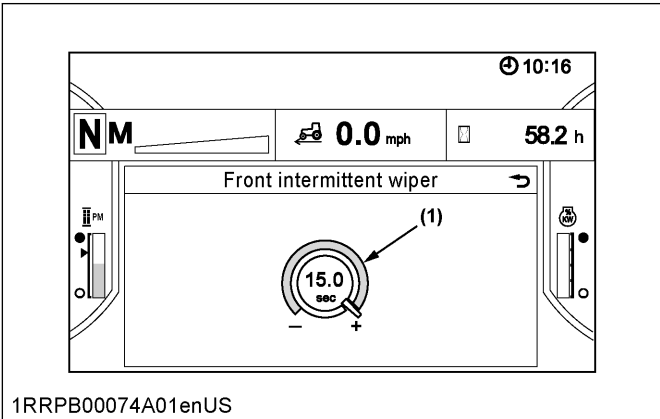
Memory A screen



No.	Name	Function
(1)	RPM memory ON/OFF switch	RPM memory A function can be switched to enabled (ON) or disabled (OFF). Press the jog dial push button to switch to "ON" or "OFF". NOTE : The RPM memory switch A on the right console can also be switched to "ON" or "OFF".
(2)	Speed adjustment dial	The engine speed of the RPM memory A can be changed. Rotate the jog dial to adjust the engine speed of the RPM memory A and press the jog dial push button to confirm your selection.
(3)	Engine speed setting button	The engine speed at the time this button is pressed can be reflected in the speed adjustment value. Press the jog dial push button to reflect the engine speed in the adjustment value.
(4)	Back icon	Return to the previous screen.

FRONT INTERMITTENT WIPER SETTINGS SCREEN [PREMIUM CAB MODEL]

The intermittent timing of the front wiper can be adjusted on the “Front intermittent wiper” screen. The “Front intermittent wiper” screen can be displayed by selecting “Accessory” from the “Menu” screen.

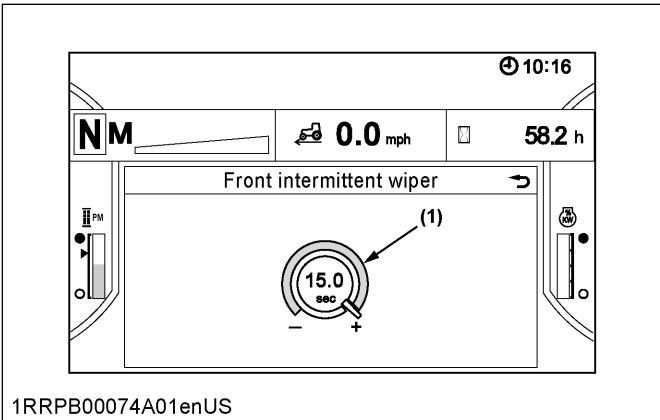


(1) Front intermittent wiper dial

NOTE :
The deluxe model does not have the “Front intermittent wiper” screen. Additionally, the intermittent time for the front wipers cannot be changed.

1. Setting the front intermittent wiper

1. Display the “Front intermittent wiper” screen.
“Menu” → “Accessory”
(For details on accessing the screens, see EXAMPLE OF OPERATING THE DISPLAY CONTROL DEVICE on page 50.)
2. Rotate the jog dial to adjust the intermittent timing of the front wiper and press the jog dial push button to confirm your selection.
3. After confirmation, the screen will return to the previous screen.

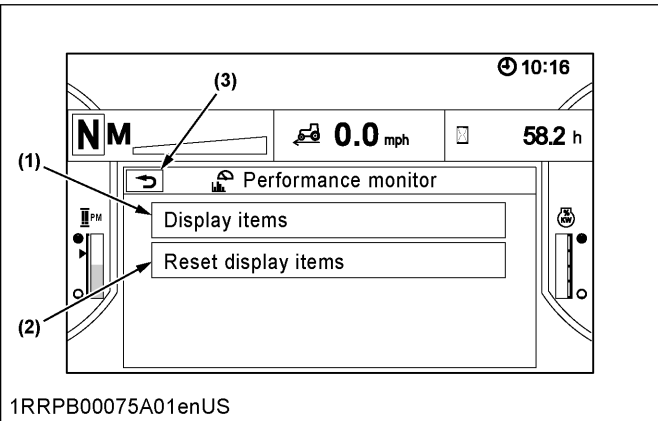


(1) Front intermittent wiper dial

NOTE :
The factory setting is 6.5 seconds.

PERFORMANCE MONITOR SETTINGS SCREEN [PREMIUM MODEL]

The following items can be set on the “Performance monitor” screen. Modify these settings as required. The “Performance monitor” screen can be displayed from the “Menu” screen.

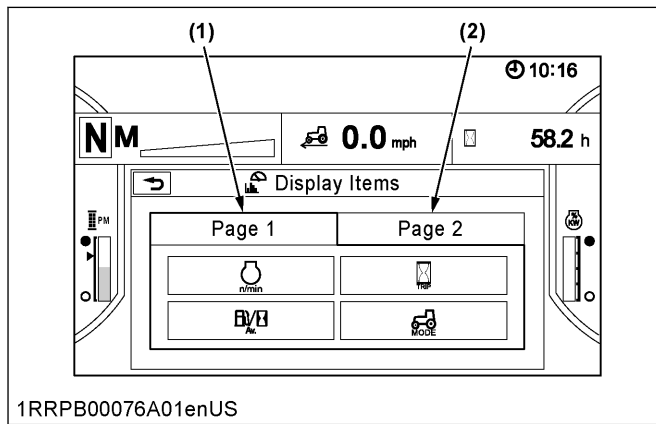


No.	Description	Ref. page
(1)	Display items The information displayed in the performance monitor can be selected.	66
(2)	Reset display items Resets the display items of the performance monitor to the initial settings.	67
(3)	Back icon Returns to the “Menu” screen.	-

NOTE :
The deluxe model does not have the performance monitor settings screen. Additionally, the information displayed on the performance monitor cannot be changed.

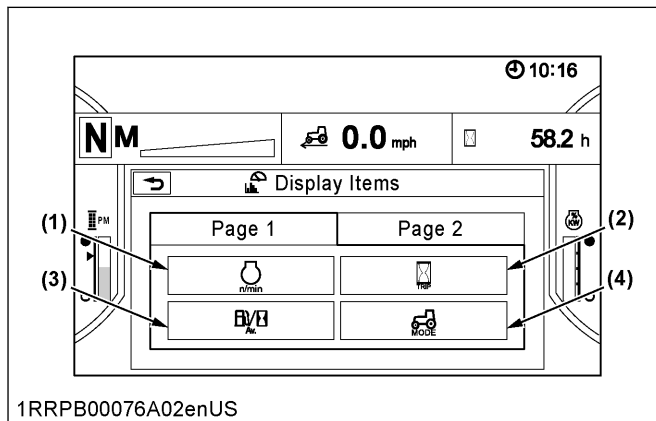
1. Setting the display items on performance monitor

1. Display the “Display items” screen.
“Menu” → “Performance monitor” → “Display items”
(For details on accessing the screens, see EXAMPLE OF OPERATING THE DISPLAY CONTROL DEVICE on page 50.)
2. Rotate the jog dial to select “Page 1” or “Page 2”, then press the jog dial push button.



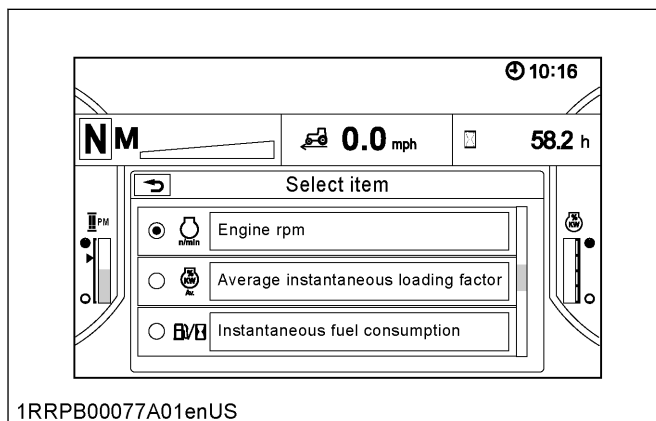
- (1) Page 1
(2) Page 2

3. Rotate the jog dial to select the desired area, then press the jog dial push button.



- (1) Upper left area
(2) Upper right area
(3) Lower left area
(4) Lower right area

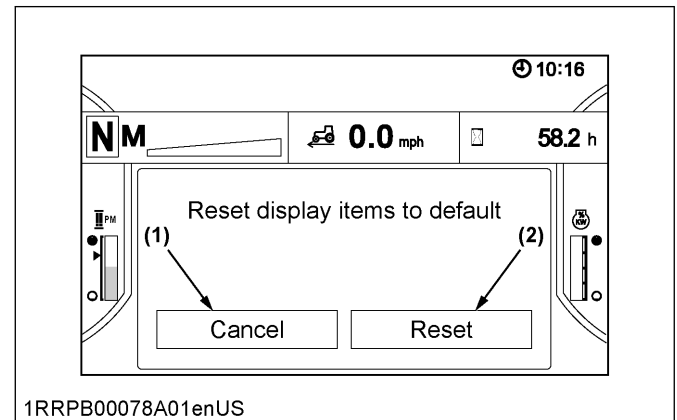
4. Rotate the jog dial to select the desired information from the “Select item” screen.
(For the available options, see Select item list for the performance monitor on page 68.)
5. Press the jog dial push button to confirm your selection.



6. Repeat steps 2 to 6 to set the desired items for page 1 and page 2.

2. Resetting the display items on performance monitor

1. Display the “Display items” screen.
“Menu” → “Performance monitor” → “Display items”
(For details on accessing the screens, see EXAMPLE OF OPERATING THE DISPLAY CONTROL DEVICE on page 50.)
2. Rotate the jog dial to select “Reset”, then press the jog dial push button to return the display items to the initial settings.

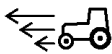


- (1) Cancel
(2) Reset

3. Select item list for the performance monitor

Icon	Name	Remark
	Engine rpm	The current engine speed is displayed.
	Average loading factor	The average of the instantaneous loading factor from the previous resetting is displayed. Reset procedure: 1. Display the average instantaneous loading factor on the performance monitor. 2. Select " <i>Average instantaneous loading factor</i> " on the performance monitor operation screen and confirm to reset it to "0". (See Operating the performance monitor screen on page 57.)
	Instantaneous fuel consumption	The fuel consumption per hour is displayed.
	Mileage graph	The fuel consumption per hour is displayed as a graph.
	Average fuel consumption	The average fuel consumption per hour from the previous resetting is displayed. Reset procedure: 1. Display " <i>Average fuel consumption</i> " on the performance monitor. 2. Select " <i>Average fuel consumption</i> " on the performance monitor operation screen and confirm to reset it to "0.0". (See Operating the performance monitor screen on page 57.)
	Total fuel consumption	The total fuel consumption from the previous resetting is displayed. The maximum value that can be displayed is xxx gallons or xxx liters. Reset procedure: 1. Display " <i>Total fuel consumption</i> " on the performance monitor. 2. Select " <i>Total fuel consumption</i> " on the performance monitor operation screen and confirm to reset it to "0.0". (See Operating the performance monitor screen on page 57.)
	Trip time	The measured trip time is displayed. Measurement procedure: 1. Display " <i>Trip time</i> " on the performance monitor. 2. Select " <i>Trip time</i> " on the performance monitor operation screen and confirm to start the measurement. 3. Confirm again to stop the measurement. (See Operating the performance monitor screen on page 57.)
	Engine coolant temperature	The engine's coolant temperature is displayed.
	Memory A rpm	The setting speed of the engine RPM memory A is displayed. (See Setting the RPM memory [Premium model] on page 65.)
	Memory B rpm	The setting speed of the engine RPM memory B is displayed. (See Setting the RPM memory [Premium model] on page 65.)
	Upper-limit rpm setting	The engine speed limit setting is displayed. (See Setting the rev-limit [Premium model] on page 65.)
H-DS	Hydro dual speed	The selected H-DS " <i>HI</i> " or " <i>LO</i> " is displayed. (See Setting the hydro dual speed on page 62.)
	iHST mode	The selected HST mode is displayed. (See Setting the iHST mode on page 62.)

(Continued)

Icon	Name	Remark
	iHST response	The setting value of the HST response is displayed. (See Setting the iHST response on page 63.)
	Throttle-up	The setting value of the throttle-up is displayed. (See Setting the throttle-up on page 64.)
	iHST drive mode	The selected HST drive mode is displayed. (See IHST DRIVE MODE SETTINGS SCREEN [PREMIUM MODEL] on page 74.)
	Blank	Used to delete the information displayed.

TIRE CIRCUMFERENCE SETTING SCREEN

The tire circumference can be set in the “*Tire circumference*” screen. Before work, the installed tire circumference is set.

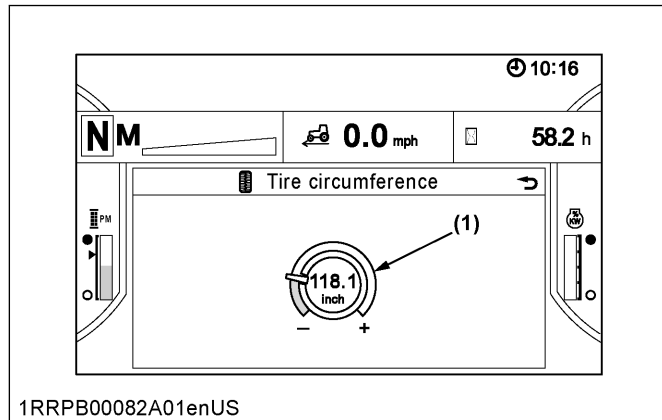
[Premium model]

The “*Tire circumference*” screen can be displayed by selecting the “*Vehicle adjustment*” from the “*Menu*” screen.

[Deluxe model]

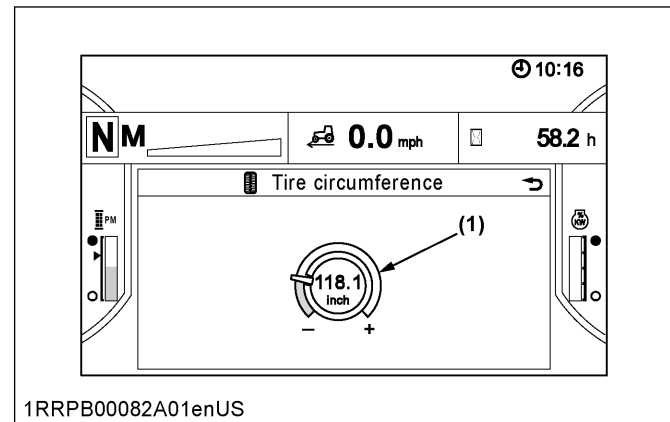
The “*Tire circumference*” screen can be displayed from the “*Function menu*” screen.

Tire circumference screen



(1) Tire circumference dial

Tire circumference screen



(1) Tire circumference dial

NOTE :

[Deluxe model]

The next or previous button changes incrementally with a short press and changes continuously with a long press.

1. Setting the tire circumference

1. Display the “*Tire circumference*” screen.

[Premium model]

“*Menu*” → “*Vehicle adjustment*” → “*Tire circumference*”

[Deluxe model]

“*Performance monitor*” → “*Function menu*” → “*Tire circumference*”

(For details on accessing the screens, see EXAMPLE OF OPERATING THE DISPLAY CONTROL DEVICE on page 50.)

2. Adjust the tire circumference value.

[Premium model]

Rotate the jog dial to adjust the tire circumference value and press the jog dial push button to confirm your selection.

[Deluxe model]

Press the next button or the previous button to adjust the tire circumference value and press the enter button to confirm your selection.

3. After confirmation, the screen will return to the previous screen.

Tire circumference table (reference)

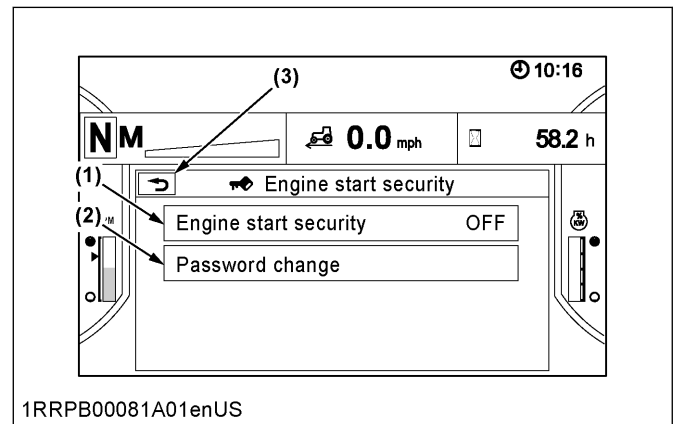
Model	Rear tire size	Entry (in.)	Entry (mm)
L3770 L3970	12.4-24	138.0	3505
	355/80-D20	124.5	3162
	44 × 18-20	132.5	3366
	41/18LL × 16.1	122.5	3112
	420/70-24	140.0	3556
L4270	14.9-24	146.5	3721
	355/80-D20	124.5	3162
	44 × 18-20	132.5	3366
	41/18LL × 16.1	122.5	3112
	17.5 L -24	146.5	3721
L4470	14.9-24	146.5	3721
	355/80-D20	124.0	3150
	44 × 18-20	132.0	3353
	41/18LL × 16.1	122.0	3099
	17.5 L -24	146.0	3708
L5070	14.9-24	146.5	3721
	44 × 18-20	132.0	3353
	17.5 L -24	146.0	3708
	610R470	112.5	2858
L6070	14.9-26	156.0	3962
	44 × 18-20	132.0	3353
	13.6-28	156.0	3962
	17.5 L -24	146.0	3708
	610R470	112.5	2858

ENGINE START SECURITY SETTINGS SCREEN

The following items can be set in the “*Engine start security*” screen. Modify these settings as required.

The premium model displays the “*Engine start security*” screen from the “*Menu*” screen.

The deluxe model displays the “*Engine start security*” screen from the “*Function menu*” screen.



No.	Description	Ref. page
(1)	Engine start security The engine start security can be switched to “ON” or “OFF”.	71
(2)	Password change The password number of the engine start security can be changed.	72
(3)	Back icon [Premium model] Returns to the “ <i>Menu</i> ” screen. [Deluxe model] Returns to the “ <i>Function menu</i> ” screen.	-

1. Setting the engine start security “ON” and “OFF”

1. Display the “*Engine start security*” screen.

[Premium model]

“*Menu*” → “*Engine start security*” → “*Engine start security*”

[Deluxe model]

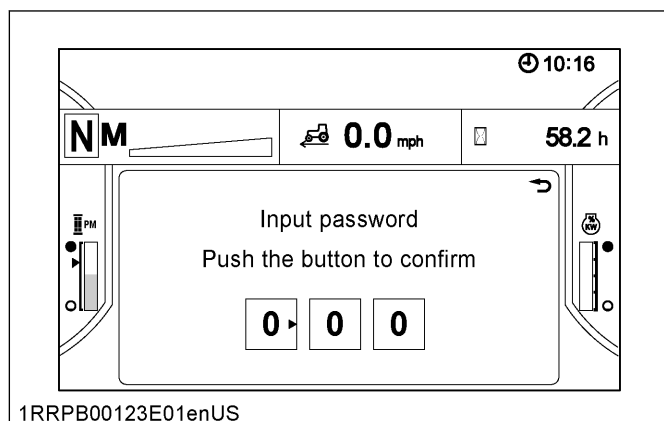
“*Performance monitor*” → “*Function menu*” → “*Engine start security*” → “*Engine start security*”

(For details on accessing the screens, see EXAMPLE OF OPERATING THE DISPLAY CONTROL DEVICE on page 50.)

2. Selecting “*Engine start security*” will display the “*Input password*” screen. Enter the 3-digit password number.

(See Entering the password number on page 134.)

Password number input screen



NOTE :

- The factory set password number is “000”
- When the password number does not match, “Incorrect password” is displayed, and then press the enter button to return the “Engine start security” screen.

IMPORTANT :

When you enter the wrong password number 10 times in a row, the engine start security function will be locked, and you will not be able to enter the password, and the engine will not start. In this case, contact your local Kubota dealer.

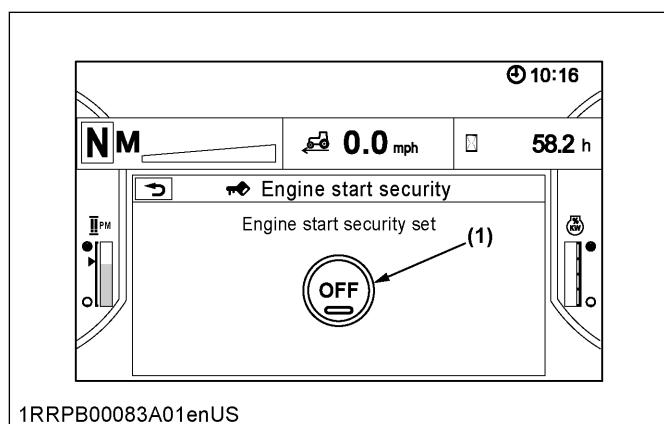
- When the password number matches, the “Engine start security” screen will be displayed. Switch to “ON” or “OFF”.

[Premium model]

Press the jog dial push button to switch to “ON” or “OFF”.

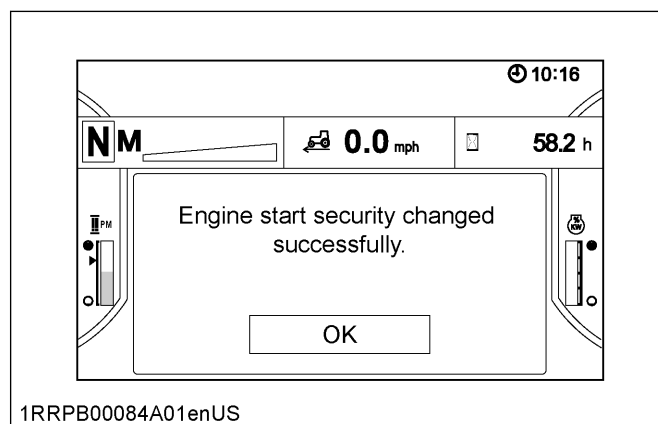
[Deluxe model]

Press the enter button to switch to “ON” or “OFF”.



(1) Engine start security ON/OFF switch

- When switching to “ON” or “OFF”, the following screen will be displayed. Pressing “OK” will return to the previous screen.



2. Changing the password number

- Display the “Password change” screen.

[Premium model]

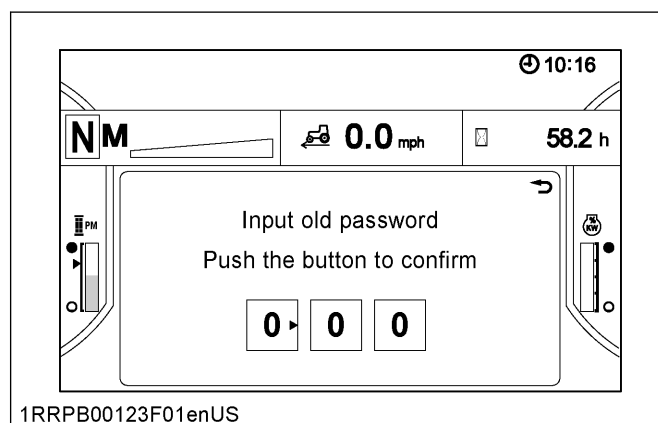
“Menu” → “Engine start security” → “Password change”

[Deluxe model]

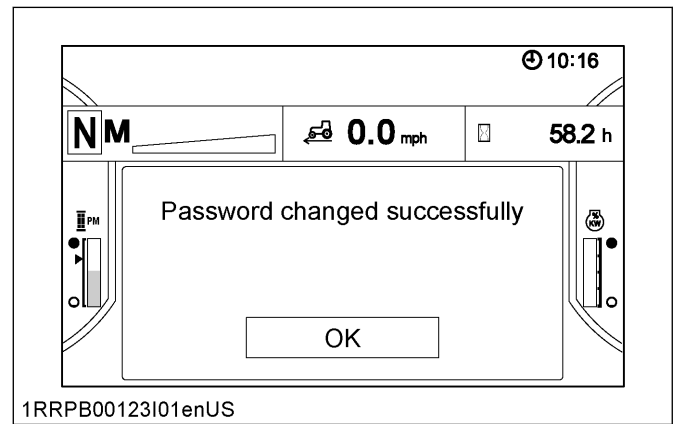
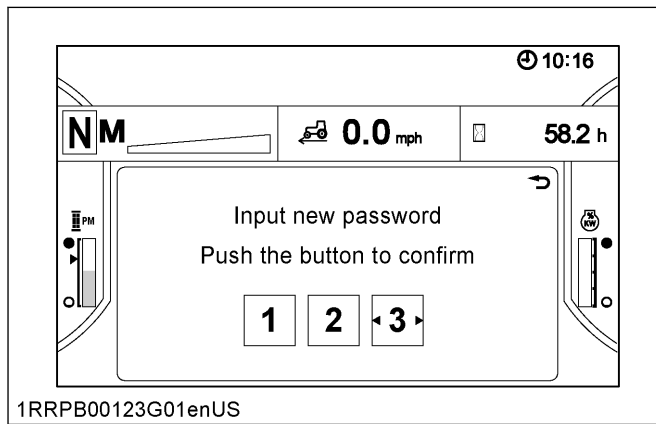
“Performance monitor” → “Function menu” → “Engine start security” → “Password change”

(For details on accessing the screens, see EXAMPLE OF OPERATING THE DISPLAY CONTROL DEVICE on page 50.)

- Selecting “Password change” will display the “Input old password” screen. Enter the old 3-digit password.
(See Entering the password number on page 134.)



- When the password number matches, the “Input new password” screen is displayed. Enter the new 3-digit password number.

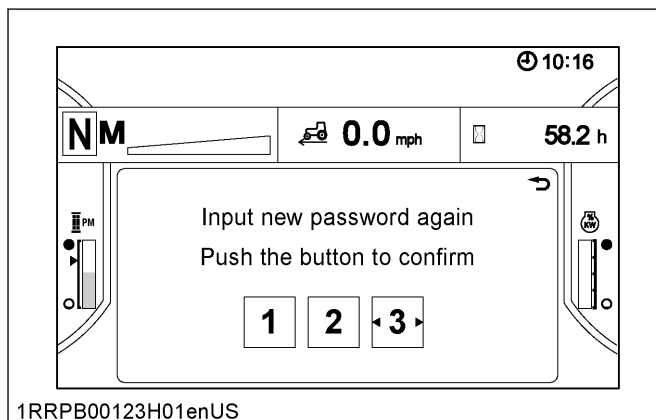
**NOTE :**

When the password number does not match, *“Incorrect password”* is displayed, and then press the enter button to return the *“Input new password”* screen.

IMPORTANT :

When you enter the wrong password number 10 times in a row, the engine start security function will be locked, and you will not be able to enter the password, and the engine will not start. In this case, contact your local Kubota dealer.

4. When the password number matches, the *“Input new password again”* screen is displayed. Enter the new 3-digit password again.

**NOTE :**

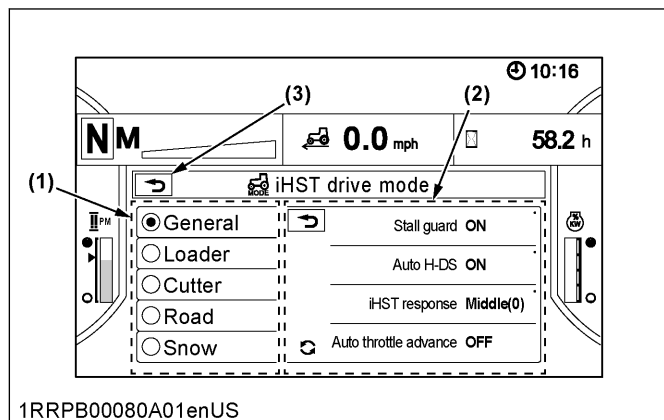
If the password is re-entered incorrectly, the screen displays *“Password does not match.”* and returns to the *“Input new password”* screen.

5. When the same password is re-entered correctly, the following screen will be displayed. Pressing *“OK”* will return to the previous screen.

IHST DRIVE MODE SETTINGS SCREEN [PREMIUM MODEL]

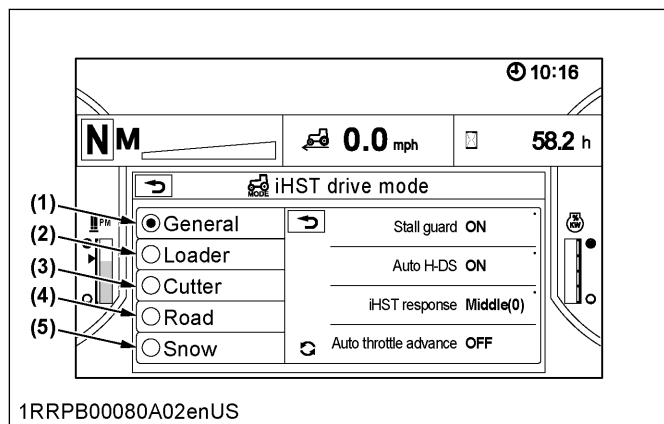
The “iHST drive mode” screen can be set for the selection of modes and customization of settings. Choose the best mode according to the type of job or your operating style.

The “iHST drive mode” screen can be displayed from the “Menu” screen and from the iHST drive mode select button on the multi-function lever.



No.	Description	Ref. page
(1)	Mode select area Displays the available modes for selection.	76
(2)	Detailed settings area Displays the detailed settings for the selected mode. NOTE : If the “iHST Drive Mode” screen is displayed by pressing the iHST drive mode select button, the detailed settings area cannot be selected.	76
(3)	Back icon Returns to the “Menu” screen.	-

Mode select area

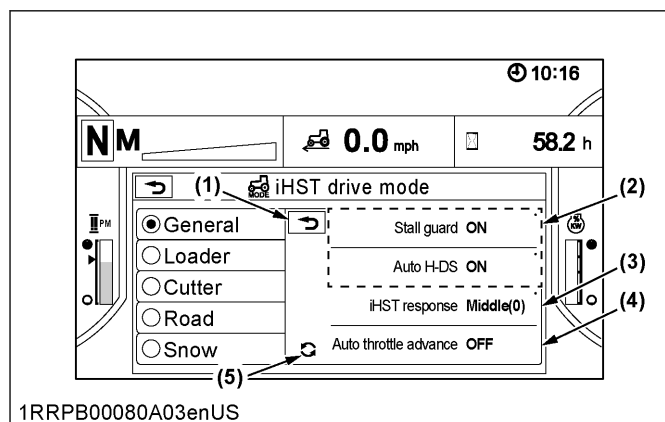


No.	Drive mode	iHST mode		iHST response	Auto throttle advance	Remarks
		Stall guard	Auto H-DS			
(1)	General	ON	ON	Middle (0)	OFF	Designed for general-purpose tasks.
(2)	Loader	ON	OFF	Slow (-5)	ON	Designed for loader tasks.
(3)	Cutter	ON	ON	Slow (-4)	OFF	Designed for grass cutting tasks.
(4)	Road	OFF	OFF	Slow (-3)	ON	Designed for road travel.

(Continued)

No.	Drive mode	iHST mode		iHST response	Auto throttle advance	Remarks
		Stall guard	Auto H-DS			
(5)	Snow	ON	OFF	Middle (-2)	OFF	Designed for snow removal tasks.

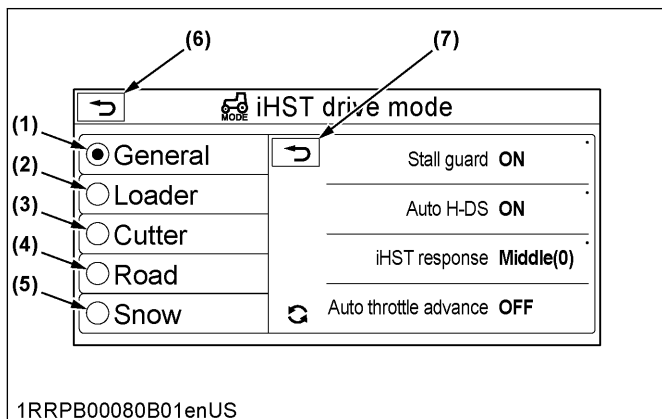
Detailed settings area



No.	Name	Function
(1)	Back icon	This icon returns to the drive mode selection. When a drive mode is selected, the back cursor appears on the icon, allowing for the selection of various functions. Selecting the back icon will return the cursor to the drive mode selection.
(2)	iHST mode setting	Displays the iHST mode settings. Selecting the iHST mode will display the iHST mode settings screen, allowing for changes to the iHST mode. (See Setting the iHST mode on page 62.)
(3)	iHST response setting	Displays the iHST response settings. Selecting "iHST response" will display the iHST response settings screen, allowing for changes to the iHST response. (See Setting the iHST response on page 63.)
(4)	Auto throttle advance setting	Displays the auto throttle advance settings. Selecting "Auto throttle advance" will display the auto throttle advance settings screen, allowing for changes to the auto throttle advance. (See Setting the auto throttle advance (ATA) on page 62.)
(5)	Reset icon	Resets the settings to the default settings.

1. Setting the iHST drive mode

1. Display the “iHST drive mode” screen.
“Menu” → “iHST drive mode”
(For details on accessing the screens, see EXAMPLE OF OPERATING THE DISPLAY CONTROL DEVICE on page 50.)
2. Rotate the jog dial to select “iHST drive mode” and press the jog dial push button to confirm your selection.



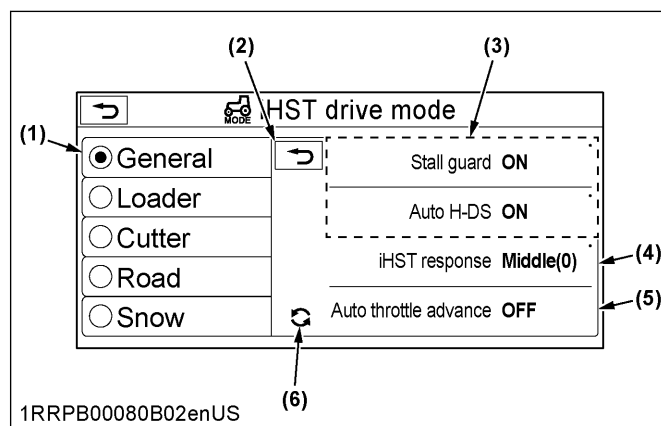
- (1) General mode
(2) Loader mode
(3) Cutter mode
(4) Road mode
(5) Snow mode
(6) Back icon to menu screen
(7) Back icon to mode selection

3. Once the selection is confirmed, the back icon will appear, allowing for changes to the detailed settings.
 - If you do not want to make changes to the detailed settings, select the back icon to return to the “Menu” screen.
 - If you want to make changes to the detailed settings, rotate the jog dial to select the desired options.

2. Customize the drive mode

Example: Customizing the “General” mode

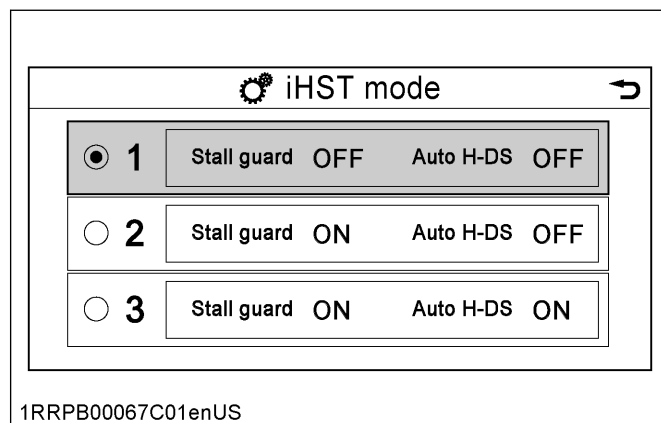
1. Select “General” on the “iHST drive mode” screen.
The cursor will appear on the back icon, allowing changes to the detailed settings.



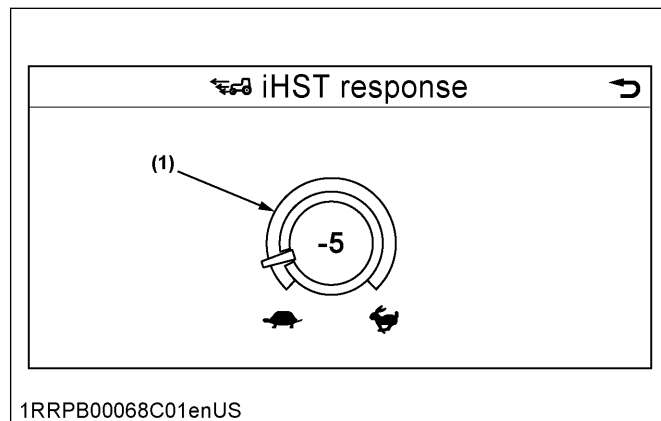
- (1) General mode
(2) Back icon and cursor
(3) iHST mode
(4) iHST response
(5) Auto throttle advance
(6) Reset icon

2. Make changes to the detailed settings.

- To change the iHST mode:

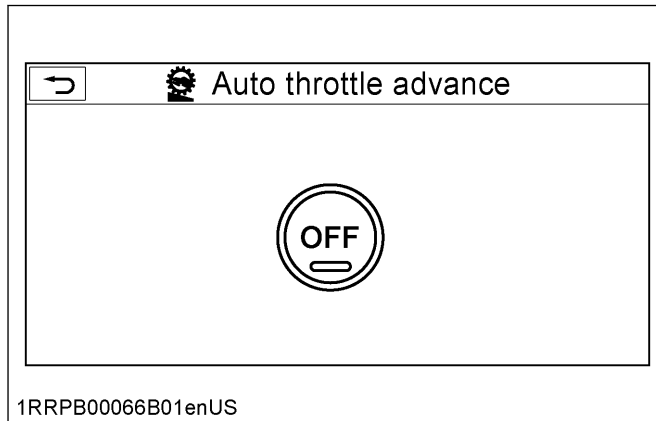


- Rotate the jog dial to select “iHST mode”, then press the jog dial button to display the iHST mode settings.
 - Select the desired mode and confirm your selection.
 - After confirmation, the screen will return to the iHST drive mode.
- To change the iHST response:

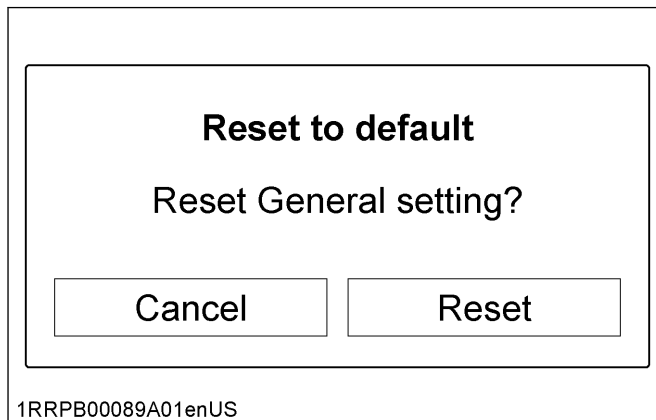


- (1) iHST response dial

- Rotate the jog dial to select “*iHST response*”, then press the jog dial button to display the iHST response settings.
 - Change to the desired iHST response and confirm.
 - After confirmation, the screen will return to the iHST drive mode.
- To change the auto throttle advance:



- Rotate the jog dial to select “*Auto throttle advance*”, then press the jog dial button to display the auto throttle advance settings.
 - Choose to turn auto throttle advance on or off and confirm.
 - After switching, the screen will return to the iHST drive mode.
- To reset to the default settings:



- Rotate the jog dial to select the reset icon and press the jog dial push button to display the dialog.
 - Select “*Reset*” and confirm.
 - After confirming, the iHST drive mode settings will revert to their default values.
- Once the settings are complete, select the back icon to return to the “*Menu*” screen.

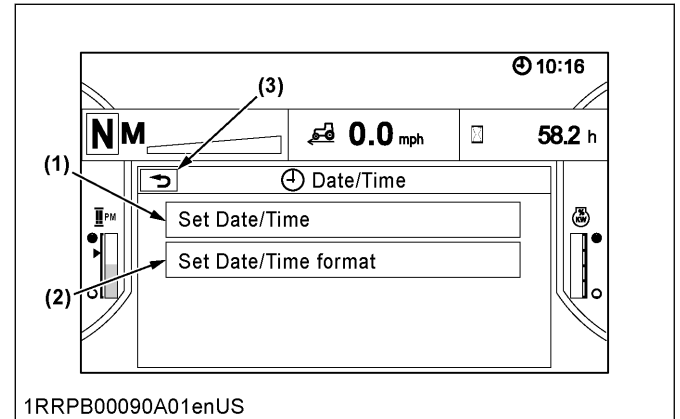
NOTE :

The detailed settings for other drive modes can be changed using the same procedure.

DATE AND TIME SETTINGS SCREEN [PREMIUM MODEL]

The following items can be set in “*Date/time*” screen. Modify these settings as required.

The “*Date/time*” screen can be displayed from the “*Menu*” screen.



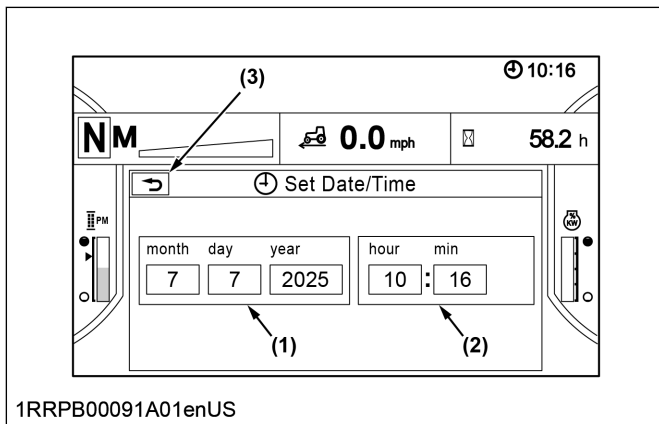
No.	Description	Ref. page
(1)	“ <i>Set Date/Time</i> ” The clock can be adjusted.	77
(2)	“ <i>Set Date/Time format</i> ” The following items can be set: - Change order of date (day / month / year) - Change from 12-hour display to 24-hour display.	78
(3)	Back icon Returns to the “ <i>Menu</i> ” screen.	-

NOTE :

The deluxe model does not have a clock display.

1. Setting the date and time

- Display the “*Set Date/Time*” screen.
“*Menu*” → “*Date/Time*” → “*Set Date/Time*”
(For details on accessing the screens, see EXAMPLE OF OPERATING THE DISPLAY CONTROL DEVICE on page 50.)
- Set the date and time.



- (1) Date input area
(2) Time input area
(3) Back icon

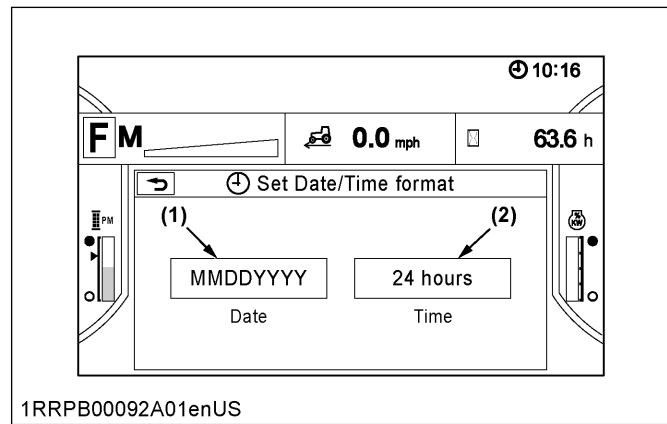
- To set the date:
 - Rotate the jog dial to select the date input area, then press the jog dial push button to place the cursor on "month".
 - Rotate the jog dial to choose the number and press the jog dial push button to confirm the "month". After confirming, the cursor will move to "day".
 - Follow the same steps to confirm "day" and "year". After confirming "year", the cursor will move to the time input area.
- To set the time:
 - Rotate the jog dial to select the time input area, then press the jog dial push button to place the cursor on "hour".
 - Rotate the jog dial to choose the number and press the jog dial push button to confirm the "hour". After confirming, the cursor will move to "min".
 - Follow the same steps to confirm "min". After confirming the number for "min", the cursor will move to the back icon.

NOTE :

- When the date and time is set in the "Set Date/Time" screen, the time will be displayed on the screen.
- When the battery is removed, the clock setting will be lost.

2. Setting the date and time format

- Display the "Set Date/Time format" screen.
"Menu" → "Date/Time" → "Set Date/Time format"
(For details on accessing the screens, see EXAMPLE OF OPERATING THE DISPLAY CONTROL DEVICE on page 50.)
- Set the date and time format.



- (1) Date format
(2) Time format

- To change the date format:
 - Rotate the jog dial to select "Date", then press the jog dial push button.
 - Choose the desired date format and press the jog dial push button to confirm your selection.
- NOTE :**
The order of year, month, and day can be changed, but this tractor does not have a date display.
- To change the time format:
 - Rotate the jog dial to select "Time", then press the jog dial push button.
 - Choose either "12 hours" or "24 hours", and press the jog dial push button to confirm your selection.

MAINTENANCE LOG SCREEN

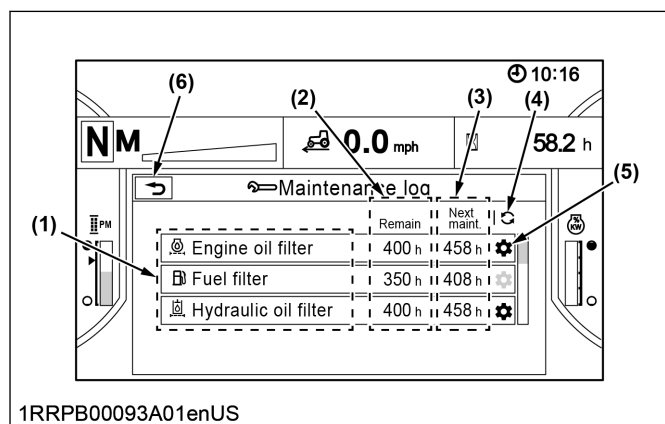
The following items can be checked and changed on the "Maintenance log" screen. Modify these settings as required.

[Premium model]

The "Maintenance log" screen can be displayed from the "Menu" screen.

[Deluxe model]

The "Maintenance log" screen can be displayed from the "Function menu" screen.



No.	Description
(1)	Maintenance parts list • Engine oil filter • Fuel filter • Hydraulic oil filter • Transmission oil filter • Transmission oil • Engine oil • Front axle oil
(2)	Remaining time for maintenance Displays the remaining time until the next maintenance. As the hour meter progresses, the remaining time decreases. When the remaining time for maintenance is less than 20 hours, the remaining time will be displayed in yellow. When the remaining time for maintenance is 0 hours, the remaining time will be displayed in red.
(3)	Next maintenance time Displays the scheduled hour meter time for the next maintenance. When the remaining time is reset, the next maintenance time will be updated to reflect the hour meter time for the next scheduled maintenance based on the maintenance cycle.
(4)	Update icon The remaining time can be reset.
(5)	Maintenance cycle settings icon Maintenance parts with a white icon can change the maintenance cycle. Maintenance parts with a grayed-out icon cannot change the maintenance cycle.
(6)	Back icon [Premium model] Returns to the "Menu" screen. [Deluxe model] Returns to the "Function menu" screen.

1. Resetting the remaining time for maintenance

IMPORTANT :

After performing maintenance, reset the remaining time.

1. Display the "Maintenance log" screen.

[Premium model]

"Menu" → "Maintenance log"

[Deluxe model]

Screen navigation

"Performance monitor" → "Function menu" → "Maintenance log"

(For details on accessing the screens, see EXAMPLE OF OPERATING THE DISPLAY CONTROL DEVICE on page 50.)

2. Select the update icon and display the checkbox.

[Premium model]

Rotate the jog dial to select the update icon, then press the jog dial push button to display the checkbox.

[Deluxe model]

Press the next button or the previous button to select the update icon, then press the enter button to display the checkbox.

3. Select the maintenance parts to reset and check the checkbox.

[Premium model]

Rotate the jog dial to select the maintenance parts to reset, then press the jog dial push button to check the checkbox.

[Deluxe model]

Press the next button or the previous button to select the maintenance parts to reset, then press the enter button to check the checkbox.

NOTE :

Maintenance parts with the remaining time of 20 hours or less are automatically checked in the check box.

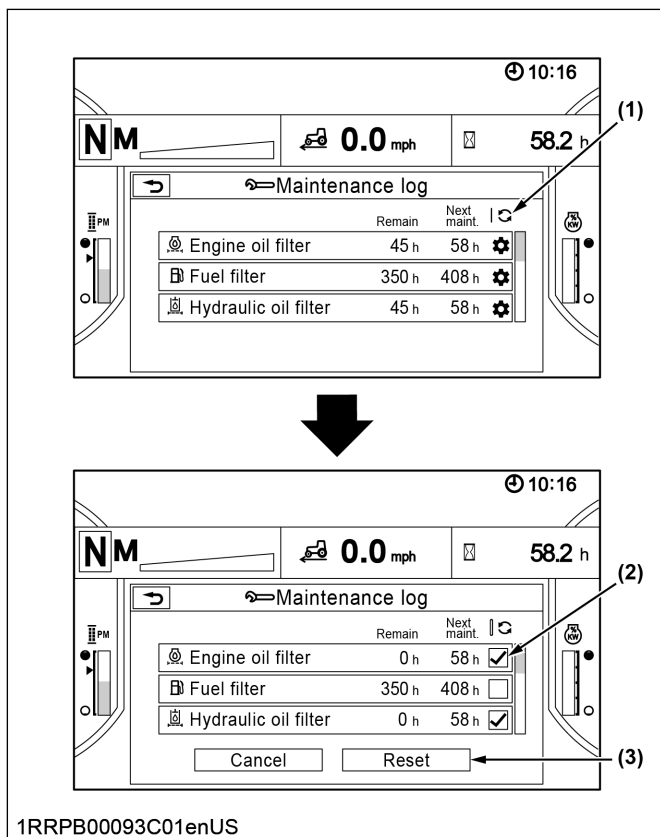
4. Select "Reset".

[Premium model]

Rotate the jog dial to select "Reset", then press the jog dial push button.

[Deluxe model]

Press the next button or the previous button to select "Reset", then press the enter button.



- (1) Update icon
(2) Checkbox
(3) Reset

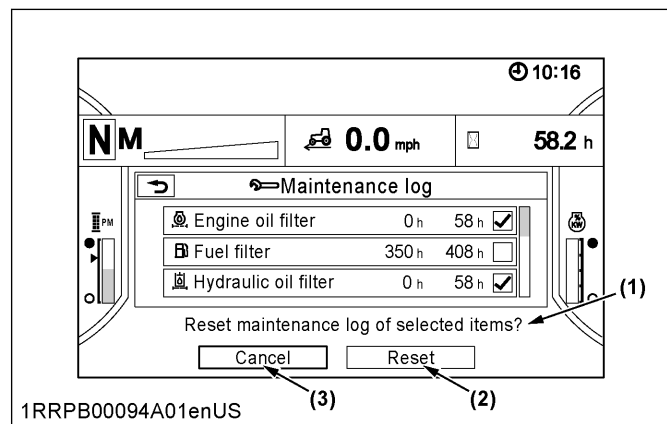
5. After selecting, the confirmation message is displayed. Select “Reset” or “Cancel”.

[Premium model]

- Rotate the jog dial to select “Reset” or “Cancel”, then press the jog dial push button.
- Press “Reset” to complete the reset.
- Press “Cancel” to return to the previous screen.

[Deluxe model]

- Press the next button or the previous button to select “Reset” or “Cancel”, then press the enter button.
- Select “Reset” to complete the reset.
- Select “Cancel” to return to the previous screen.



- (1) Confirmation message
(2) Reset
(3) Cancel

2. Changing the maintenance cycle

IMPORTANT :

When using biodiesel, check the maintenance requirements of biodiesel fuel as the intervals will change for some of the items.

NOTE :

For parts that have completed the initial reset, the maintenance cycle can be changed starting from the second reset.

1. Display the “Maintenance log” screen.

[Premium model]

“Menu” → “Maintenance”

[Deluxe model]

“Performance monitor” → “Function menu” → “Maintenance log”

(For details on accessing the screens, see EXAMPLE OF OPERATING THE DISPLAY CONTROL DEVICE on page 50.)

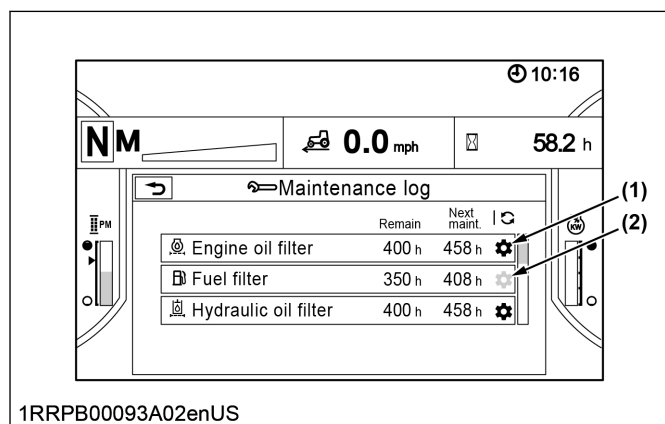
2. Select the active settings icon.

[Premium model]

Rotate the jog dial to select the active settings icon, then press the jog dial push button to display the maintenance cycle settings screen.

[Deluxe model]

Press the next button or the previous button to select the active settings icon, then press the enter button to display the maintenance cycle settings screen.



- (1) Active setting icon
(2) Not active setting icon

3. Adjust to the desired maintenance cycle.

[Premium model]

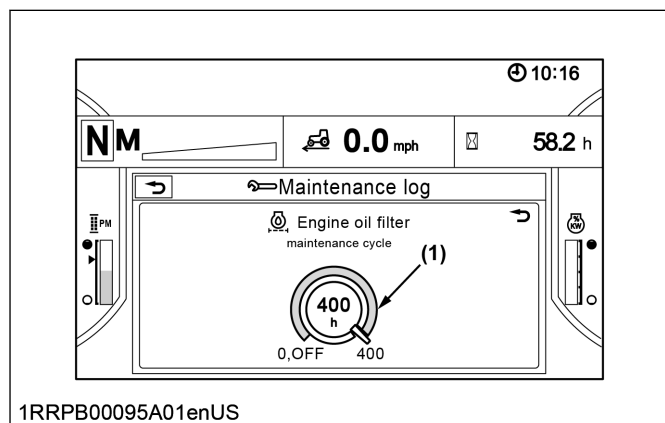
Rotate the jog dial to adjust the maintenance cycle, then press the jog dial push button to confirm your selection.

[Deluxe model]

Press the next button or the previous button to adjust the maintenance cycle, then press the enter button to confirm your selection.

4. After confirmation, the screen will return to the previous screen.

Example: Maintenance cycle settings screen of engine oil filter

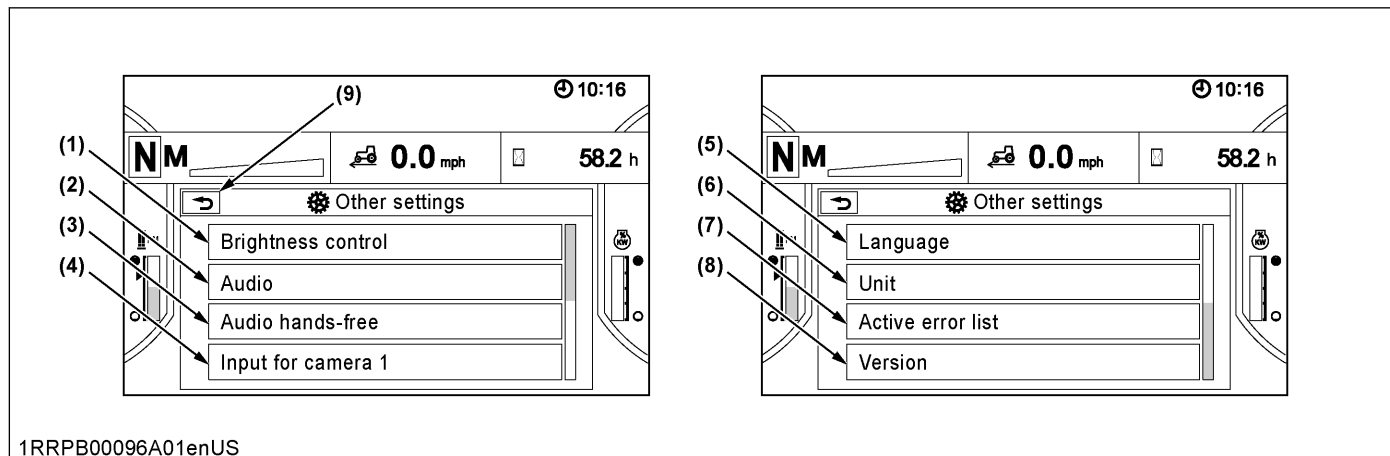


- (1) Maintenance cycle dial

NOTE :

- The maintenance cycle can be changed in units of 10 hours.
 - If the maintenance cycle is set to 20 hours or less, the upcoming maintenance alert will not appear.
 - If the maintenance cycle is set to "OFF", the maintenance alert will not appear.
- The time until the next maintenance is displayed as the last reset time.

OTHERS SETTINGS MENU SCREEN



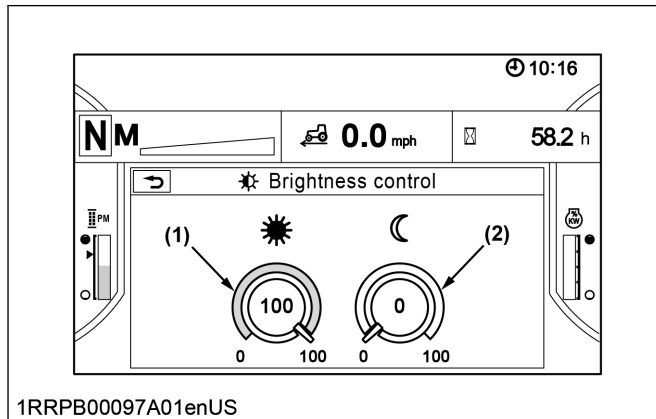
No.	Description	Ref. page
(1)	Brightness control The screen brightness can be adjusted.	83
(2)	Audio [CAB model] (if equipped) The following settings can be configured: - Connect Bluetooth - Switch the audio function to "ON" or "OFF" NOTE : - When the audio function is turned off, the hands-free function is also disabled. [Deluxe CAB model] When the optional CAN radio kit is installed, the audio controls can be used.	83
(3)	Audio hands free [CAB model] (if equipped) The following settings can be configured: - Switch the hands-free function to "ON" or "OFF" - Adjust the hands-free volume NOTE : [Deluxe CAB model] When the optional CAN radio kit is installed, the hands free can be used.	84
(4)	Input for camera (Optional for the premium model) The following settings can be configured: - Switch the camera input screen to "ON" or "OFF" - Flip the camera image horizontally - Switch the "Display when reversing" to "ON" or "OFF" NOTE : If the camera kit is installed, the "Input for camera" is displayed.	85
(5)	Language The language displayed on the screen can be selected.	85
(6)	Unit [Premium model] The unit and decimal symbol displayed on the screen can be selected.	86
(7)	Active error list The currently occurring fault can be checked.	86
(8)	Version The version information of the DBM software and hardware can be checked.	-
(9)	Back icon Returns to the "Menu" screen.	-

NOTE :

The deluxe model does not have the "Menu" screen. Display the settings screens from the "Function menu" screen.

1. Adjusting the screen brightness [Premium model]

1. Display the “Brightness control” screen.
“Menu” → “Other settings” → “Brightness control”
(For details on accessing the screens, see
EXAMPLE OF OPERATING THE DISPLAY
CONTROL DEVICE on page 50.)
2. Rotate the jog dial to select the desired function.



No.	Name	Function
(1)	Daytime brightness dial	The screen brightness can be adjusted for when the headlights are off. Rotate the jog dial to adjust the daytime brightness and press the jog dial push button to confirm.
(2)	Night brightness dial	The screen brightness can be adjusted for when the headlights are on. Rotate the jog dial to adjust the nighttime brightness and press the jog dial push button to confirm.

2. Setting the Bluetooth connection and audio [CAB model] (if equipped)

NOTE :

[Deluxe CAB model]

When the optional CAN radio kit is installed, the “Audio” can be set.

1. Display the “Audio” screen.

[Premium CAB model]

- “Menu” → “Other settings” → “Audio”
- “Performance monitor” → “Shortcut menu” → “Audio”

[Deluxe CAB model]

“Performance monitor” → “Function menu” → “Audio”

(For details on accessing the screens, see
EXAMPLE OF OPERATING THE DISPLAY
CONTROL DEVICE on page 50.)

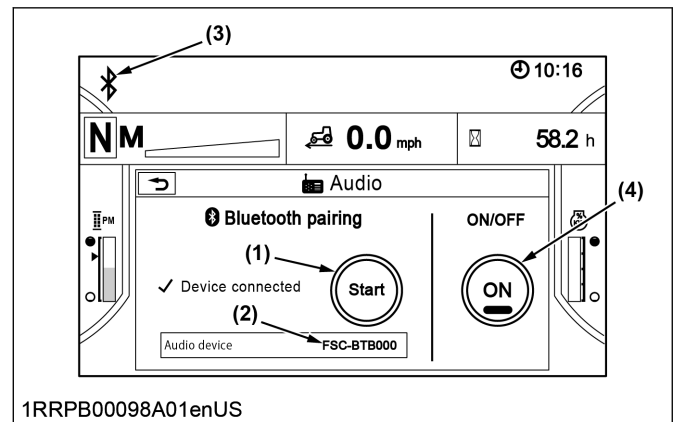
2. Select the desired function.

[Premium CAB model]

Rotate the jog dial to select a function.

[Deluxe CAB model]

Press the next button or the previous button to select a function.



No.	Name	Function
(1)	Pairing start button	The pairing start button initiates the pairing process with the Bluetooth devices. [Premium CAB model] 1. Press the jog dial push button to start pairing. 2. Select the audio device name on your Bluetooth device. 3. When pairing is successful, the Bluetooth icon will be displayed. [Deluxe CAB model] 1. Press the enter button to start pairing. 2. Select the audio device name on your Bluetooth device. 3. When pairing is successful, the Bluetooth icon will be displayed. NOTE : • When the engine is restarted, the system will automatically search for and pair with the nearest registered Bluetooth device. • To connect to a different Bluetooth device, press the pairing start button again to initiate pairing with the new device.
(2)	Audio device name	The name of the Bluetooth device on the tractor is displayed on the screen of the Bluetooth-enabled device.
(3)	Bluetooth activated icon	The Bluetooth icon will be displayed when pairing is successful.
(4)	Audio control ON/OFF switch	The audio control function can be switched to "ON" or "OFF". When the audio control function is set to "ON", the audio screen can be displayed on various display screens. [Premium CAB model] • Press the jog dial push button to switch to "ON" or "OFF". [Deluxe CAB model] • Press the enter button to switch to "ON" or "OFF".

3. Setting the audio hands-free ON and OFF [CAB model] (if equipped)

NOTE :

- If the audio function is set to "OFF", the hands-free is not available.
When using hands-free function, turn the audio function to "ON".
- **[Deluxe CAB model]**
When the optional CAN radio kit is installed, the audio hands-free can be set.

1. Display the "Audio hands-free" screen.

[Premium CAB model]

- "Menu" → "Other settings" → "Audio hands-free"

- "Performance monitor" → "Shortcut menu" → "Audio hands-free"

[Deluxe CAB model]

- "Performance monitor" → "Function menu" → "Audio hands-free"

(For details on accessing the screens, see EXAMPLE OF OPERATING THE DISPLAY CONTROL DEVICE on page 50.)

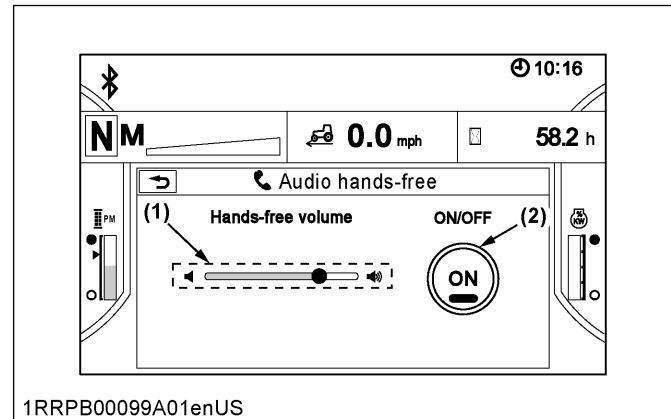
2. Select the desired function.

[Premium CAB model]

Rotate the jog dial to select a function.

[Deluxe CAB model]

Press the next button or the previous button to select a function.



No.	Name	Function
(1)	Hands-free volume	The hands-free volume can be changed. [Premium CAB model] Rotate the jog dial to adjust the hands-free volume and press the jog dial push button to confirm your selection. [Deluxe CAB model] Press the next button or the previous button to adjust the hands-free volume and press the enter button to confirm your selection. NOTE : [Deluxe CAB model] The volume switch on the right console can also be adjusted to the hands-free volume.
(2)	Hands-free ON/OFF switch	The hands-free function can be switched to "ON" or "OFF". When the hands-free function is set to "ON", the hands-free screen can be displayed on various display screens. [Premium CAB model] Press the jog dial push button to switch to "ON" or "OFF". [Deluxe CAB model] Press the enter button to switch to "ON" or "OFF".

4. Setting the camera input (option for the premium model)

NOTE :

When the optional camera 1 or 2 kit is installed, the camera 1 or 2 screen can be displayed.

The premium CAB model can accommodate two camera kits, which enables the configuration of camera input 1 and camera input 2.

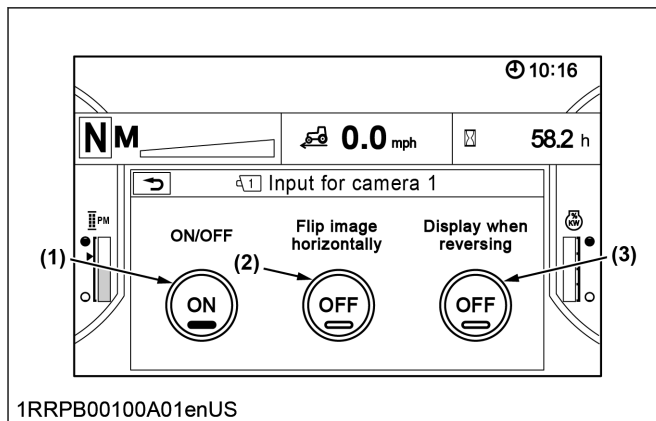
If optional two camera kits are installed, the selector kit is required.

The premium ROPS model can accommodate one camera kit on the front side of the tractor.

The method for setting the camera input 1 and camera input 2 is the same.

The setting method for the camera input 1 will be explained as an example.

1. Display the "Input for camera 1" screen.
"Menu" → "Other settings" → "Input for camera 1"
(For details on accessing the screens, see EXAMPLE OF OPERATING THE DISPLAY CONTROL DEVICE on page 50.)
2. Rotate the jog dial to select the desired function.



No.	Name	Function
(1)	Camera input ON and OFF switch	The camera input function can be switched to "ON" or "OFF". When the camera input function is set to "ON", the camera input screen can be displayed on various display screens. Press the jog dial push button to switch to "ON" or "OFF".
(2)	Camera image inversion ON and OFF switch	The camera image inversion can be switched to "ON" or "OFF". When the camera image inversion is set to "ON", the image on the camera input screen will be flipped horizontally. Press the jog dial push button to switch to "ON" or "OFF".
(3)	Display-when-reversing ON and OFF switch	The display-when-reversing function can be switched to "ON" or "OFF". When the display-when-reversing function is set to "ON", the camera input screen will be displayed while the speed control pedal is depressed backwards. It is recommended for use when checking behind you while reversing. Press the jog dial push button to switch to "ON" or "OFF". NOTE : If two camera kits are installed, the display-when-reversing cannot display two screens at the same time. The display-when-reversing that is set to "ON" later will be displayed.

5. Setting the language

1. Display the "Language" screen.

[Premium model]

"Menu" → "Other settings" → "Language"

[Deluxe model]

"Performance monitor" → "Function menu" → "Language"

(For details on accessing the screens, see EXAMPLE OF OPERATING THE DISPLAY CONTROL DEVICE on page 50.)

2. Select the language.

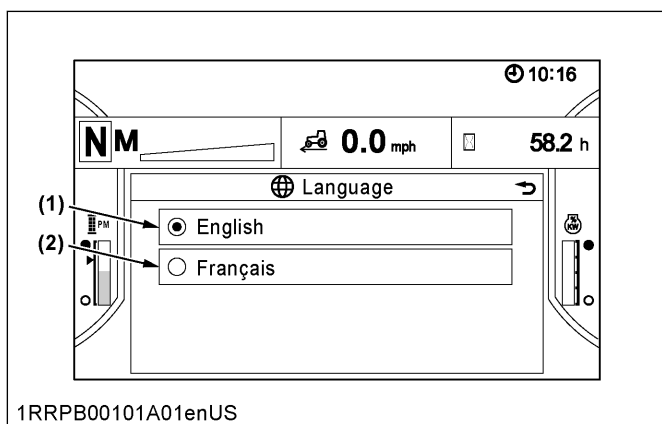
[Premium model]

Rotate the jog dial to select the language and press the jog dial push button to confirm your selection.

[Deluxe model]

Press the next button or the previous button to select the language and press the enter button to confirm your selection.

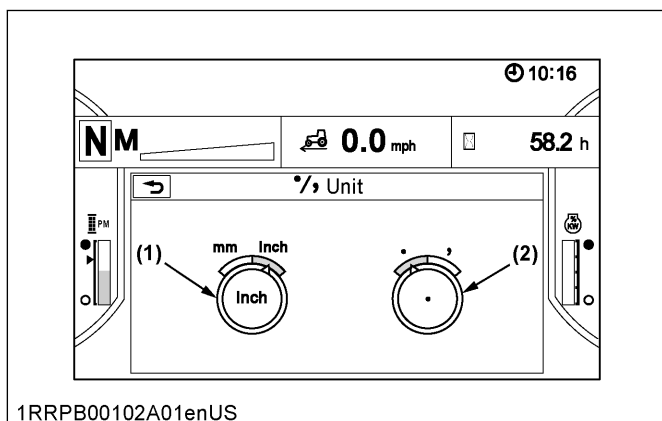
3. After confirmation, the screen will return to the previous screen.



- (1) English
(2) French

6. Setting the unit [Premium CAB model]

- Display the "Unit" screen.
"Menu" → "Other settings" → "Unit"
(For details on accessing the screens, see EXAMPLE OF OPERATING THE DISPLAY CONTROL DEVICE on page 50.)
- Rotate the jog dial to select the desired function.



No.	Name	Function
(1)	Unit select switch	The unit can be switched between metric (mm) and imperial (inch). Press the jog dial push button to switch to "mm" or "inch".
(2)	Decimal symbol select switch	The decimal symbol can be switched between a period and a comma. Press the jog dial push button to switch to a period or a comma.

NOTE :

The following units are changed according to the unit setting.

metric (mm)	imperial (inch)
mm	inch
km/h	mph
L/h	gal/hr
L	gal
L/ha	gal/ac
km/L	mpg
ha/h	ac/hr
ha	acres
km	mile
°C	°F
cm	inch
m	ft.

7. Checking the active error list

- Display the "Active error list" screen.

[Premium model]

"Menu" → "Other settings" → "Active error list"

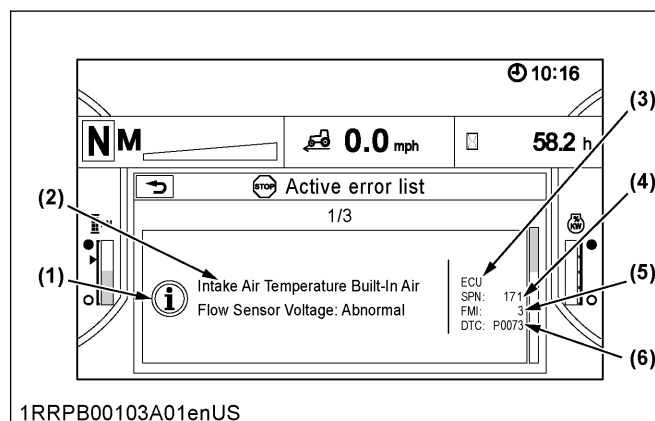
[Deluxe model]

"Performance monitor" → "Function menu" → "Active error list"

(For details on accessing the screens, see EXAMPLE OF OPERATING THE DISPLAY CONTROL DEVICE on page 50.)

- The currently occurring fault is displayed on the "Active error list" screen.

If multiple faults have occurred, up to 16 can be listed, and you can scroll through them using the jog dial.



- (1) Alert indicator (4) SPN code
(2) Error message (5) FMI code
(3) Name of electric control unit (6) P/U code

NOTE :

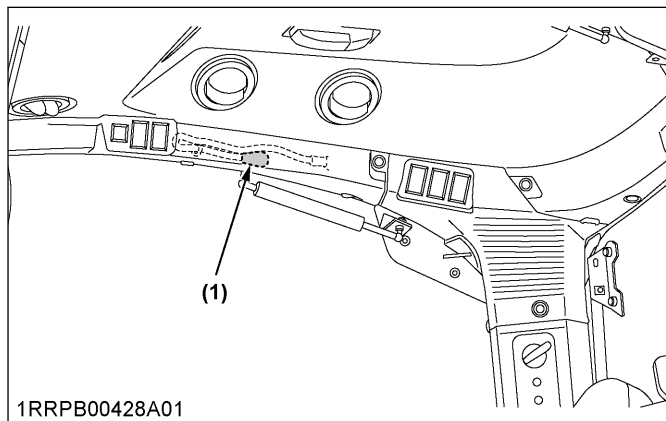
If there is no failure, the "Active error list" screen will display "Any active error are not received".

RADIO

BLUETOOTH MICROPHONE

The Bluetooth microphone is used to make hands-free calls.

(See Operating the "Bluetooth Hands-free" screen on page 60 for instructions on how to use the hands-free phone)



(1) Bluetooth microphone

NOTE :

- To use the Bluetooth microphone, settings on your mobile phone may be required. See the operating manual of your mobile phone for details of connecting the device.

IMPACT OF BLUETOOTH

Bluetooth specifications and supported profiles

Supported Bluetooth specifications

Version : 5.0

Class : 1

Supported profiles: A2DP, AVRCP, HFP

Number of registered pairings allowed: Maximum 5

NOTE :

- We do not guarantee that all Bluetooth devices can be operated with this machine.
- If the Bluetooth of the connected device is older than recommended version or incompatible, the Bluetooth functions may not work properly.
- This product complies with the legally stipulated technical standards regarding the required standards for radio equipment and EMC regulations for radio equipment. The sticker affixed on the products is the proof. Do not remove the sticker.

IMPORTANT :

- Do not use Bluetooth-connected mobile devices near the radio unit. If the Bluetooth-connected mobile device gets too close, the sound quality and connection will deteriorate.

Persons using a pacemaker or other electrical device for medical treatment,

note of the following points regarding radio waves in Bluetooth communication.



WARNING

To avoid personal injury or death:

- The antenna for Bluetooth communication is built in the radio unit.
With the exception of an implantable cardiac pacemaker, implantable biventricular pacing pulse generator, and implantable cardioverter defibrillator, if you are using an electrical device for medical treatment, check in advance with your physician and the manufacturer of the medical device about the impact of radio waves. Radio waves may affect the operation of electrical devices for medical treatment.

Bluetooth connected mobile devices

A Bluetooth connected mobile device is used for wireless (Bluetooth) communication with this machine. For example, hands-free mobile use is possible even when your device is in your pocket.

NOTE :

- If the Bluetooth connected mobile device is used simultaneously with other radio devices, it can adversely impact their communication.
- If Wi-Fi®, Miracast® and Bluetooth-connected mobile devices using the 2.4 GHz band radio communication are used simultaneously with this machine, it can adversely impact their communication.
- Batteries of Bluetooth-connected mobile devices will drain faster due to Bluetooth connection.
- The frequency band used by Bluetooth-connected mobile devices are used for industrial use such as microwave ovens, scientific use, and use in medical devices, in addition to the following radio stations.
 - On-site radio stations for moving object identification used in factory production lines, etc. (radio stations that require a license)

- Specified low-power radio stations (radio stations that do not require a license)
- Amateur radio stations (radio stations that require a license)

(The 3 types of radio stations mentioned above are hereinafter abbreviated as "other radio stations")

Before using a Bluetooth-connected mobile device, ensure there are no "other radio stations" operating nearby.

In the unlikely event of hazardous radio interference from a Bluetooth-connected mobile device to "other radio stations", immediately change the location of use to avoid radio interference.

- The frequency band used by Bluetooth-connected mobile devices is the 2.4 GHz band. FH-SS modulation is used as the modulation method.

The expected giving interference distance is 10 m or less.

Bluetooth-connected mobile devices use the entire bandwidth and can evade the bandwidth of moving object identification equipment.

Hands-free

By connecting an operation-confirmed Bluetooth-connected mobile device* (hereinafter referred to as "mobile phone") to this machine, you can use the phone functions of "calling" and "receiving calls" without directly operating the mobile phone. This is called the hands-free function.

To connect to this machine, use a mobile phone that is compatible with the specifications of this machine. However, some functionality may be limited depending on the mobile phone model.



WARNING

To avoid personal injury or death:

- For safety reasons, when using a mobile phone in hands-free mode, the driver should not operate the mobile phone while driving.
- Stop the vehicle at a safe place and make your call. If you receive a phone call while driving, drive carefully and keep the call brief.

Situations when the hands-free function cannot be used

- Hands-free operation is not possible in the following cases:
 - When outside the calling area
 - When outgoing calls are restricted, such as when the line is busy
 - When on an emergency call
 - When the mobile phone is dial-locked
 - When the mobile phone is in use, such as when data communication is in progress
 - When the mobile phone is malfunctioning

- When the mobile phone is not connected to this machine
- When the mobile phone battery is low
- When the mobile phone is switched off
- When the mobile phone is not set to hands-free mode
- And also, when the mobile phone is not usable

NOTE :

- If there is a contract for three-way calling, deactivate three-way calling on the mobile phone before use.

Calls

Use the microphone for calls.

- Audio such as incoming call notifications and on-call voice is output from the speaker.
- Audio sounds are muted (silenced) when voice, ring tone, etc. are output in hands-free mode.

NOTE :

- Adjust the receiving volume as low as possible. If the volume is too loud, the other person's voice may be heard outside the vehicle or they might hear an echo during the call.
- In the following cases, it may be difficult for the other party to hear your voice.
 - When driving on rough roads
 - When the window is open
 - When the air conditioner is noisy
 - When a cell phone is placed close to the microphone
- The sound quality may deteriorate (noise, echoes, etc.) due to the cell phone or network used.

IMPORTANT :

- Do not touch the microphone or insert pointed objects into it. This may cause the microphone to malfunction.

COMPLIANCE STATEMENT

1. FCC Statement

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC CAUTION

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

U.S.A. : Kubota Tractor Corporation
1000 Kubota Drive, Grapevine, TX 76051
Telephone : (817)756-1171

2. ISED Canada Statement

This device contains licence-exempt transmitter(s)/ receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

1. This device may not cause interference.
2. This device must accept any interference, including interference that may cause undesired operation of the device.

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

1. L'appareil ne doit pas produire de brouillage;
2. L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Canada : Kubota Canada Ltd.

1155 Kubota Drive, Pickering, Ontario L 1X 0H4,
Canada

Telephone : (905)294-7477

PRE-OPERATION CHECK

DAILY CHECK

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



WARNING

To avoid personal injury or death, check and service the tractor on a level surface with the engine shut off, the parking brake “ON” and the implement lowered to the ground.

Check item

- Walk around inspection
- Check engine oil level
- Check transmission oil level
- Check coolant level
- Check water separator
- Clean grille and radiator screen
- Clean oil cooler
- Clean fuel cooler
- Check DPF muffler
- Check air cleaner dust indicator
(When used in a dusty place)
- Check brake pedal
- Check gauges, meter, and Easy Checker
- Check lights
- Check seat belt and ROPS
- Check movable parts
- Check antifrost heater for oil separator (if equipped)
- Check the fuel tank and refuel
(See DAILY CHECK on page 184.)
- Care of the safety labels
(See SAFETY LABELS on page 16.)

OPERATING THE ENGINE

WARNING

To avoid personal injury or death:

- Read and understand the safe operation section.
(See **SAFE OPERATION** on page 9.)
- Read and understand the safety labels located on the tractor.
- To avoid the danger of exhaust fume poisoning, do not operate the engine in a closed building without proper ventilation.
- Never start the engine while standing on the ground. Start the engine only from the operator's seat.
- Set all shift levers to the “**NEUTRAL**” positions and to place the PTO clutch control switch in its “**OFF**” position before starting the engine.

IMPORTANT :

- Do not use starting fluid or ether.
- To protect the battery and the starter, make sure that the starter is not continuously turned for more than 10 seconds.

EXHAUST AFTERTREATMENT DEVICES

WARNING

To avoid personal injury or death:

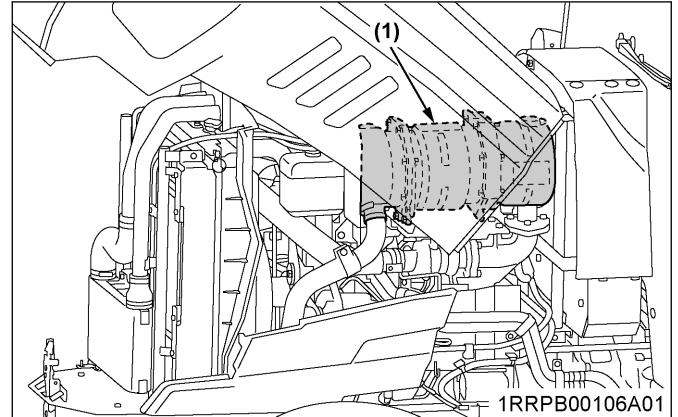
- During diesel particulate filter (DPF) regenerating operations, exhaust gases and exhaust filter components reach temperatures hot enough to burn people or ignite or melt common materials.
- Keep the machine away from people, animals or structures which may be susceptible to harm or damage from hot exhaust gases.
- During regeneration, white exhaust gases may be visible. Do not allow regeneration in an unventilated garage or confined area.
- During regeneration, do not leave the machine.

DIESEL PARTICULATE FILTER (DPF) MUFFLER

This machine is equipped with an engine with a diesel particulate filter (DPF) muffler which serves to reduce hydrocarbons, carbon monoxide and other toxic gases, all of which are contained in diesel engine emissions, to

harmless carbon dioxide and water. The DPF also traps particulate matter (PM).

Please handle exhaust aftertreatment devices correctly and in an environmentally responsible manner.



(1) Diesel particulate filter (DPF)

1. Handling points

When a specific amount of particulate matter (PM) has accumulated in the DPF muffler, it is necessary to refresh the DPF muffler by burning the PM inside it.

This burning off work is called “**Regeneration**”.

To extend operating time to reach this regeneration, and to avoid DPF muffler trouble, observe the following handling matters.

Fuel

Use ultra-low sulfur fuel (S15).

IMPORTANT :

Use of diesel fuel other than ultra-low sulfur fuel may adversely affect the engine and DPF performance.

Use of fuels other than ultra-low sulfur fuel (S15) may not meet regulations for your region.

Engine oil

Use DPF-compatible oil (CJ-4) for the engine.

IMPORTANT :

If any engine oil other than CJ-4 is used, the DPF may become clogged earlier than expected and the fuel economy may drop.

Prohibition of unnecessary idling operation

Generally, the lower the engine speed, the lower the exhaust gas temperature is, so the PM contained in exhaust gas will not be burned, and begins to accumulate. Therefore, do not idle unnecessarily.

Regeneration

When there is “*Regeneration*” instruction sign by lamp or buzzer, immediately perform the required procedure for regeneration.

IMPORTANT :

If you interrupt the regeneration cycle or you continue the operation while ignoring the warning signs, the DPF and engine may become damaged.

2. DPF regeneration process

DPF regeneration process can be performed by choosing “*Auto regeneration*” or “*Regeneration inhibit*” mode according to your job conditions.

For jobs not affected by hot gases emitted during regeneration, “*Auto regeneration*” is advisable.

Auto regeneration mode

When starting the engine (switch operation is unnecessary), the “*Auto regeneration*” mode is automatically activated.

With the auto regeneration mode on, when a specific amount of PM has accumulated, and the regeneration conditions are satisfied, the DPF will be automatically regenerated whether the tractor is in motion or parked.

(See Tips on diesel particulate filter (DPF) regeneration on page 98.)

For more details, read the “*Auto regeneration*” section of this manual.

(See Operating procedure for auto regeneration mode on page 93.)

Regeneration inhibit mode

After starting the engine, if the “*regeneration inhibit switch*” is pressed to turn on the switch lamp, the “*Regeneration inhibit*” mode will be activated.

With “*Regeneration inhibit*” mode on, the PM which has accumulated inside the DPF will not be burned, unless the operator performs the regeneration work manually.

The “*Regeneration inhibit*” mode is effective for work in poorly ventilated workspaces.

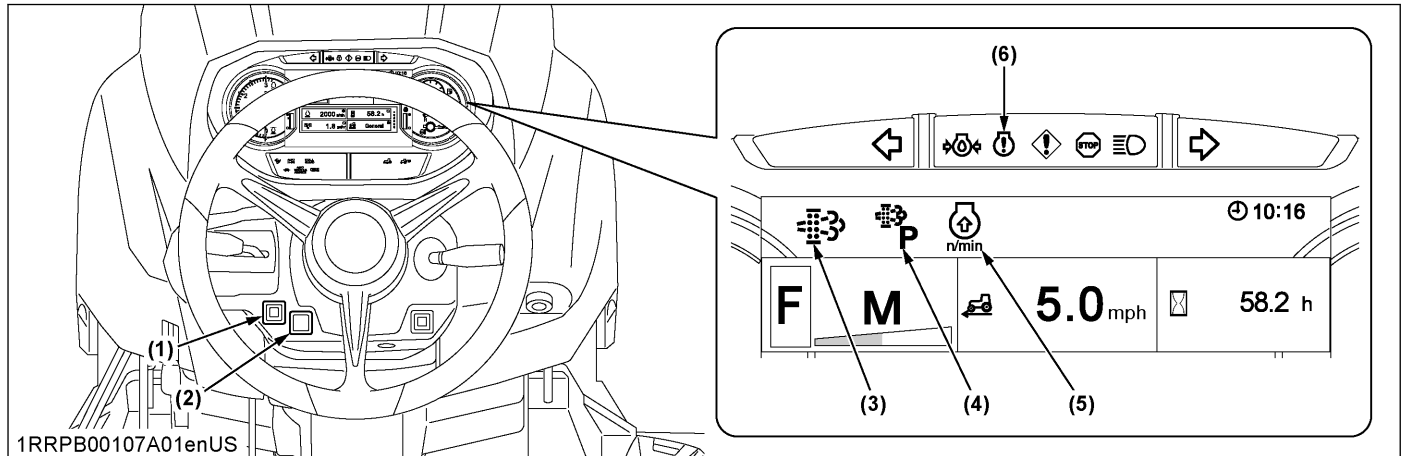
For more details, read the regeneration prohibition section of this manual.

(See Operating procedure for regeneration inhibit mode on page 95.)

NOTE :

If the engine is stopped once, the “*Auto regeneration*” mode will be activated.

3. Operating procedure for auto regeneration mode



1RRPB00107A01enUS

- (1) Parked regeneration switch
(2) Regeneration inhibit switch

- (3) Regeneration indicator
(4) Parked regeneration indicator

- (5) Engine rpm increase indicator
(6) Engine warning indicator

Regeneration operating procedure

1. Start the engine.

Make sure that the regeneration inhibit switch lamp  is off.

Switch lamp "OFF": Auto regeneration mode activated.

Switch lamp "ON": Regeneration inhibit mode activated.

NOTE :

- When the engine is started, the "Auto regeneration" mode is automatically activated.
- "Regeneration inhibit" mode is activated when the regeneration inhibit switch is pushed after the engine is started.

2. When the regeneration indicator  starts to flash:

A specific amount of PM has built up in the DPF.

Continue to operate the machine, and the regeneration process will begin automatically. Make sure that the working place is in a safe area as DPF and exhaust temperature will rise.

3. When the engine rpm increase indicator  starts to flash:

Keep on working and increase the engine rpm until the indicator turns off.

NOTE :

- Even if the auto regeneration mode is selected, DPF regeneration may not begin because system requirements have not been satisfied.
- The engine rpm increase indicator is used as a guide to satisfy the regeneration conditions. If the engine load is too heavy, the engine rpm increase indicator may continue to flash, even though regeneration system conditions are satisfied and regeneration may begin automatically.
(See Tips on diesel particulate filter (DPF) regeneration on page 98.)

3.1 PM warning level and required procedures

During auto regeneration mode when the PM level has built up in the DPF, the regeneration cycle will begin automatically.

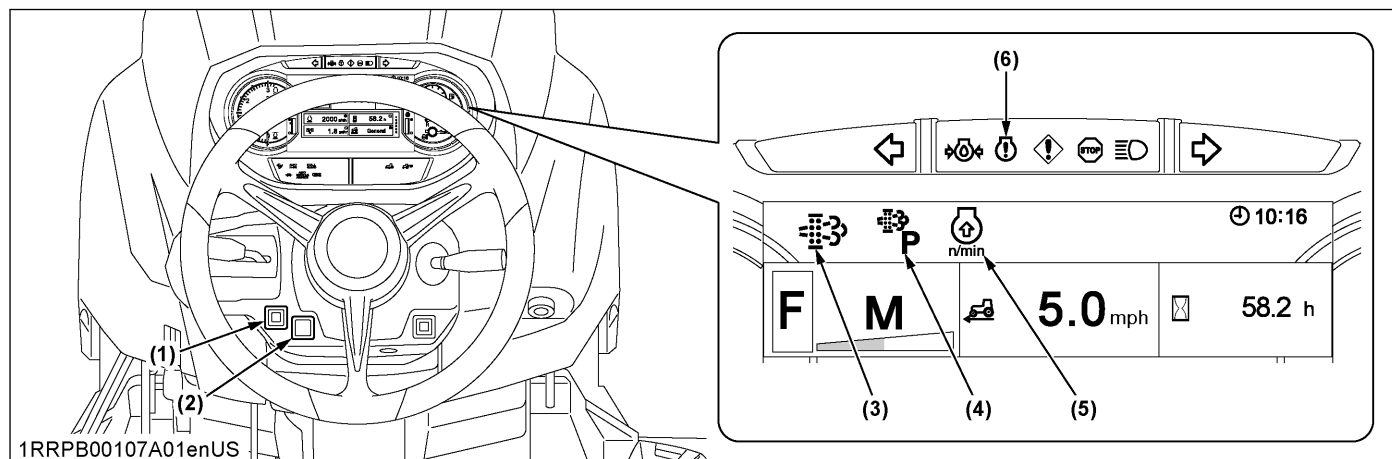
If the regeneration cycle is interrupted or the regeneration conditions are not satisfied, the buzzer starts to sound and the indicator display changes in response to the PM level in order to prompt the operator to perform the required procedure listed in the following table.

IMPORTANT :

Once the regeneration level has been reached, immediately perform the required procedure for regeneration. If you interrupt the regeneration cycle or you continue the operation while ignoring the warning signs, the DPF and engine may become damaged.

Auto mode		
	DPF system status	Required procedure
PM warning level: 1 Buzzer: Not sounding	 The regeneration indicator starts to flash.	A specific amount of PM has accumulated in the DPF muffler. Continue to work the tractor to raise the DPF temperature. Continue the work and increase the engine rpm until the indicator turns off. The regeneration cycle begins and continues until cycle is complete then the indicator will turn off.
	 The rpm increase indicator starts to flash.	
	 The regeneration indicator will stop flashing and remain “ON” constantly.	
PM warning level: 2-1 Buzzer: Sounding every 5 seconds	If the regeneration cycle was interrupted or conditions are not satisfied for regeneration then DPF system is now in Level 2.	
PM warning level: 2-2 Buzzer: Sounding every 3 seconds	 The regeneration indicator starts to flash.	Start the regeneration, referring to PM warning level: 1 above. Now the parked regeneration indicator starts to flash, and the parked regeneration can also be started. If the regeneration conditions are not met, perform the parked regeneration procedure. (See Operating procedure for parked regeneration on page 97.)
	 The rpm increase indicator starts to flash.	
	 The parked regeneration indicator starts to flash.	
PM warning level: 3 Buzzer: Sounding every 1 second Engine output: 50 %	If the regeneration fails in the warning level 2:	
	 The engine warning indicator starts to flash.	Immediately stop working the machine and begin the parked regeneration cycle process. (See Operating procedure for parked regeneration on page 97.) At this PM warning level, the auto regeneration mode does not function. If the machine is operated further, the regeneration cycle will be disabled.
	 The parked regeneration indicator starts to flash.	
PM warning level: 4 Buzzer: Sounding every 1 second Engine output: 50 %	If the parked regeneration is interrupted or the machine is continuously operated in the warning level 3:	
	 The engine warning indicator remains constantly “ON”.	Immediately move the engine to a safe place, park it there and turn off the engine. Contact your local Kubota dealer. At this level, never continue to operate the machine; otherwise, damage will result to the DPF and engine.

4. Operating procedure for regeneration inhibit mode



1RRPB00107A01enUS

- (1) Parked regeneration switch
(2) Regeneration inhibit switch

- (3) Regeneration indicator
(4) Parked regeneration indicator

- (5) Engine rpm increase indicator
(6) Engine warning indicator

Regeneration operating procedure

1. Start the engine.
2. Press the regeneration inhibit switch , and the switch lamp illuminates.

Switch lamp "ON": Regeneration inhibit mode selected.

Switch lamp "OFF": Auto regeneration mode selected.

3. When the parked regeneration indicator  starts to flash:

A specific amount of PM has accumulated in the DPF muffler.

Move the tractor to a safe place and activate the DPF muffler.

(See Operating procedure for parked regeneration on page 97.)

4.1 PM warning level and required procedures

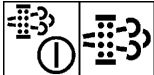
In the regeneration inhibit mode, the buzzer starts to sound and the indicator display changes in response to the PM level in order to prompt the operator to perform the required procedure listed in the following table.

IMPORTANT :

Once the regeneration level has been reached, immediately perform the required procedure for regeneration. If you interrupt the regeneration cycle or you continue the operation while ignoring the warning signs, the DPF and engine may become damaged.

Regeneration inhibit mode		
	DPF system status	Required procedure
PM warning level: 1 Buzzer: Not sounding	 The regeneration indicator starts to flash.	A specific level of PM has built up in the DPF muffler. You can continue with the operation as it is, or you can move the tractor to a safe area and then begin the parked regeneration cycle process. (See Operating procedure for parked regeneration on page 97.)
	 The parked regeneration indicator starts to flash.	
	 At PM warning levels range from 1 to 2-2, it is also possible to change regeneration inhibit switch to auto regeneration mode, then perform the regeneration.	
PM warning level: 2-1 Buzzer: Sounding every 5 seconds	 The regeneration indicator starts to flash.	Move the tractor to a safe area, then begin the parked regeneration cycle process. (See Operating procedure for parked regeneration on page 97.)
PM warning level: 2-2 Buzzer: Sounding every 3 seconds	 The parked regeneration indicator starts to flash.	
PM warning level: 3 Buzzer: Sounding every 1 second Engine output: 50 %	If the parked regeneration cycle is interrupted or the tractor is continuously operated in the PM warning level 2:	
	 The engine warning indicator starts to flash.	Immediately stop working the tractor, move the tractor to a safe area, then begin the parked regeneration cycle process. (See Operating procedure for parked regeneration on page 97.) If the tractor is operated further and the operator ignores the warning signs, then regeneration will be disabled.
	 The parked regeneration indicator starts to flash.	
PM warning level: 4 Buzzer: Sounding every 1 second Engine output: 50 %	If the regeneration cycle is interrupted or the tractor is continuously operated ignoring the warning signs, in the PM warning level 3:	
	 The engine warning indicator remains constantly “ON”.	Immediately move the tractor to a safe place, park it there and turn off the engine. Contact your local Kubota dealer. At this level, do not continue to operate the tractor; otherwise, damage may result to the DPF and engine.

5. Operating procedure for parked regeneration

1. Park the tractor in a safe area away from buildings, people and animals.
2. Apply the parking brake.
3. Set the speed control pedal to the neutral position.
4. Turn off the PTO clutch control switch or lever.
5. Return the engine rpm to the idle speed.
6. Lower the implement to the ground.
Turn steering wheel so front wheels are in the straight ahead position.
7. Press the regeneration inhibit switch , and the switch lamp turns off.
8. When the regeneration conditions are satisfied (2 to 5 and 7 mentioned previously), the parked regeneration switch lamp  starts to flash.
9. Press the parked regeneration switch  to start the regeneration cycle.
The switch lamp will stop flashing and remain "ON" constantly during the cycle.
10. The engine rpm will automatically rise, and the regeneration process will begin.
11. Both indicators  stay "ON" while regenerating the DPF.
They turn off when the cycle is complete.
12. After the indicator turns off, normal tractor work may resume.
When driving in "Regeneration inhibit" mode, press the regeneration inhibit switch to turn on the switch lamp.

NOTE :

- During the regeneration cycle, do not touch the levers and switches (mentioned previously in steps 2, 3, 4), nor change the engine rpm other than for an emergency stop. Otherwise, the regeneration will be interrupted.
- Never leave the tractor when the parked regeneration process is activated.
- If the parked regeneration cycle is interrupted, the engine rpm is fixed at the idling level for about 30 seconds. For this period, keep the hand throttle lever and foot throttle pedal at the idle position. Do not move them. They will function again in 30 seconds.

6. Tips on diesel particulate filter (DPF) regeneration

- **Operation**

The higher in speed or load the engine operates, the higher the exhaust temperature rises. As a result, particulate matter (PM) inside the DPF is consumed and the regeneration process is required less frequently over time.

The lower in speed or load the engine operates, the lower the exhaust temperature. Accordingly, less particulate matter (PM) inside the DPF is consumed and more accumulation of PM will occur, which requires frequent regeneration. Therefore, avoid prolonged idling if possible.

- **Necessary conditions for “Regeneration”**

When the conditions below are all satisfied, regeneration will start. However, if even one condition is deviated from during the process, the regeneration will be interrupted.

- The engine coolant temperature.
- The DPF temperature.
- The engine speed is 1200 rpm or higher.

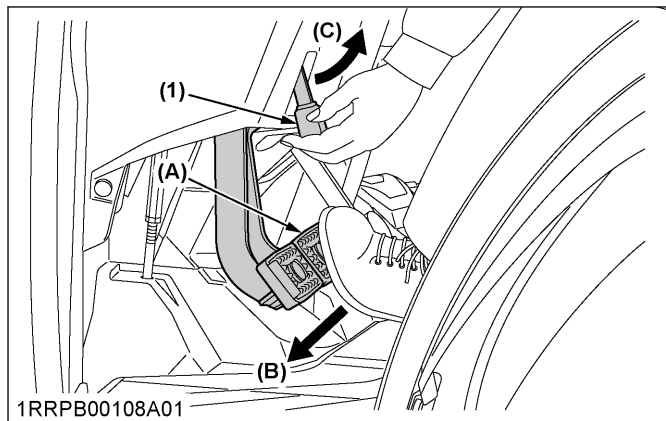
- Usually, it takes 15 to 20 minutes to complete the regeneration cycle.

Actual regeneration time may depend on ambient temperature, exhaust temperature and engine speed.

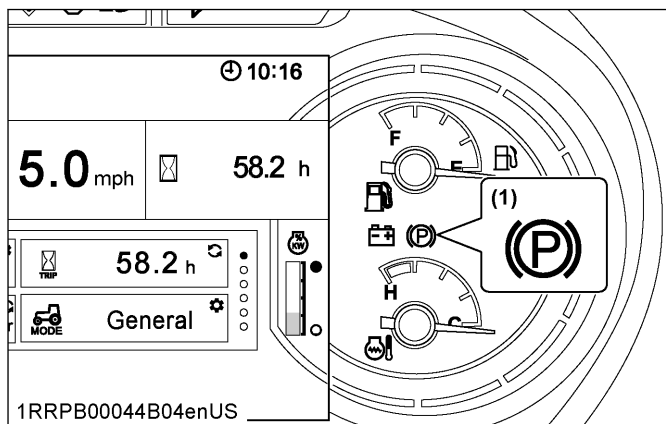
- It is recommended to do the regenerating while the engine is warm.
- Do not unnecessarily start and interrupt the regeneration process. Otherwise, a small amount of fuel becomes mixed with the engine oil, which degrades the oil quality.
- While the DPF is being regenerated, the engine air flow rate is automatically limited to maintain the high exhaust temperature. This may cause the engine to sound different, but this is normal for this engine.
- Just after the regeneration has ended, the DPF muffler remains hot. It is advisable to keep the engine running for about 5 minutes to allow cooling of the exhaust components.

STARTING THE ENGINE

1. Make sure that the parking brake is set.
 - a. To set the parking brake:
 - i. Interlock the brake pedals.
 - ii. Depress the brake pedals.
 - iii. Latch the brake pedals with the parking brake lever.
 - b. To release the parking brake, depress the brake pedals again.



(1) Parking brake lever
 (A) Interlock the brake pedals
 (B) Depress
 (C) Pull



(1) Parking brake indicator

IMPORTANT :

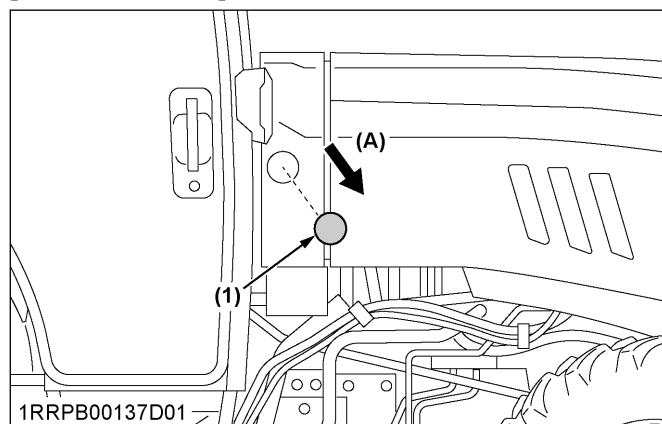
To prevent damage to the parking brake lever, make sure that brake pedals are fully depressed before pulling the parking brake lever up.

NOTE :

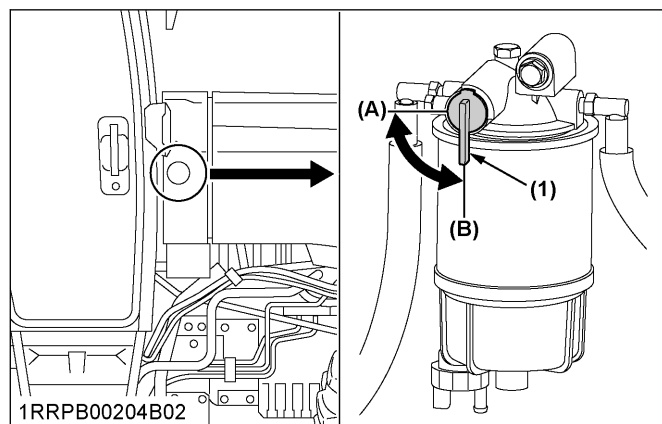
The parking brake indicator comes on while parking brake is applied and goes off when it is released.

2. Make sure that the fuel shut-off valve is in the "OPEN" position.

[Premium model]

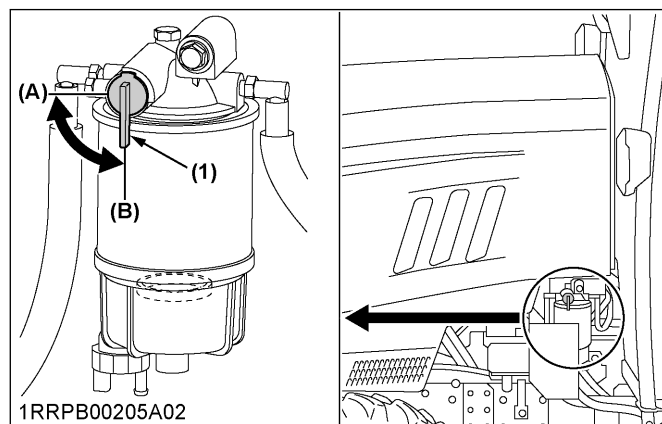


(1) Cap
 (A) Remove



(1) Fuel shut-off valve
 (A) Close
 (B) Open

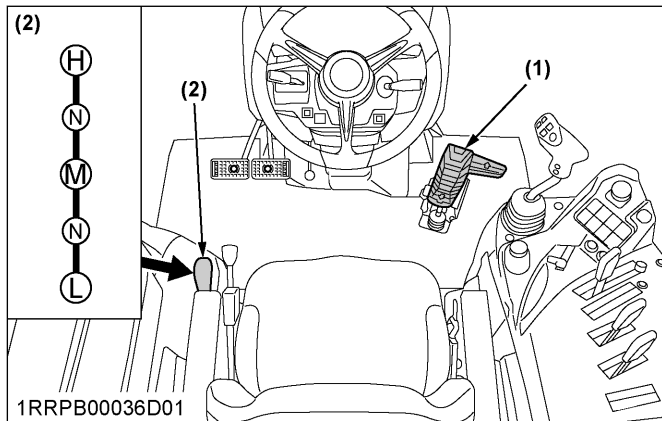
[Deluxe model]



(1) Fuel shut-off valve
 (A) Close
 (B) Open

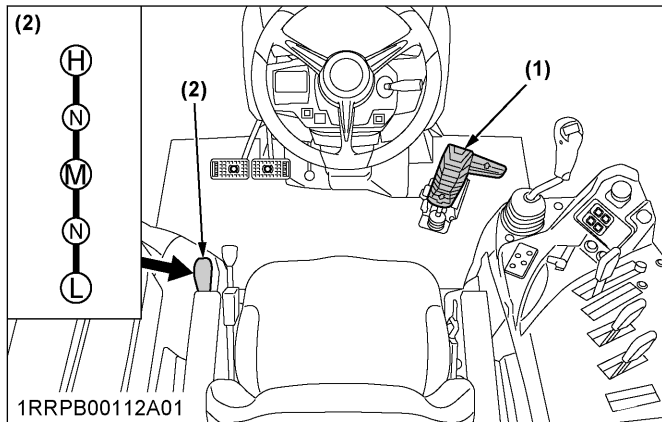
- Place the speed control pedal in the “NEUTRAL” position. Place the range gear shift lever in the “NEUTRAL” position.

[Premium model]



- (1) Speed control pedal (N) “NEUTRAL” position
(2) Range gear shift lever

[Deluxe model]



- (1) Speed control pedal (N) “NEUTRAL” position
(2) Range gear shift lever

NOTE :

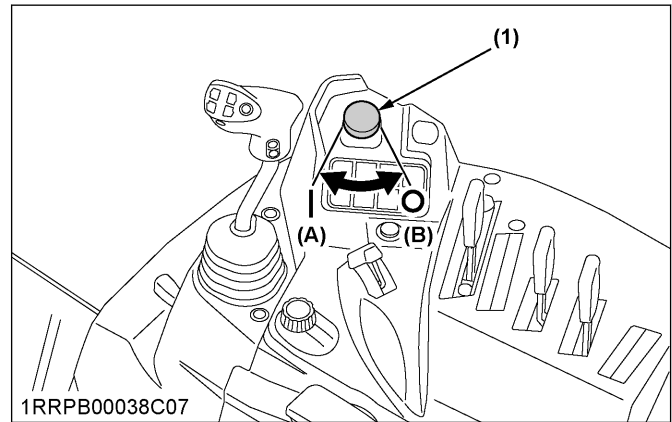
When removing the foot from speed control pedal, the pedal automatically returns to the neutral position.

- Place the PTO clutch control switch in the “OFF” position.

With mid-PTO type

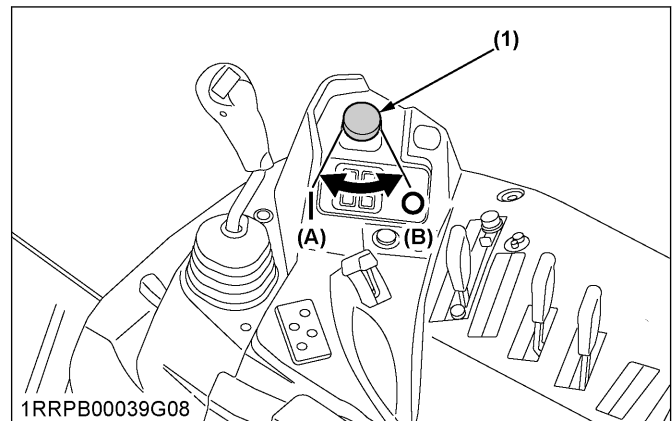
Place the mid-PTO lever in the “OFF” position.

[Premium model]



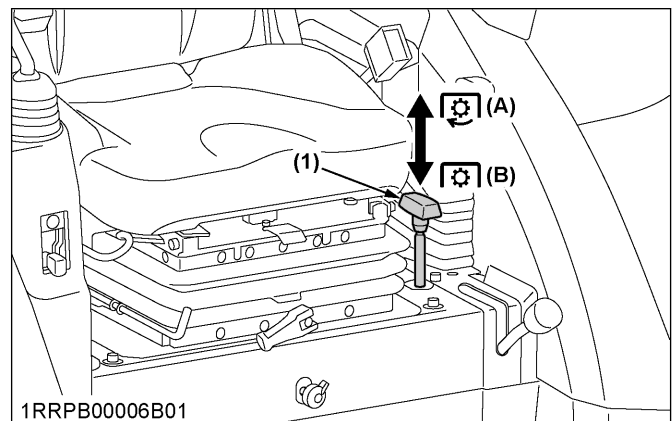
- (1) PTO clutch control switch (A) On
(B) Off

[Deluxe model]



- (1) PTO clutch control switch (A) On
(B) Off

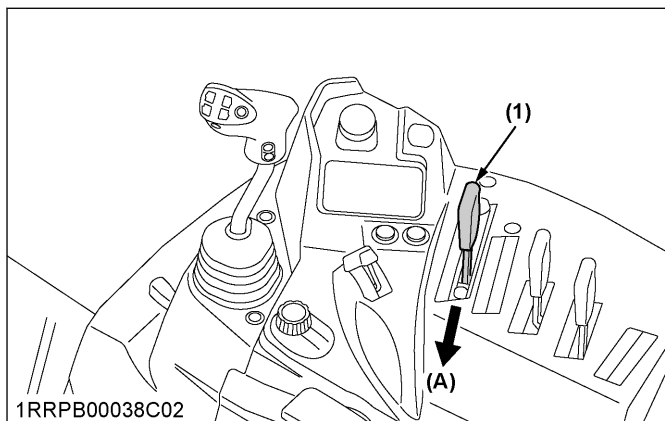
With mid-PTO



- (1) Mid-PTO lever (A) On
(B) Off

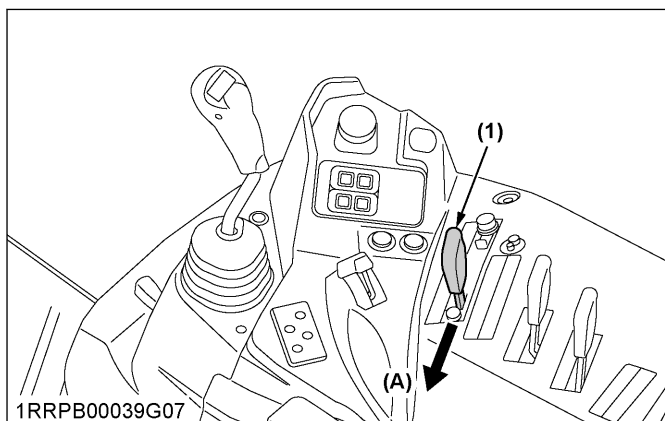
- Place the hydraulic control lever in the "LOWEST" position.

[Premium model]



(1) Position control lever (A) Down

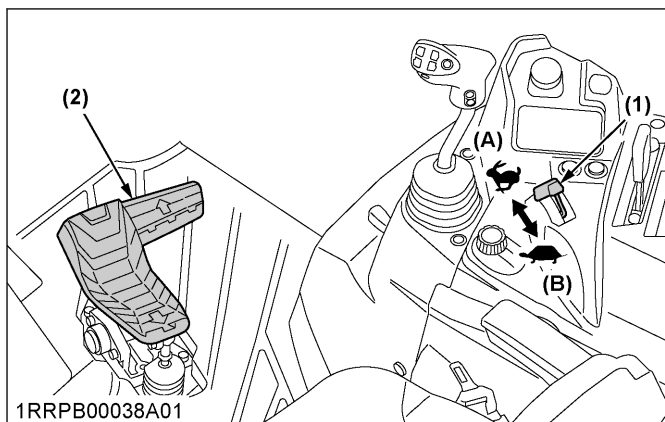
[Deluxe model]



(1) Position control lever (A) Down

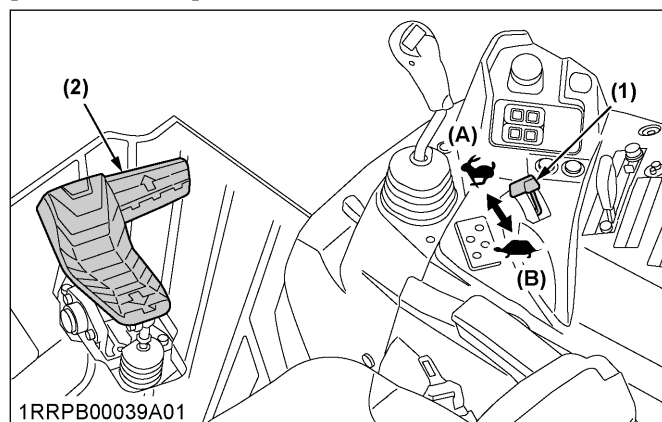
- Set the throttle lever at the minimum speed position.

[Premium model]



(1) Hand throttle lever (A) Increase
(2) Speed control pedal (B) Decrease

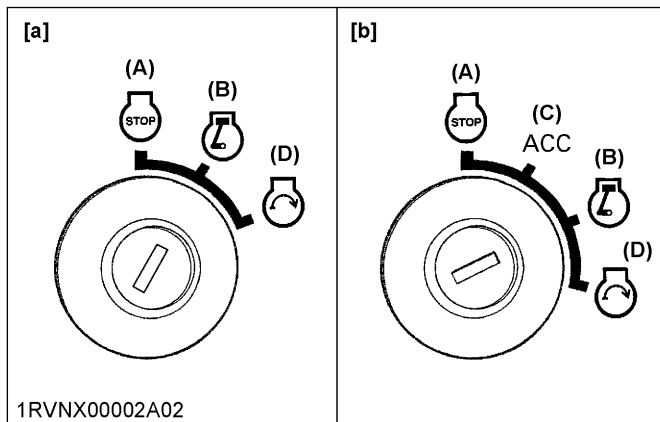
[Deluxe model]



(1) Hand throttle lever (A) Increase
(2) Speed control pedal (B) Decrease

7. Insert the key into the key switch and turn it to the "ON" position.

If the ambient temperature is below -5 °C (23 °F) and the engine is very cold, turn the key to the "ON" (glow plug) position and hold it until the heater indicator turns off.



[a] With ROPS

[b] With CAB

(A) OFF (Engine-stop)

(B) On (Engine-run)

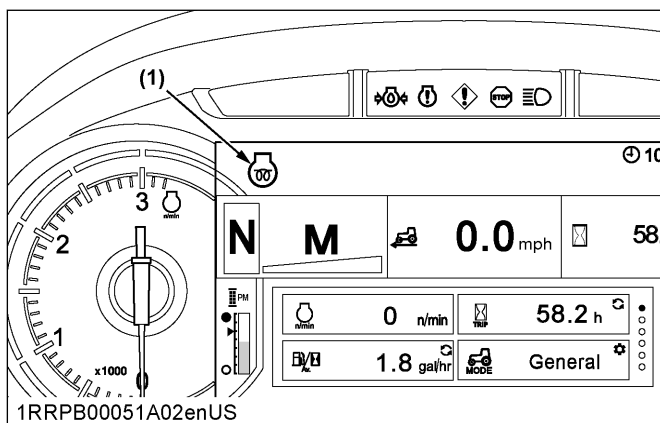
(C) ACC (Electrical power-accessories)

(D) Start (Engine-start)

enter the password number can be found in a different section.

(See ENGINE START SECURITY SETTINGS SCREEN on page 71.)

- If you enter the wrong password number 10 times in a row, "Incorrect password" is displayed on the LCD monitor and the engine cannot be started. In this case, contact your local Kubota dealer.
- You can restart the engine without entering the password number when within 10 minutes after stopping the engine.



(1) Heater indicator

NOTE :

- The accessories can be used while the engine is stopped.
- Do not leave the key at the "ACC" position. The battery will be quickly discharged. Turn it back to the "OFF" position after use.

8. If the engine start security function is switched on, check that the password number input screen is displayed on the LCD monitor, and use the display control device to input the 3-digit password number.

NOTE :

- The engine start security function is initially switched off as part of the factory setting.
- Details regarding how to switch on or off the security function and how to change or

9. Check the Easy Checker indicators.

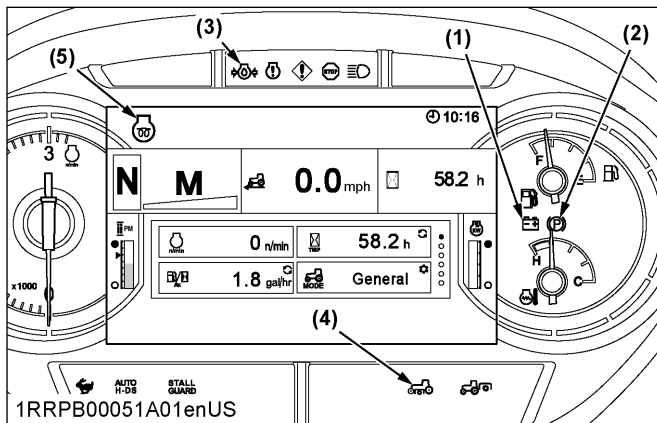
IMPORTANT :

Daily checks with the Easy Checker only, are not sufficient. Never fail to conduct daily checks carefully by referring to the daily check. (See DAILY CHECK on page 184.)

NOTE :

Some of the Easy Checker indicators may illuminate or start flashing depending on the positions of the levers and switches.

- When the key is turned to the “ON” position, indicators (1) (3) should come on. If trouble should occur at any location while the engine is running, the indicator corresponding to problem will turn on.
- Suppose that the engine coolant temperature is not high enough yet. The heater indicator (5) also appears when the key is turned to the “ON” position to preheat the engine and goes off automatically when preheat is completed. Illumination time of indicator varies according to the temperature of coolant.
- The parking brake warning indicator (2) turns on while the parking brake is applied and turns off when it is released.
- If the PTO indicator (4) stays on, disengage (OFF) the PTO.



- (1) Electrical charge warning indicator
- (2) Parking brake warning indicator
- (3) Engine oil pressure warning indicator
- (4) PTO indicator
- (5) Heater indicator

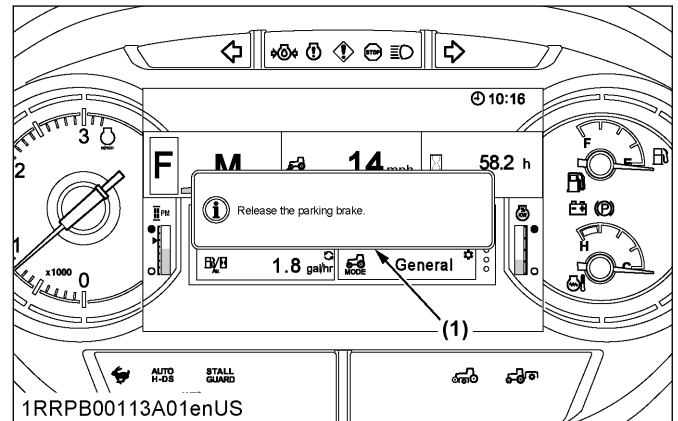
10. Turn the key to the “START” position and release when the engine starts.

IMPORTANT :

If the engine fails to start after 10 seconds, turn off the key for 30 seconds. Then repeat steps 7 through 10. To protect the battery and the starter, make sure that the starter is not continuously turned for more than 10 seconds.

NOTE :

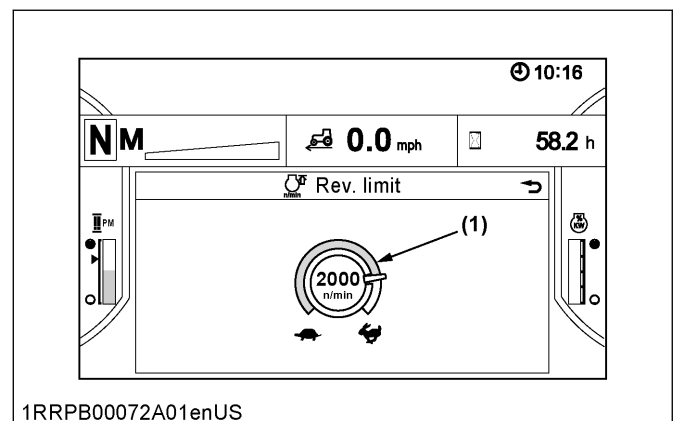
- If you try to start the engine but the following message appears in the display, the engine fails to start. Follow the appearing instructions and take the necessary actions.
 - Set the PTO clutch control switch to “OFF” position.
 - Ensure the HST pedal is in “NEUTRAL” position.
 - Ensure the range shift lever is in “NEUTRAL” position.



(1) Instruction message

• **[Premium model]**

When the rev-limit function is set, the engine speed will not exceed the speed that is set, even when the hand throttle lever is operated. Set the rev-limit to the “CANCEL” position to disable the rev limit function. Setting the rev-limit [Premium model] on page 65



1RRPB00072A01enUS

(1) Rev-limit dial

11. Check to see that all the indicators on the Easy Checker are off.

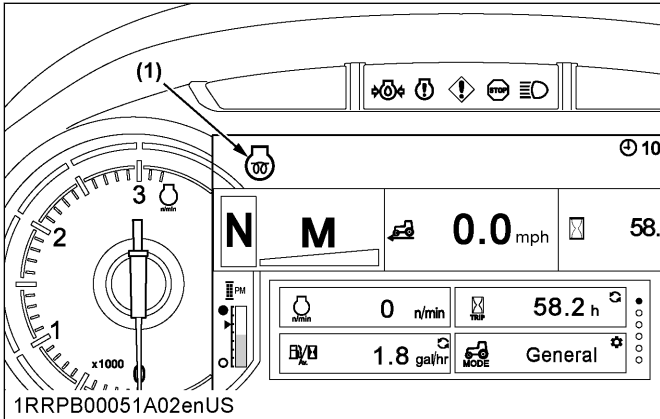
If an indicator is still on, immediately stop the engine and determine the cause.

COLD WEATHER STARTING

When the ambient temperature is below -5 °C (23 °F) and the engine is very cold, follow the procedure below after taking the step 1 through 7 in the starting the engine section.

(See STARTING THE ENGINE on page 99.)

1. Turn the key to the "ON" (glow plug) position and hold it until the heater indicator turns off.



(1) Heater indicator

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

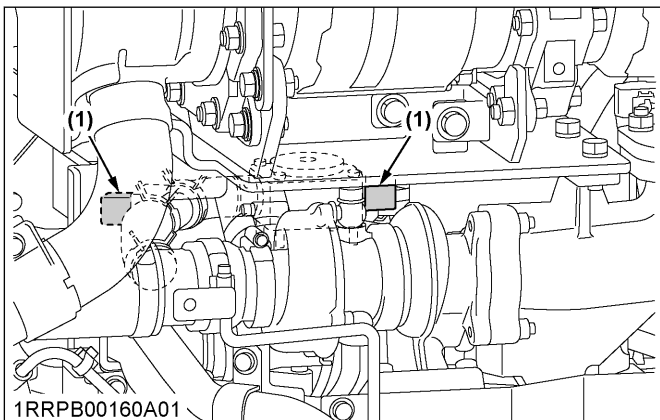
If the engine fails to start after 10 seconds, turn off the key for 30 seconds. Then turn the key to "ON" position and repeat the procedure until the heater indicator turns off. To protect the battery and the starter, make sure that the starter is not continuously turned for more than 10 seconds.

1. Antifrost heater for oil separator (if equipped)

The heater element operates continuously when the key switch is in the run position.

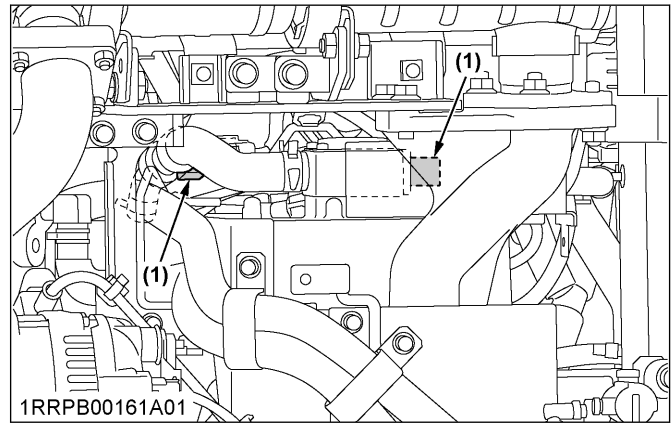
Due to high electrical draw, extended idle time or operations will drain the battery and stop the tractor.

[Premium model]



(1) Antifrost heater for oil separator

[Deluxe model]



(1) Antifrost heater for oil separator

2. Block heater (if equipped)

A block heater is available as an option from your dealer. A block heater will assist you in starting your tractor when the ambient temperature is below -20 °C (-4 °F).

STOPPING THE ENGINE

NOTE :

If removing the key does not stop the engine, contact your local Kubota dealer.

[Deluxe model]

1. After slowing the engine to idle, turn the key to the "OFF" position.
2. Remove the key.

[Premium model]

1. After slowing the engine to idle, wait 3 to 5 minutes for turbo to slow down and then turn the key to the "OFF" position.
2. Remove the key.

WARMING UP THE ENGINE



WARNING

To avoid personal injury or death:

- Set the parking brake during warm-up.
- Set all shift levers to their "NEUTRAL" positions and place the PTO clutch control switch in the "OFF" position during warm-up.

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

1. Warm-up and transmission oil at low temperature range

Hydraulic oil serves as transmission oil. In cold weather, the oil may be cold with increased viscosity. High oil viscosity can cause delayed oil circulation or abnormally low hydraulic pressure for some time after engine start-up. Delayed oil circulation and low hydraulic pressure, in turn, can result in damage to the hydraulic system.

To prevent the above, observe the following instructions:

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

Ambient temperature	Warm-up time requirement
Higher than -10 °C (14 °F)	Approximately. 5 minutes
-15 to -10 °C (5 to 14 °F)	5 to 10 minutes
-20 to -15 °C (-4 to 5 °F)	10 to 20 minutes
Below -20 °C (-4 °F)	More than 30 minutes

IMPORTANT :

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

JUMP STARTING THE ENGINE



WARNING

To avoid personal injury or death:

- Battery gases can explode. Keep cigarettes, sparks, and flames away from the battery.
- If the tractor battery is frozen, do not jump start engine.
- Do not connect the other end of the negative (-) jumper cable to the negative (-) terminal of the tractor battery.
- When taking out the dead battery, putting in the battery or fixing the battery, do not allow the positive (+) terminal of the battery to touch other parts.

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

1. Bring the helper vehicle with a battery of the same voltage as the disabled tractor within easy cable reach.

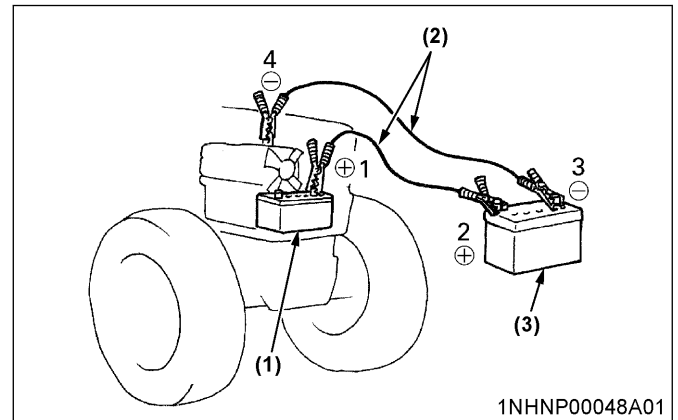
IMPORTANT :

The vehicles must not touch.

2. Engage the parking brakes of both vehicles and put the shift levers in their "NEUTRAL" positions. Shut off both engines.
3. Wear eye protection and rubber gloves.
4. Attach the red clamp to the positive (red, (+) or positive) terminal of the dead battery and clamp the

other end of the same cable to the positive (red, (+) or positive) terminal of the helper battery.

5. Clamp the other cable to the negative (black, (-) or negative) terminal of the helper battery.
6. Clamp the other end to the engine block or frame of the disabled tractor as far from the dead battery as possible.
7. Start the helper vehicle and let its engine run for a few moments. Start the disabled tractor.
8. Disconnect the jumper cables in the exact reverse order of attachment (steps 6, 5 and 4).



- (1) Dead battery
(2) Jumper cables
(3) Helper battery

IMPORTANT :

- This tractor has a 12 volt negative (-) ground starting system.
- Use only the same voltage for jump starting.
- Use of a higher voltage source on tractor's electrical system could result in severe damage to tractor's electrical system.
Use only matching voltage source when "Jump starting" a low or dead battery condition.
- Do not operate the tractor with the battery cable disconnected from the battery.
- Do not operate the tractor without the battery mounted.
- Do not operate the tractor with the battery dead. Charge the battery fully before operating the tractor.

OPERATING THE TRACTOR

OPERATING NEW TRACTOR

How a new tractor is handled and maintained determines the life of the tractor.

A new tractor just off the factory production line has been tested, but the various parts are not accustomed to each other, so care should be taken to operate the tractor for the first 50 hours at a slower speed and avoid excessive work or operation until the various parts become *"broken-in"*. The manner in which the tractor is handled during the *"breaking-in"* period greatly affects the life of your tractor.

Therefore, to obtain the maximum performance and the longest life of the tractor, it is very important to properly break-in your tractor. In handling a new tractor, the following precautions should be observed.

1. Do not operate the tractor at full speed for the first 50 hours

- Do not start quickly nor apply the brakes suddenly.
- In winter, operate the tractor after fully warming up the engine.
- Do not run the engine at speeds faster than necessary.
- On rough roads, slow down to suitable speeds. Do not operate the tractor at high speed.

These precautions are not limited only to new tractors, but to all tractors. However, the precautions should be especially observed in the case of new tractors.

2. Changing lubricating oil for new tractor

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

For more details, read the maintenance section of this manual.

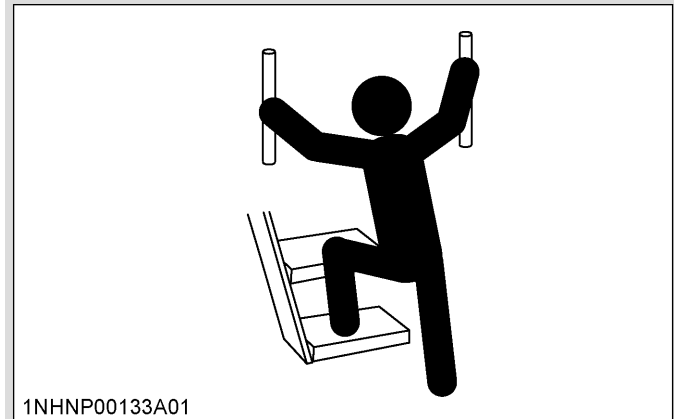
(See MAINTENANCE on page 174.)

BOARDING AND LEAVING THE TRACTOR

WARNING

To avoid personal injury or death:

- Never try to get on or off a moving tractor or jump off the tractor to exit.
- Face the tractor when getting into or out of the tractor. Do not use the controls as handholds to prevent inadvertent machine movements.
- Always keep steps and floor clean to avoid slippery conditions.



OPERATING FOLDABLE ROPS (IF EQUIPPED)

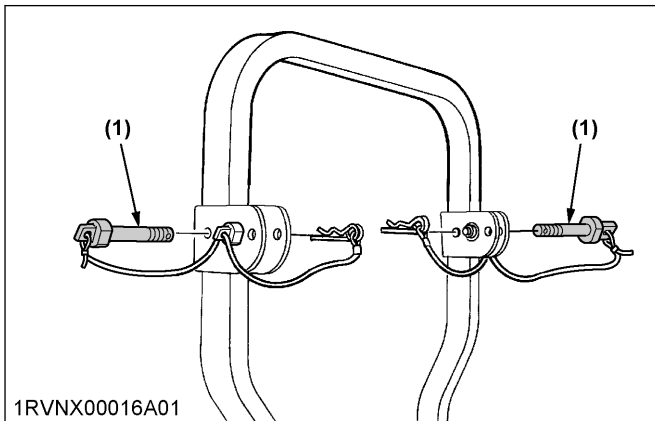
WARNING

To avoid personal injury or death:

- When raising or folding the ROPS, apply the parking brake, stop the engine and remove the key.
Always perform function from a stable position at the rear of the tractor.
- Fold the ROPS down only when absolutely necessary and fold it up and lock it again as soon as possible.
- Before proceeding to fold the ROPS, check for any possible interference with installed implements and attachments.
If interference occurs, contact your Kubota dealer.

1. Folding the ROPS

1. Remove both set bolts.

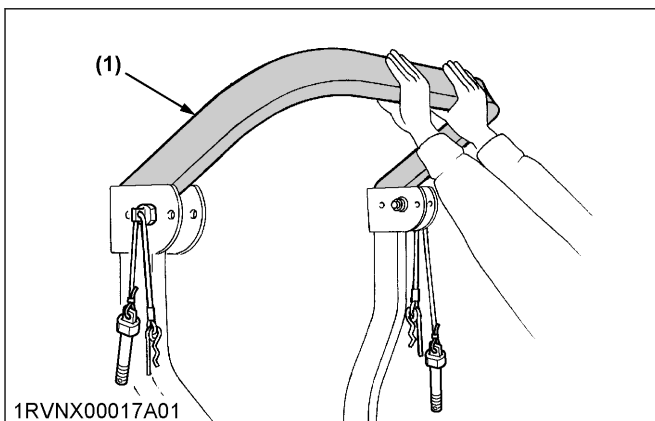


(1) Set bolt

2. Fold the ROPS.

CAUTION

To avoid personal injury, hold the ROPS tightly with both hands and fold the ROPS slowly and carefully.

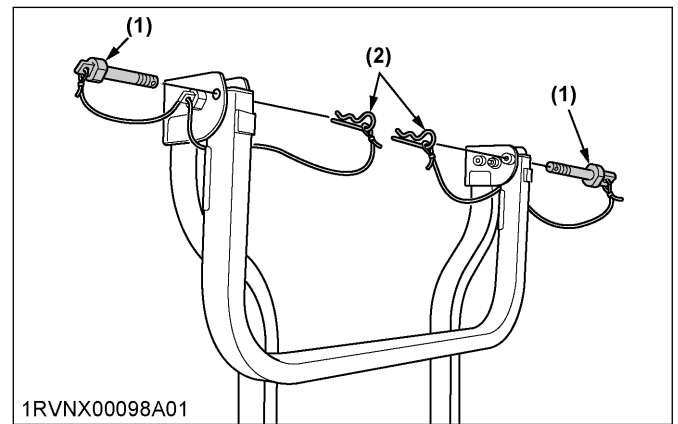


(1) ROPS

3. Align set bolt holes and insert both set bolts. Slightly tighten the set bolts and secure them with the hair pin cotters.

CAUTION

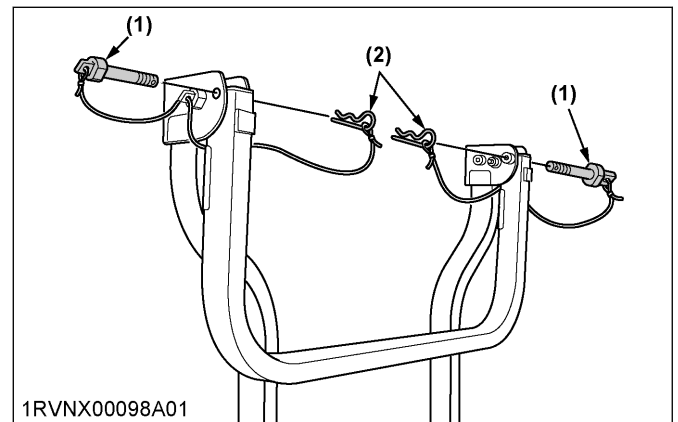
To avoid personal injury, make sure that both set bolts are properly installed and secured with the hair pin cotters.



(1) Set bolt
(2) Hair pin cotter

2. Raising the ROPS to upright position

1. Remove both hair pin cotters and set bolts.



(1) Set bolt
(2) Hair pin cotter

2. Raise the ROPS to the upright position.

CAUTION

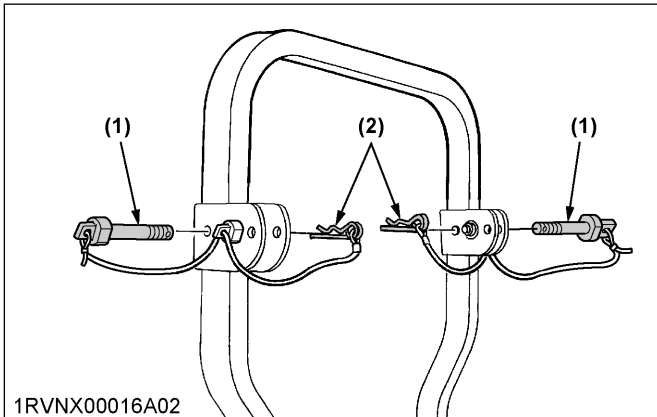
To avoid personal injury, raise the ROPS slowly and carefully.

- Align set bolt holes and insert both set bolts. Slightly tighten the set bolts and secure them with the hair pin cotters.



CAUTION

To avoid personal injury, make sure that both set bolts are properly installed as soon as the ROPS is in the upright position and secured with the hair pin cotters.

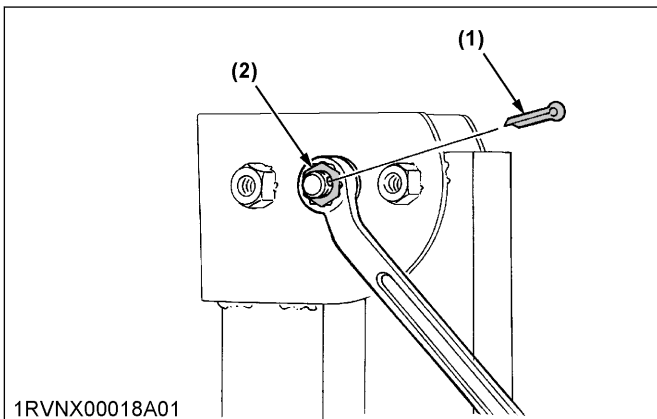


1RVNX00016A02

- (1) Set bolt
(2) Hair pin cotter

3. Adjusting the foldable ROPS

- Adjust free fall of the ROPS upper frame regularly.
- If you feel less friction in folding the ROPS, remove the cotter pin (1), tighten the nut (2) until you feel the right friction in the movement and then replace the cotter pin.



1RVNX00018A01

- (1) Cotter pin
(2) Nut

STARTING THE TRACTOR

- Adjusting the operator's position.

NOTE :

The seat and suspension should be adjusted to ensure that the controls are comfortably at hand

for the operator, ensuring that the operator maintains a good posture and minimizes risks from whole body vibration.

- Operator's seat on page 108
 - Seat belt on page 109
 - Steering wheel adjustment on page 110
- Selecting light switch position.
 - Tractor light on page 110
 - Headlight switch on page 111
 - Turn signal switch and hazard light switch on page 111
 - Front work light switch on page 112
 - Rear work light switch for CAB model (if equipped) on page 113
 - Checking the brake pedal.
 - Brake pedal (right and left) on page 113
 - Raise the implement.
 - Position control lever on page 152
 - Selecting the travel speed.
 - iHST drive mode [Premium model] on page 116
 - iHST response control on page 117
 - Hydro dual speed (H-DS) on page 118
 - iHST mode on page 119
 - Throttle-up button on page 122
 - Range gear shift lever (L-M-H) on page 124
 - Front wheel drive lever on page 124
 - Hand throttle lever on page 125
 - ATA (auto throttle advance) switch on page 128
 - Accelerate the engine.
 - Hand throttle lever on page 125
 - Rev-limiter control on page 135
 - Unlock the parking brake.
 - Parking brake on page 113
 - Depress the speed control pedal.
 - Speed control pedal on page 125
 - Cruise control on page 126

OPERATOR'S POSITION CONTROLS

1. Operator's seat



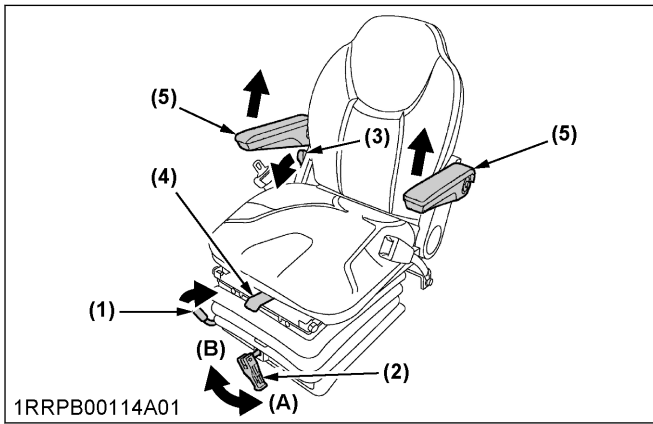
WARNING

To avoid personal injury or death:

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

IMPORTANT :

After adjusting the operator's seat, check to see that the seat is properly locked.



- (1) Travel adjust lever
(2) Suspension adjust lever
(3) Backrest tilt adjust lever
(4) Swivel adjust lever
(5) Arm rest
- (A) To decrease tension
(B) To increase tension

Travel adjustment

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

NOTE :

The operator's seat base has a slope. When lifting the lever, be careful not to allow the seat to slide forward.

Suspension adjustment

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

Tilt adjustment

Unlock the backrest tilt adjust lever and move the backrest to the desired angle.

Arm rest

Arm rest may be set at upright position if desired.

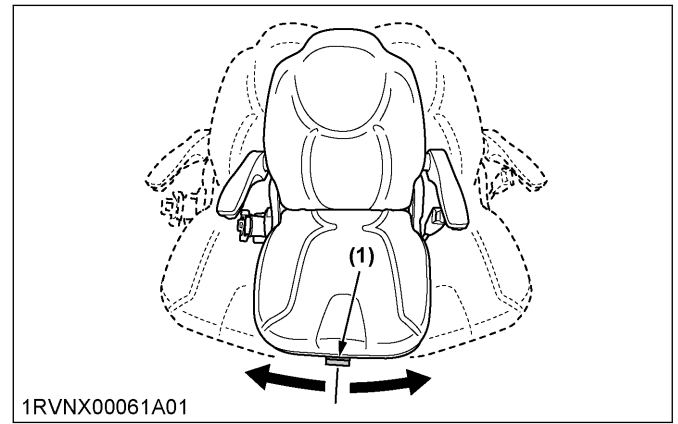
Swivel adjustment

Unlock the swivel adjust lever and rotate the seat right or left as desired.

NOTE :

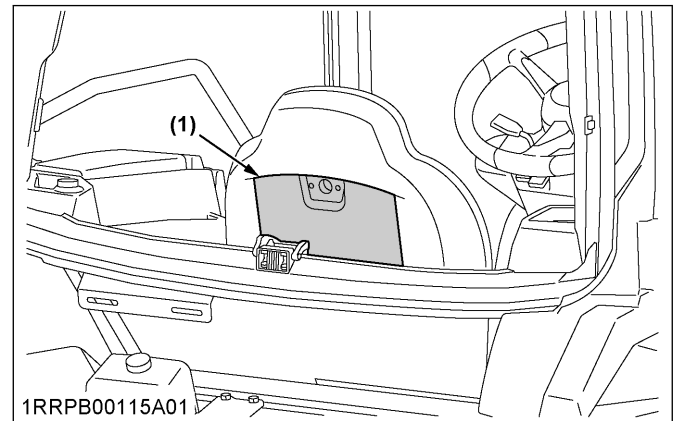
Using the swivel seat

- Swivel the seat to the right and left to position yourself comfortably for jobs in which you need to look rearwards.
- Turn the seat to the left to facilitate getting in and out of the tractor.
- The seat can swivel in both directions.



- (1) Swivel adjust lever

2. Glove box (if equipped)



- (1) Glove box

3. Seat belt

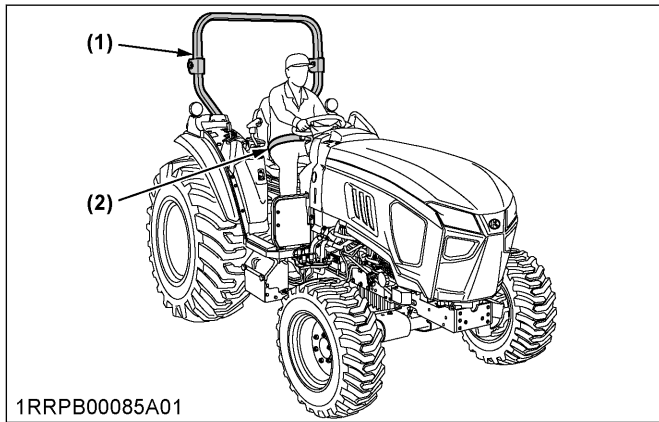
! WARNING

To avoid personal injury or death:

- Always use the seat belt when a ROPS or CAB is installed.
- Do not use the seat belt if the foldable ROPS is down or if there is no ROPS.

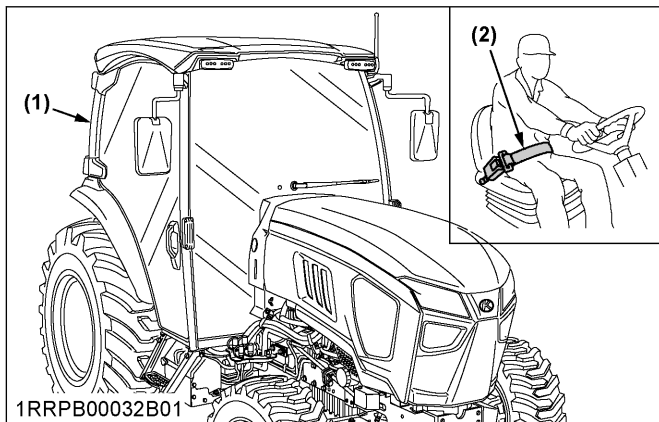
Adjust the seat belt for proper fit and connect the buckle. This seat belt is auto-locking retractable type.

[ROPS model]



- (1) ROPS
- (2) Seat belt

[CAB model]



- (1) CAB
- (2) Seat belt

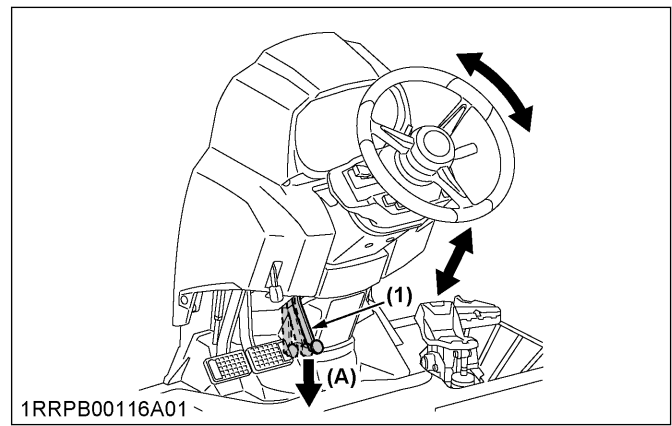
4. Steering wheel adjustment

CAUTION

To avoid personal injury, do not adjust the steering wheel while the tractor is in motion.

[Premium CAB model]

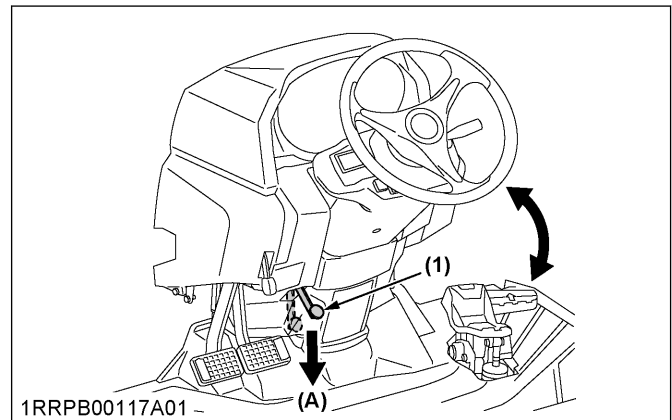
Depress the steering wheel lock pedal halfway to release the lock and adjust the tilt of the handle. Pressing the pedal further enables the telescopic adjustment of the handle.



- (1) Steering wheel lock pedal
- (A) Depress

[Except premium CAB model]

Depress the steering wheel tilt pedal to release the lock so the steering wheel can be adjusted to the desired position.

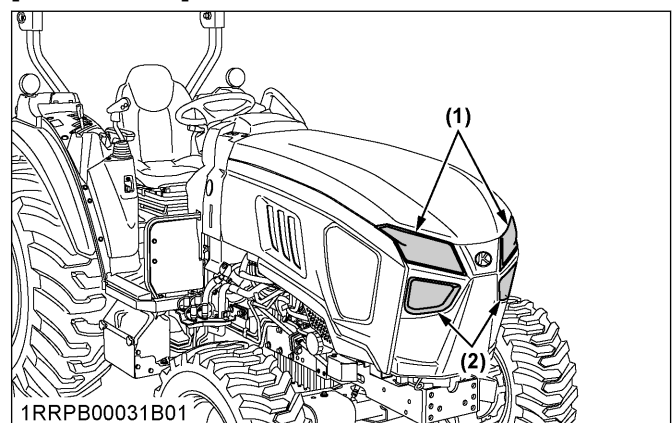


- (1) Steering wheel tilt pedal
- (A) Depress

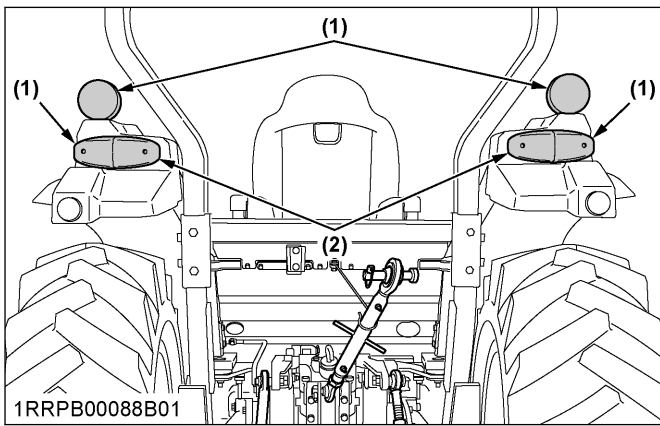
CONTROLS FOR LIGHTS AND SOUNDS

1. Tractor light

[ROPS model]

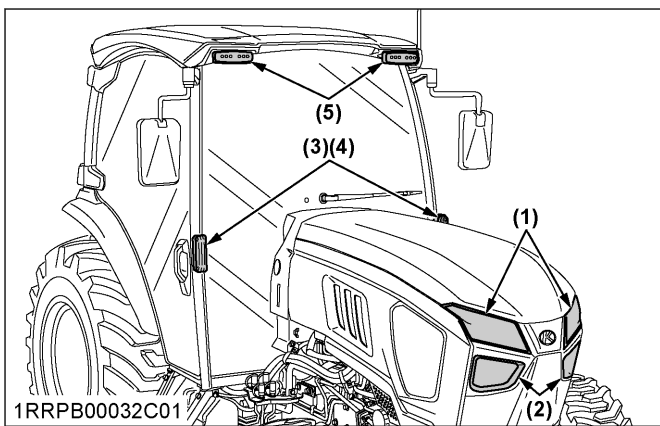


- (1) Front work light
- (2) Headlight

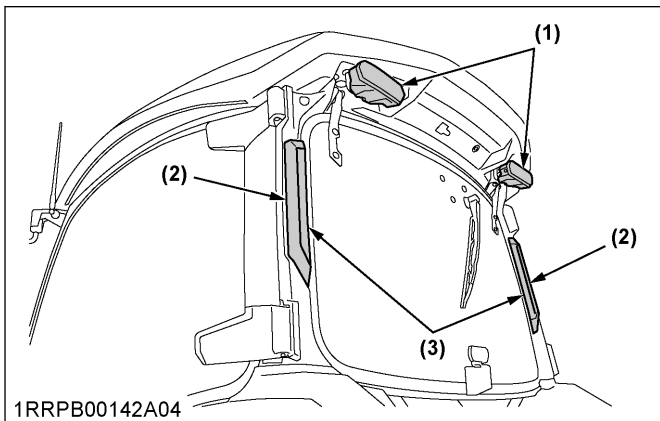


- (1) Turn signal and hazard light
(2) Tail light

[CAB model]



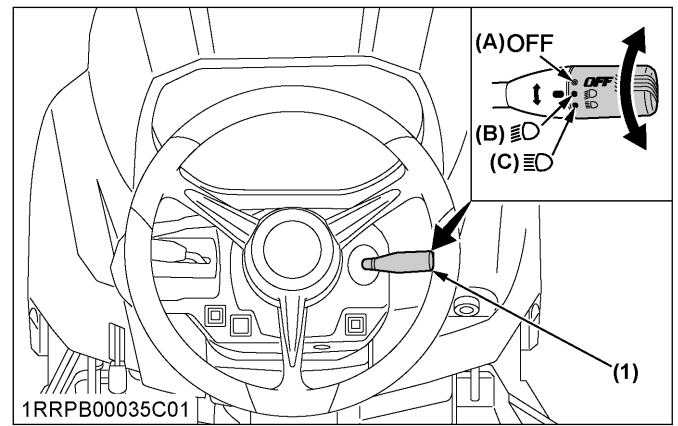
- (1) Front work light (hood)
(2) Headlight
(3) Turn signal and hazard light
(4) Side marker light
(5) Front work light



- (1) Rear work light (if equipped)
(2) Tail light
(3) Turn signal and hazard light

2. Headlight switch

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



- (1) Headlight switch
(A) Headlights OFF.
(B) Headlights dimmed, low beam.
(C) Headlights ON, high beam.

3. Turn signal switch and hazard light switch

Hazard light

1. When the hazard light switch is pushed, the hazard lights flash, along with the LH and RH indicators on the instrument panel.
2. Push the hazard light switch again to turn off the hazard lights.

Turn signal with hazard light

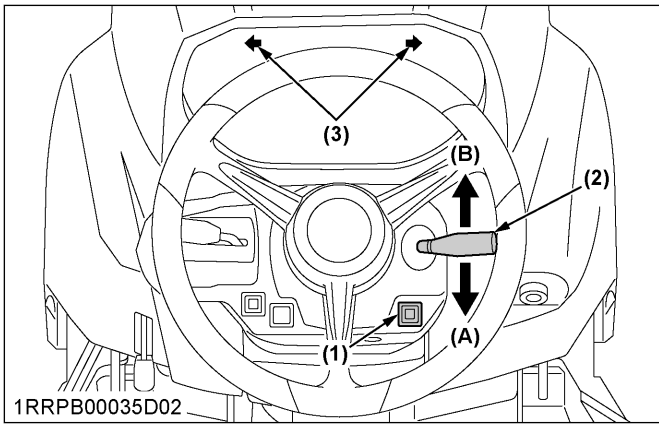
1. To indicate a right turn with the hazard lights already flashing, turn the switch clockwise.
2. To indicate a left turn with the hazard lights already flashing, turn the switch counterclockwise.
3. When the left or right turn signal is activated in combination with the hazard lights, the indicated turning light will flash and the other will stay on.

Turn signal without hazard light

1. To indicate a right turn without hazard lights, turn the switch clockwise.
2. To indicate a left turn without hazard lights, turn the switch counterclockwise.
3. When the left or right turn signal is activated without the hazard lights, the indicated turning light will flash and the other will stay on.

NOTE :

- The hazard light switch is operative when the key switch is in the "ON" or "OFF" position.
- The turn signal light switch is only operative when the key switch is in the "ON" position.
- Return the turn signal switch to center position after turning.



- (1) Hazard light switch
(2) Turn signal light switch
(3) Turn signal and hazard light indicator
- (A) Right turn
(B) Left turn

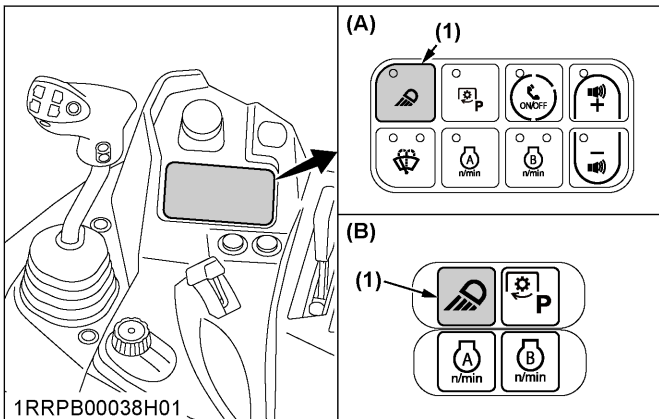
4. Front work light switch

WARNING

To avoid personal injury or death, do not operate on roads with work lights on. Work lights may blind or confuse the drivers of oncoming vehicles.

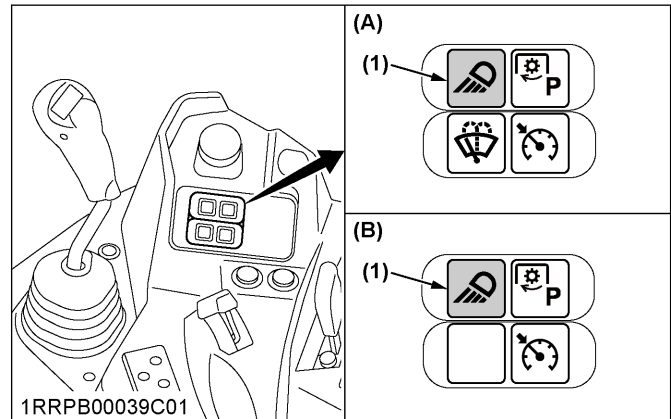
Turn on the key switch and press the front work light switch. The work lights and the switch's indicator light up. Press the switch again to turn off the lights and indicator.

[Premium model]



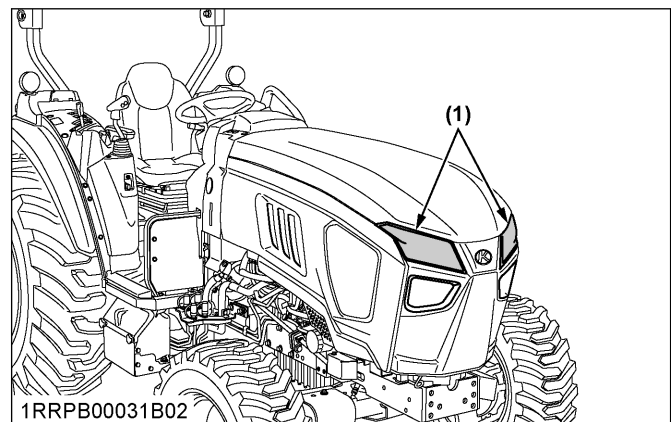
- (1) Front work light switch
- (A) CAB model
(B) ROPS model

[Deluxe model]



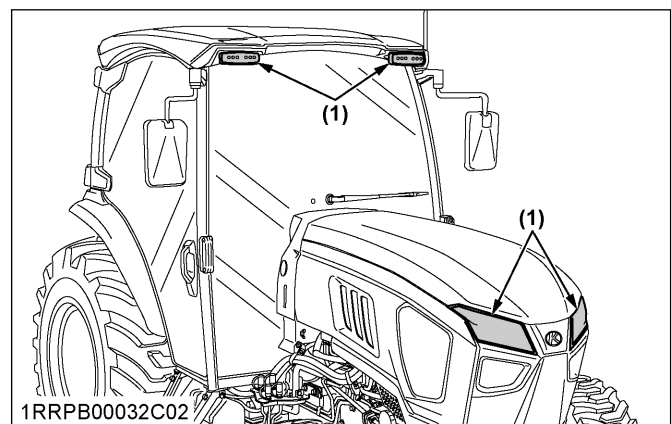
- (1) Front work light switch
- (A) CAB model
(B) ROPS model

[ROPS model]



- (1) Front work light

[CAB model]



- (1) Front work light

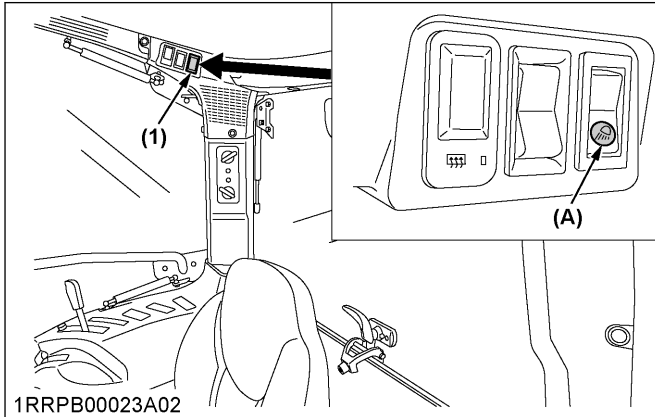
NOTE :

[CAB model]

- To turn on the work light on the hood, press the front work light switch once.
- To turn on the work lights on both the CAB and the hood, press the front work light switch twice.
- To turn off all work lights, press the front work light switch three times.

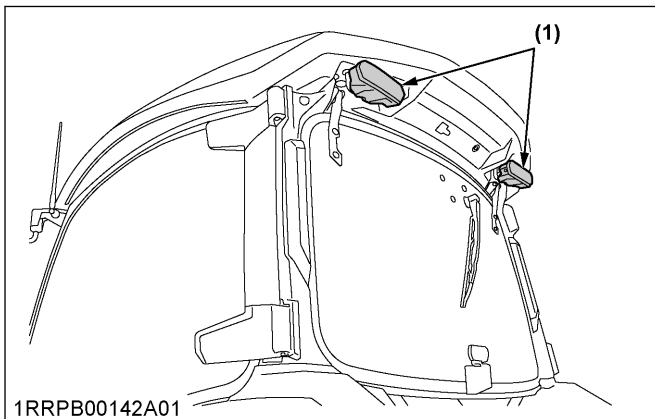
5. Rear work light switch for CAB model (if equipped)

Turn on the key switch and press the bottom half of the work light switch. The work light and the switch's indicator light up. Press the top half of the work light switch to turn off the light and indicator.



(1) Rear work light switch (if equipped)

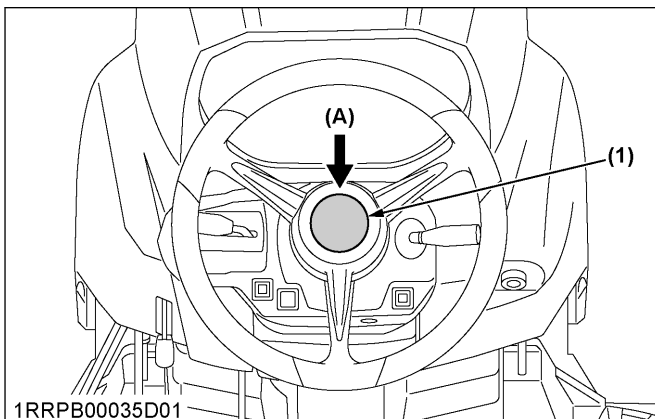
(A) Indicator for rear work lights



(1) Rear work light (if equipped)

6. Horn button (if equipped)

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



(1) Horn button

(A) Push

BRAKE CONTROLS

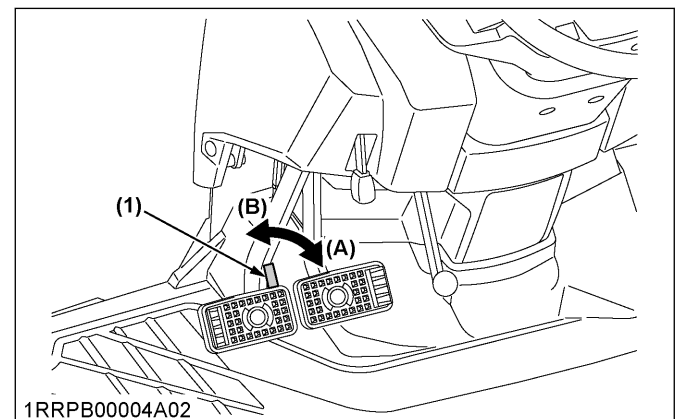
1. Brake pedal (right and left)

WARNING

To avoid personal injury or death:

- Interlock the right and left pedals. Applying only one rear wheel brake at high speeds could cause the tractor to swerve or roll-over.
- Be sure that the brake pedals have equal adjustment when using locked together. Incorrect or unequal brake pedal adjustment can cause the tractor to swerve or roll-over.
- Do not brake suddenly.
An accident may occur as a result of a heavy towed load shifting forward or loss of control.
- To avoid skidding and loss of steering control when driving on icy, wet, or loose surfaces, make sure that the tractor is correctly ballasted, operated at reduced speed, and operated with the front wheel drive engaged (if equipped).
- The braking characteristics are different between 2-wheel drive and 4-wheel drive. Be aware of the difference and use carefully.

1. Before operating the tractor on the road, interlock the right and left pedals as in the following illustration.
2. Use individual brakes to assist in making sharp turns at low speeds (field operation only). Disengage the brake pedal lock and depress only one brake pedal.
3. Make sure that the brake pedals have equal adjustment when being used locked together.



(1) Brake pedal lock

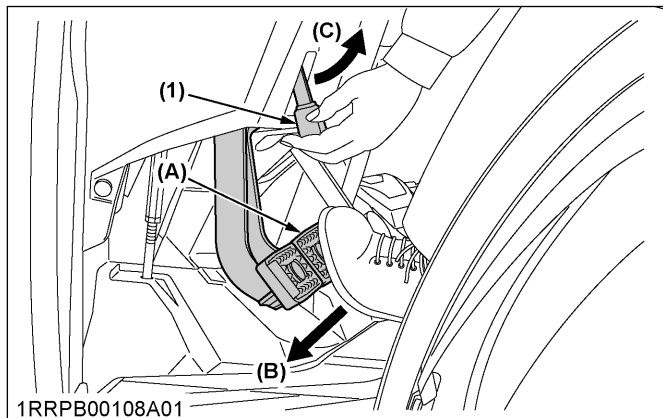
(A) Lock

(B) Release

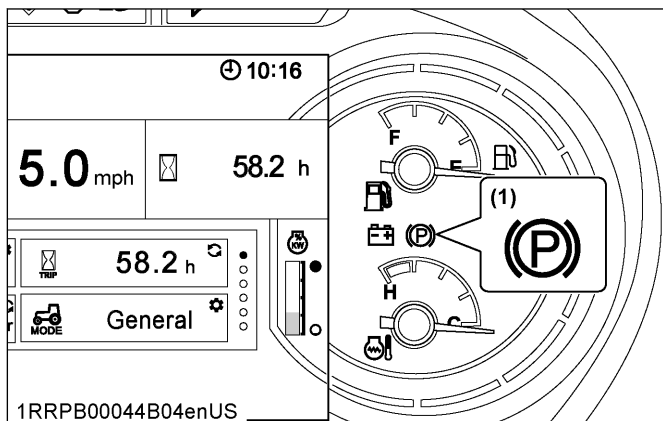
2. Parking brake

1. Make sure that the parking brake is set.
 - a. To set the parking brake:
 - i. Interlock the brake pedals.
 - ii. Depress the brake pedals.

- iii. Latch the brake pedals with the parking brake lever.
- b. To release the parking brake, depress the brake pedals again.



- (1) Parking brake lever
- (A) Interlock the brake pedals
- (B) Depress
- (C) Pull



- (1) Parking brake warning indicator

IMPORTANT :

To prevent damage to the parking brake lever, make sure that the brake pedals are fully depressed before pulling the parking brake lever up.

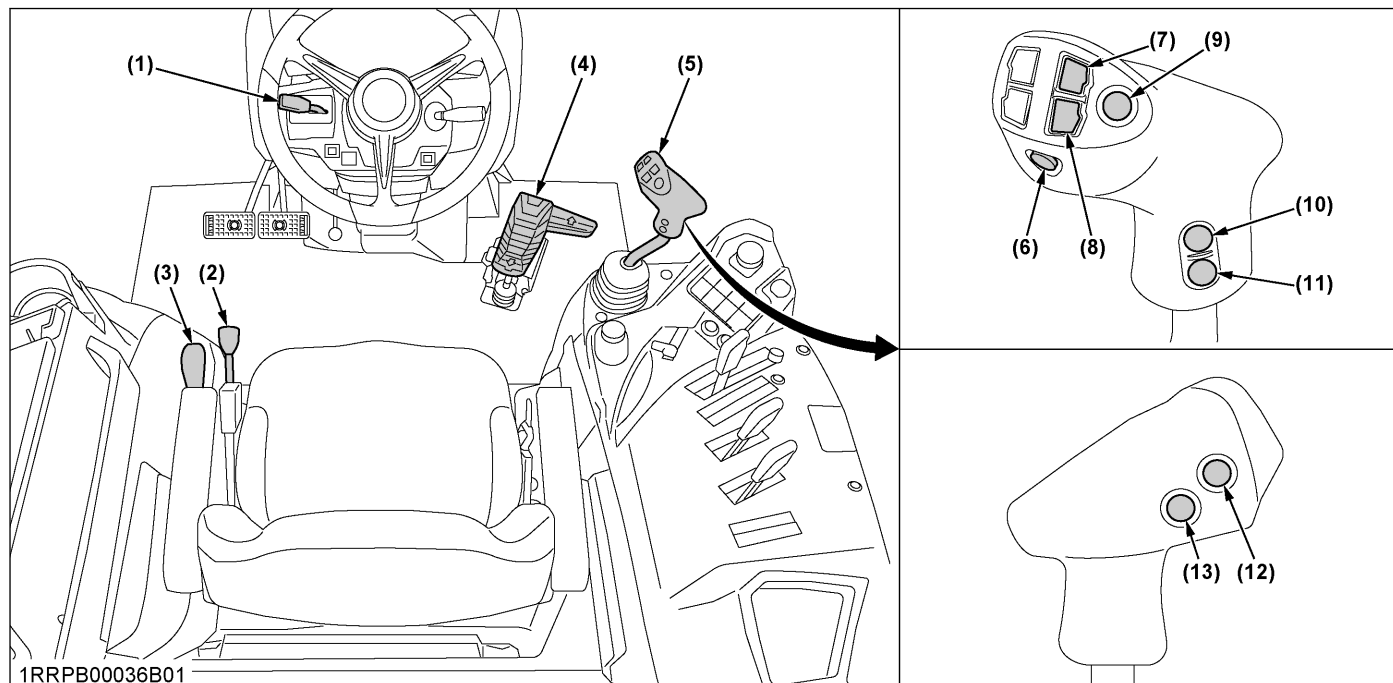
NOTE :

The parking brake warning indicator comes on while parking brake is applied and goes off when it is released.

TRAVEL CONTROLS

1. Switches and levers for adjusting travel speed

[Premium model]

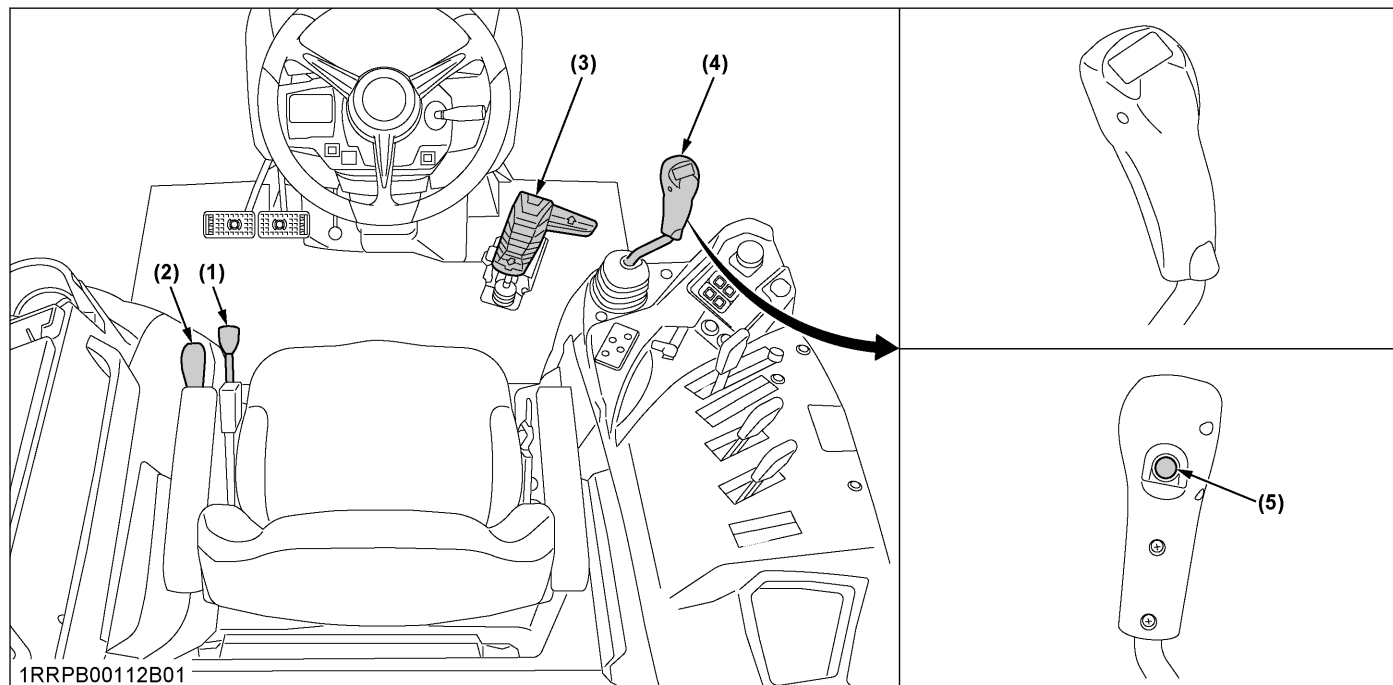


- (1) H-DS lever
- (2) Front wheel drive lever
- (3) Range gear shift lever
- (4) Speed control pedal
- (5) Multi-function lever

- (6) iHST drive mode select button
- (7) Cruise speed button (increase)
- (8) Cruise speed button (decrease)
- (9) ATA (auto throttle advance) switch
- (10) iHST response button (fast)

- (11) iHST response button (slow)
- (12) Throttle-up button
- (13) Cruise control ready button

[Deluxe model]



- (1) Front wheel drive lever
- (2) Range gear shift lever
- (3) Speed control pedal

- (4) Loader and remote control valve lever
- (5) Throttle-up button

2. iHST drive mode [Premium model]

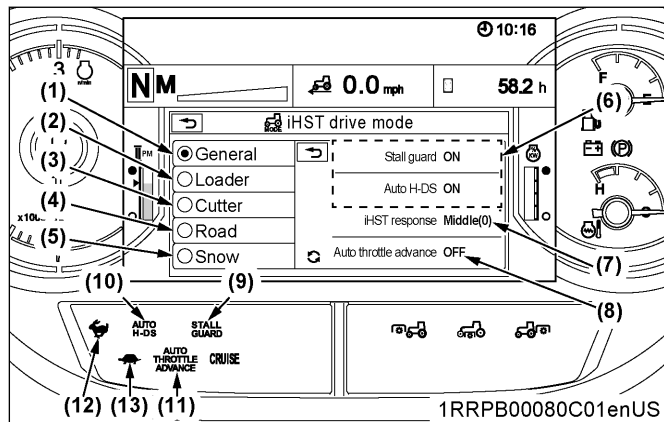
The iHST drive mode is Kubota's recommended setting, optimized for various tasks with the following features:

- iHST mode
- iHST response
- Auto throttle advance

The iHST drive mode can be selected from the following modes.

Choose the best mode according to the type of job or your operating style.

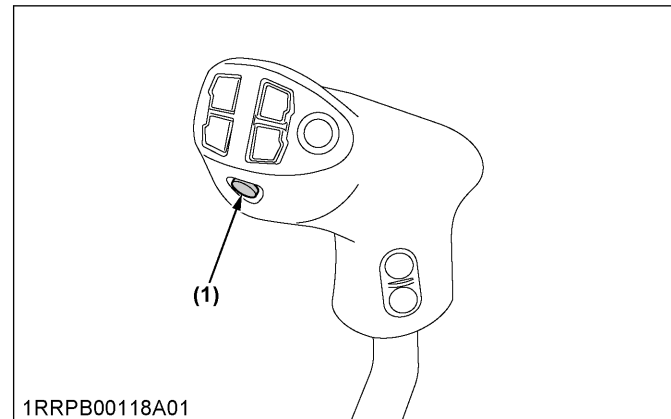
Drive mode	Description
General	Designed for general-purpose tasks.
Loader	Designed for loader tasks.
Cutter	Designed for grass cutting tasks.
Road	Designed for road travel.
Snow	Designed for snow removal tasks.



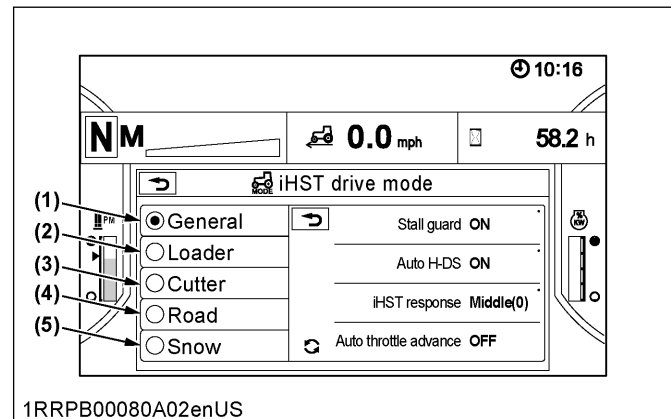
- | | |
|----------------------------|--------------------------------------|
| (1) General mode | (8) Auto throttle advance settings |
| (2) Loader mode | (9) STALL GUARD indicator |
| (3) Cutter mode | (10) AUTO H-DS indicator |
| (4) Road mode | (11) AUTO THROTTLE ADVANCE indicator |
| (5) Snow mode | (12) High indicator |
| (6) iHST mode settings | (13) Low indicator |
| (7) iHST response settings | |

Setting procedure

1. Set the speed control pedal to neutral position.
2. Press the iHST drive mode select button to display the "iHST drive mode" screen.



(1) iHST drive mode select button



1RRPB00080A02enUS

- | |
|------------------|
| (1) General mode |
| (2) Loader mode |
| (3) Cutter mode |
| (4) Road mode |
| (5) Snow mode |

Kubota's recommended settings

Drive mode	iHST mode		iHST response	Auto throttle advance
	Stall guard	Auto H-DS		
General	ON	ON	Middle (0)	OFF
Loader	ON	OFF	Slow (-5)	ON
Mower	ON	ON	Slow (-4)	OFF
Road	OFF	OFF	Slow (-3)	ON
Snow	ON	OFF	Middle (-2)	OFF

NOTE :

The settings for each drive mode can also be customized.

3. Select and confirm the iHST drive mode.
 - Press the iHST drive mode select button briefly to move the cursor.
 - Press and hold the iHST drive mode select button to confirm your selection.

NOTE :

- If no changes are made within 5 seconds, the “iHST drive mode” screen will disappear.
- The “Menu” screen also enables access to the “iHST drive mode” screen, where the “iHST drive mode” can be selected. (See Setting the iHST drive mode on page 76.)
- When the “iHST drive mode” screen is displayed by pressing the iHST drive mode select button, detailed customization of the mode is not possible. To customize, display the “iHST drive mode” screen from the menu. (See Customize the drive mode on page 76.)

3. iHST response control

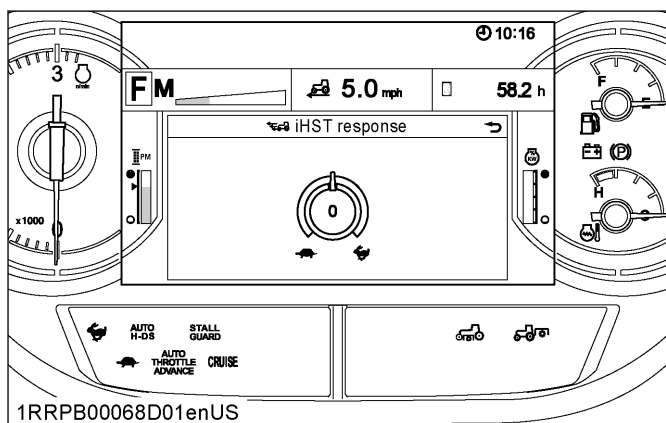
iHST response control is used to set the start-up response when you step on the speed control pedal and the engine brake effect when you release the pedal.

Set the iHST response control toward **[FAST]**, and the response level gets quicker. Set it toward **[SLOW]** to have a slower response level.

When you move the tractor forward and backward repeatedly, during loader operations, for example, set the iHST response control toward **[FAST]**. It helps improve working efficiency.

NOTE :

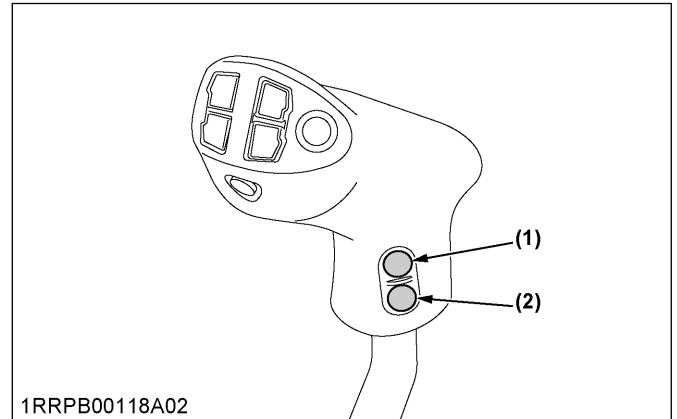
When using **[STALL GUARD]** with PTO powered implements, the tractor automatically adjust for optimum response.



Setting procedure [Premium model]

Press the iHST response button (fast) to increase the response speed.

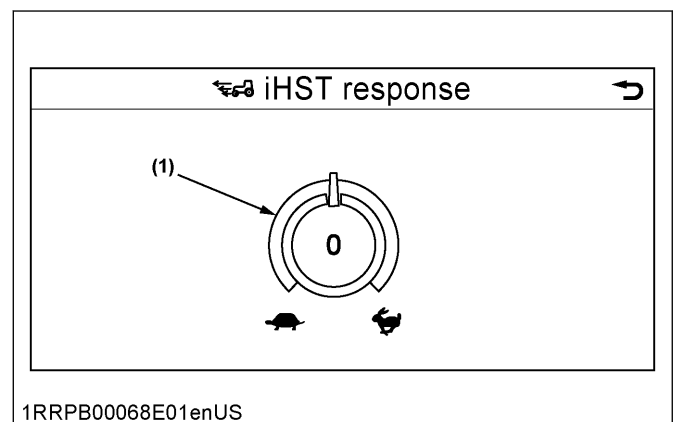
Press the iHST response button (slow) to decrease the response speed.



- (1) iHST response button (fast)
- (2) iHST response button (slow)

NOTE :

- Pressing the iHST response button will temporarily display the “iHST response” screen.

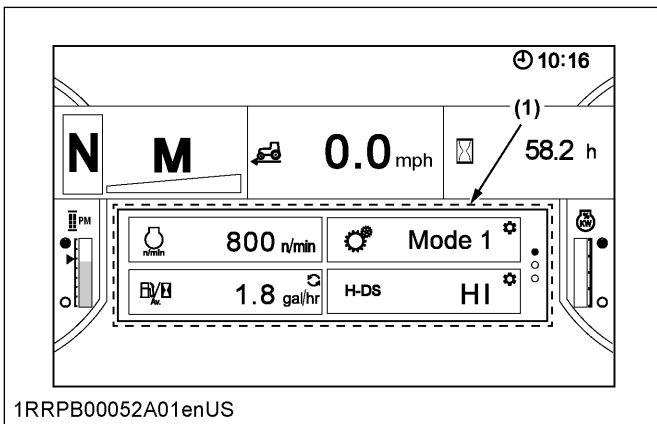


- (1) iHST response dial

- If no changes are made within 5 seconds, the “iHST response” screen will disappear.
- The “Menu” screen also enables access to the “iHST response” screen, where the iHST response can be adjusted. (See Setting the iHST response on page 63.)

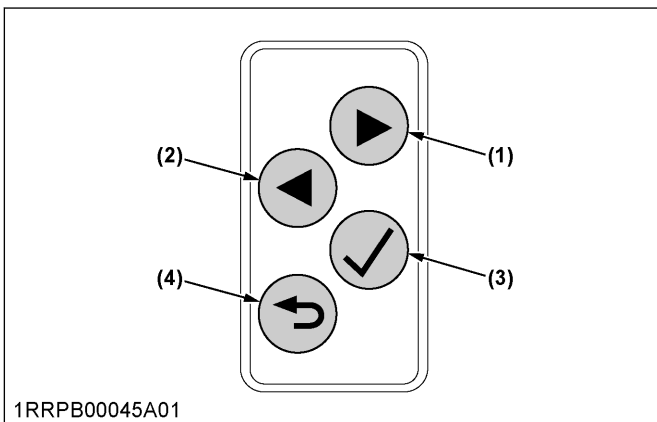
Setting procedure [Deluxe model]

1. Display the performance monitor screen that appears when the key switch is turned to the “ON” position.

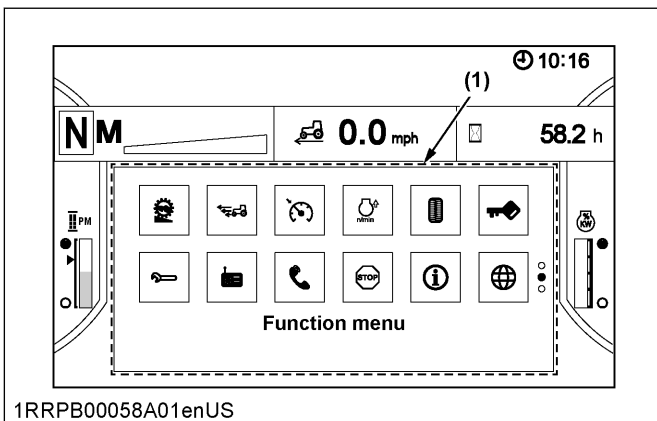


(1) Performance monitor screen

- Press the next button to display the "Function menu" screen.

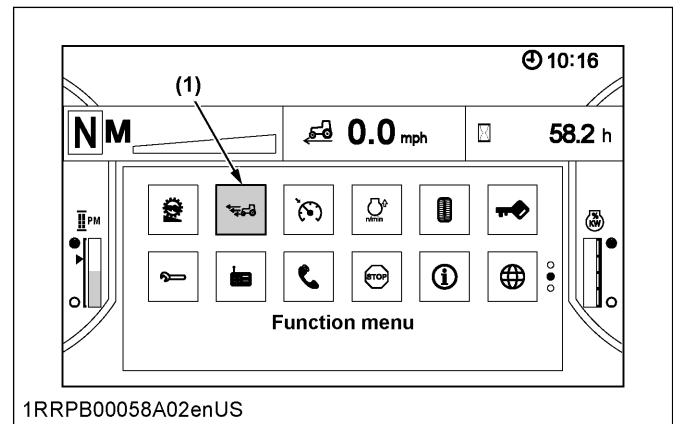


- Next button
- Previous button
- Enter button
- Back button



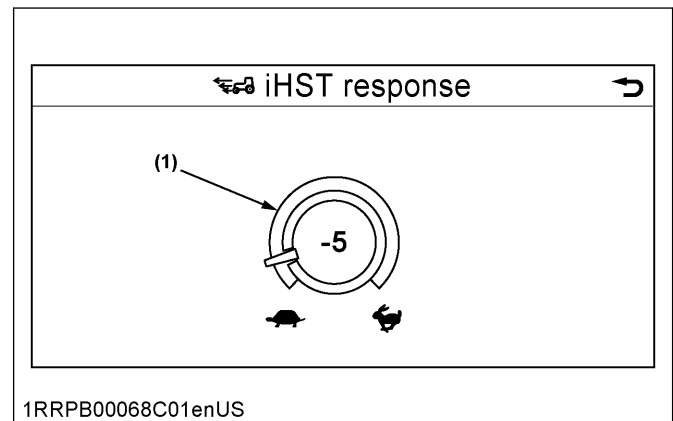
(1) Function menu screen

- Press the enter button to switch to the function menu operation screen, where the cursor will appear, allowing you to select icons.
- Press the next button or previous button to select the "iHST response" icon, then press the enter button to display the "iHST response" screen.



(1) iHST response icon

- Press the next button or previous button to adjust the iHST response value, and press the enter button to confirm your selection.

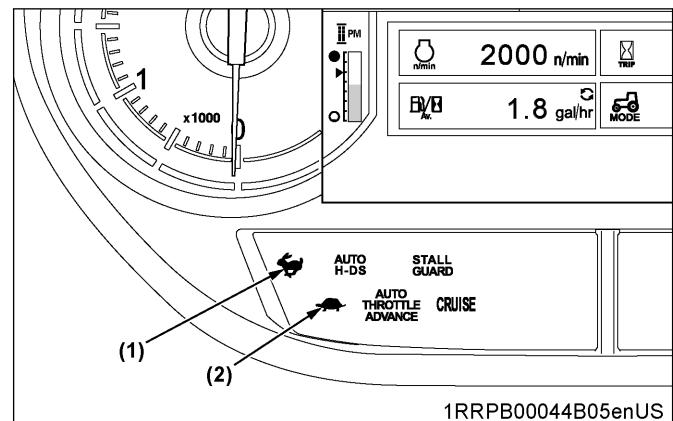


(1) iHST response dial

4. Hydro dual speed (H-DS)

H-DS changes the tractor speed in 2 stages whether the tractor is moving or not.

The selected speed can be checked with the indicator on the instrument panel.

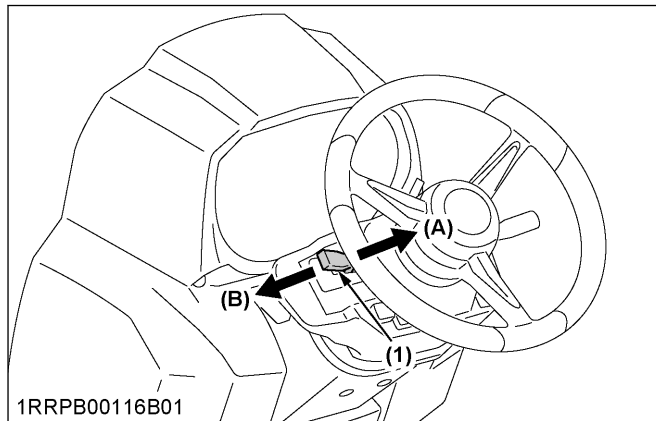


- H-DS high speed range indicator
- H-DS low speed range indicator

Setting procedure [Premium model]

Pull up the H-DS lever to increase the speed.

Push down the H-DS lever to decrease the speed.



(1) H-DS lever
(A) Pull up (high)
(B) Push down (low)

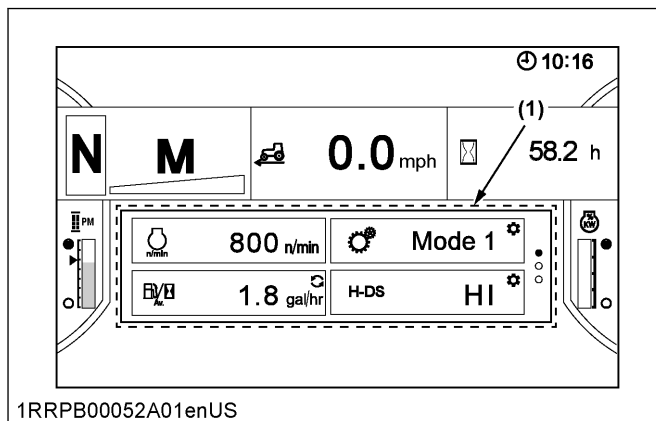
NOTE :

The H-DS function can also be set from the “Hydro dual speed” screen.

(See Setting the hydro dual speed on page 62.)

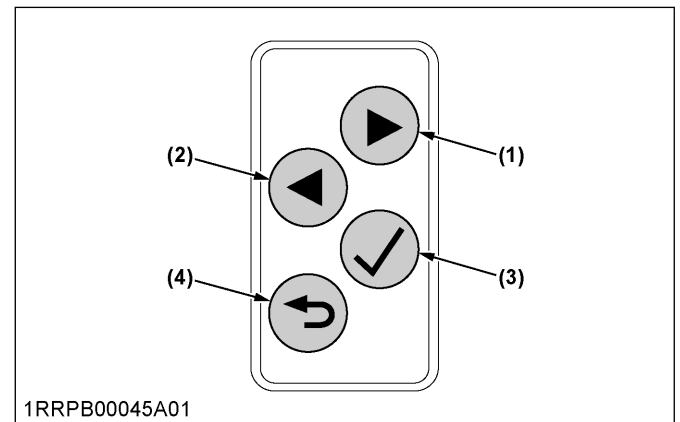
Setting procedure [Deluxe model]

1. Display the performance monitor screen that appears when the key switch is turned to the “ON” position.



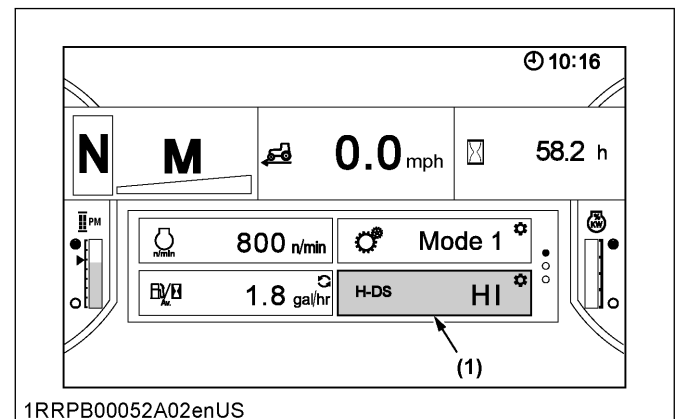
(1) Performance monitor screen

2. Press the enter button to switch to the performance monitor operation screen, where the cursor will appear, allowing you to select items.



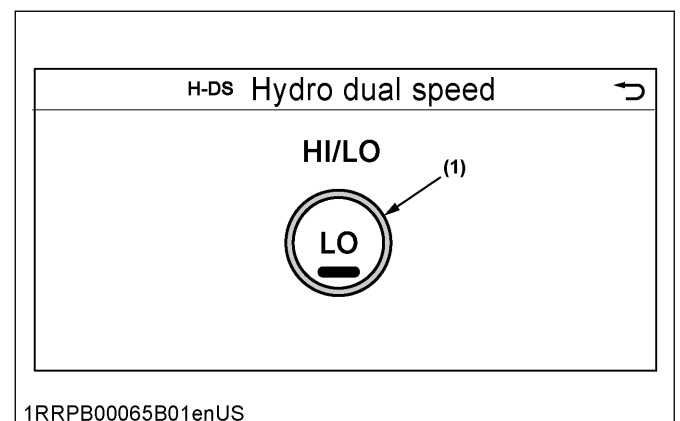
(1) Next button
(2) Previous button
(3) Enter button
(4) Back button

3. Press the next button or previous button to select the H-DS, then press the enter button to display the “Hydro dual speed” screen.



(1) H-DS

4. Press the enter button to switch the H-DS settings.



(1) Hydro dual speed HI/LO switch

5. iHST mode

iHST mode is Kubota's load sensing mode.

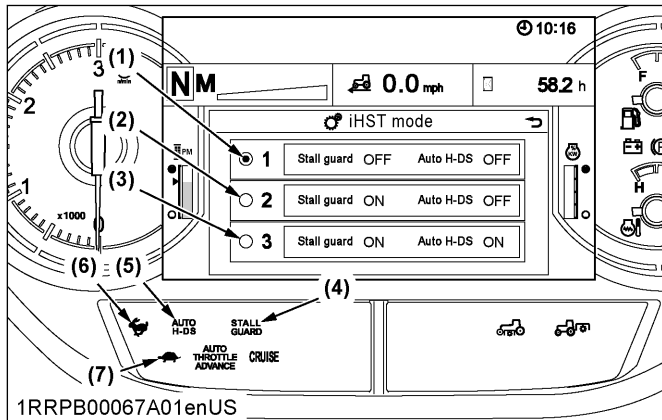
Load sensing includes “Stall guard” and “Auto H-DS”.

The iHST mode can be selected from “Manual”, “Stall guard”, or “Auto H-DS/Stall guard”.

Choose the best mode according to the type of job or your operating style.

The relationship between the mode and the indicator is as follows.

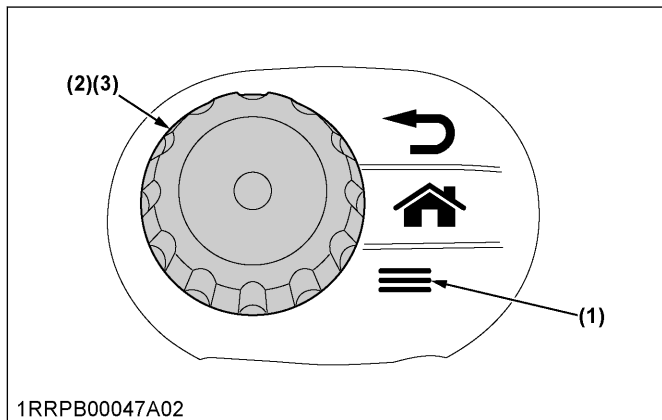
No.	Mode	Indicator	
		STALL GUARD	AUTO H-DS
1	Manual	Off	Off
2	Stall guard	On	Off
3	Auto H-DS/Stall guard	On	On



- (1) Manual mode
- (2) Stall guard mode
- (3) Auto H-DS/Stall guard mode
- (4) STALL GUARD indicator
- (5) AUTO H-DS indicator
- (6) High indicator
- (7) Low indicator

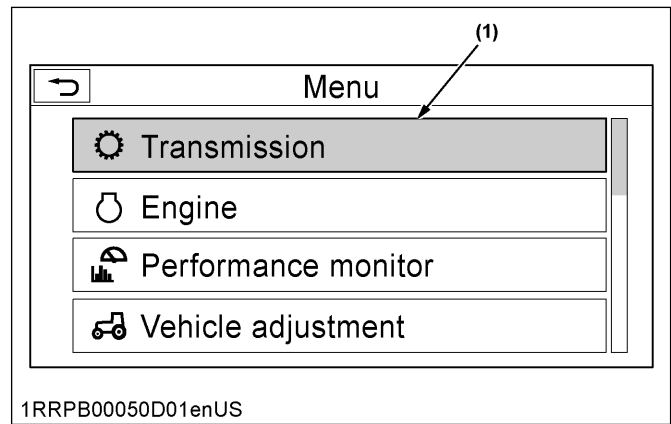
Setting procedure [Premium model]

- Press the menu button to display the “Menu” screen.



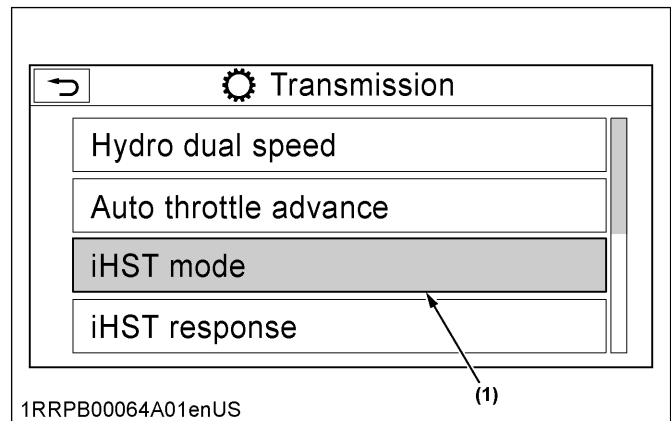
- (1) Menu button
- (2) Jog dial
- (3) Jog dial push button

- Rotate the jog dial to select “Transmission”, then press the jog dial push button to display the “Transmission” screen.



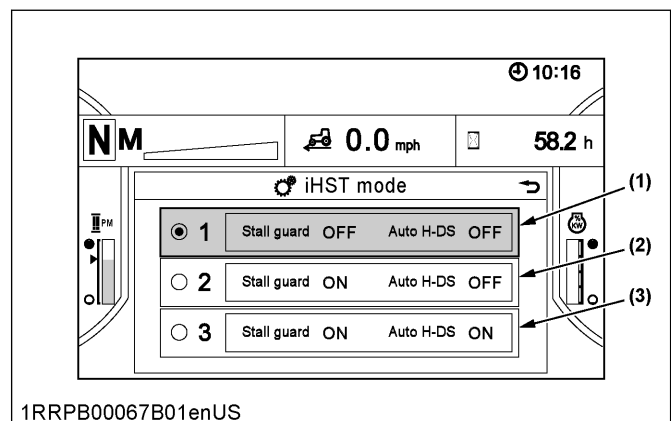
- (1) Transmission

- Rotate the jog dial to select “iHST mode”, then press the jog dial push button to display the “iHST mode” screen.



- (1) iHST mode

- Rotate the jog dial to select the “iHST mode”, and press the jog dial push button to confirm your selection.



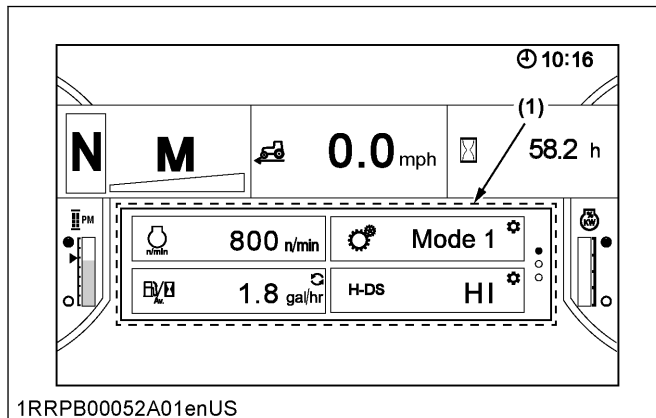
- (1) Manual
- (2) Stall guard
- (3) Auto H-DS/Stall guard

NOTE :

The “iHST mode” screen can also be displayed from the “Function menu” screen.

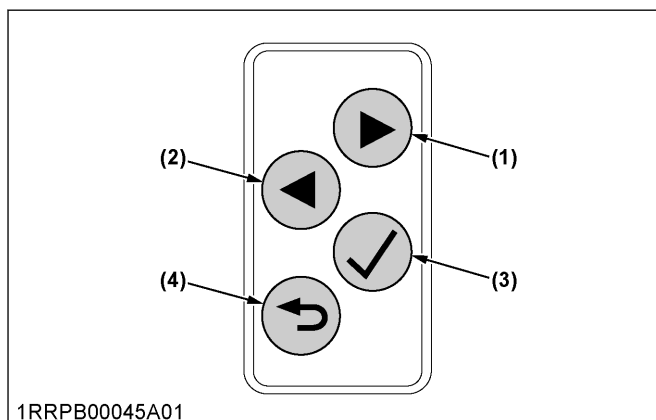
Setting procedure [Deluxe model]

1. Display the performance monitor screen that appears when the key switch is turned to the "ON" position.



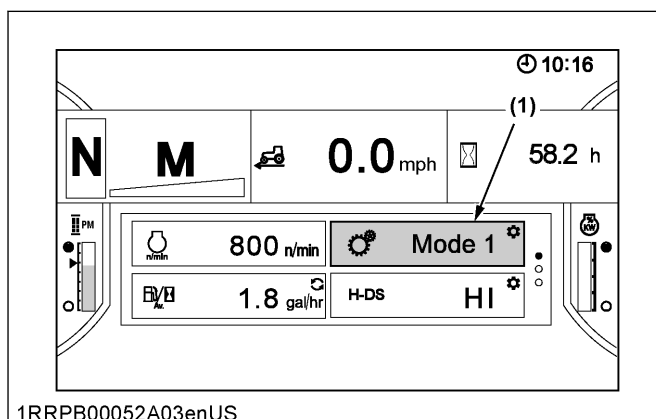
(1) Performance monitor screen

2. Press the enter button to switch to the performance monitor operation screen, where the cursor will appear, allowing you to select items.



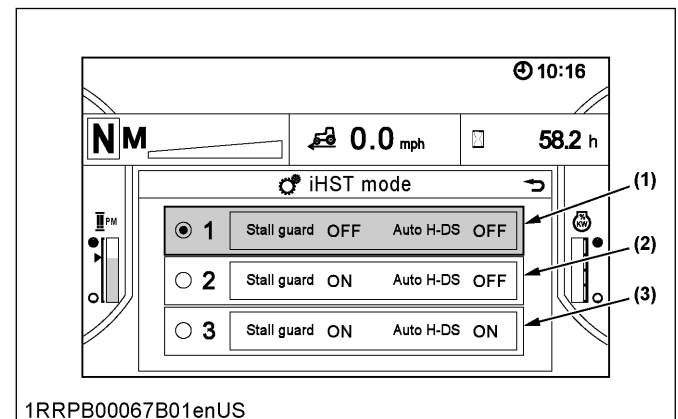
- (1) Next button
- (2) Previous button
- (3) Enter button
- (4) Back button

3. Press the next button or previous button to select the "iHST mode", then press the enter button to display the "iHST mode" screen.



(1) iHST mode

4. Press the next button or previous button to select the "iHST mode", and press the enter button to confirm your selection.



- (1) Manual
- (2) Stall guard
- (3) Auto H-DS/Stall guard

"Stall guard"

When the tractor gets overloaded and the engine speed drops, the tractor automatically slows down in response to the load, which prevents an engine stall.

NOTE :

When "Stall guard" is selected and the PTO is engaged, "Stall guard" switches to "Stall guard plus".

"Stall guard plus" maintains engine speed at a higher rate, and the tractor speed will automatically adjust to the loads on the engine.

"Auto H-DS/Stall guard"

Operate with the H-DS lever in the "High" position.

When the tractor gets overloaded and the engine speed drops, the tractor automatically slows down to the low-speed range without needing to operate the H-DS lever. In this case, the "High" indicator goes out, and the "Low" indicator lights up instead.

If the load is rather heavy and the engine speed drops further, "Stall guard" will activate to prevent the engine from stalling.

When the engine speed increases again, the tractor will automatically speed up from the low to the high-speed range, matching the speed control pedal.

NOTE :

- When the H-DS lever is set to the "Low" position, "Auto H-DS" does not work. If the "Low" indicator stays on and the "AUTO H-DS" indicator is flashing, the H-DS lever is set to the "High" position.
- Even in "Auto H-DS/Stall guard", the high-low speed change can be made with the H-DS lever. Return the H-DS lever to the "High" position when there is no longer a need to slow down.
- When "Auto H-DS/Stall guard" is selected and the PTO is engaged, "Stall guard" switches to

“Stall guard plus”. “Stall guard plus” maintains engine speed at a higher rate, and the tractor speed will automatically adjust to the loads on the engine.

“Manual”

The automatic control in response to the load does not activate.

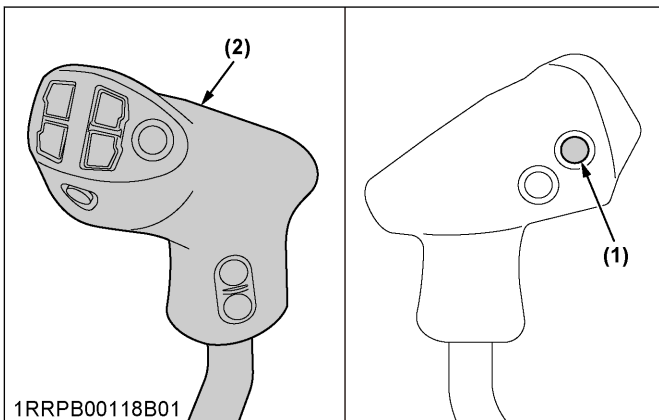
6. Throttle-up button

The throttle-up button is used to increase the engine speed while the button is being pressed.

The lifting and lowering speeds of the front loader, as well as the operating speeds of front attachments, depend on the amount of hydraulic pump oil, which varies in proportion to the engine speed.

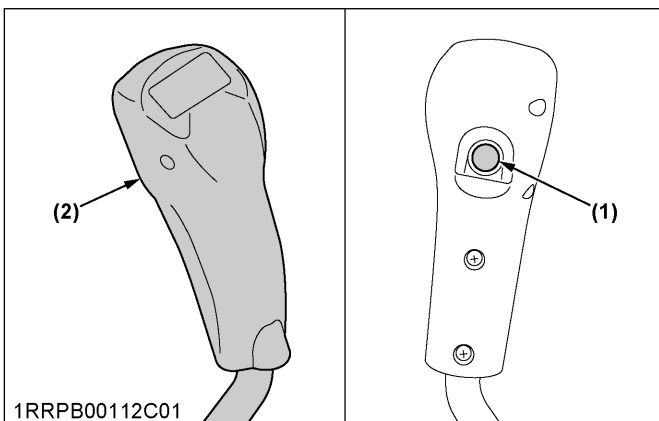
By holding down this button and moving the loader or remote control valve lever, these speeds can be increased in response to the “*Presetable engine speed*”. As a result, the cycle time of the loader can be shortened, leading to higher working efficiency.

[Premium model]



- (1) Throttle-up button
(2) Multi-function lever

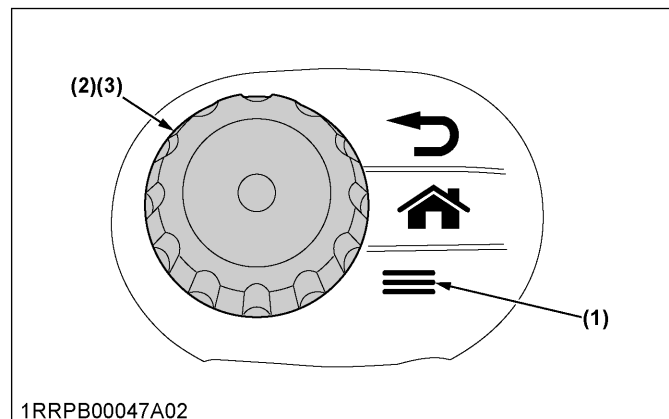
[Deluxe model]



- (1) Throttle-up button
(2) Loader and remote control valve lever

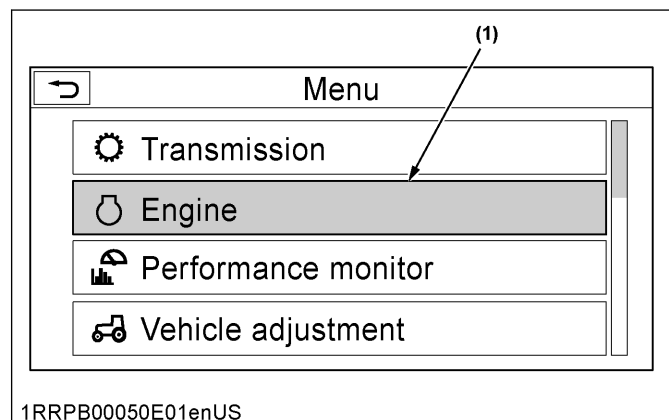
Setting procedure [Premium model]

- Press the menu button to display the “Menu” screen.



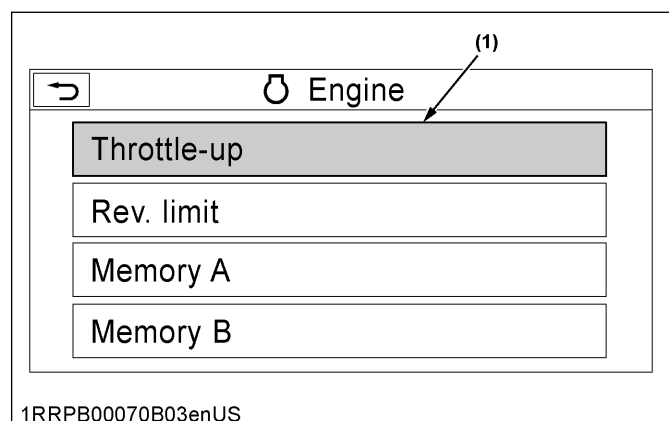
- (1) Menu button
(2) Jog dial
(3) Jog dial push button

- Rotate the jog dial to select “Engine”, then press the jog dial push button to display the “Engine” screen.



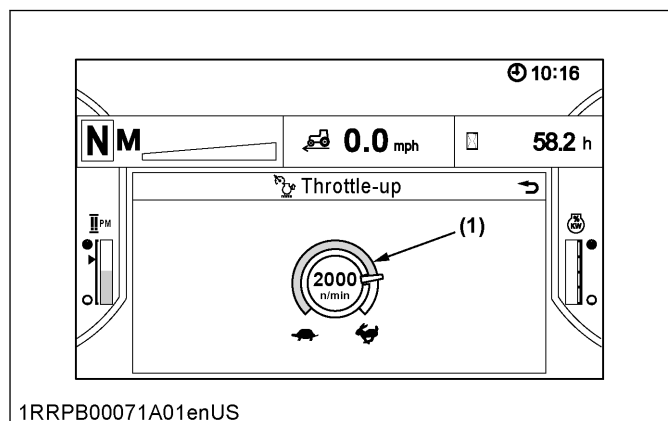
- (1) Engine

- Rotate the jog dial to select “Throttle-up”, then press the jog dial push button to display the “Throttle-up” screen.



- (1) Throttle-up

4. Rotate the jog dial to adjust the throttle-up value, and press the jog dial push button to confirm your selection.



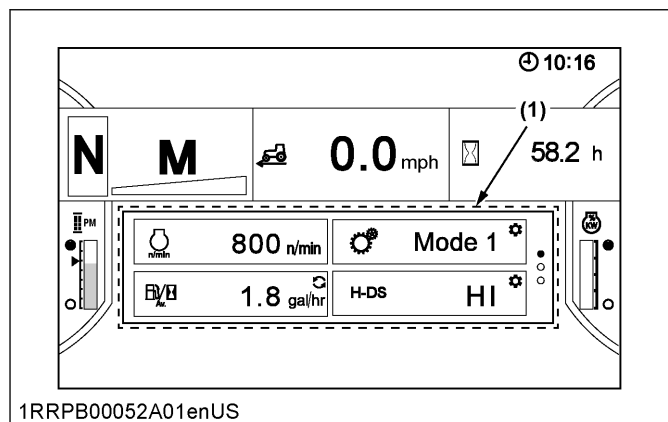
(1) Throttle-up dial

NOTE :

The “Throttle-up” screen can also be displayed from the “Function menu” screen.

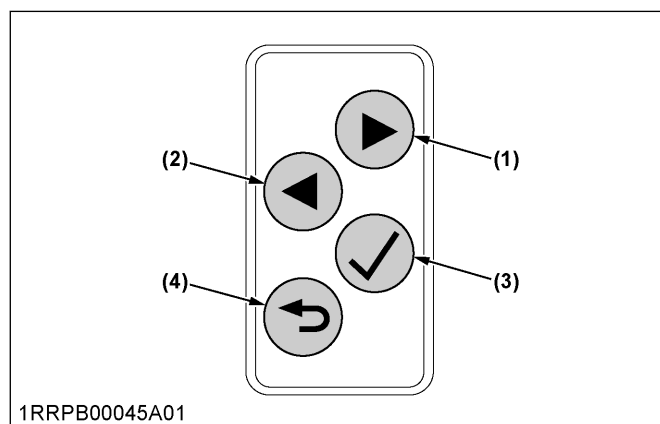
Setting procedure [Deluxe model]

1. Display the performance monitor screen that appears when the key button is turned to the “ON” position.



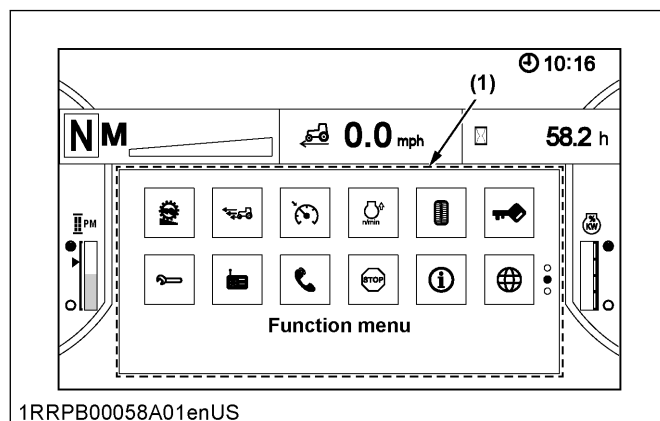
(1) Performance monitor screen

2. Press the next button to display the “Function menu” screen.



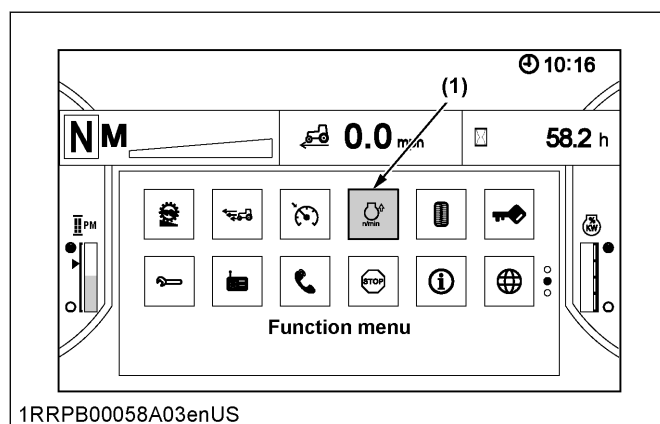
- (1) Next button
- (2) Previous button
- (3) Enter button
- (4) Back button

3. Press the enter button to switch to the function menu operation screen, where the cursor will appear, allowing you to select icons.



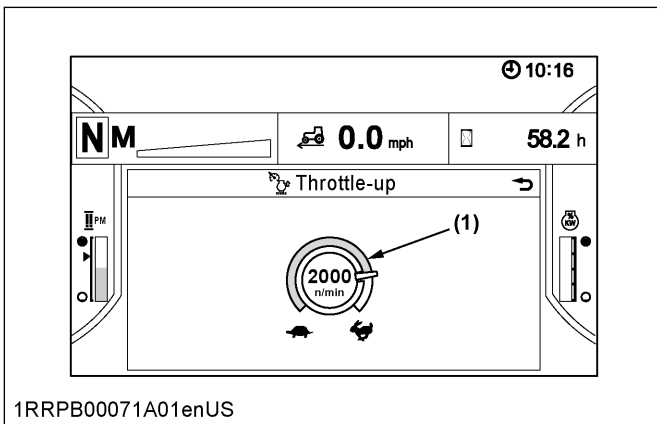
(1) Function menu screen

4. Press the next button or previous button to select the “Throttle-up” icon, then press the enter button to display the “Throttle-up” screen.



(1) Throttle-up icon

5. Press the next button or previous button to adjust the throttle-up value, and press the enter button to confirm your selection.



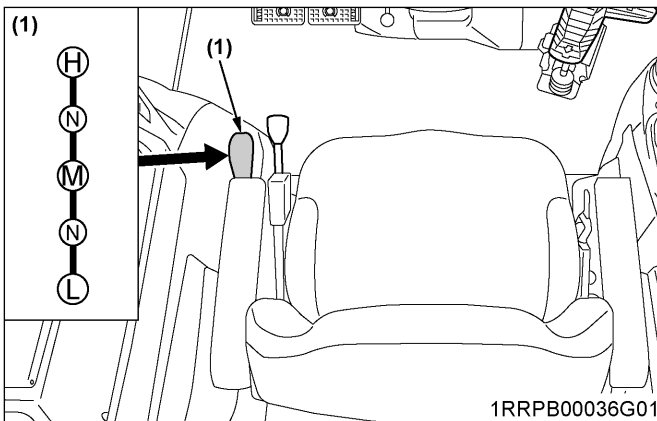
(1) Throttle-up dial

NOTE :

The next button or previous button change continuously with a long press.

7. Range gear shift lever (L-M-H)

The range gear shift can only be shifted when the tractor is completely stopped and the speed control pedal is in the neutral position.



(1) Range gear shift lever (L-M-H)
 (H) High
 (M) Middle
 (L) Low
 (N) Neutral position

IMPORTANT :

To avoid transmission and shift linkage damage when shifting:

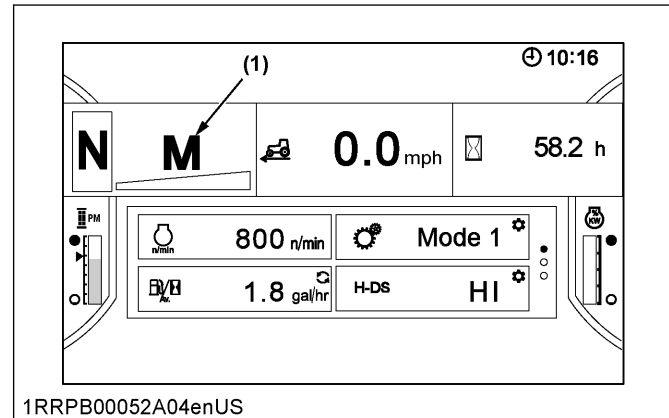
- Completely stop the tractor using the brake pedals.
- Do not force the range gear shift lever.
- If it is difficult to shift the lever into L, M, or H from neutral position:

On slopes, set the parking brake before starting the procedure.

- Slightly depress the speed control pedal to rotate the gears inside of the transmission.
- Release the speed control pedal to the neutral position.
- Wait for a moment and then shift the lever.

NOTE :

The range gear shift number being selected appears on the display.



(1) Gear shift number (H-M-L-N)

8. Front wheel drive lever

The front wheel drive lever can be used to shift between 2WD and 4WD.

WARNING

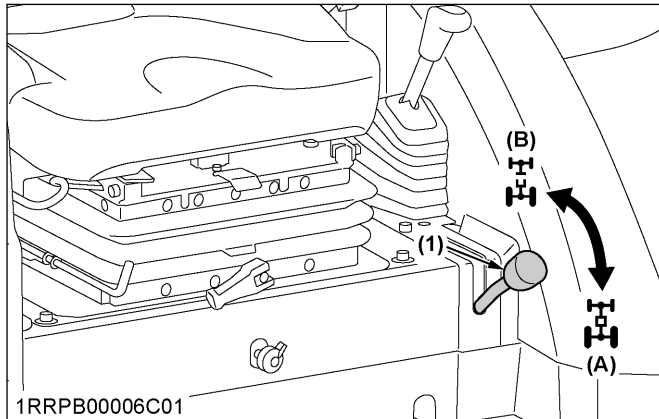
To avoid personal injury or death:

- Do not engage the front wheel drive when traveling at road speed.
 - When driving on icy, wet, or loose surfaces, make sure the tractor is correctly ballasted to avoid skidding and loss of steering control. Operate at reduced speed and engage front wheel drive.
 - 4WD model tractor is equipped with 4-wheel braking and appropriate care should be taken during hard braking.
 - Do not brake suddenly.
- An accident may occur as a result of a heavy towed load shifting forward or loss of control.
- The braking characteristics are different between 2-wheel and 4-wheel drive tractor models. Be aware of the difference and use carefully.
 - When driving down a slope, ensure that the 4-wheel drive is engaged to increase traction and braking efficacy (if equipped).

1. Make sure the tractor has come to a complete stop before shifting the front wheel drive lever.
2. Shift the front wheel drive lever.
 - Shift the lever to "ON" to engage the front wheel drive.
 - Shift the lever to "OFF" to disengage the front wheel drive.

NOTE :

If there are difficulties shifting the front wheel drive lever, turn the steering wheel around and then shift the lever.



(1) Front wheel drive lever (A) On
(B) Off

IMPORTANT :

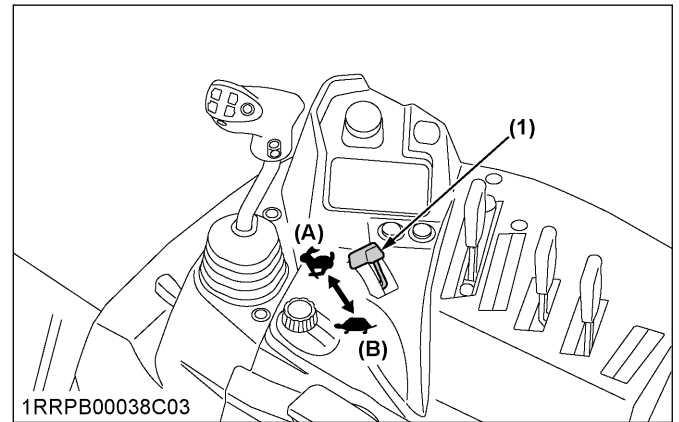
- Make sure that the tractor has come to a complete stop before shifting the front wheel drive lever.
- Tires will wear quickly if front wheel drive is engaged on paved roads.

Front wheel drive is effective for the following jobs:

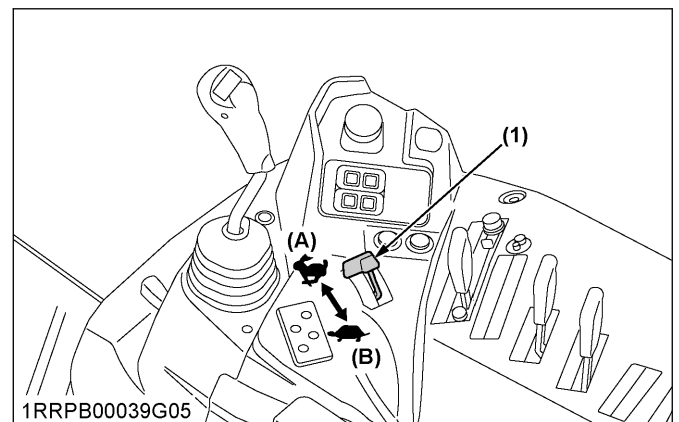
- When greater pulling force is needed, such as working in a wet field, when pulling a trailer, or when working with a front-end loader.
- When working in sandy soil.
- When working on a hard soil where a rotary tiller might push the tractor forward.
- For increased braking at reduced speed.

9. Hand throttle lever

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

[Premium model]

(1) Hand throttle lever (A) Increase
(B) Decrease

[Deluxe model]

(1) Hand throttle lever (A) Increase
(B) Decrease

10. Speed control pedal**⚠ WARNING**

To avoid personal injury or death:

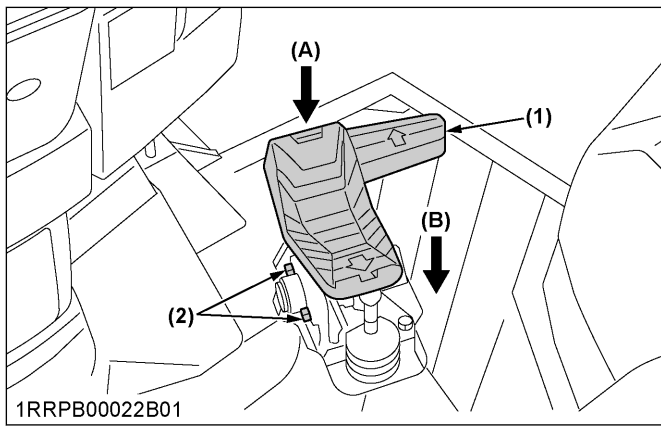
- Do not operate if the tractor moves on level ground with foot off of the speed control pedal.
- Contact your local Kubota dealer.

Forward pedal

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

Reverse pedal

Depress the speed control pedal with the heel or toe of your right foot to move backward.



- (1) Speed control pedal
(2) Stopper bolt
(A) Forward
(B) Reverse

IMPORTANT :

To prevent serious damage to the HST, do not adjust the stopper bolts.

NOTE :

When you stand up from the seat with the speed control pedal stepped on or the cruise control switch engaged (ON), the engine will stop regardless of whether the tractor is moving or not. This is because the tractor is equipped with operator presence control system (OPC).

11. Cruise control

WARNING

To avoid personal injury or death:

- Do not use the cruise control when driving on the road.
- Connect both the left and the right brakes when driving on the road. The speed cruise control will not be released with single brake activation.

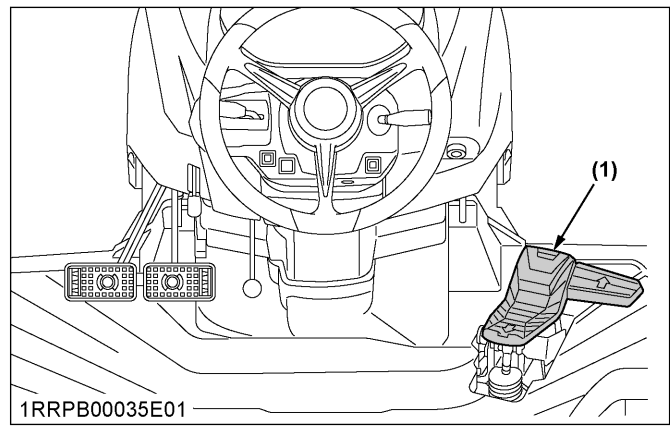
Cruise control is designed for tractor operating efficiency and operator comfort. This device will provide a constant forward operating speed.

To activate the cruise control [Premium model]

NOTE :

To operate faster than the set speed, press the speed control pedal further down in this condition. The set speed will be resumed if you release the speed control pedal.

1. Press the forward side of the speed control pedal until the desired tractor speed is reached.



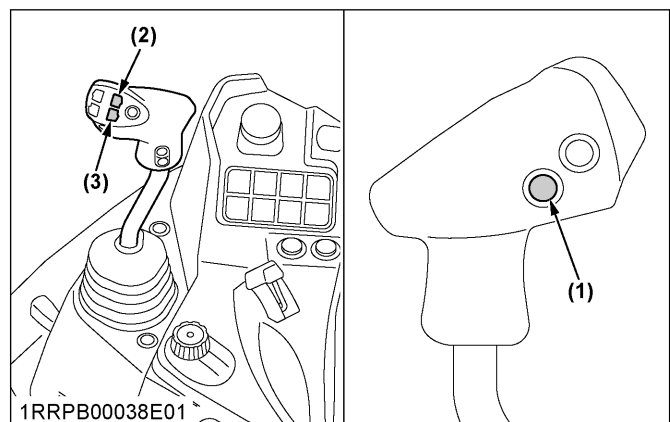
- (1) Speed control pedal

2. With the speed control pedal still down, activate the cruise control.

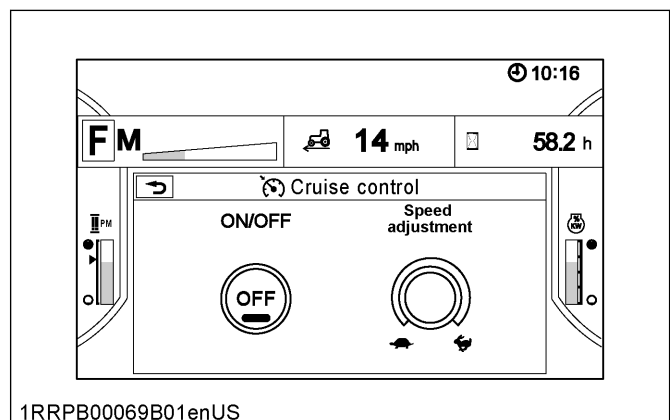
- a. Press the cruise control ready button, the "Cruise control" screen appears.

NOTE :

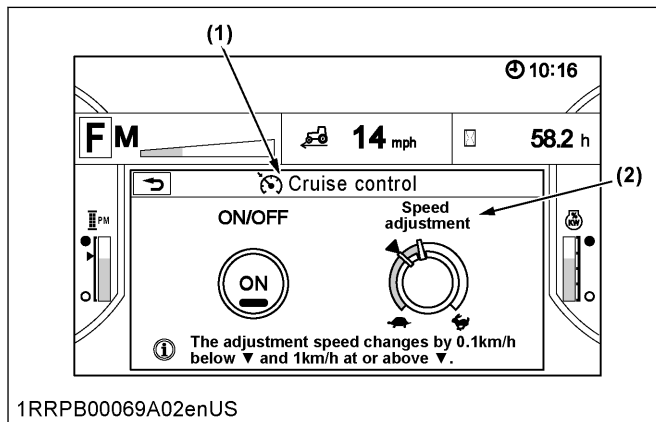
If no changes are made within 5 seconds, the "Cruise control" screen will disappear.



- (1) Cruise control ready button
(2) Cruise speed button (increase)
(3) Cruise speed button (decrease)



- b. Press the cruise speed button (increase) to activate the cruise control.
The cruise control is displayed when the cruise control is activated.



- (1) Cruise control screen
(2) Speed adjustment dial

NOTE :

The cruise control can also be turned on or off from the “Cruise control” screen.
(See Setting the cruise control on page 63.)

3. Press the cruise speed button to adjust the cruise set speed.
The change in the set speed varies depending on the position of the ▼ mark.
- Above the ▼ mark: Change of 1 km/h
 - Below the ▼ mark: Change of 0.1 km/h

IMPORTANT :

The displayed speed may not match the set speed for the following reasons:

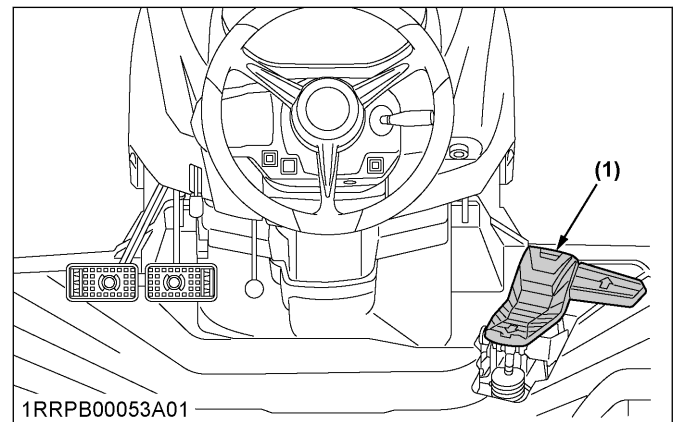
- Wheel slip
- Tire wear and pressure
- Insufficient engine warm-up (Low engine and transmission oil temperature)

To activate the cruise control [Deluxe model]

NOTE :

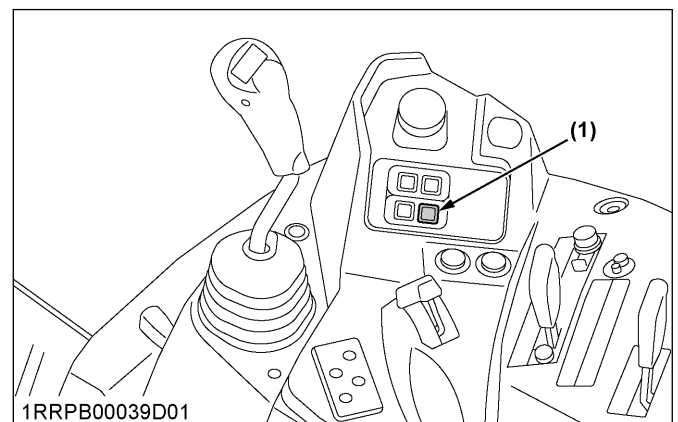
To operate faster than the set speed, press the speed control pedal further down in this condition. The set speed will be resumed if you release the speed control pedal.

1. Press the forward side of the speed control pedal until the desired tractor speed is reached.



- (1) Speed control pedal

2. With the speed control pedal still down, press the cruise control switch to activate the cruise control.



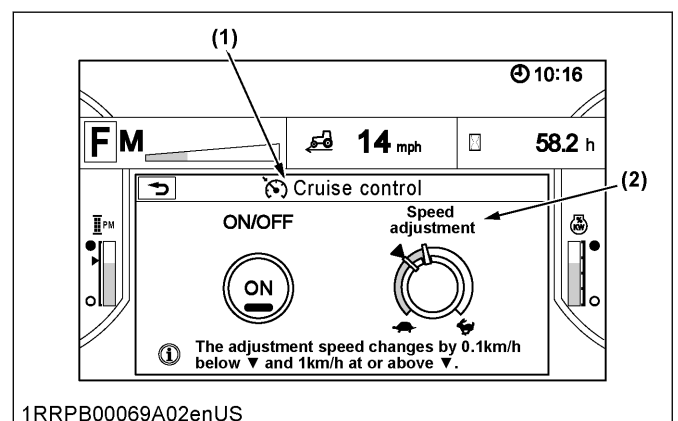
- (1) Cruise control switch

3. Adjust the cruise set speed.
a. Display the “Cruise control” screen.

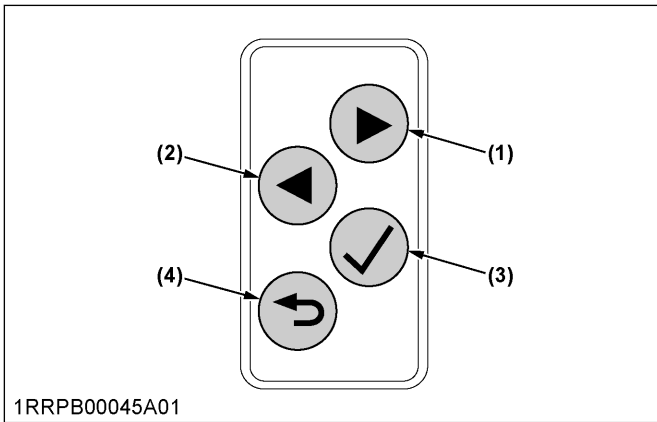
NOTE :

The “Cruise control” screen can also be opened from the “Function menu” screen.
(See Setting the cruise control on page 63.)

- b. Press the next button or previous button to select “Speed adjustment”, then press the enter button to confirm.



- (1) Cruise control screen
(2) Speed adjustment dial



- (1) Next button
 (2) Previous button
 (3) Enter button
 (4) Back button

- c. Press the next button or previous button to adjust the desired speed.

The change in the set speed varies depending on the position of the ▽ mark.

- Above the ▽ mark: Change of 1 km/h
- Below the ▽ mark: Change of 0.1 km/h

IMPORTANT :

The displayed speed may not match the set speed for the following reasons:

- Wheel slip
- Tire wear and pressure
- Insufficient engine warm-up (Low engine and transmission oil temperature)

NOTE :

Pressing and holding the next button or previous button continuously changes the set speed.

- d. After adjustment, press the enter button or return button to exit the adjustment mode of the speed adjustment dial.

To deactivate the cruise control

The cruise control can be deactivated by using one of the following methods:

- Press the cruise control ready button [**Premium model**].
- Press the cruise control switch [**Deluxe model**].
- Depress both brake pedals.
- Depress the speed control pedal in reverse.
- Turn off the “ON” or “OFF” switch displayed on the cruise control screen.
- Set the cruise speed to 0 mph.
- Shift the range shift lever to another position.

NOTE :

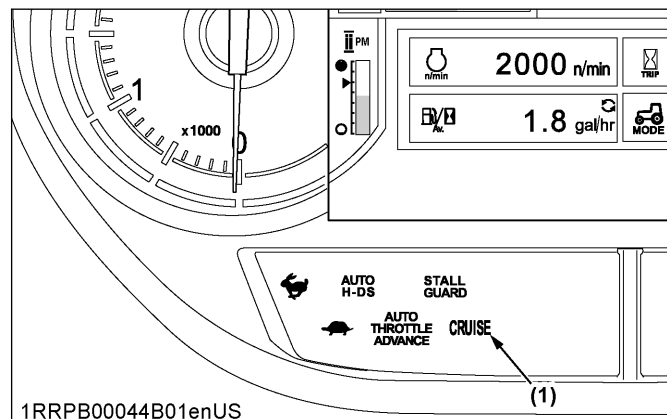
- The cruise control will be deactivated automatically when both brake pedals are depressed.

The cruise control does not deactivate when only the right or left brake is applied.

- The cruise control will not operate in reverse.
- When you stand up from the operator's seat with the speed control pedal depressed or the cruise control activated, the engine will stop regardless of whether the tractor is moving or not. This is due to the tractor being equipped with an operator presence control (OPC) system.

K-Command display message

- The cruise control indicator remains illuminated while the cruise control is activated.
- When the tractor exceeds the cruise set speed, the cruise control indicator will start flashing after depressing the speed control pedal.
- The cruise control indicator will turn off when the cruise control is deactivated by setting the cruise control switch to the “OFF” position ([**Deluxe model**]), or by depressing the brake pedal or the reverse side of the speed control pedal.



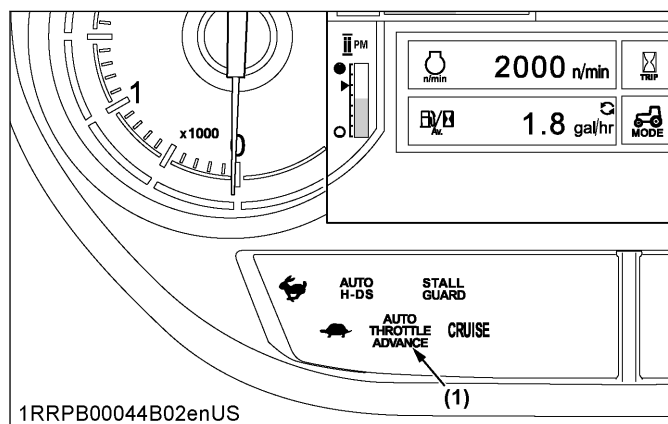
(1) Cruise control indicator

12. ATA (auto throttle advance) switch

The ATA (auto throttle advance) function links the engine speed with the tractor's speed and allows control using the speed control pedal. It assists when pulling a trailer or the like more easily.

Press the ATA switch to activate the ATA function and the “AUTO THROTTLE ADVANCE” indicator will turn on.

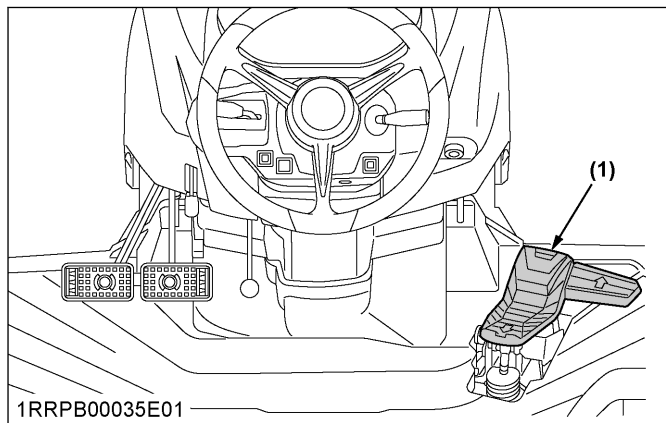
Deactivate the ATA function, and the “AUTO THROTTLE ADVANCE” indicator will turn off.



(1) AUTO THROTTLE ADVANCE indicator

NOTE :

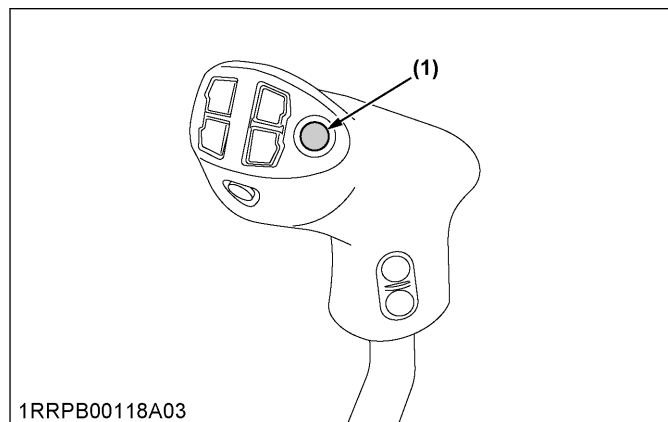
Before pressing the ATA switch, return the speed control pedal to the “NEUTRAL” position.



(1) Speed control pedal

Setting procedure [Premium model]

Press the ATA switch to activate the ATA function.
Press the ATA switch again to deactivate the ATA function.



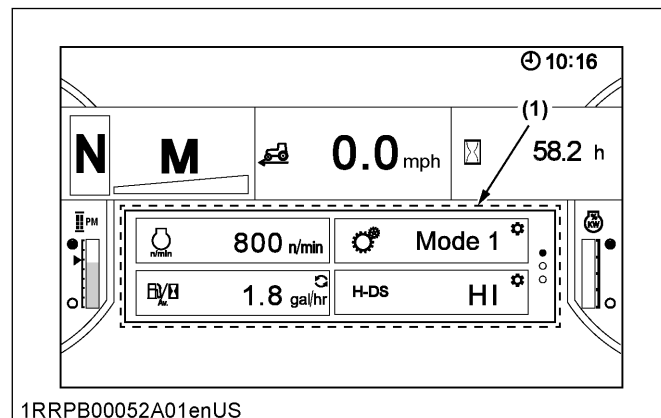
(1) ATA (auto throttle advance) switch

NOTE :

The ATA function can be set from the auto throttle advance screen.

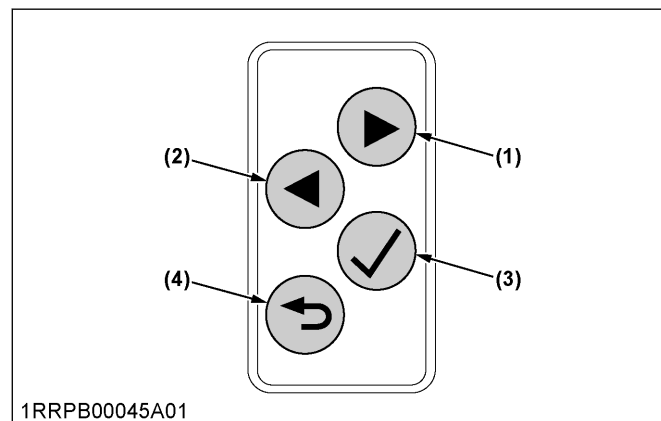
Setting procedure [Deluxe model]

1. Display the performance monitor screen that appears when the key switch is turned to the “ON” position.

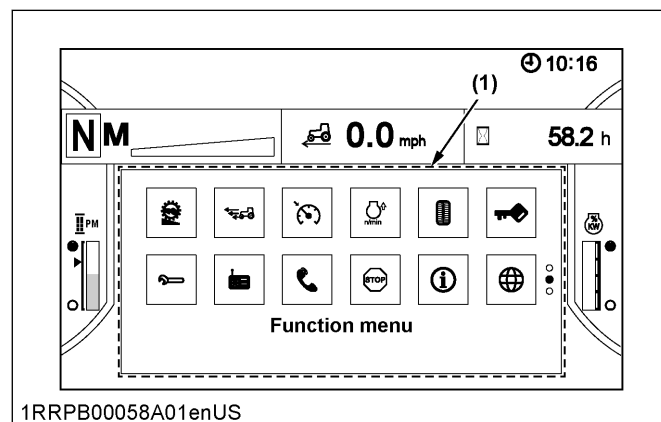


(1) Performance monitor screen

2. Press the next button to display the “Function menu” screen.



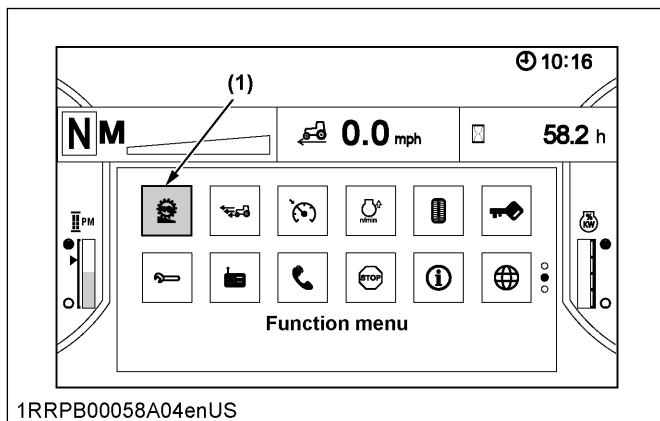
- (1) Next button
- (2) Previous button
- (3) Enter button
- (4) Back button



(1) Function menu screen

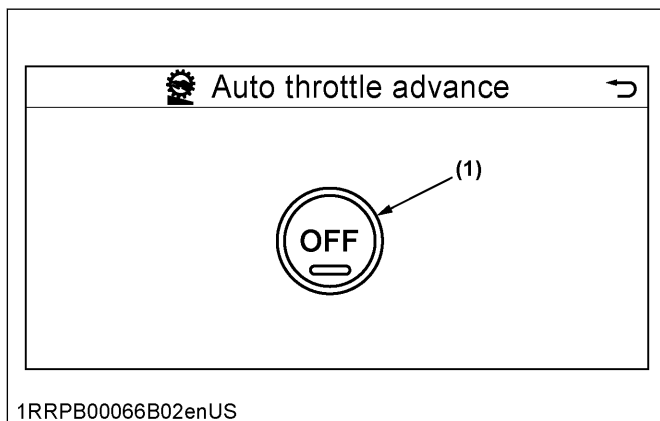
3. Press the enter button to switch to the function menu operation screen, where the cursor will appear, allowing you to select icons.

- Press the next or previous button to select the “Auto throttle advance” icon, then press the enter button to display the “Auto throttle advance” screen.



(1) Auto throttle advance icon

- Press the enter button to set the auto throttle advance function to “ON” or “OFF”.



(1) Auto throttle advance ON/OFF switch

STOPPING THE TRACTOR

- Slow down the engine.
- Depress the brake pedal.
- Wait for the tractor to stop.
- Disengage the PTO clutch.
- Lower the implement to the ground.
- Shift the transmission to “NEUTRAL”.
- Set the parking brake.

CHECK DURING DRIVING

IMPORTANT :

Immediately stop the engine if:

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

While driving, check the following items to see that all the parts are functioning normally:

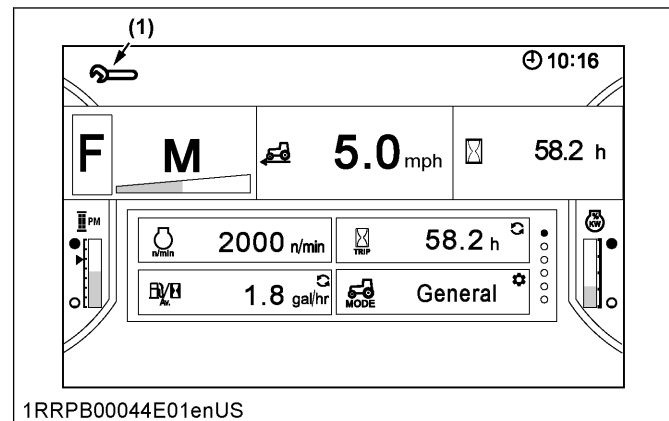
- Service inspection indicator on page 130
- Easy Checker on page 130
- Fuel gauge on page 131
- Coolant temperature gauge on page 132
- Tachometer on page 132

1. Service inspection indicator

The service inspection indicator activates when the items in the maintenance log are due for service. Perform the necessary maintenance.

After maintenance, reset the maintenance hour display to zero on the maintenance log screen in service inspection mode. The service inspection indicator will turn off.

(See MAINTENANCE LOG SCREEN on page 78.)

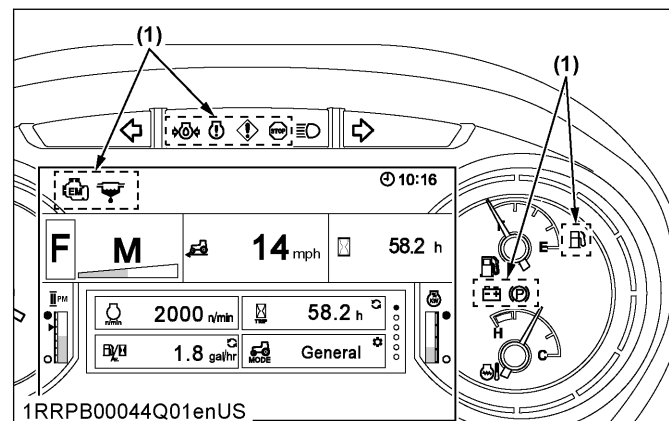


(1) Service inspection indicator

2. Easy Checker

If the warning indicators on the Easy Checker come on during operation, immediately stop the engine and find the cause as follows.

Never operate the tractor while an Easy Checker indicator is on.



(1) Easy Checker

Engine oil pressure

If the oil pressure in the engine drops below the prescribed level, the warning indicator on the Easy Checker will come on.

If this should happen during operation, and it does not go off when the engine is accelerated to more than 1000 rpm, check the engine oil level.

(See Changing the engine oil on page 203.)

Electrical charge

If the alternator is not charging the battery, the indicator on the Easy Checker will come on.

If this should happen during operation, check the electrical charging system or contact your local Kubota dealer.

Engine warning

This indicator serves the following 2 functions. If the warning indicator lights up, pinpoint the cause and take proper measures.

1. Error with the engine control system

If during operation the water temperature gauge reads an acceptable level but the warning indicator on the Easy Checker comes on, stop the engine and then restart it. If the error happens again, contact your local Kubota dealer.

IMPORTANT :

If the warning indicator lights up, the following phenomena may appear depending on the engine's trouble spot.

- The engine stops unexpectedly.
- The engine fails to start or gets interrupted just after starting.
- The engine output is not enough.
- The engine output is enough, but the warning indicator stays on.

If the engine output is not enough, immediately interrupt the operation and move the tractor to a safe place and stop the engine.

2. Engine overheat

If the water temperature gauge reads an unusual level and the warning indicator on the Easy Checker comes on, the engine may have overheated. Check the tractor by reading the troubleshooting section of this manual.

(See TROUBLESHOOTING on page 227.)

Emission indicator

If this indicator appears on the K-Command display, take the steps to lower the water temperature. This helps keep the emission clean.

Master system warning

If trouble should occur at the engine, transmission, hydraulic or other control parts, the warning indicator flashes as a warning.

The “*Master system warning*” indicates more severe trouble than the “*System abnormality*”.

If the trouble is not corrected by restarting the tractor, contact your local Kubota dealer.

System abnormality

If trouble should occur at the engine, transmission, hydraulic or other control parts, the indicator flashes as a warning.

Move the tractor to a safe place and stop the engine.

If the trouble is not corrected by restarting the tractor, contact your local Kubota dealer.

Parking brake

If the parking brake is applied, the Easy Checker warning indicator will light up.

If the indicator is on during operation, release the parking brake lever immediately.

Fuel level

If the fuel in the tank goes below the prescribed level, the Easy Checker indicator will light up.

- **L3770, L4270** less than 6 L (1.5 U.S. gals)
- **L3970, L4470, L5070, L6070** less than 5.6 L (1.4 U.S. gals)

If this should happen during operation, refuel as soon as possible.

(See Checking the fuel tank and refueling on page 185.)

IMPORTANT :

When the fuel indicator lights up, refuel the tank as soon as possible. If the tractor runs out of fuel and stalls, the engine and its components may be damaged.

Water separator

If water or impurities collect in the water separator, the indicator will be displayed on the K-Command display and the buzzer will sound.

If this should happen during operation, drain the water from the water separator as soon as possible. (See Checking the water separator on page 186.)

NOTE :

For checking and servicing of your tractor, contact your local Kubota dealer for instructions.

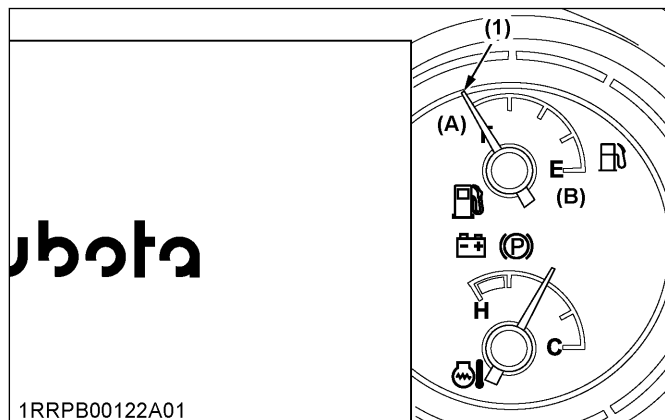
3. Fuel gauge

A needle indicates the amount of fuel left regardless of the key position.

Be careful not to empty the fuel tank. Otherwise air may enter the fuel system.

Should this happen, the system should be bled.

(See Bleeding the fuel system on page 216.)



(1) Fuel gauge

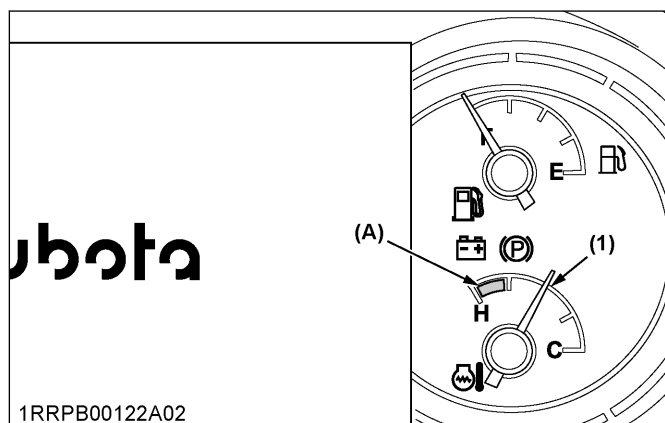
(A) Full
(B) Empty

4. Coolant temperature gauge

WARNING

To avoid personal injury or death, do not remove the radiator cap until coolant temperature is well below its boiling point. Then, loosen the cap slightly to the first stop to relieve any pressure before removing the cap completely.

1. With the key switch at the "ON" position, this gauge indicates the temperature of the coolant. [C] is for cold and [H] is for hot.
2. If the indicator reaches the red zone position, the engine coolant is overheated. Check the tractor by reading the troubleshooting section of this manual. (See TROUBLESHOOTING on page 227.)



(1) Coolant temperature gauge (A) Red zone

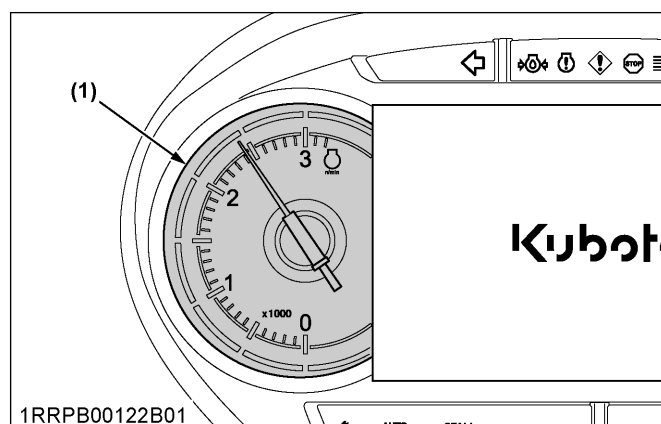
4.1 Overheating countermeasures

Take the following actions if the engine overheats.

1. Park the tractor in a safe place and keep the engine idling unloaded.
2. Allow the engine to idle unloaded for about 5 minutes before stopping it, rather than stopping it suddenly.
3. Keep away from the machine for another 10 minutes or while the steam blows out.
4. Check that there are no dangers such as burns. Get rid of the causes of overheating according to the troubleshooting section of this manual. (See TROUBLESHOOTING on page 227.) Afterwards, restart the engine.

5. Tachometer

The tachometer indicates the engine speed on the dial.



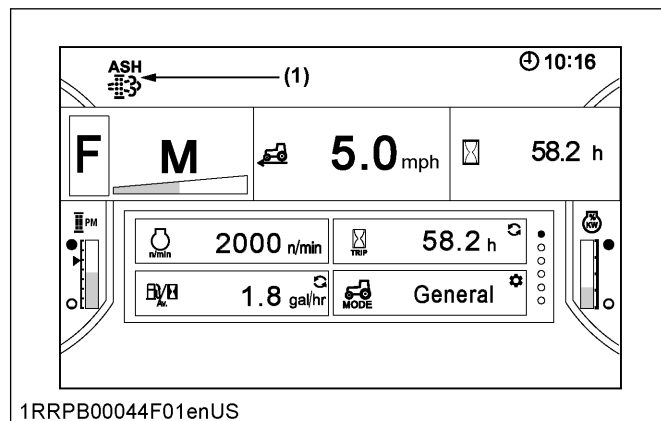
(1) Engine revolution

6. Ash cleaning notification

The ash cleaning indicator lights up when the DPF needs to be cleaned. Contact your local Kubota dealer for this service.

More information about this service item can be found in the following sections:

(See Cleaning the DPF muffler on page 210.)



(1) Ash cleaning indicator

7. CCV freezing warning system



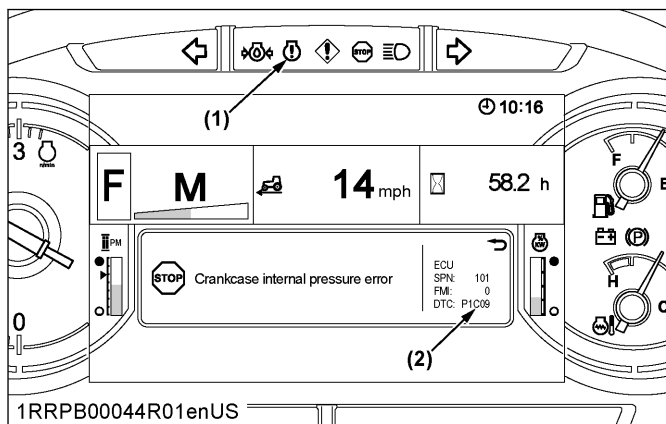
WARNING

To avoid personal injury or death, do not remove out the engine oil dipstick immediately after the warning indicator has come on. Allow the engine to cool sufficiently before removing the engine oil dipstick.

If the oil separator hose freezes, the engine warning indicator starts flashing, the error code (P1C09) appears in the hour meter, and the buzzer starts sounding continuously.

IMPORTANT :

- If the CCV freezing warning system is activated, stop the engine and consult your local Kubota dealer immediately. Otherwise the engine oil may spout and in the worst case the engine is damaged then needs to be replaced.
- Before and after the cold season, check the terminals, pressure switch, and others. If any damage or corrosion are found, do not use the machine and consult your local Kubota dealer for repair request.



- 1RRPB00044R01enUS
- (1) Engine warning indicator
(2) Error code

ENGINE START SECURITY FUNCTION

This function is a theft prevention system which ensures that the engine will start only when you enter a pre-set password number.

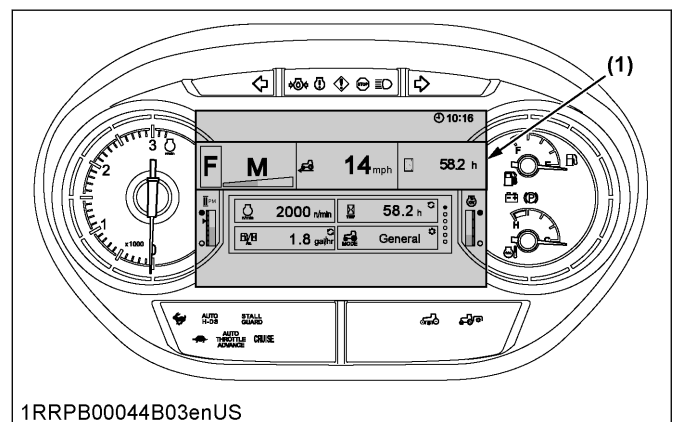
IMPORTANT :

- This function is not directly intended for the prevention of tractor theft.
- This function can be switched on or off. The function has no preventive effect on theft when it is switched off.
- If you enter the wrong password number 10 times in a row, password number input is

rejected and the engine can no longer be started. In this case, or if you forget your password number, contact your local Kubota dealer.

- After releasing the engine security via password number, for 10 minutes this function is canceled and you can restart the engine without needing to enter the password number even when ignition is "OFF".
- Details regarding how to confirm if the function is switched on or off can be found in a different section.
(See Setting the engine start security function on page 135.)
- In order to have an effective theft prevention system, the password number must be changed on a regular basis and must not be an easy-to-guess sequence of numbers (such as consecutive numbers).

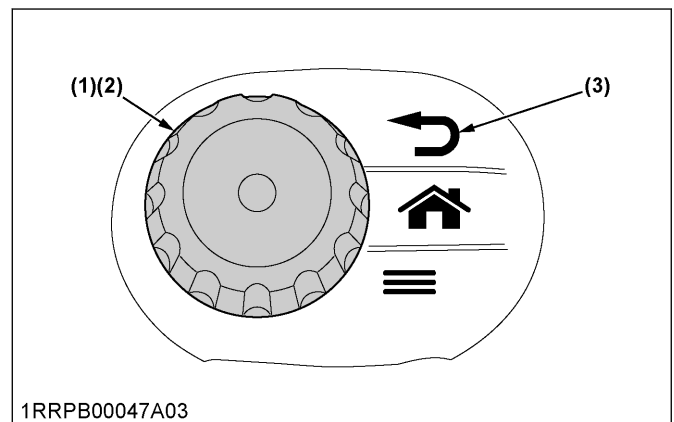
Operations and settings are performed using the display control device, while the password number and messages are displayed on the LCD monitor.



1RRPB00044B03enUS

(1) LCD monitor

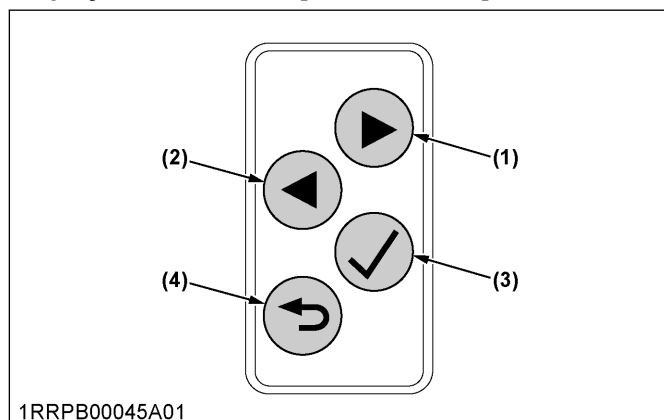
Display control device [Premium model]



1RRPB00047A03

- (1) Jog dial
(2) Jog dial push button
(3) Back button

Display control device [Deluxe model]

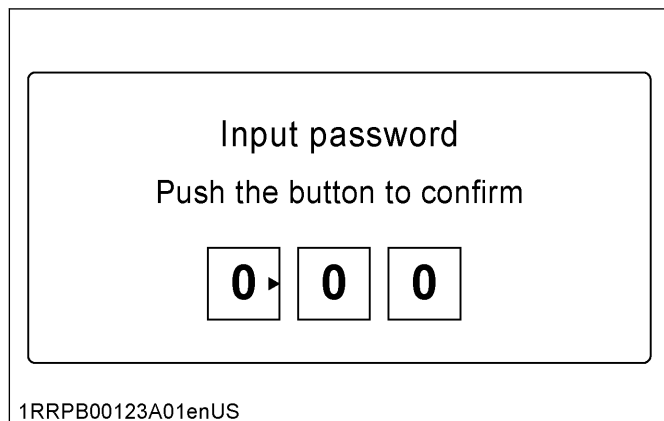


- (1) Next button
 (2) Previous button
 (3) Enter button
 (4) Back button

1. Entering the password number

1. Turn the ignition "ON", and the password input screen will be displayed on the LCD monitor.

Password number input screen



2. Enter the password number from the hundreds digit in order. The password number should be triple-digit number.

For example, when the password number is 234:

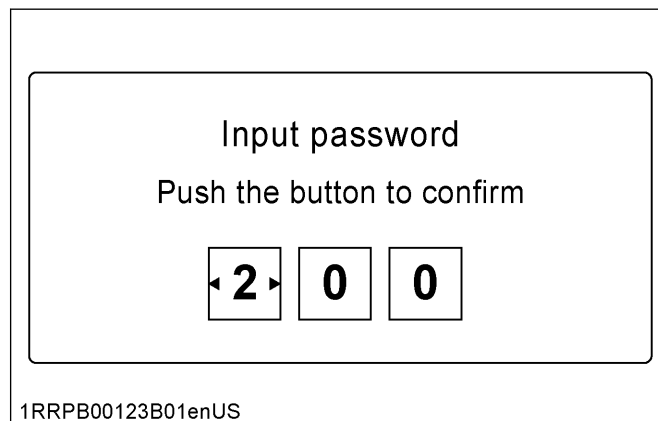
- Display the digit [2] in the hundreds place.
 - Rotate the jog dial to display the digit. **[Premium model]**
 - Press the next button or previous button to display the digit. **[Deluxe model]**
- Confirm the displayed digit.
 - Press the jog dial push button to confirm. **[Premium model]**
 - Press the enter button to confirm. **[Deluxe model]**
- Once confirmed, the cursor will move to the tens place.

NOTE :

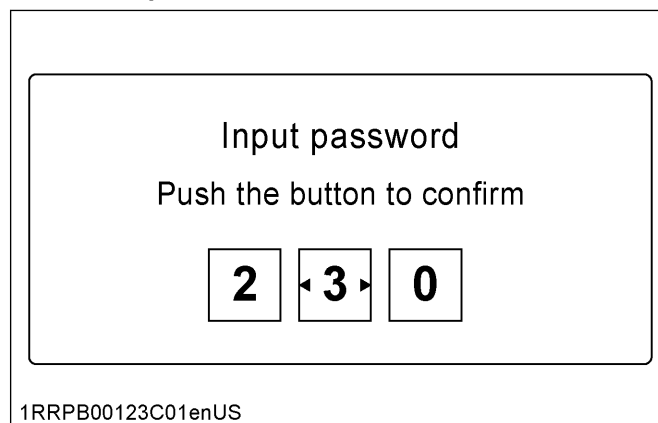
Pressing the back button will return you to the previous digit input.

- Repeat the same operation to confirm the digits in the tens and ones places.
- Once the digit in the ones place is confirmed, the three-digit password is set.

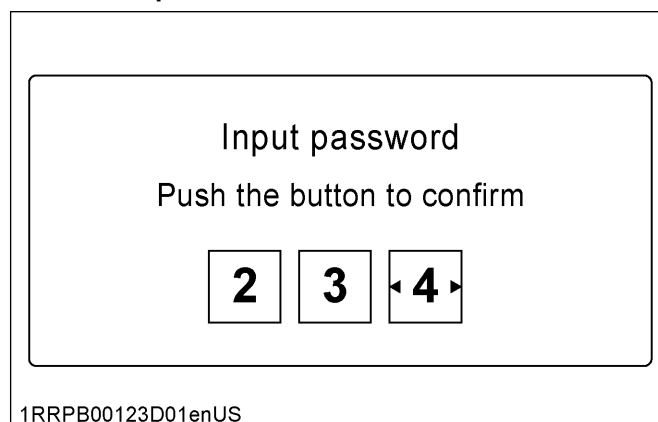
Enter hundreds place



Enter tens place



Enter ones place



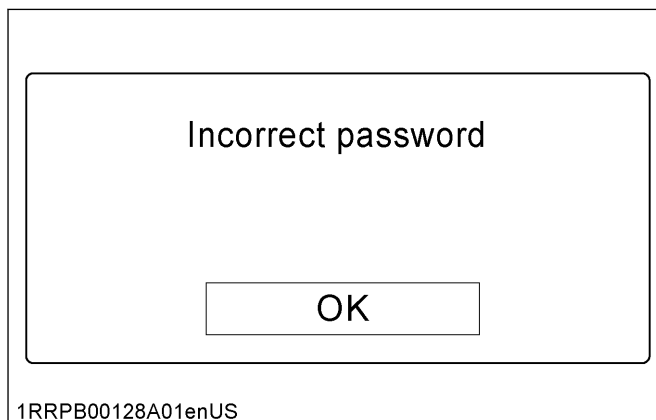
- When the password number matches, the screen returns to the home screen and you can start the engine.

NOTE :

When the password number does not match, "Incorrect password" is displayed and then press the enter switch to change the "Input password" screen.

Repeat the operation from the previous step 2.

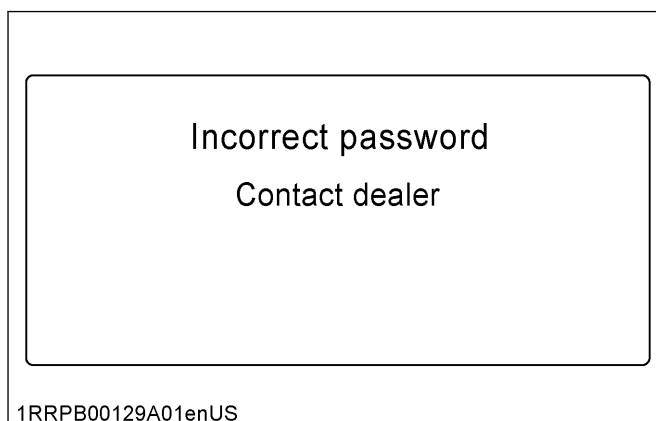
When the password number is wrong

**IMPORTANT :**

When you enter the wrong password number 10 times in a row, "Incorrect password" is displayed on the LCD and the engine cannot be started.

In this case, contact your local Kubota dealer.

When the password number is entered incorrectly 10 times in a row



2. Setting the engine start security function

The following shows how to switch on or off the engine start security function.

Switching on

The engine will not start unless the password number is entered. The engine can be restarted without entering

the password number when it is within 10 minutes after turning the ignition "OFF".

Switching off

The engine can be started after turning the ignition "ON" without requiring the password number.

NOTE :

- The engine start security function is initially switched off as part of the factory setting.
- The engine start security on or off settings and password changes can be made in the "Engine Start Security" settings screen. (See ENGINE START SECURITY SETTINGS SCREEN on page 71.)

ELECTRONIC ENGINE CONTROL [PREMIUM MODEL]

The electronically controlled engine installed in this tractor performs the following 2 types of control.

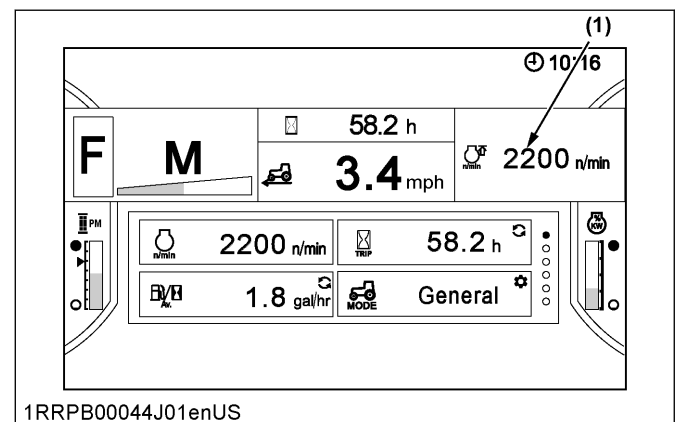
- Rev-limiter control
- RPM dual memory

1. Rev-limiter control

The Rev-limiter control is a feature that adjusts the engine speed by setting an upper limit.

It is useful when the PTO speed of the implement has a maximum limit.

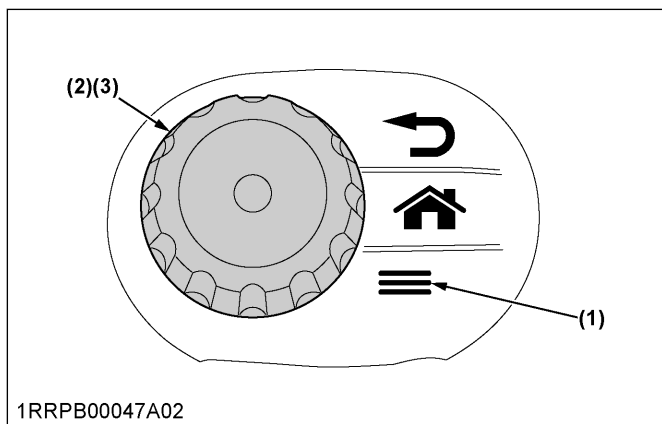
The Rev-limiter control screen is displayed when the engine speed reaches the set upper limit.



(1) Rev-limiter control screen

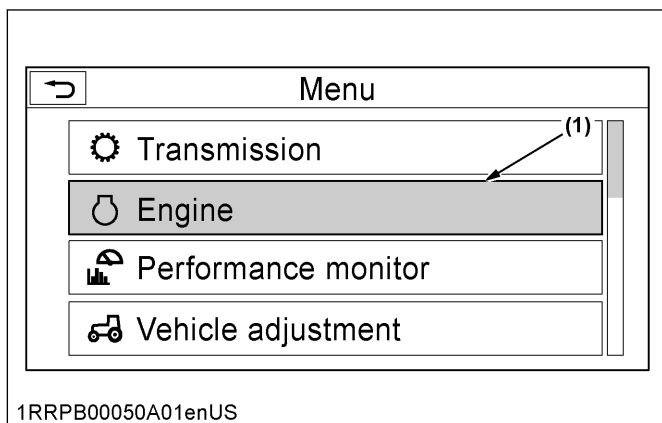
Setting procedure

- Press the menu button to display the "Menu" screen.



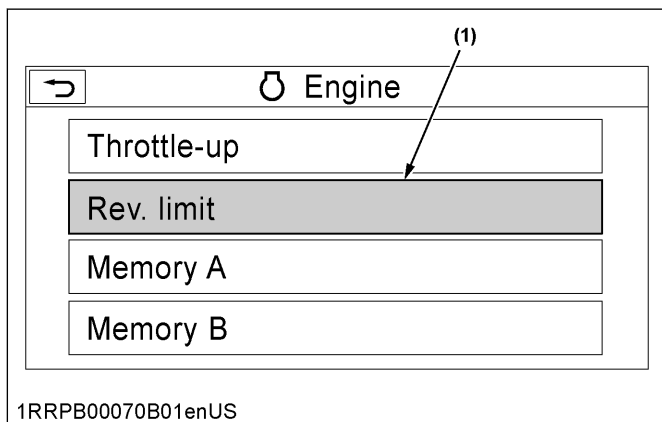
- (1) Menu button
(2) Jog dial
(3) Jog dial push button

2. Rotate the jog dial to select “Engine”, then press the jog dial push button to display the “Engine” screen.



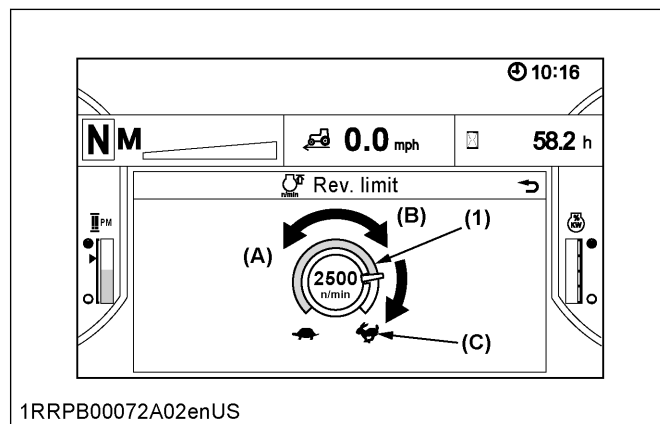
- (1) Engine

3. Rotate the jog dial to select “Rev-limit”, then press the jog dial push button to display the Rev-limit screen.



- (1) Rev-limit

4. Rotate the jog dial to adjust the Rev-limit value, and press the jog dial push button to confirm your selection.



- (1) Rev-limiter control dial
(A) Low-speed side
(B) High-speed side
(C) Canceled

5. When the dial is turned all the way to the right, to the position, the restriction is canceled.

NOTE :

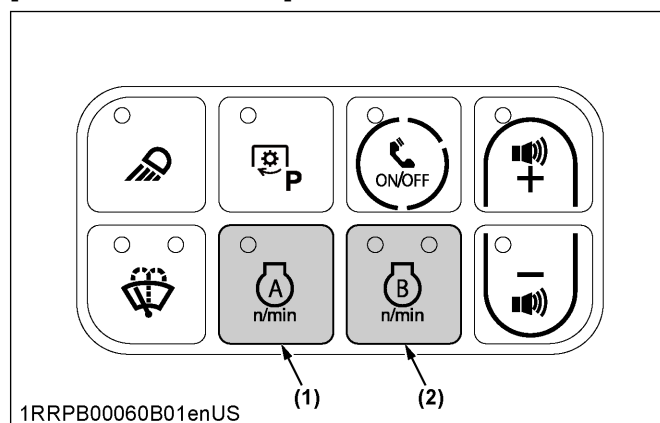
- The Rev-limit setting can be made both when the engine is running and when it is stopped.
- When the dial is turned all the way to the right, to the position, the restriction is canceled.
- The “Rev-limit” screen can also be opened from the “Shortcut menu” screen.

2. RPM dual memory

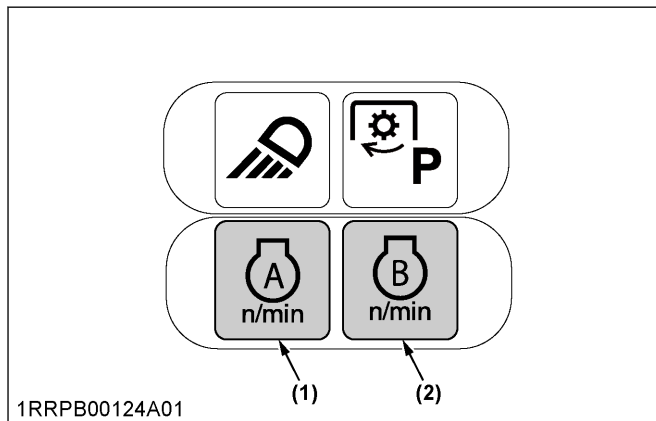
Two different engine speeds can each be set with a single touch by pressing the RPM memory switch (A) and (B). This can be used to eliminate troublesome acceleration operations.

The engine RPM memory screen is displayed when the RPM memory switch (A) or (B) is pressed.

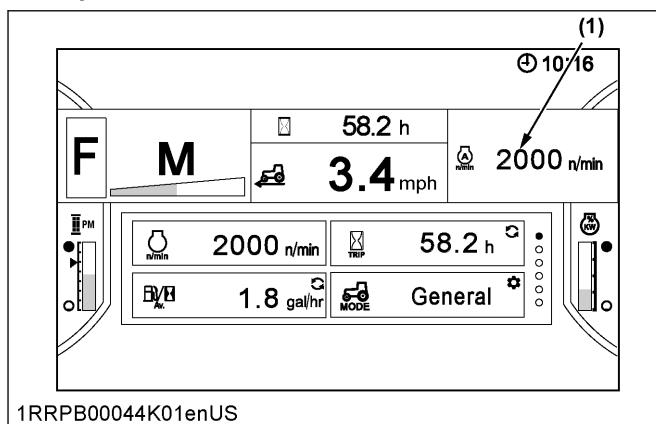
[Premium CAB model]



- (1) RPM memory switch (A)
(2) RPM memory switch (B)

[Premium ROPS model]

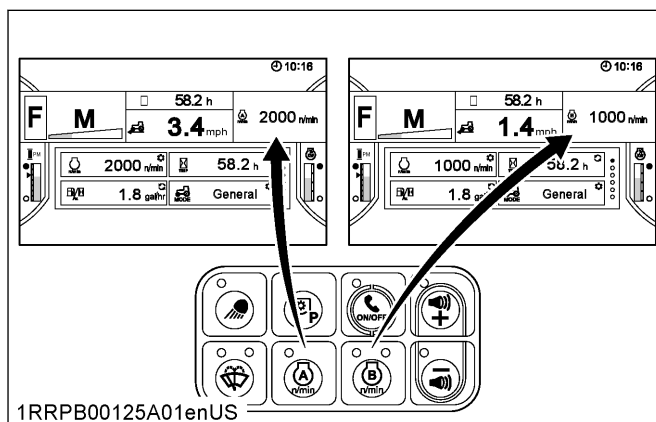
- (1) RPM memory switch (A)
(2) RPM memory switch (B)

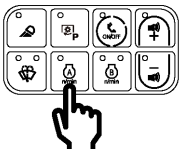
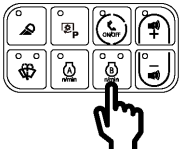
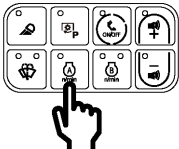
Example

- (1) Engine RPM memory A screen

Example of use

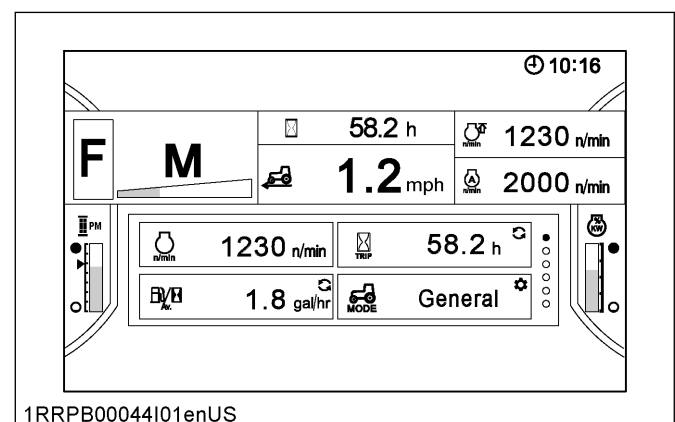
Consider an example in which an engine speed of 2000 rpm is set for the RPM memory switch (A) and a speed of 1000 rpm is set for the RPM memory switch (B).



Work ↓		During work, simply press the switch to the RPM memory switch (A) to automatically set an engine speed of 2000 rpm.
Turning ↓		When turning, press the switch to the RPM memory switch (B) to lower the speed to 1000 rpm, allowing turning at low speed.
Work		After turning, press the RPM memory switch (A) to resume a speed of 2000 rpm.

NOTE :

- Keep the hand throttle lever above the minimum speed. At the minimum speed, a memory setup cannot be performed.
- You can also depress the foot throttle to increase the engine speed above the set speed.
- If the RPM memory is set higher than the value that was set with the Rev-limiter control, pressing the RPM memory switch will not increase the engine speed to the set value (the Rev-limiter takes priority).
- For example, if the speed set in the memory is 2000 rpm, and the Rev-limiter control is set to 1230 rpm, then the Rev-limiter screen will appear on the monitor, and the engine speed will not increase above 1230 rpm.

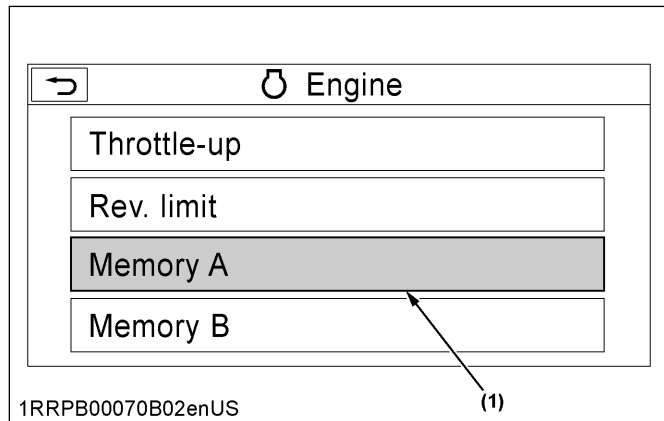
**2.1 Setting or changing the RPM memory****Setting RPM memory switch (A)**

1. Turn the key switch to the "ON" position.

NOTE :

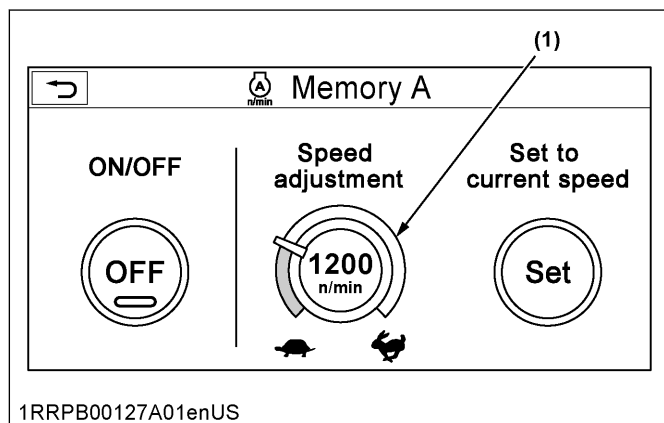
The RPM memory setting can be made both when the engine is running and when it is stopped.

2. Set the hand throttle lever slightly toward the higher-speed side.
3. Cancel the Rev-limiter control setting.
(See Rev-limiter control on page 135.)
4. Set the value for engine RPM memory A.
 - a. Rotate the jog dial to select "Memory A", then press the jog dial push button to display the "Memory A" screen.



(1) Memory A

- b. Rotate the jog dial to adjust the memory value, and press the jog dial push button to confirm your selection.



(1) Rev-limit

For setting RPM memory B, set it in the "Memory B" screen.

NOTE :

The set speeds will be stored even after the engine is stopped.

2.2 Canceling the RPM memory

Perform any of the following actions to cancel the RPM memory:

- If the RPM memory switch A is activated, press switch A again.
- If the RPM memory switch B is activated, press switch B again.
- Return the hand throttle lever to the lowest speed position.
- Turn the key switch to the "OFF" position.

NOTE :

- When the memory speed is canceled, the speed will return to the speed that is determined by the hand throttle lever (foot throttle).
- Cancel the RPM memory, and the engine RPM memory screen will disappear.

2.3 Checking the speeds set in the RPM memory

The engine rotation memory settings can be confirmed on the "Memory A" screen or "Memory B" screen.
(For details, see RPM dual memory on page 136.)

PARKING THE TRACTOR

**WARNING**

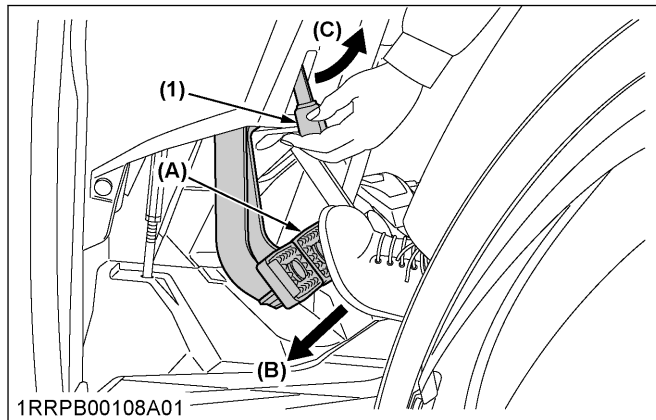
To avoid personal injury or death:
Before dismounting tractor

- Always set parking brake and lower all implements to the ground.
Leaving the transmission in gear with the engine stopped will not prevent the tractor with HST from rolling.
- Stop the engine and remove the key.
- Do not stop the machine on top of straw chaff or dried grass.

1. When parking, set the parking brake.

To set the parking brake:

 - a. Interlock the brake pedals.
 - b. Depress the brake pedals.
 - c. Latch the brake pedals with the parking brake lever.



- (1) Parking brake lever
- (A) Interlock the brake pedals
(B) Depress
(C) Pull

IMPORTANT :

To prevent damage to the parking brake lever, make sure that brake pedals are fully depressed before pulling the parking brake lever up.

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

OPERATING TECHNIQUES

1. Differential lock

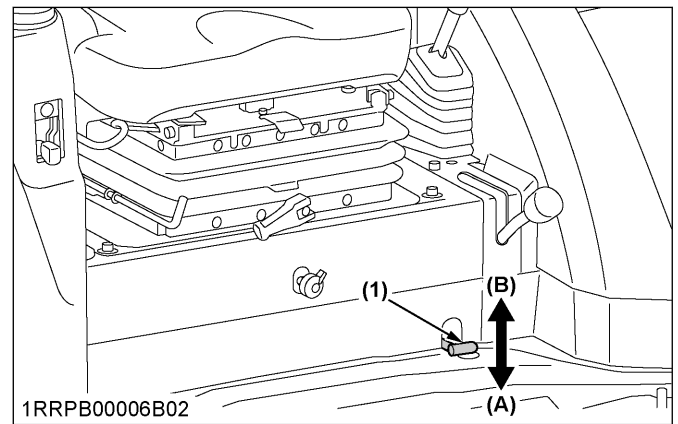
! WARNING

To avoid personal injury or death due to loss of steering control:

- Do not operate the tractor at high speed with differential lock engaged.
- Do not turn with the differential lock engaged.
- Release the differential lock before making a turn in field conditions.

If one of the rear wheels should slip, depress the differential lock pedal. Both wheels will turn together, then reduce slippage.

Differential lock is maintained only while the pedal is depressed.



- (1) Differential lock pedal
- (A) Press to engage
(B) Release to disengage

IMPORTANT :

- When using the differential lock, always slow the engine down.
- To prevent damage to the powertrain, do not engage the differential lock when one wheel is spinning and the other is completely stopped.
- If the differential lock cannot be released, lightly depress the brake pedals alternately.

2. Operating the tractor on a road

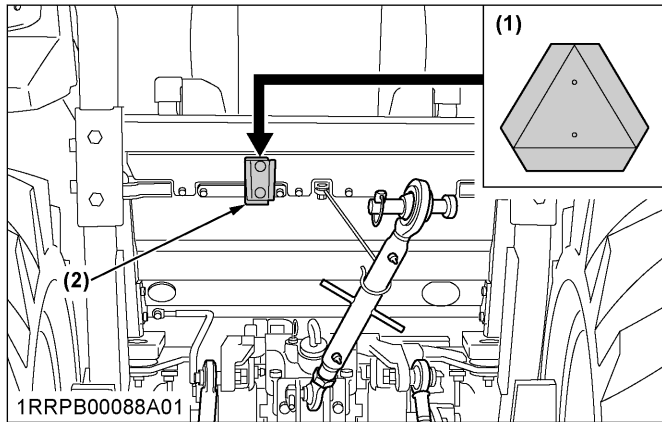
! WARNING

To avoid personal injury or death:

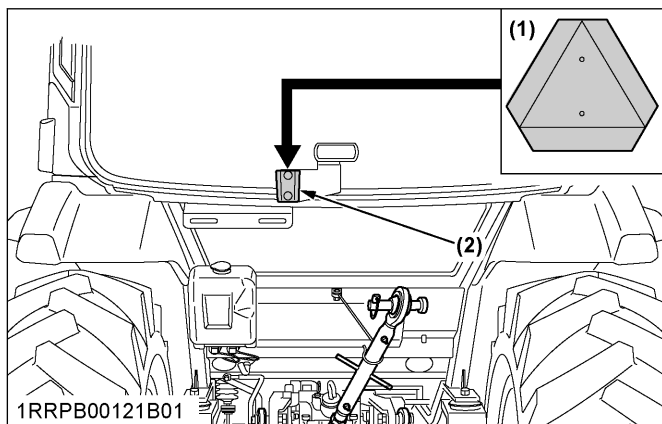
- To help assure straight line stops when driving at transport speeds, lock the brake pedals together. Uneven braking at road speeds could cause the tractor to roll-over.
- When traveling on the road with a 3-point hitch mounted implement attached, make sure that there is sufficient front weight on the tractor to maintain steering ability.
- When traveling on the road with or without a trailer, you must comply with local regulations at all time.

The maximum traveling speed with trailer is determined by each country, and regulated speeds may vary according to the size of the trailer and the type of trailer brake system.

Make sure that the SMV emblem and warning lamps are clean and visible. If towed or rear-mounted equipment obstructs these safety devices, install the SMV emblem and warning lamps on the equipment. Contact your local Kubota dealer for further details.

[ROPS model]

- (1) SMV emblem
(2) Bracket

[CAB model]

- (1) SMV emblem
(2) Bracket

3. Operating on slopes and rough terrain

WARNING

To avoid personal injury or death:

- Always back up when going up a steep slope. Driving forward could cause the tractor to tip over backward. Stay off hills and slopes too steep for safe operation.
- Avoid changing gears when climbing or descending a slope.
- If operating on a slope, never disengage the clutch or shift levers to “NEUTRAL”. Doing so could cause loss of control.
- Do not drive the tractor close to the edges of ditches or banks which may collapse under the weight of the tractor, especially when the ground is loose or wet.

1. Be sure that the wheel tread is adjusted to provide maximum stability.
(See WHEEL ADJUSTMENT on page 159.)

2. Slow down for slopes, rough ground, and sharp turns, especially when transporting heavy, rear-mounted equipment.
3. Before descending a slope, shift to a gear low enough to control the speed without using brakes.

4. Transporting the tractor safely

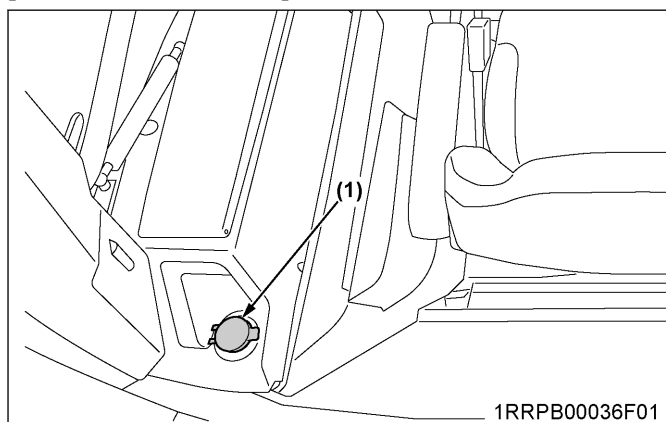
1. The tractor, if damaged, must be carried on a truck. Secure the tractor tightly with chains or straps.
2. Follow these instructions when towing the tractor. Otherwise, the tractor's powertrain may be damaged.
 - Set all the shift levers to “NEUTRAL” position.
 - If possible, start the engine and select 2WD. If creep speed is fitted, ensure that it is disengaged.
 - Tow the tractor using its front hitch or drawbar.
 - Never tow faster than 10 km/h (6.2 mph).

5. Directions for the use of power steering

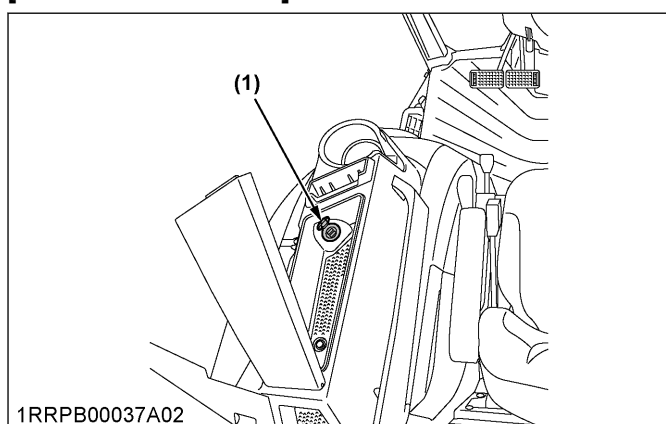
- Power steering is activated only while the engine is running. Slow engine speeds make the steering a little heavier. While the engine is stopped, tractors with power steering function in the same manner as tractors without power steering.
- When the steering wheel is turned all the way to the stop, the relief valve is activated. Do not hold the steering wheel in this position for a long period of time.
- Avoid turning the steering wheel while the tractor is stopped, or tires may wear out sooner.
- The power steering mechanism makes the steering easier. Be careful when driving on the road at high speeds.

6. Electrical outlet

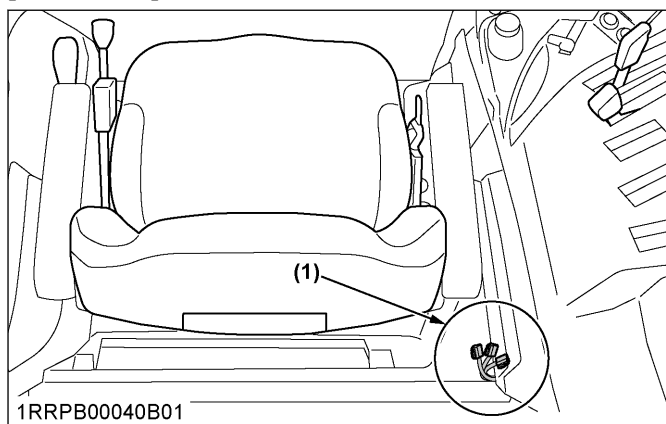
An electrical outlet is supplied for use with implement.

[Premium CAB model]

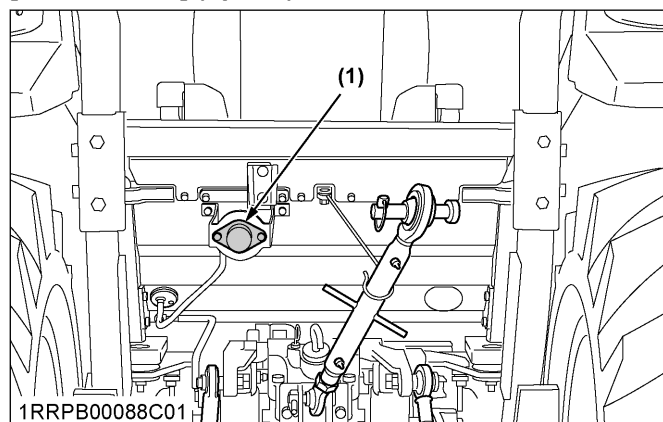
(1) Accessory electrical outlet (total 20 A)

[Premium CAB model]

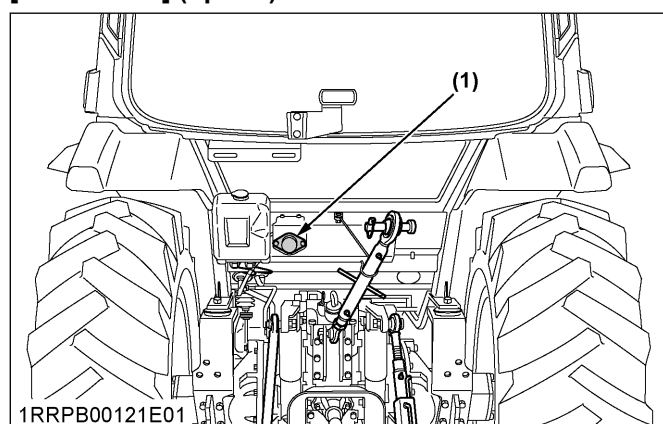
(1) USB type-A socket

[All models]

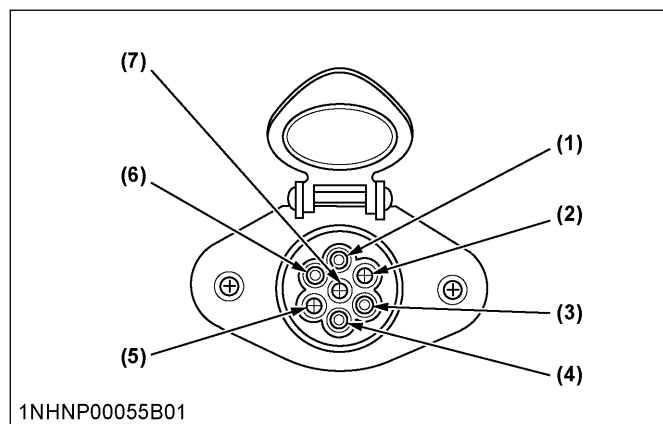
(1) Accessory electrical outlet (total 10 A)

[ROPS model] (option)

(1) Trailer electrical outlet

[CAB model] (option)

(1) Trailer electrical outlet

Function of each terminal in trailer electrical outlet**7. Trailer electrical outlet**

A trailer electrical outlet is supplied for use with implement.

Terminal	Function
(1)	Ground
(2)	Tail light Side marker light Parking light
(3)	Turn signal light (LH)
(4)	Brake stop light
(5)	Turn signal light (RH)
(6)	Registration plate light
(7)	-

PTO

PTO OPERATION

WARNING

To avoid personal injury or death, disengage the PTO, stop the engine, and allow all rotating components to come to a complete stop before connecting, disconnecting, adjusting, or cleaning any PTO driven equipment.

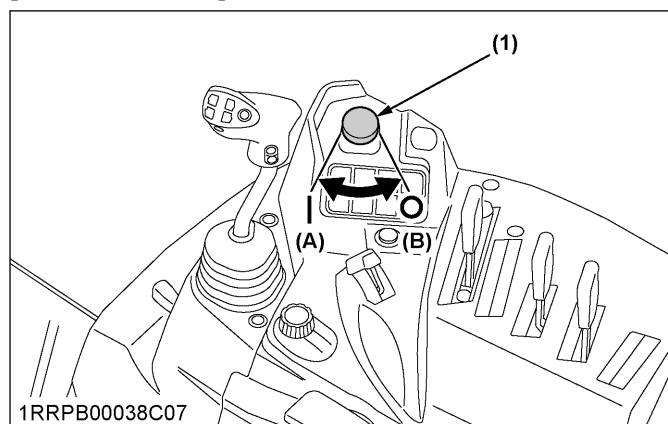
1. PTO clutch control switch

The PTO clutch control switch engages or disengages the PTO clutch which gives the PTO independent control.

The tractor has a 540 rpm speed position and 6-spline shaft.

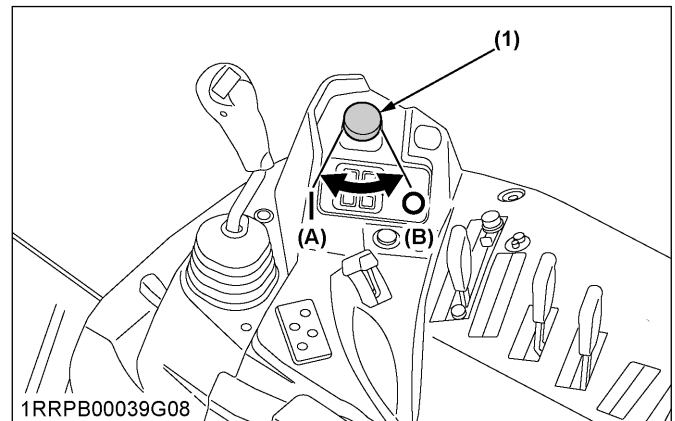
Turn the switch to “ON” to engage the PTO clutch. Turn the switch to “OFF” to disengage the PTO clutch.

[Premium model]



(1) PTO clutch control switch (A) On (B) Off

[Deluxe model]



(1) PTO clutch control switch (A) On (B) Off

IMPORTANT :

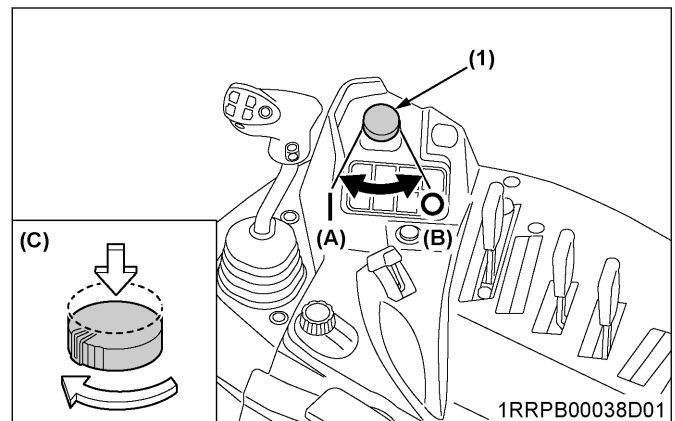
- To avoid shock loads to the PTO, reduce engine speed when engaging the PTO, then open the throttle to the recommended speed.
 - To avoid damage of PTO clutch and implement, proper warm up is strongly recommended in cold weather.
- Do not continuously turn the PTO clutch control switch.

NOTE :

Tractor engine will not start if PTO clutch control switch is in the engaged “ON” position.

To turn “ON”

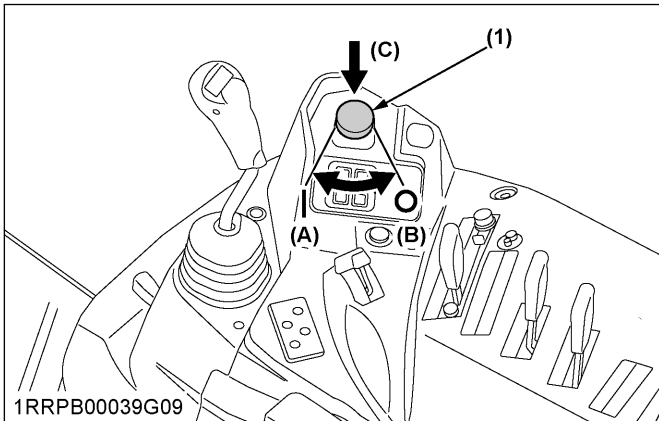
1. While pushing the switch, turn clockwise to the “ON” position and release your hand. (In the “ON” position, switch slightly rises itself.)



(1) PTO clutch control switch (A) On (B) Off (C) Turn on

To turn “OFF”

1. Tap on top of the switch, and the switch will return to the “OFF” position.

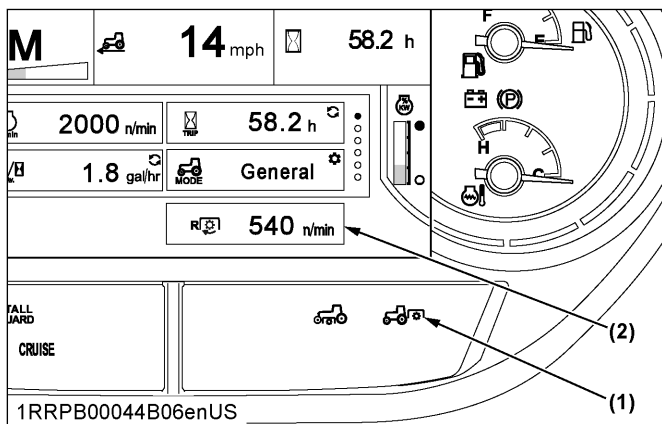


(1) PTO clutch control switch
 (A) On
 (B) Off
 (C) Push

Model	Engine speed rpm	Shaft	PTO speed rpm
L3770 L4270	2491	6-spline	540
L3970 L4470 L5070	2299		
L6070	2257		

PTO clutch indicator

The PTO clutch indicator turns on while PTO clutch control switch is in the “ON” (engage) position.



(1) PTO clutch indicator
 (2) PTO speed

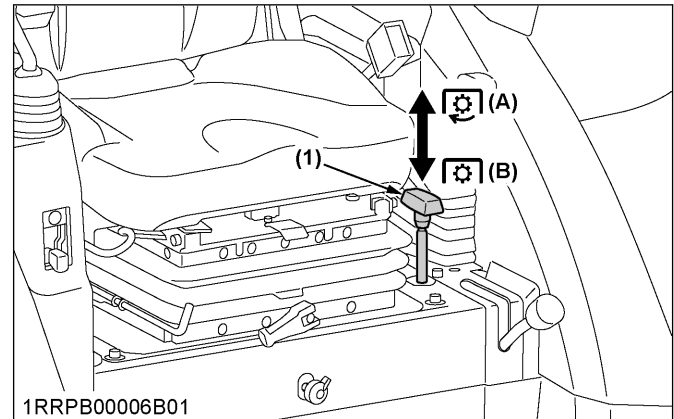
2. Mid-PTO (if equipped)**WARNING**

To avoid personal injury or death:

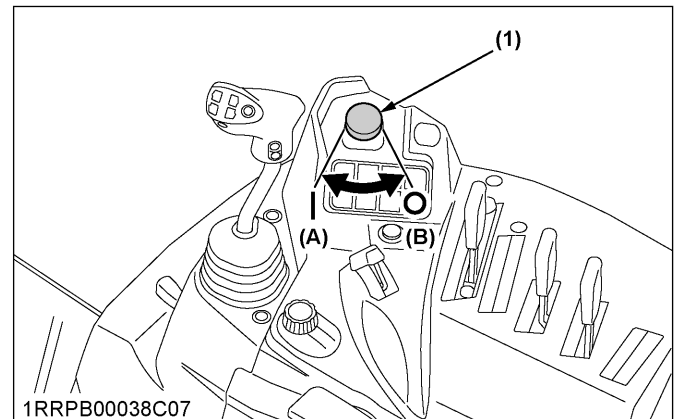
- Before operation, select the correct PTO lever position (mid/rear).

- Do not operate rear-PTO driven implements and mid-PTO driven implements at the same time except when the implements are specially designed to be used together.

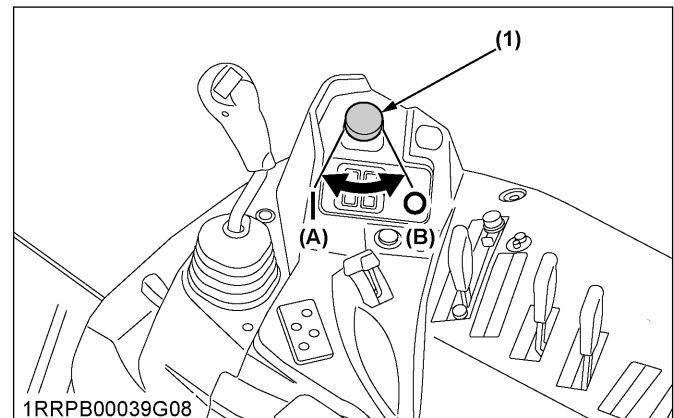
To use mid-PTO, shift the mid-PTO lever to engaged position and turn the PTO clutch control switch to engaged position.

Mid-PTO lever

(1) Mid-PTO lever
 (A) On
 (B) Off

[Premium model]

(1) PTO clutch control switch
 (A) On
 (B) Off

[Deluxe model]

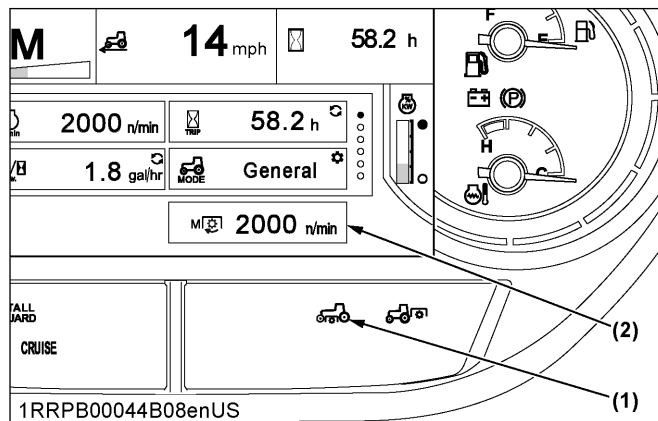
(1) PTO clutch control switch
 (A) On
 (B) Off

Rear and Mid-PTO speed

Mid-PTO lever	PTO	PTO revolution (rpm)	
		PTO clutch control switch	
		○ → I	
	Rear	0	540
	Mid	0	0
	Rear	0	540
	Mid	0	2000

Mid-PTO indicator

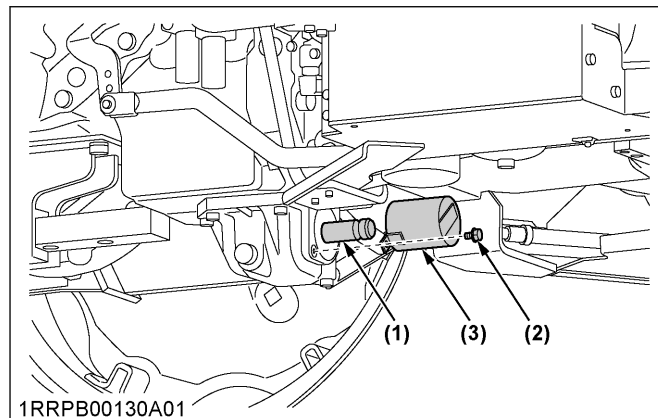
The PTO clutch indicator turns on while PTO clutch control switch is in the “ON” (engage) position.



- (1) Mid-PTO indicator
(2) PTO speed

Mid-PTO

The mid-PTO is available for Kubota approved implements.



- (1) Mid-PTO
(2) Bolt
(3) PTO shaft cover

3. Stationary PTO

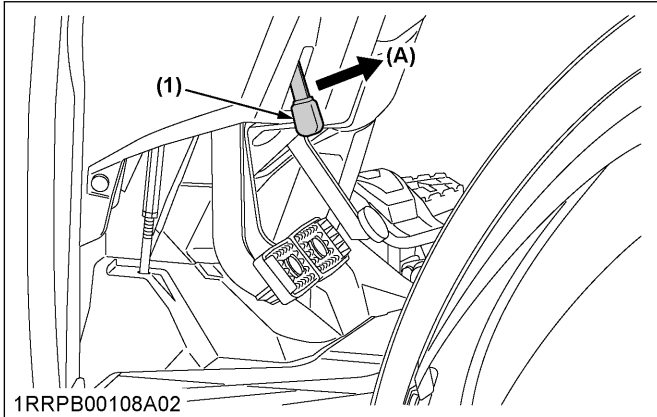
To park the tractor and use the PTO system (for chipper or pump, for example), start the PTO system in the following steps:

1. Apply the parking brakes and place blocks at the tires.
2. Make sure that the shift levers are at the “NEUTRAL” position, and start the engine.
3. Set the PTO clutch control switch to engage “ON”.
4. Set the engine speed to provide recommended rear PTO speed.
5. Push and hold down the stationary PTO switch for more than 3 seconds (turn on the switch lamp).

6. Get off the tractor.

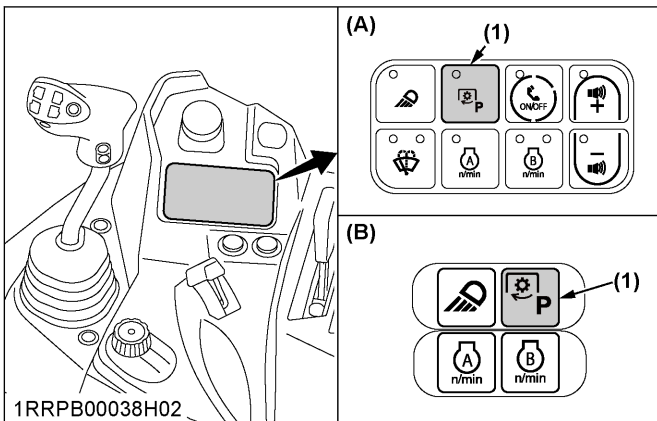
NOTE :

- If the PTO system is engaged and you stand up from the seat and release the parking brake, the engine stops automatically after standing up.



(1) Parking brake lever

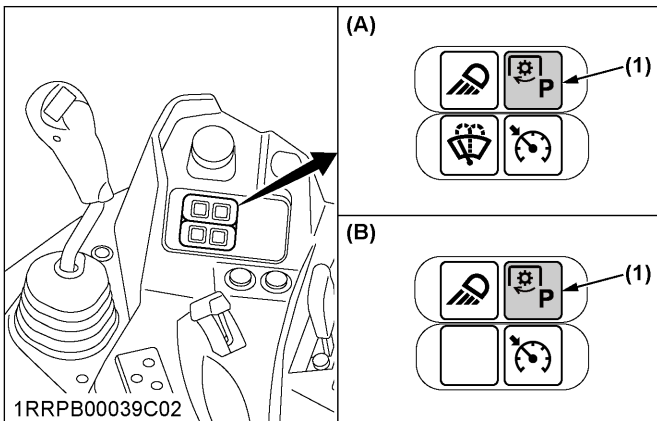
(A) Parking position

[Premium model]

(1) Stationary PTO switch

(A) CAB model

(B) ROPS model

[Deluxe model]

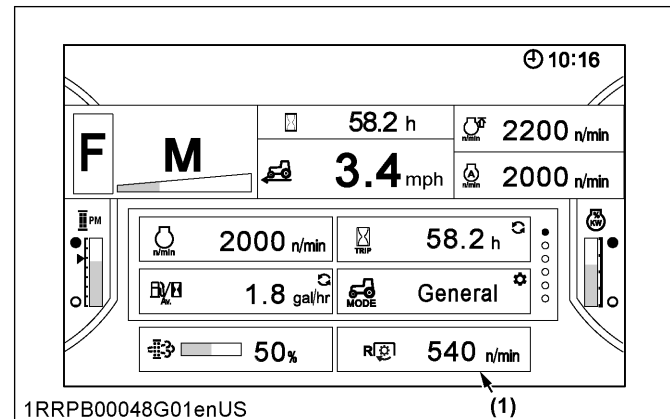
(1) Stationary PTO switch

(A) CAB model

(B) ROPS model

4. PTO rpm display

The PTO rpm can be checked on the K-Command display.

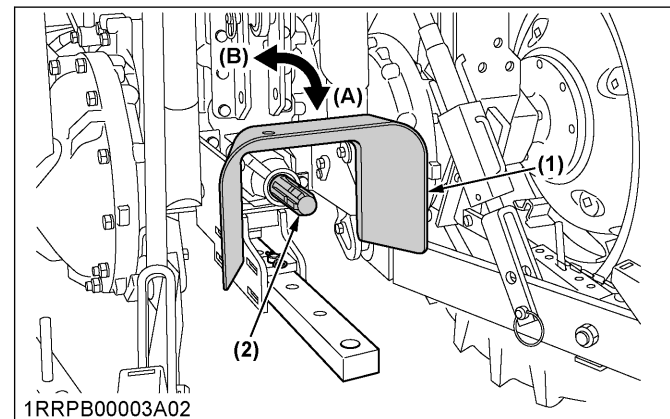


(1) PTO speed

5. PTO shaft cover and shaft cap**! WARNING**

To avoid personal injury or death:

- Keep the PTO shaft cover in place at all times.
- Put back the PTO shaft cap when the PTO is not in use.
- When connecting or disconnecting the implement PTO shaft to the tractor PTO shaft, raise up the PTO shaft cover.



(1) PTO shaft cover

(2) PTO shaft cap

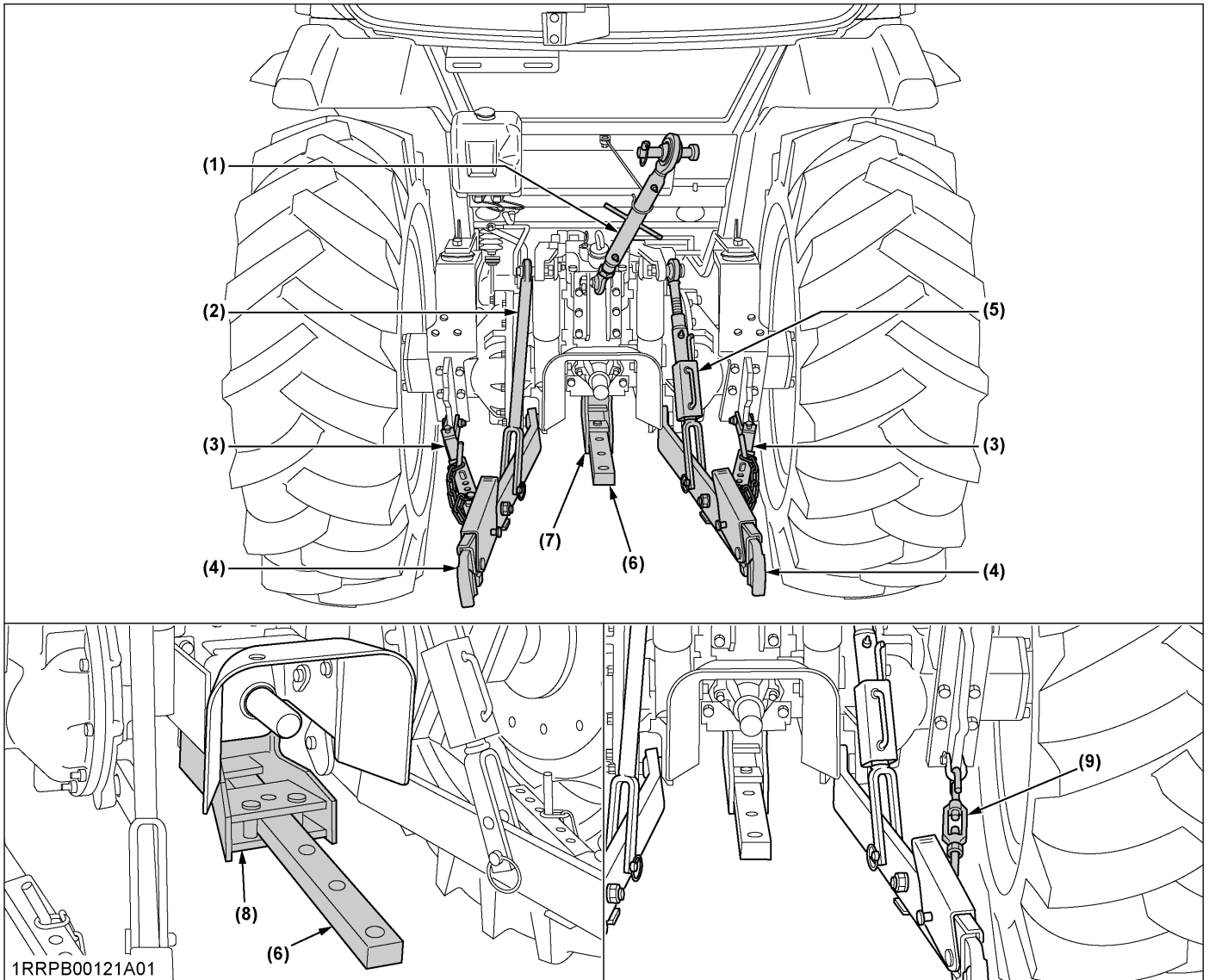
(A) Normal position

(B) Raised position

IMPORTANT :

The universal joint of the PTO drive shaft is technically limited in its moving angle. Refer to the PTO Drive Shaft Instructions for proper use.

3-POINT HITCH AND DRAWBAR



- 1RRPB00121A01
- (1) Top link
 - (2) Lifting rod (left)
 - (3) Telescopic stabilizers [Except deluxe ROPS model]

- (4) Lower link
- (5) Lifting rod (right)
- (6) Drawbar

- (7) Fixed drawbar frame
- (8) Swing drawbar frame (if equipped)
- (9) Check chains [Deluxe ROPS model]

THE 3-POINT HITCH SETUP

1. Make preparations for attaching implement.
 - Lower link category 1 and 2 on page 148
 - Selecting the top link mounting hole on page 148
 - Drawbar on page 148
2. Attaching and detaching implements



WARNING

To avoid personal injury or death:

- Stop the engine.
- Do not stand between tractor and implement unless the parking brake is applied.
- Before attaching or detaching the implement, locate the tractor and implement on a firm level surface.
- Whenever an implement or other attachment is connected to the tractor 3-point hitch, check full range of operation for interference, binding or PTO separation.

- Lifting rod (right) on page 148
- Top link on page 149
- Telescopic stabilizer [Except deluxe ROPS model] on page 149
- Check chain [Deluxe ROPS model] on page 149

1. Lower link category 1 and 2

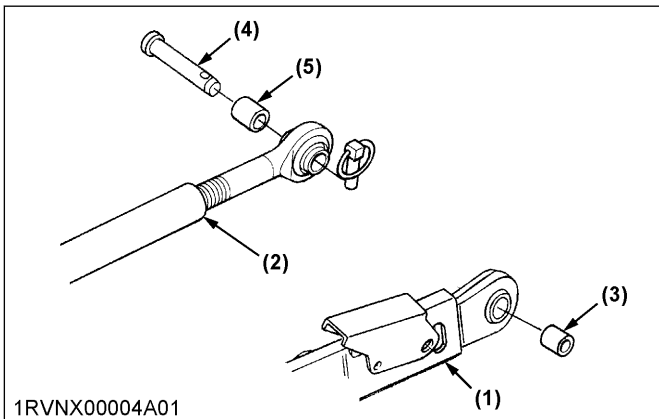
Only **L6070** has both category 1 and 2.

Category 1 type is standard and assemble all parts shown as follows.

To change from category 1 to category 2:

1. Remove adjusting collar from the lower link.
2. Remove adjusting collar from the rear top link pin.
3. Use the correct rear top link pin for category 2.

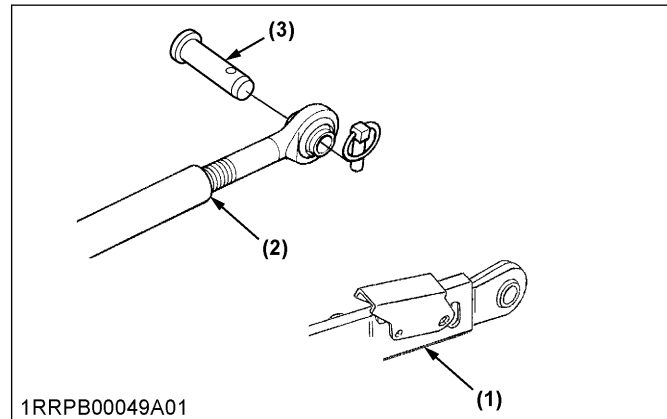
Category 1 type



- 1RVNX00004A01
- (1) Lower link
(2) Top link
(3) Collar, lower link

- (4) Top link rear pin
(5) Collar, top link

Category 2 type



- 1RRPB00049A01
- (1) Lower link
(2) Top link

- (3) Top link rear pin

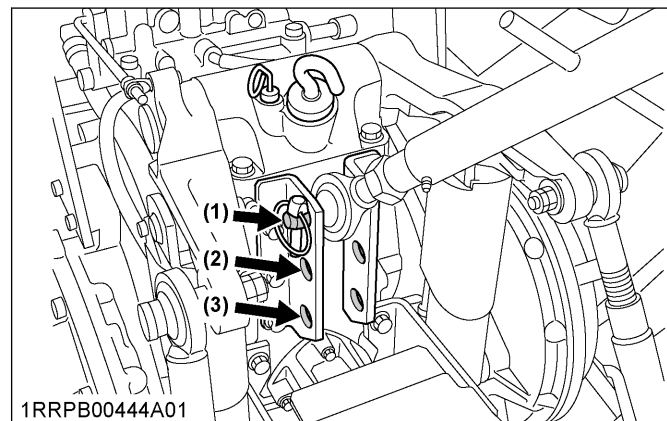
NOTE :

All models except for L6070 have only category 1. Category 1 type is standard and assemble all parts shown in the preceding illustration.

2. Selecting the top link mounting hole

Select the proper set of holes.

(See Hydraulic control unit reference chart [Except deluxe ROPS model] on page 157.)



3. Drawbar

Remove the drawbar if a close-mounted implement is attached.

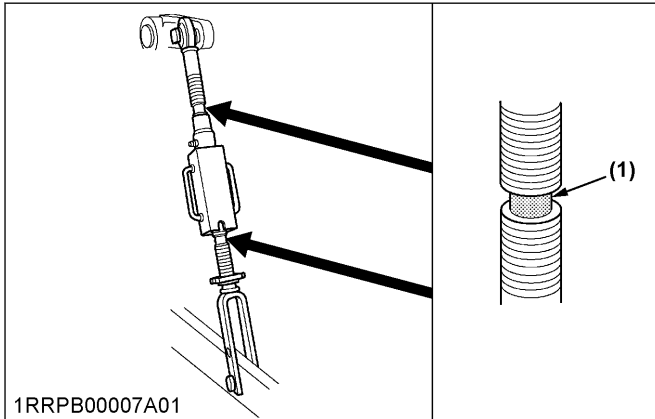
4. Lifting rod (right)



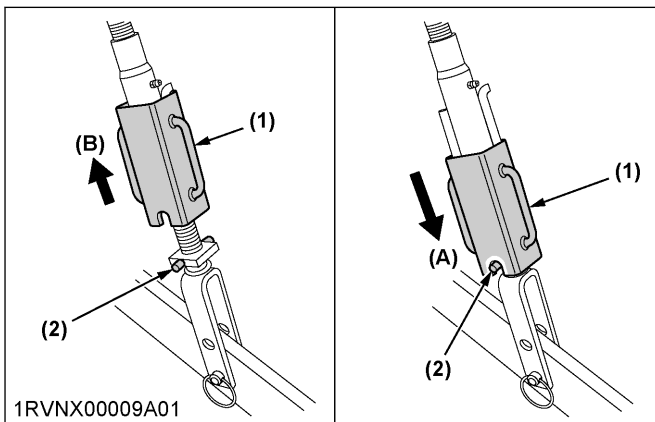
WARNING

To avoid personal injury or death, do not extend lifting rod beyond the groove on the threaded rod.

1. To adjust the length of the lifting rod, lift the adjusting handle and turn to desired length.
2. After adjusting, lower the lifting rod adjusting handle to the lock position.
3. When extending the rod using the adjusting handle, do not exceed the groove on the rod thread.



(1) Groove

(1) Adjusting handle
(2) Lock pin(A) Lock position
(B) Unlock position

5. Top link

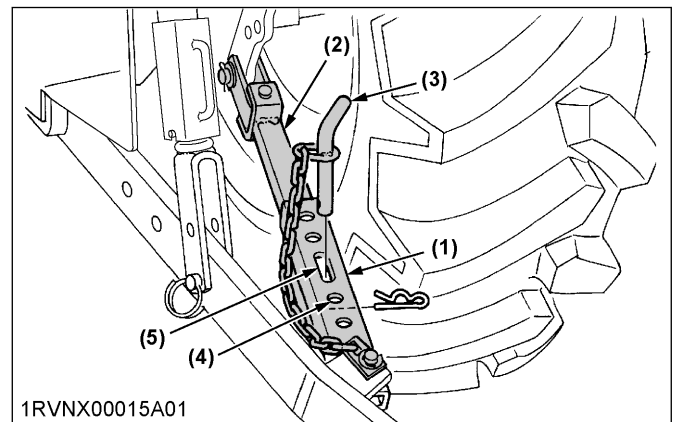
1. Adjust the angle of the implement to the desired position by shortening or lengthening the top link. After adjustment, tighten the lock nut securely.
2. The proper length of the top link varies according to the type of implement being used.

6. Telescopic stabilizer [Except deluxe ROPS model]

1. Adjust the telescopic stabilizers to control horizontal sway of the implement. Select the proper set of holes. (See Hydraulic control unit reference chart [Except deluxe ROPS model] on page 157.)
2. After aligning satisfactorily, insert the set-pin through any one of the 4 holes on the outer tube

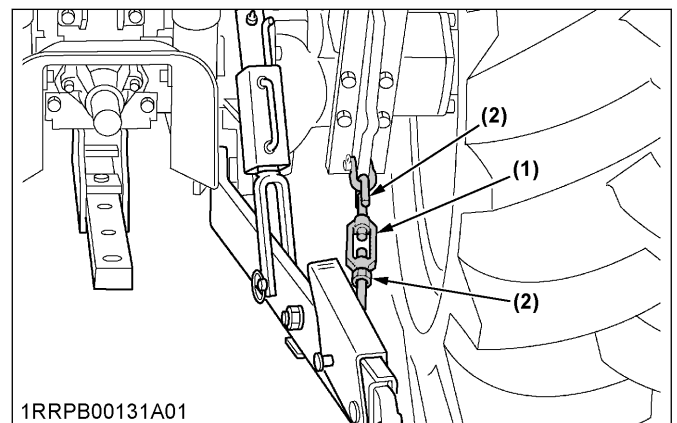
that align with one of the holes on the inner bar and both stabilizers will be locked.

If the set-pin is inserted through the slot to engage one of the holes on the inner bar, a limited degree of sway will be permitted.

(1) Outer tube
(2) Inner bar
(3) Set-pin(4) Hole
(5) Slot

7. Check chain [Deluxe ROPS model]

1. Adjust the turnbuckle to control horizontal sway of the implement. (See Hydraulic control unit reference chart [Except deluxe ROPS model] on page 157.)
2. After adjustment, retighten the lock nut.

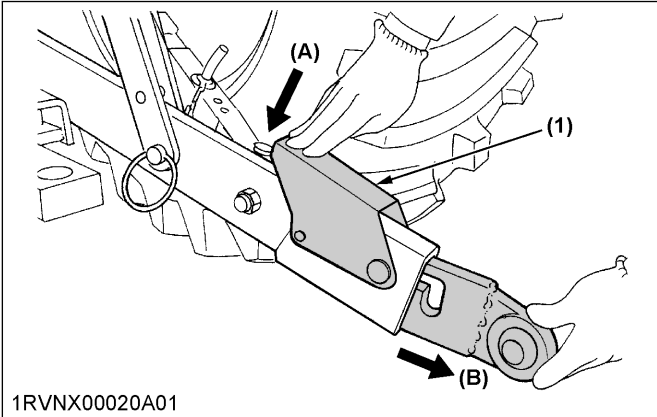
(1) Turnbuckle
(2) Lock nut

8. Telescopic lower link

To attach an implement, follow the following instructions:

1. Push the levers, pull out the lower link ends, and attach to the implement.

- Back up the tractor slightly to make sure that the lower links are pushed in securely.



(1) Lever

(A) Push
(B) Pull out

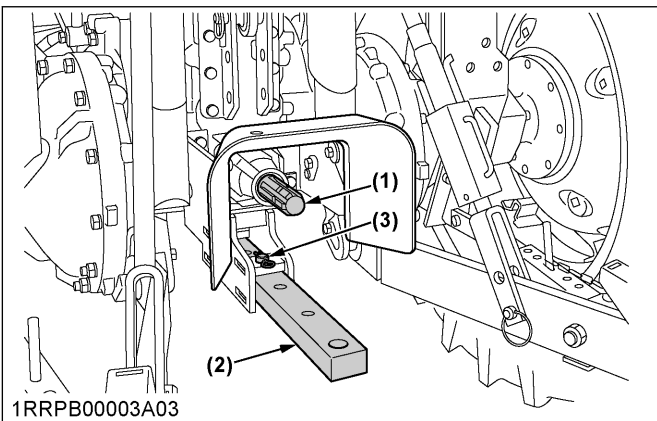
DRAWBAR

WARNING

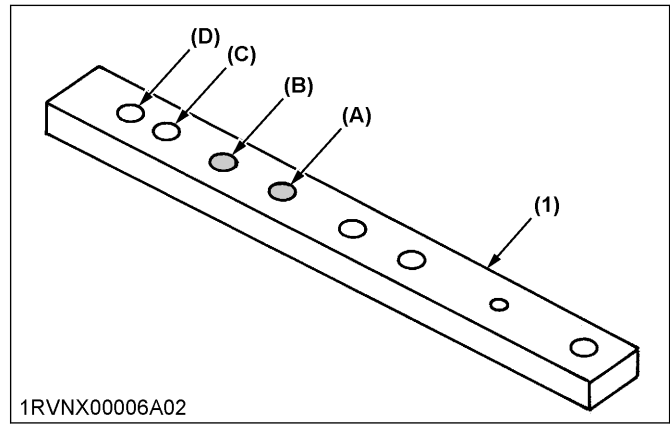
To avoid personal injury or death, never pull from the top link, the rear axle or any point above the drawbar. Doing so could cause the tractor to tip over rearward.

1. Adjusting drawbar length

- When towing an implement, it is recommended that the (A) or (B) hole in drawbar be utilized.
- For information about the drawbar load, read the implement limitations section of this manual. (See IMPLEMENT LIMITATIONS on page 32.)



(1) PTO shaft
(2) Drawbar
(3) Pivot pin



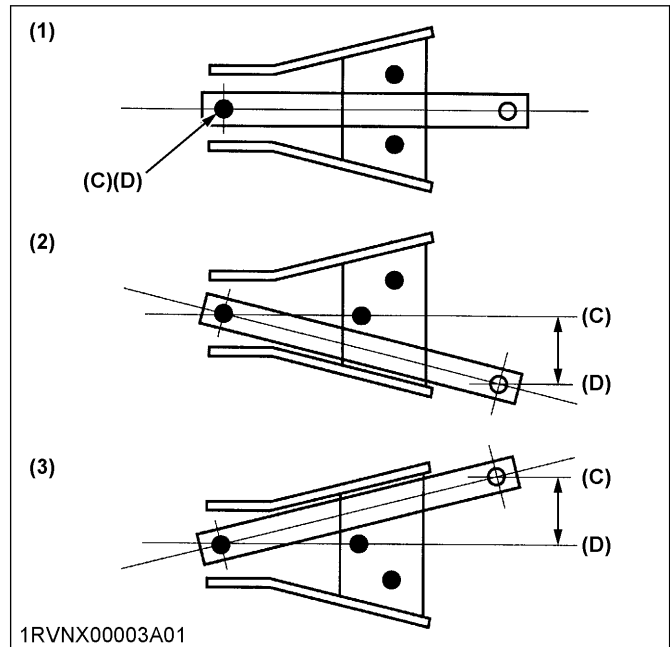
(1) Drawbar

(A) Hole
(B) Hole

Hole	Tractor model
(A)	L3770, L3970
(B)	L4270, L4470,, L5070, L6070

2. Swing drawbar

The drawbar can be used in 3 different ways as follows. Assemble it correctly with joint pins set at the points as marked by ● in the figure.



(1) Assembly pattern 1
(2) Assembly pattern 2
(3) Assembly pattern 3

(C) Hole
(D) Hole

		Distance (E)		
Hole	Tractor model	Pattern (1)	Pattern (2)	Pattern (3)
(C)	L3770 L3970	-	129 mm/ 5.1 in.	129 mm/ 5.1 in.
(D)	L4270 L4470 L5070 L6070	-	147 mm/ 5.8 in.	147 mm/ 5.8 in.

HYDRAULIC UNIT

IMPORTANT :

- Do not operate until the engine is warmed up. If any operation is attempted when the engine is still cold, the hydraulic system may be damaged.
- If noises are heard when the implement is lifting after the hydraulic control lever has been activated, the hydraulic mechanism is not adjusted properly. Unless corrected, the unit will be damaged. Contact your Kubota dealer for adjustments.

A standard tractor has following hydraulic control systems. Choose the most appropriate system for the implement you are using.

3-Point Hitch Control System

- Position Control
- Float Control

Remote Hydraulic Control System

3-POINT HITCH CONTROL SYSTEM

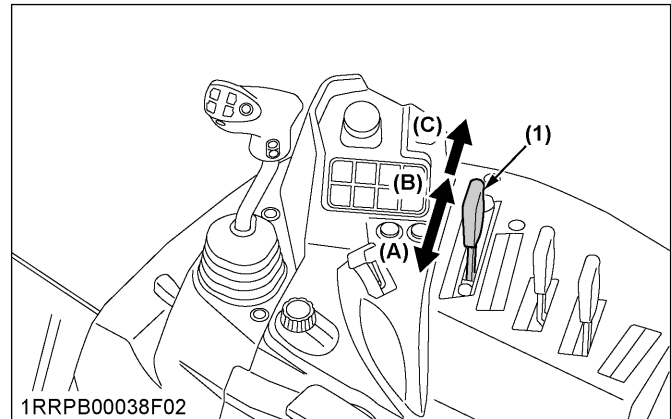
WARNING

To avoid personal injury or death, observe the following precautions. Before using the 3-point hitch controls, ensure that no person or object is in the area surrounding the implement or 3-point hitch. Do not stand on or near the implement or between the implement and tractor when operating the 3-point hitch controls.

1. Position control

This will control the working depth of the 3-point hitch mounted implement regardless of the amount of pull required.

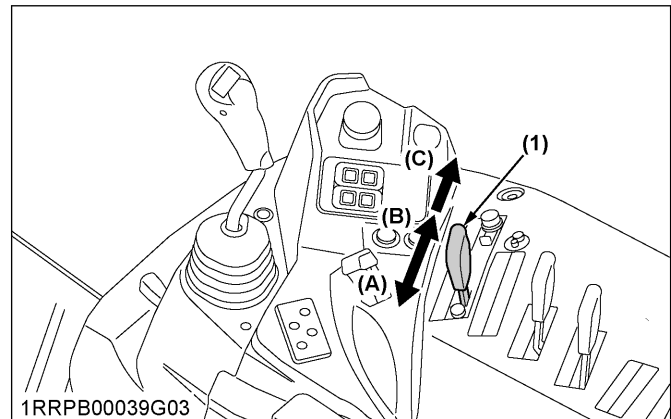
[Premium model]



(1) Position control lever

- (A) Up
(B) Down
(C) Float

[Deluxe model]



(1) Position control lever

- (A) Up
(B) Down
(C) Float

2. Float control

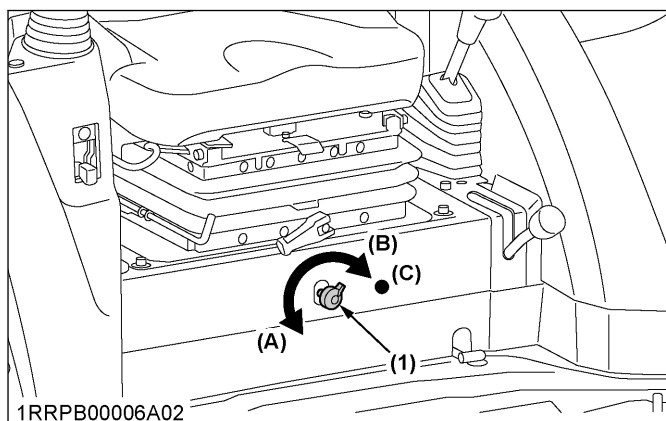
Place the position control lever in the "FLOAT" position to move the lower links freely along with the ground conditions.

3. 3-point hitch lowering speed knob

WARNING

To avoid personal injury or death, the lowering speed of the implement should be adjusted to 2 or more seconds. A fast lowering speed may cause damage or injury.

The lowering speed of the 3-point hitch can be controlled by adjusting the 3-point hitch lowering speed knob.



- (1) 3-point hitch lowering speed knob
- (A) Fast
(B) Slow
(C) Lock

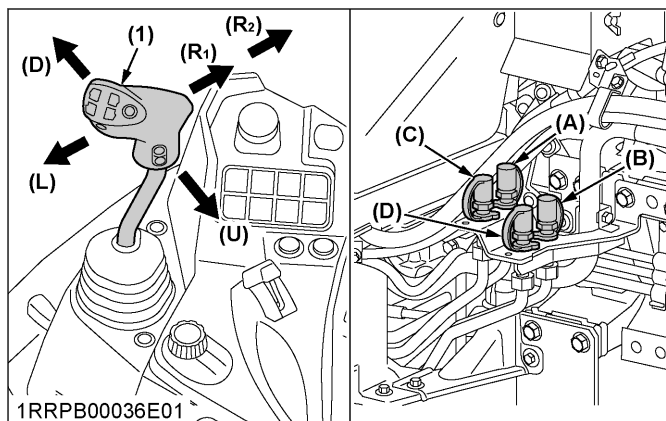
DUAL REMOTE HYDRAULIC CONTROL SYSTEM

The tractor is equipped with the double-acting 2-segment hydraulic control valve for front loader. To apply the hydraulic power take-off for general attachments, keep the following point in mind.

1. Control lever and hydraulic hose connections

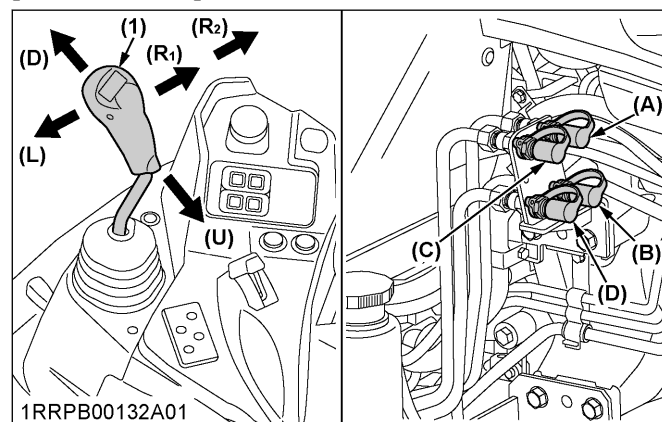
Connect the control lever in its specified direction and the hydraulic hoses to their specified ports.

[Premium model]



- (1) Multi-function lever
- (R) Right
(L) Left
(U) Up
(D) Down
- (A) White
(B) Yellow
(C) Blue
(D) Red

[Deluxe model]



- (1) Loader and remote control valve lever
- (R) Right
(L) Left
(U) Up
(D) Down
- (A) White
(B) Yellow
(C) Blue
(D) Red

Hydraulic outlet ports of first segment

Lever		Up		Down	
Port	[A]	in	←	out	→
	[B]	out	→	in	←

Pressure →

Returning ←

Hydraulic outlet ports of second segment

Lever		right		Left	
Port	[C]	in	←	out	→
	[D]	out	→	in	←

Pressure →

Returning ←

IMPORTANT :

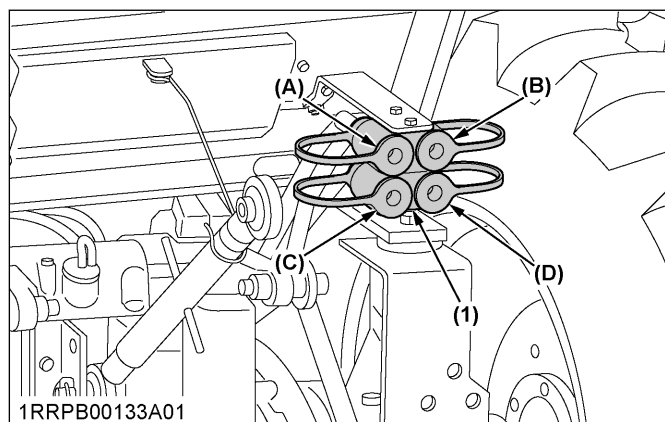
To avoid damage of the attachments:

- Do not connect attachments through the hydraulic motor to the [C] and [D] ports. If the control lever is moved to the regeneration position (R1), the seals on the hydraulic motor will be damaged.
- This control valve is provided with the regeneration position. When the [C] and [D] ports are used to take off hydraulic power for the hydraulic cylinder, connect the [C] port to the "head-end" side port of the hydraulic cylinder.
- Make the following connections when using this valve to take off hydraulic power for the hydraulic cylinder.

Colored coupler	Hydraulic cylinder port
[B: yellow], [C: blue]	Head-end side
[A: white], [D: red]	Rod-end side

1.1 Rear hydraulic outlet (if equipped)

With the optional kit in place, oil from the loader valve can be taken out of the back of the tractor.



(1) Rear hydraulic outlet

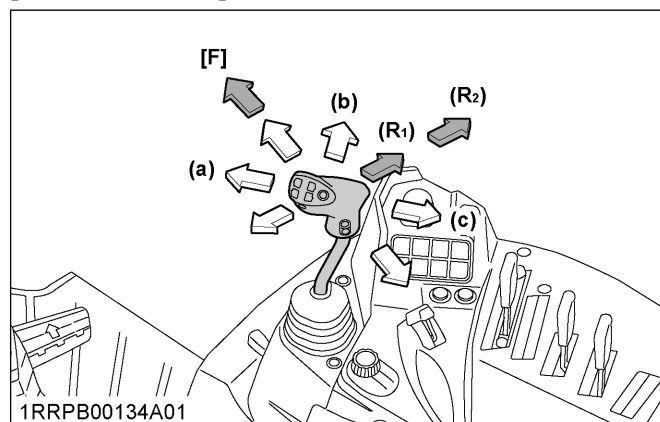
NOTE :

- If this optional kit is installed and hydraulic oil is extracted to the rear of the tractor, oil cannot be drawn from the hydraulic outlet on the right side of the engine.
- If the optional remote hydraulic control valve is already in place, this kit cannot be additionally installed.

2. Multi-function lever [Premium model] and Loader and remote control valve lever [Deluxe model]

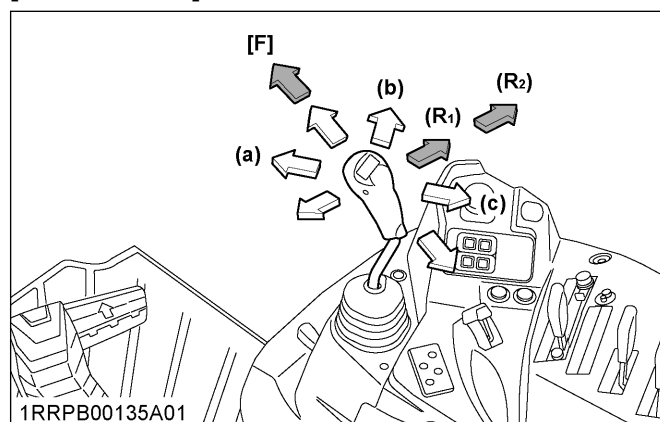
1. Before moving the lever, make sure that the hydraulic hoses for attachments are connected.
2. Move the lever diagonally (a, b, c shown in the figure), and the first and second segments can be controlled at once.

[Premium model]



[F] Float

[Deluxe model]



[F] Float

NOTE :

- Move the lever to the “FLOAT” position, and it will be held there by the detent mechanism. To use the valve as a floating valve with detents, connect the hydraulic hoses to ports [A] and [B].
- When taking off hydraulic power from port [D], the flow rate can be adjusted in two stages with the lever. The flow rate is high at position (R1) and low at position (R2). Move the lever to position (R1) or (R2) depending on the attachment in use.

3. Valve lock

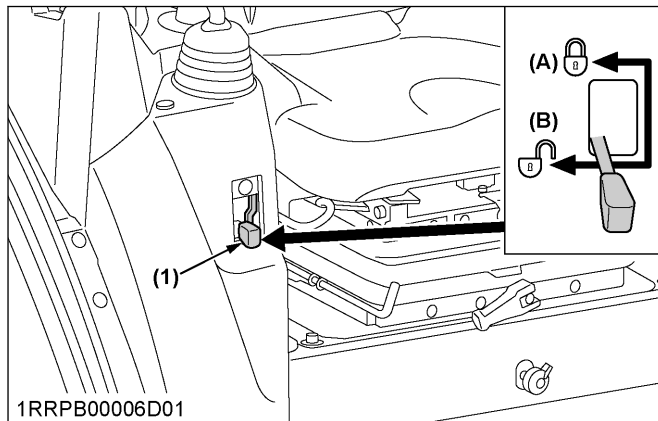


WARNING

To avoid personal injury or death from crushing:

- Do not utilize the valve lock for tractor maintenance or repair.
- The valve lock is to prevent accidental actuation when implement is not in use or during transport.

The control valve is equipped with a valve lock feature. The control valve is locked in the neutral position. The lock is not intended and will not prevent a leak down of the implement during the period of storage.



(1) Lock lever

 (A) Lock
(B) Unlock

REMOTE HYDRAULIC CONTROL SYSTEM (IF EQUIPPED)

The hydraulic auxiliary control valves can be installed up to triple segments.

NOTE :

With the optional BH92A backhoe, the third segment cannot be attached to ROPS models.

1. Remote control valve

There are 2 types of remote valves available for these models.

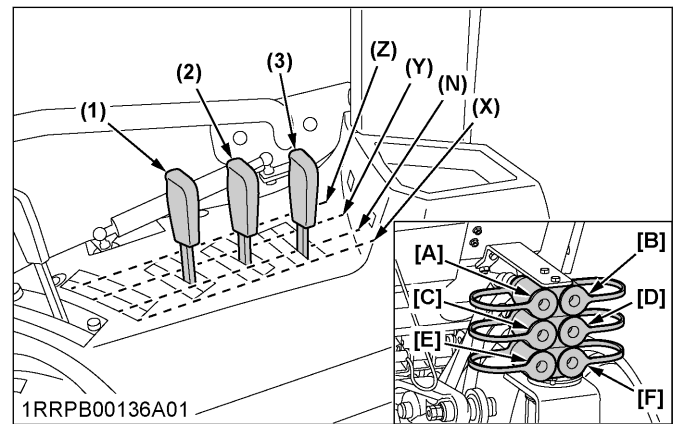
- Double acting valve.
- Double acting valve with float position:
This valve may be placed in the float mode with the control lever all the way forward. The cylinder is free to extend or retract, letting an implement such as a loader bucket follow the ground.

2. Remote control valve lever

The remote control valve lever directs pressurized oil flow to the implement hydraulic system.

Example: Installing triple segment valves

1st 3rd	Double acting valve
2nd	Double acting valve with float position



- 1RRPB00136A01
- (1) Remote control valve lever with double acting valve 1
(2) Remote control valve lever with double acting valve with float position 2
(3) Remote control valve lever with double acting valve 3

Lever 1		-	Y		X	
Port	[A]	-	in	←	out	→
	[B]	-	out	→	in	←

Lever 2		Z		Y		X	
Port	[C]	in	Float	in	←	out	→
	[D]	out		out	→	in	←

Lever 3		-	Y		X	
Port	[E]	-	in	←	out	→
	[F]	-	out	→	in	←

Pressure →
Returning ←

		Coupler size
Port [A] [B] [C] [D] [E] [F]		PT 1/2

IMPORTANT :

- Do not hold the lever in the “REARWARD” or “FORWARD” position once the remote cylinder has reached the end of the stroke, as this will cause oil to flow through the relief valve. Forcing oil through the relief valve for extended periods will overheat the oil.
- When using the tractor hydraulic system to power front loader, do not operate boom and bucket cylinders simultaneously.

NOTE :

To use the single-acting cylinder with the float valve, connect this cylinder to the [C] port.

To extend a single-acting cylinder, pull the remote control valve lever rearward. To retract a cylinder, push it fully forward to the “FLOAT” position. Do not hold it in the down position or the transmission oil may overheat.

3. Remote control valve coupler

 WARNING

To avoid personal injury or death:

- Stop the engine and relieve pressure before connecting or disconnecting lines.
- Do not use your hands to check for leaks.

Connecting

1. Clean both couplers.
2. Remove dust plugs.
3. Insert the implement coupler into the tractor hydraulic coupler.
4. Pull the implement coupler slightly to make sure that the couplers are firmly connected.

Disconnecting

1. Lower the implement to the ground to release hydraulic pressure from the hoses.
2. Clean the couplers.
3. Relieve pressure by moving the hydraulic control levers with the engine shut off. To release the hose, pull it straight from the hydraulic coupler.
4. Clean oil and dust from the coupler, then replace the dust plugs.

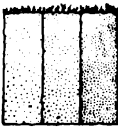
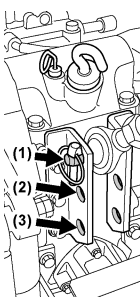
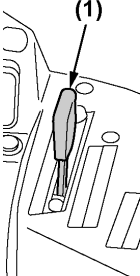
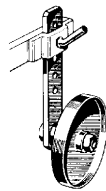
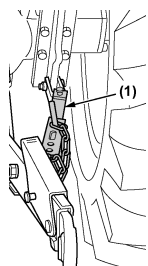
NOTE :

Your local Kubota dealer can supply parts for adapting couplers to hydraulic hoses.

4. Hydraulic control unit reference chart [Except deluxe ROPS model]

In order to handle the hydraulics properly, the operator must be familiar with the following.

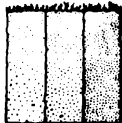
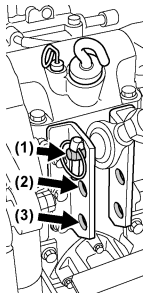
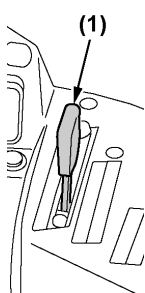
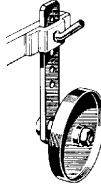
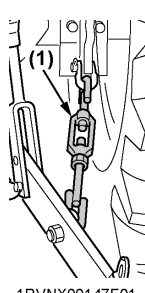
Although this information may not be applicable to all types of implements and soil conditions, it is useful for general conditions.

Implement	 1FEHH00035A01 Soil condition	 1RVNX00019B01 Top link mounting holes	 1RRPB00038J01 (1) Position control lever	 1AGAIAZAP070A Gauge wheel	 1RVNX00014A01 (1) Telescopic stabilizers (if equipped)	Remarks
Moldboard plow	Light soil Medium soil Heavy soil	(1) or (2) (2) or (3) (3)	Position control	Yes/No	Loose	Insert the set-pin through the slot on the outer tube that align with one of the holes on the inner bar. For implements with gauge wheels, lower the position control lever all way.
Disc plow	-	(2) or (3)				
Harrow (spike, springtooth, disc type)	-	(2) or (3)				
Sub-spoiler, etc						
Weeder, ridge, etc	-	(3)		Yes	Tighten	Telescopic stabilizer should be tight enough to prevent excessive implement movement when implement is in raised position.
Earthmover, digger, scraper, manure fork, rear carrier, etc			Yes/No			

5. Hydraulic control unit reference chart [Deluxe ROPS model]

In order to handle the hydraulics properly, the operator must be familiar with the following.

Although this information may not be applicable to all types of implements and soil conditions, it is useful for general conditions.

Implement	 1FEHH00035A01 Soil condition	 1RVNX00019B01 Top link mounting holes	 1RRPB00038J01 (1) Position control lever	 1AGIAZAP070A Gauge wheel	 1RVNX00147E01 (1) Check chains	Remarks
Moldboard plow	Light soil Medium soil Heavy soil	(1) or (2) (2) or (3) (3)	Position control	Yes/No	Loose	Adjust the check chains so that the implement can move 5 to 6 cm laterally. For the implements with gauge wheels, lower the implements to the ground.
Disc plow	-	(2) or (3)				
Harrow (spike, springtooth, disc type)	-	(2) or (3)				
Sub-spoiler, etc						
Weeder, ridge, etc	-	(3)		Yes	Tighten	Check chains should be tight enough to prevent the excessive movement of the implement when implement is in the raised position. For the implements with gauge wheels, lower the implements to the ground.
Earthmover, digger, scraper, manure fork, rear carrier, etc				Yes/No		

TIRES, WHEELS, AND BALLAST

TIRES



WARNING

To avoid personal injury or death:

- Do not mount a tire on a rim. Tires should be mounted 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 other than those approved by Kubota.

1. Inflation pressure

Although the tire pressure is factory-set to the prescribed level, it naturally drops slowly in the course of time. Thus, check the tire pressure every day and inflate as necessary.

NOTE :

Maintain the maximum pressure in front tires, if using a front loader or when equipped with a full load of front weights.

	Tire sizes	Inflation pressure
Rear	12.4-24, 4PR	140 kPa (1.4 kgf/cm ² , 20 psi)
	13.6-28, 4PR	150 kPa (1.5 kgf/cm ² , 22 psi)
	14.9-24, 4PR	140 kPa (1.4 kgf/cm ² , 20 psi)
	14.9-26, 4PR	140 kPa (1.4 kgf/cm ² , 20 psi)
	41/18LL × 16.1, 6PR	70 kPa (0.7 kgf/cm ² , 10 psi)
	355/80-D20, 4PR	100 kPa (1.0 kgf/cm ² , 14 psi)
	44 × 18-20, 6PR	170 kPa (1.7 kgf/cm ² , 24 psi)
	420/70-24, 6PR	140 kPa (1.4 kgf/cm ² , 20 psi)
	610R470, 6PR	110 kPa (1.1 kgf/cm ² , 15 psi)
Front	17.5 L-24, 6PR	140 kPa (1.4 kgf/cm ² , 20 psi)
	7.2-16, 4PR	150 kPa (1.5 kgf/cm ² , 22 psi)
	8.3-16, 4PR	150 kPa (1.5 kgf/cm ² , 22 psi)
	9.5-16, 4PR	205 kPa (2.1 kgf/cm ² , 30 psi)
	27 × 8.50-15, 4PR	85 kPa (8.5 kgf/cm ² , 12 psi)
	27 × 10.50-15, 4PR	85 kPa (8.5 kgf/cm ² , 12 psi)
	29 × 12.50-15, 4PR	140 kPa (1.4 kgf/cm ² , 20 psi)
	305R343, 2PR	140 kPa (1.4 kgf/cm ² , 20 psi)
	10-16.5, 6PR	140 kPa (1.4 kgf/cm ² , 20 psi)
	12-16.5, 6PR	140 kPa (1.4 kgf/cm ² , 20 psi)

2. Dual tires

Dual tires are not approved.

WHEEL ADJUSTMENT



WARNING

To avoid personal injury or death:

- When working on slopes or when working with a trailer, set the wheel tread as wide as practical for maximum stability.
- Support the tractor securely on stands before removing a wheel.
- Do not work under any hydraulically supported devices. Such devices can settle, suddenly leak, or be accidentally lowered. If necessary to work under the tractor or any machine elements for servicing or adjustments, securely support them with stands or suitable blocking beforehand.
- Never operate the tractor with a loose rim, wheel or axle.

1. Front wheels (with 4-wheel drive)

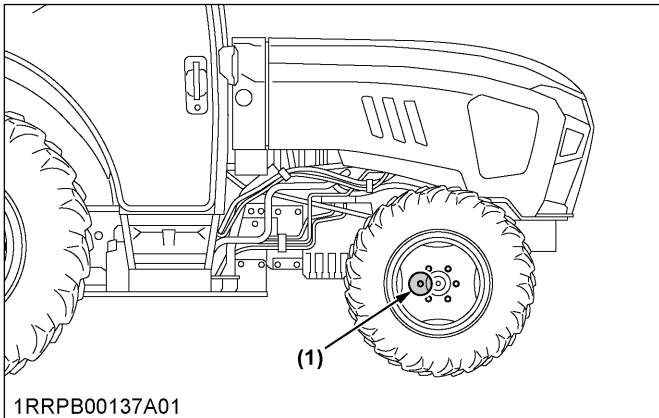
Front tread cannot be adjusted.

IMPORTANT :

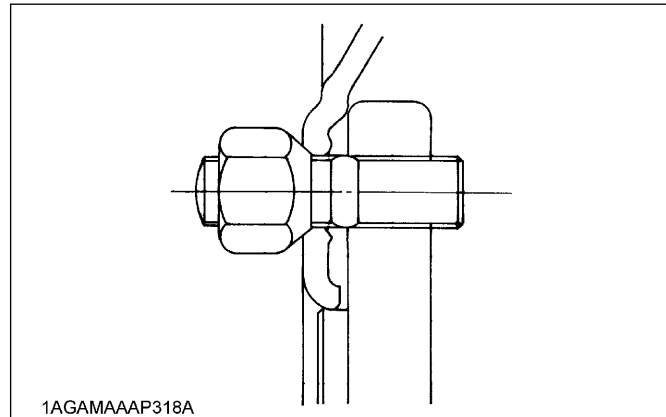
- Do not turn front discs to obtain wider tread.
- When re-fitting or adjusting a wheel, tighten the bolts to the following torques then recheck after driving the tractor 200 m (200 yards) and 10 times of shuttle movement by 5 m (5 yards), and thereafter according to service interval. (See MAINTENANCE on page 174.)

NOTE :

Wheels with beveled or tapered holes: Use the tapered side of lug nut.



(1) 185 N·m (19 kgf·m, 136 lbf·ft)



1RVNX00007A01	Model	L3770, L3970			
	Tires	7-16, 7.2-16 Farm	27 × 8.5-15 Turf	27 × 10.5-15 Turf	10-16.5 IND ^{*1}
	Tread	1155 mm (45.5 in.)	1200 mm (47.2 in.)	1230 mm (48.4 in.)	1195 mm (47.0 in.)
	Model	L4270, L4470			
	Tires	8-16, 8.3-16 Farm	27 × 8.5-15 Turf	27 × 10.5-15 Turf	10-16.5 IND ^{*1}
	Tread	1155 mm (45.5 in.)	1200 mm (47.2 in.)	1230 mm (48.4 in.)	1195 mm (47.0 in.)
	Model	L5070			
	Tires	8-16, 8.3-16 Farm	29 × 12.5-15 Turf	305R343 Turf	12-16.5 IND ^{*1}
	Tread	1285 mm (50.6 in.)	1410 mm (55.5 in.)	1333 mm (52.5 in.)	1325 mm (52.2 in.)
	Model	L6070			
	Tires	9.5-16 Farm	29 × 12.5-15 Turf	305R343 Turf	12-16.5 IND ^{*1}
	Tread	1325 mm (52.2 in.)	1410 mm (55.5 in.)	1333 mm (52.5 in.)	1325 mm (52.2 in.)

(1) Tread

^{*1} IND for industrial

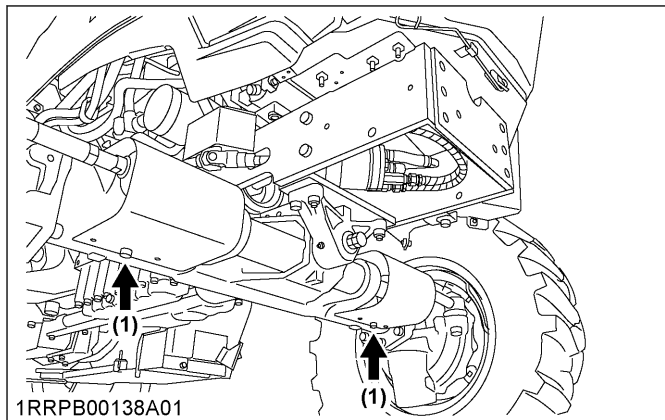
1.1 Front jack point



WARNING

To avoid personal injury or death:

- Before jacking up the tractor, park it on a firm and level ground and chock the rear wheels.
- Fix the front axle to keep it from pivoting.
- Select jacks that withstand the machine weight and set them up as follows.



(1) Jack point

2. Rear wheels

Rear tread width can be adjusted, as shown, with the standard equipped tires.

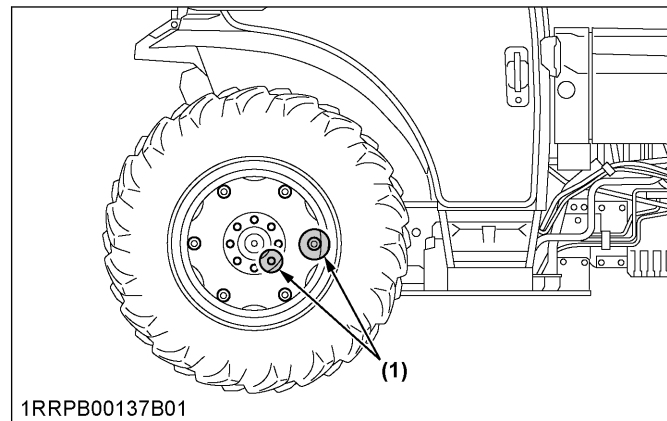
To change the tread width:

1. Remove the wheel rim and/or disc mounting bolts.
2. Change the position of the rim and/or disc (right and left) to the desired position, and tighten the bolts.

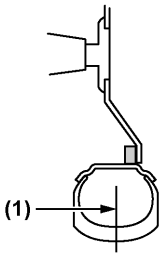
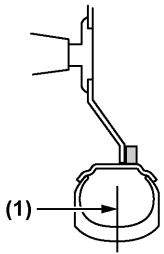
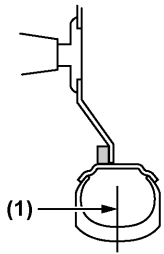
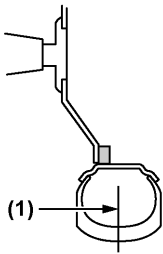
IMPORTANT :

- Always attach wheels as shown in the drawing.
- If not attached as illustrated, transmission parts may be damaged.
- When re-fitting or adjusting a wheel, tighten the bolts to the following torques then recheck after driving the tractor 200 m and 10 times of shuttle movement by 5 m, and thereafter according to service interval.

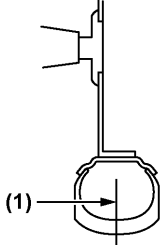
(See MAINTENANCE on page 174.)



(1) 215 N·m (22 kgf·m, 160 lbf·ft)

Models	 1RVNX00023A01	 1RVNX00023A02	 1RVNX00023A03	 1RVNX00023A04
L3770, L3970 12.4-24 Farm	1200 mm (47.2 in.)	1300 mm (51.2 in.)	1385 mm (54.5 in.)	1480 mm (58.3 in.)
L4270, L4470, L5070 14.9-24 Farm	-	1285 mm (50.6 in.)	1435 mm (56.5 in.)	1530 mm (60.2 in.)
L3770, L3970 420/70-24 IND	-	1325 mm (52.2 in.)	1360 mm (53.5 in.)	1465 mm (57.7 in.)
L4270, L4470, L5070 17.5 L-24 IND	-	1340 mm (52.8 in.)	1380 mm (54.3 in.)	1490 mm (58.7 in.)
L6070 13.6-28 Farm	1220 mm (48.0 in.)	1330 mm (52.4 in.)	1425 mm (56.1 in.)	1530 mm (60.2 in.)
L6070 14.9-26 Farm	-	-	1325 mm (52.2 in.)	1430 mm (56.3 in.)
L6070 17.5 L-24 IND	-	1360 mm (53.5 in.)	1395 mm (54.9 in.)	1500 mm (59.1 in.)

(1) Tread

Models	 1RVNX00023A05
L5070, L6070 610R470 Turf	1515 mm (59.6 in.)
L3770, L3970 355/80-D20 Turf	1270 mm (50.0 in.)
L4270, L4470 355/80-D20 Turf	1290 mm (50.8 in.)
L3770, L3970 41/18LL × 16.1 Turf	1420 mm (55.9 in.)
L4270, L4470 41/18LL × 16.1 Turf	1440 mm (56.7 in.)
L3770, L3970 44 × 18-20 Turf	1400 mm (55.1 in.)
All models 44 × 18-20 Turf	1415 mm (55.7 in.)

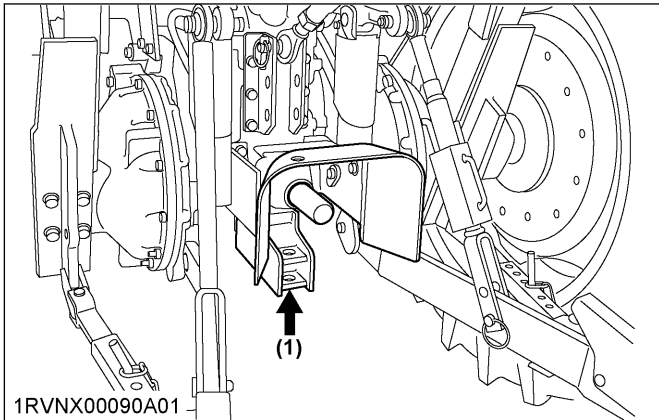
(1) Tread

2.1 Rear jack point

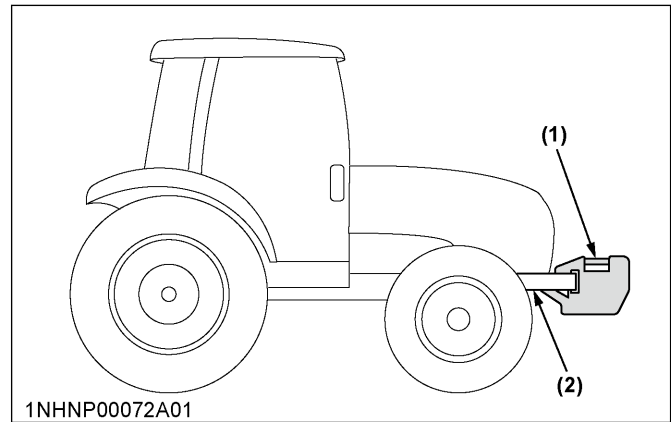
WARNING

To avoid personal injury or death:

- Before jacking up the tractor, park it on a firm and level ground and chock the front wheels.
- Fix the front axle to keep it from pivoting.
- Select a jack that withstands the machine weight and set it up as follows.



(1) Jack point



(1) Front end weights

(2) Bumper

IMPORTANT :

- Do not overload tires.
- Add no more weight than indicated in chart.

NOTE :

The front end weights can be attached to the bumper (option on 4WD models - North America only).

Maximum weight	25 kg × 7 pieces (386 lbs.)
----------------	--------------------------------

BALLAST

WARNING

To avoid personal injury or death:

- Additional ballast will be needed for transporting heavy implements. When the implement is raised, drive slowly over rough ground, regardless of how much ballast is used.
- Do not fill the front wheels with liquid to maintain steering control.

1. Front ballast

Add weights if needed for stability and improved traction.

Heavy pulling and heavy rear mounted implements tend to lift up the front wheels.

Add enough ballast to maintain steering control and to prevent tipping over. Remove the weight when it is no longer needed.

1.1 Front end weights (option)

Front end weights can be attached to the bumper.

See your implement operator's manual for required number of weights or contact your local Kubota dealer about their usage.

2. Rear ballast

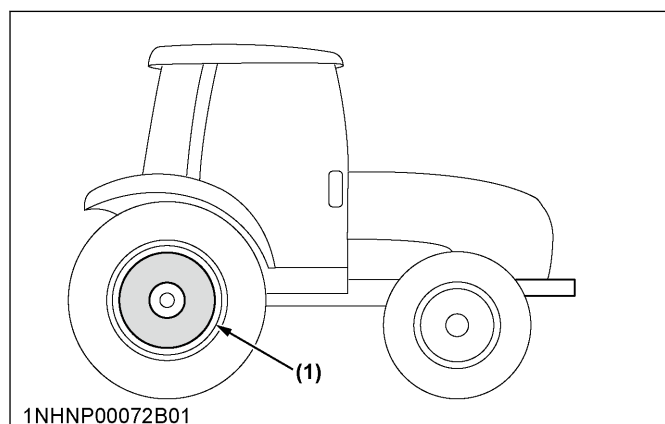
Add weight to rear wheels if needed to improve traction or for stability.

The amount of rear ballast should be matched to job and the ballast should be removed when it is not needed.

The weight should be added to the tractor in the form of liquid ballast, rear wheel weights or a combination of both.

2.1 Rear wheel weights (option)

Rear wheel weights can be attached to the rear wheel. See your implement operator's manual for the required number of weights or contact your local Kubota dealer about how to use the weights.



(1) Rear wheel weights

IMPORTANT :

- Do not overload the tires.
- Add no more weight than indicated in the following table.

Model	Maximum weight per wheel
L3770, L3970, L4270, L4470, L5070	28 kg × 3 Pieces (185 lbs.)
L6070	47 kg × 3 Pieces (310 lbs.)

2.2 Liquid ballast in rear tires

A water and calcium chloride solution provides safe and economical ballast. Used properly, it will not damage tires, tubes or rims. The addition of calcium chloride is recommended to prevent the water from freezing.

Use of this method of weighting the wheels has the full approval of the tire companies.

See your tire dealer for this service.

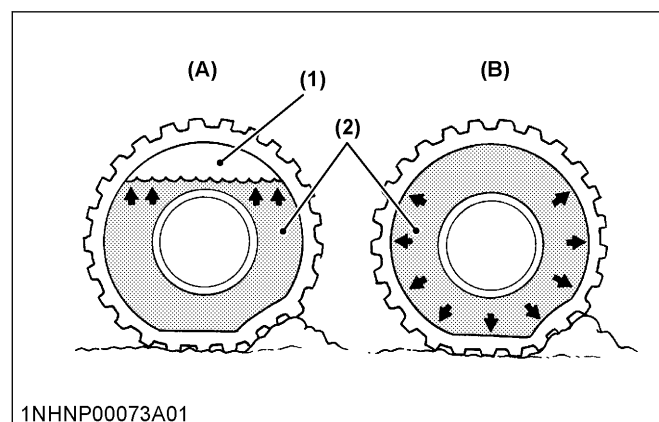
Liquid weight per tire (75 % filled)

Tire sizes	12.4-24	420/70-24	14.9-24
Slush free at -10 °C (-14 °F) Solid at -30 °C (-22 °F) [Approx. 1 kg (2 lbs.) CaCl ₂ per 4 L (1 gal.) of water]	130 kg (285 lbs.)	195 kg (430 lbs.)	205 kg (450 lbs.)
Slush free at -24 °C (-11 °F) Solid at -47 °C (-52 °F) [Approx. 1.5 kg (3.5 lbs.) CaCl ₂ per 4 L (1 gal.) of water]	135 kg (295 lbs.)	205 kg (450 lbs.)	215 kg (475 lbs.)
Slush free at -47 °C (-52 °F) Solid at -52 °C (-62 °F) [Approx. 2.25 kg (5 lbs.) CaCl ₂ per 4 L (1 gal.) of water]	145 kg (320 lbs.)	220 kg (485 lbs.)	225 kg (495 lbs.)

Tire sizes	17.5 L-24	14.9-26	13.6-28
Slush free at -10 °C (-14 °F) Solid at -30 °C (-22 °F) [Approx. 1 kg (2 lbs.) CaCl ₂ per 4 L (1 gal.) of water]	235 kg (515 lbs.)	215 kg (475 lbs.)	185 kg (405 lbs.)
Slush free at -24 °C (-11 °F) Solid at -47 °C (-52 °F) [Approx. 1.5 kg (3.5 lbs.) CaCl ₂ per 4 L (1 gal.) of water]	250 kg (550 lbs.)	225 kg (495 lbs.)	200 kg (441 lbs.)
Slush free at -47 °C (-52 °F) Solid at -52 °C (-62 °F) [Approx. 2.25 kg (5 lbs.) CaCl ₂ per 4 L (1 gal.) of water]	265 kg (585 lbs.)	235 kg (515 lbs.)	215 kg (475 lbs.)

IMPORTANT :

Do not fill tires with water or solution more than 75 % of full capacity (to the valve stem level at 12 o'clock position).



- (1) Air
(2) Water

- (A) Correct - 75 % full, air compresses like a cushion
(B) Incorrect - 100 % full, water cannot be compressed

CAB OPERATION

DOORS AND WINDOWS

1. Locking and unlocking the door

From the outside:

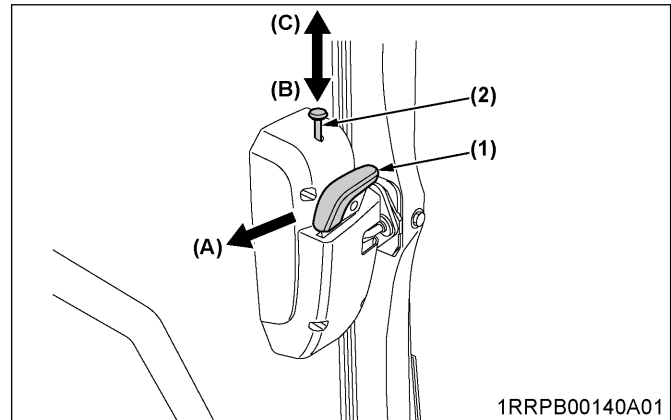
Insert the key into the door lock. Turn the key clockwise to unlock the door. To lock the door, turn the key in the opposite direction.

The key can be removed when it is in the vertical position.

From the inside:

Push down the lock knob to lock the door.

Pull up the lock knob to unlock the door.



(1) Inner door handle

(2) Lock knob

(A) Pull

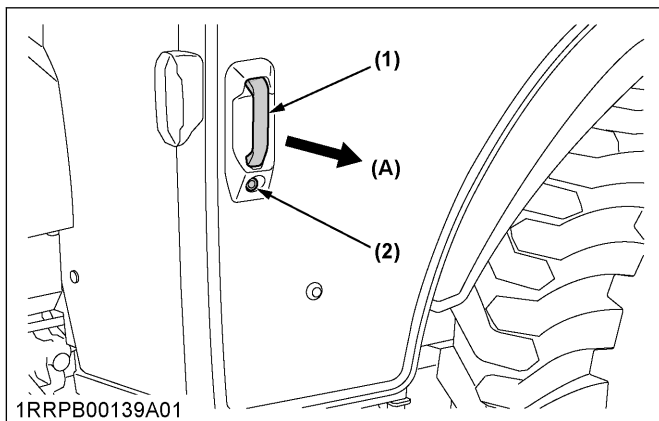
(B) Push (lock)

(C) Pull (unlock)

2. Opening the door

From the outside:

Unlock the door, and pull the outer door handle.



(1) Outer door handle

(2) Door lock

(A) Pull

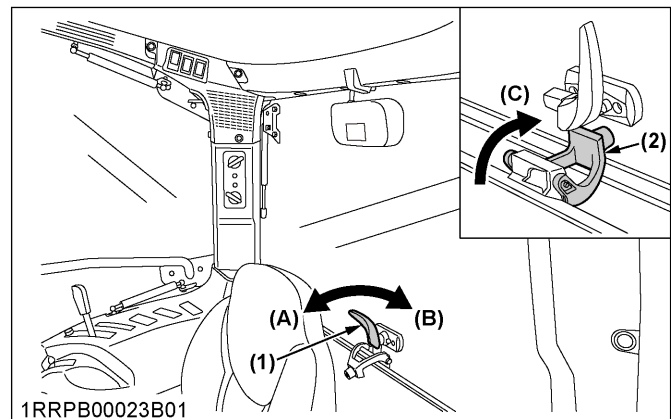
From the inside:

Unlock the door and pull the inner door handle.

3. Rear window

Turn the rear window handle clockwise to the vertical position and push the handle. The rear window is opened by the gas spring cylinder.

Raise the window stopper to keep the window open.



(1) Rear window handle

(2) Window stopper

(A) Open

(B) Close

(C) Raise

4. Emergency exit

1. In an emergency situation, open the right door of the CAB if the left door is blocked and vice versa.
2. Exit through the rear window if the CAB doors are blocked.

DOME LIGHT

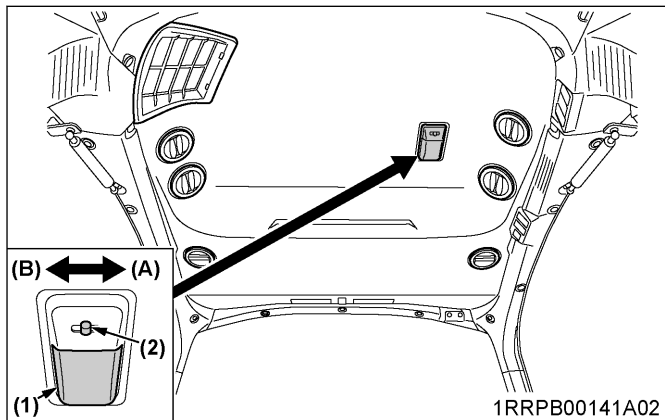
Sliding the dome light switch will give the following light condition:

[OFF]

The light does not turn on when the door is opened.

[ON]

The light remains on regardless of the door position.



- (1) Dome light
(2) Dome light switch
- (A) Off
(B) On

WIPER

1. Front wiper and washer switch

- Turn on the key switch and press the wiper switch once to activate the continuous wiper. When the wiper switch is pressed and held, washer liquid jets out. The jetting continues while the wiper switch is pressed and the continuous wiper is activated.
- Press the wiper switch twice to activate the intermittent wiper. When the wiper switch is pressed and held, washer liquid jets out and the intermittent wiper is activated.

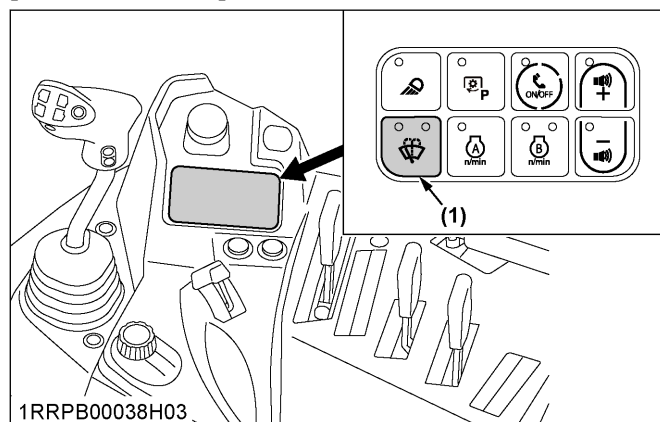
NOTE :

[Premium model]

The interval of the intermittent wiper can be adjusted.

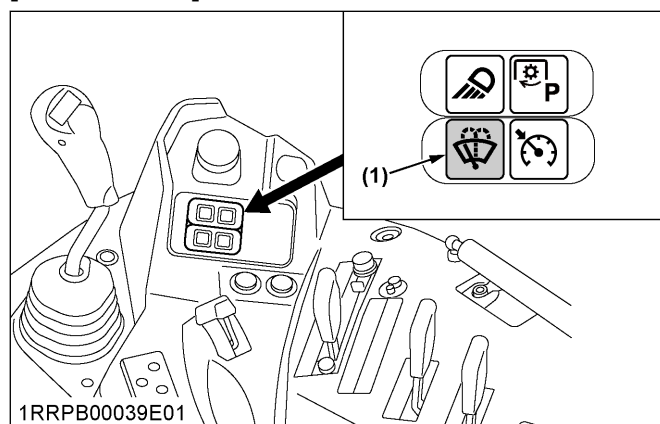
(See Setting the front intermittent wiper on page 66.)

[Premium model]



(1) Front wiper and washer switch

[Deluxe model]



(1) Front wiper and washer switch

IMPORTANT :

- Do not activate the wipers when the windows are dry, as they may be scratched. Jet washer liquid first and then activate the wipers.
- In order to protect the wiper motor from heavy loads, the wiper may temporarily stop if the wiper is used in the following conditions:
 - The window is in a semi-dry state.
 - The window is covered in snow.
 - There is ice stuck to the window.
 It will be possible to restart the wiper within 12 minutes.
This is not a malfunction.

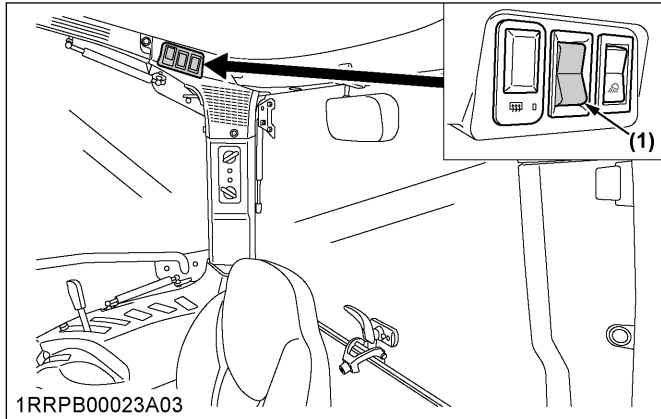
2. Rear wiper and washer switch (if equipped)

1. Turn on the key switch and press the bottom half of the wiper switch to the first step, and the wiper is activated.

When the switch is pressed further to the second step, washer liquid jets out.

The jetting continues while the switch is pressed and the wiper is activated continuously.

2. When the bottom half of the wiper and washer switch is pressed, washer liquid only jets out.



(1) Rear wiper and washer switch

IMPORTANT :

Do not activate the wipers when the windows are dry, as they may be scratched.

Jet washer liquid first and then activate the wipers.

3. Using the wipers in cold season

1. While not used in cold season, keep the wiper blades off the windshield to prevent them from being frozen to the windshield.
2. If the windshield is covered with snow, scrape it off the windshield before using the wipers.
3. If the wiper blades are frozen to the windshield and fail to move, turn the main key switch to the "OFF" position and remove the ice from the blades. Then place the main key switch back to the "ON" position.
4. When commercially available cold-season wiper blades are used, make sure that their size is the same as or smaller than that of the standard ones.

IMPORTANT :

In the cold season, the wiper blades and the wiper motor may become overloaded, and cause damage. To avoid this problem, take the previously mentioned precautions.

AIR CONDITIONER



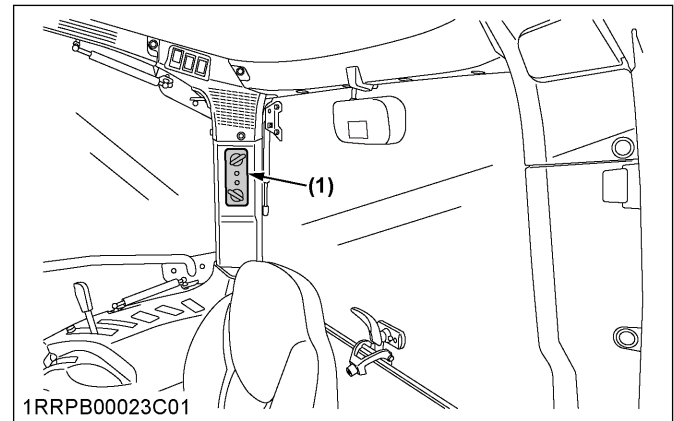
CAUTION

To avoid personal injury:

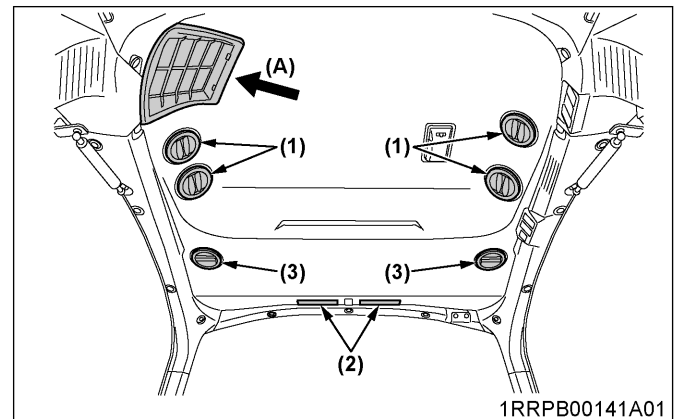
- If the window fails to defrost in extreme conditions or becomes cloudy when dehumidifying the CAB, wipe off moisture with a soft cloth.
- Do not block all the air outlets of the air conditioner. A problem could occur.

1. Airflow

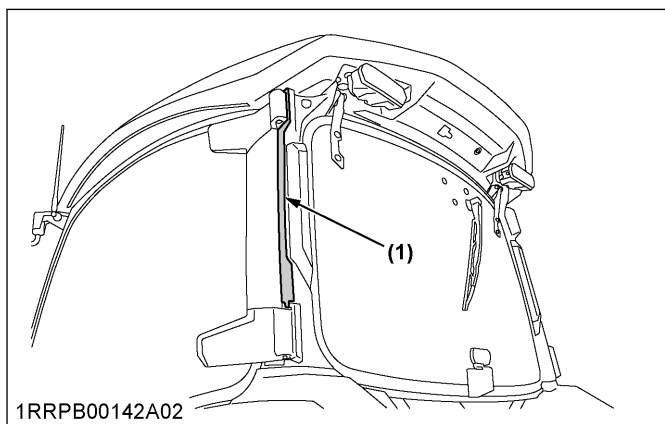
Air in the CAB and fresh air introduced into the CAB flows as follows. Adjust the air ports to obtain the desired condition.



(1) Air conditioner control panel



(1) Side air outlet (face area) (A) Inner air recirculation
(2) Front air outlet
(3) Door air outlet



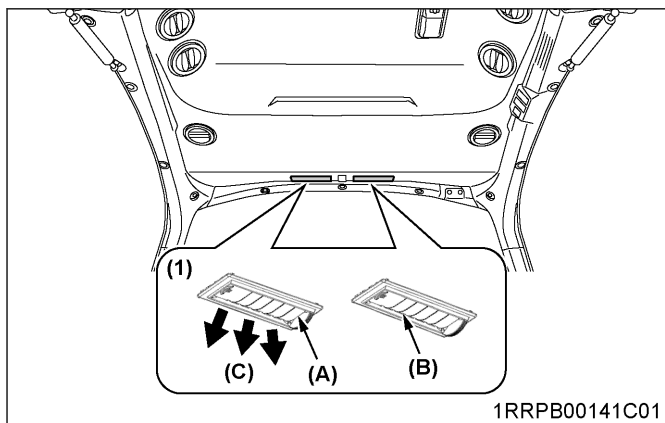
(1) Fresh air inlet

IMPORTANT :

Do not pour water directly into the fresh air port while washing the tractor.

2. Air control vent**2.1 Front air outlet**

The front air outlets can be adjusted as required. To defrost the windshield, adjust the outlets toward the windshield.

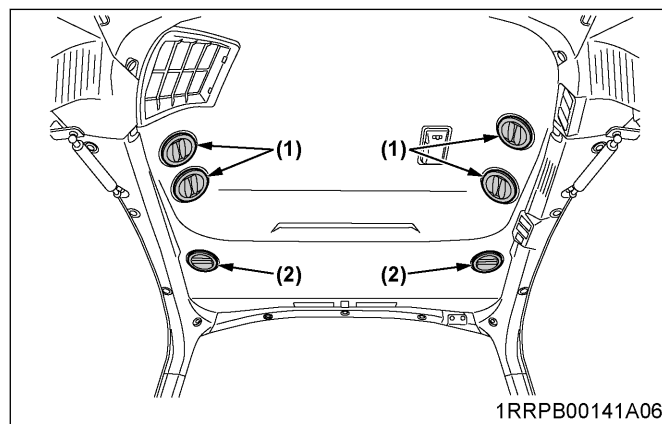


(1) Front air outlet

- (A) Open
(B) Closed
(C) Windshield

2.2 Side air outlet and door air outlet

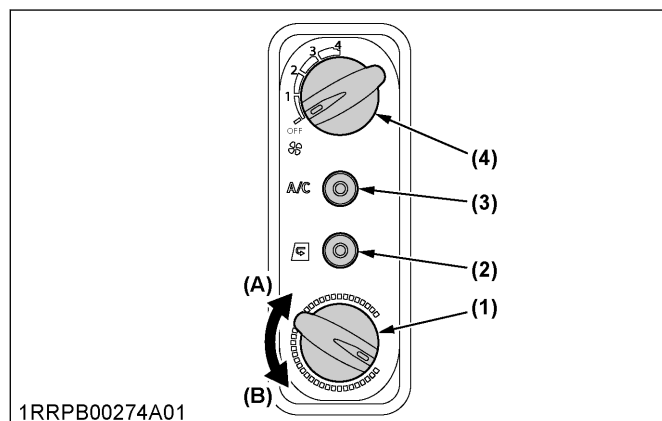
The side and door air outlets can be adjusted to direct air on to the operator, door window, or the rear of the CAB.



(1) Side air outlet
(2) Door air outlet

NOTE :

If the airflow rate at the face is too low, close the door air outlet.

3. Control panel

- (1) Temperature control dial (A) Warm (B) Cool
(2) Recirculation and fresh air selection switch with indicator light
(3) Air conditioner switch with indicator light
(4) Blower switch

3.1 Temperature control dial

Set this dial at the desired position to obtain the optimum air temperature. Turn the dial in the "WARM" direction to obtain warmer air. Turn the dial in the "COOL" direction to obtain cooler air.

3.2 Blower switch

Air volume can be changed in 4 steps. At the [4] position, the largest air volume is obtained.

3.3 Air conditioner switch

Push this switch to activate the air conditioner. An indicator light will light up when the switch is set to "ON".

Push the switch again to turn off the air conditioner, in which case the indicator light will turn off.

NOTE :

With the blower switch at the "OFF" position, the indicator light will not light up even when the air conditioner switch is set to the "ON" position.

IMPORTANT :

To operate the air conditioner after the tractor has not been used for one week or longer, run the engine at idling speed first and then set the air conditioner switch to the "ON" position. Keep this for one minute or so.

If the air conditioner switch is set to the "ON" position with the engine running at high rpm, the compressor may malfunction.

3.4 Recirculation and fresh air selection switch

Each time the switch is pressed, the air flow position changes for "RECIRCULATION" or "FRESH AIR". An indicator light will light up when the switch is set to "RECIRCULATION". And the indicator light will be off when the switch is set to "FRESH AIR".

FRESH AIR:

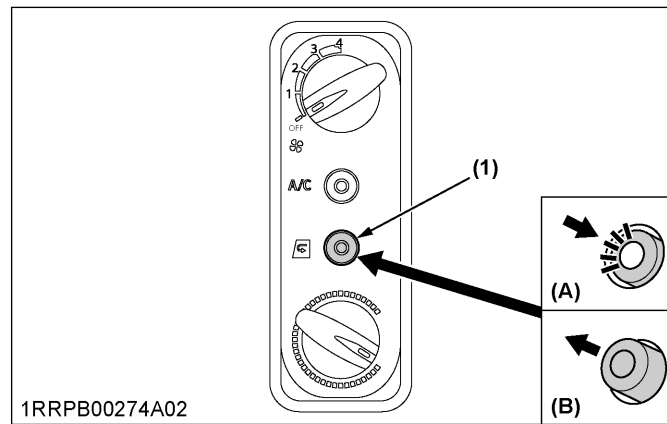
Indicator: "OFF"

Fresh air will flow into the CAB. This setting is helpful when you work in dusty conditions or if the glass windows get foggy.

RECIRCULATION:

Indicator: "ON"

In-CAB air will be recirculated. This setting is useful for cooling or heating the CAB quickly or keeping it extra cool or warm.



1RRPB00274A02

- (1) Recirculation or fresh air selection switch with indicator light
- (A) Recirculation
(B) Fresh air

NOTE :

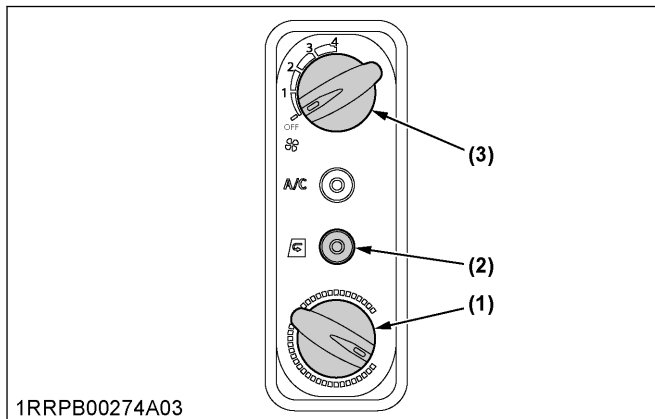
- When heating, do not keep the switch at the "RECIRCULATION" position for a long time. The windshield easily gets foggy.
- While working in dusty conditions, keep the switch at the "FRESH AIR" position. This setting increases the pressure in the CAB, which helps prevent dust from coming into the CAB.

4. Operation

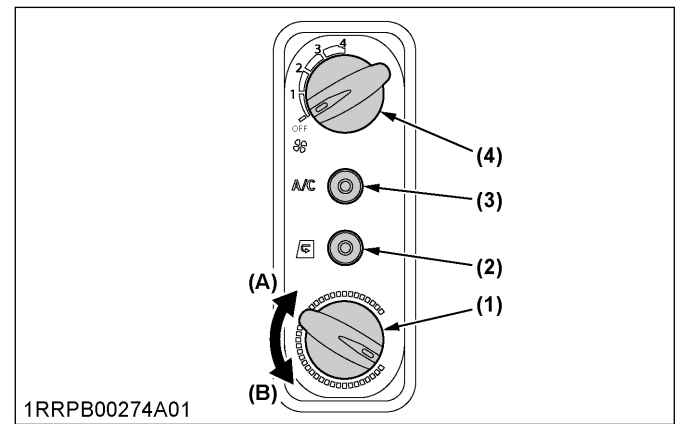
4.1 Heating

1. Set the recirculation or fresh air selection switch to the "FRESH AIR" position. To raise the temperature in the CAB quickly, set this switch to the "RECIRCULATION" position.

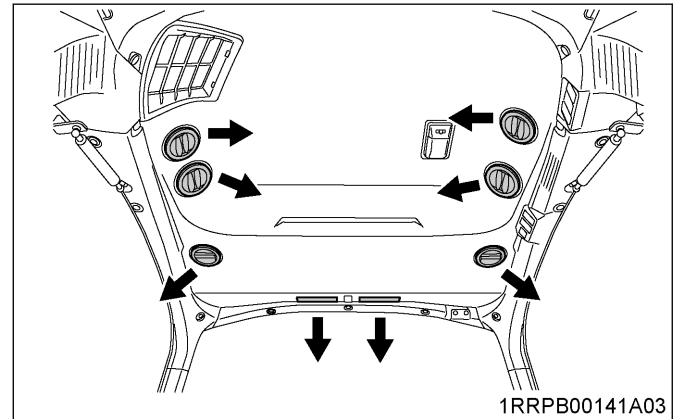
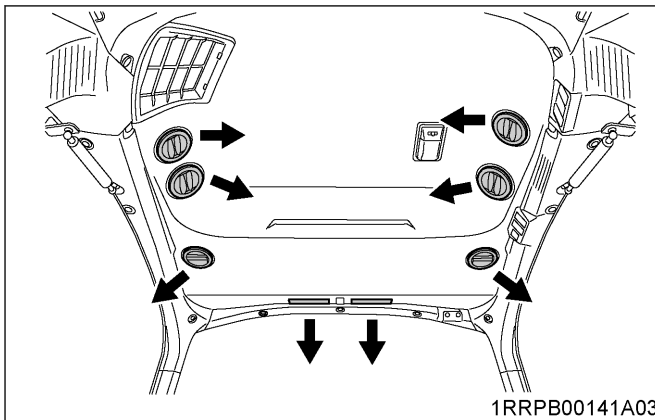
- Adjust the blower ([1], [2], [3], or [4]) switch and the temperature control dial to achieve a comfortable temperature level.



- Temperature control dial
- Recirculation or fresh air selection switch with indicator light
- Blower switch



- Temperature control dial (A) Warm (B) Cool
- Recirculation or fresh air selection switch with indicator light
- Air conditioner switch with indicator light
- Blower switch



4.2 Cooling and dehumidifying-heating

- Set the recirculation or fresh air selection switch to the "FRESH AIR" position. To lower the temperature in the CAB quickly, set this switch to the "RECIRCULATION" position.
- Press and turn on the air conditioner switch with indicator.
- Turn on the blower ([1], [2], [3], or [4]) switch.
- Adjust the temperature control dial to "COOL" or an intermediate position to achieve a comfortable temperature level.

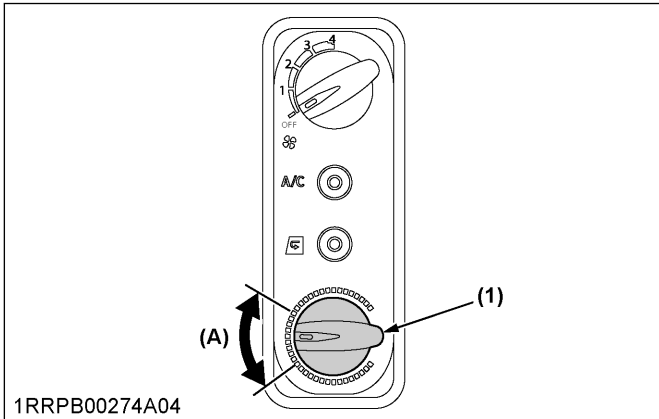
NOTE :

In summer when the heater is not used, keep the temperature control dial at the max "COOL" (end of counterclockwise) position. Otherwise, hot air will raise the temperature in the CAB.

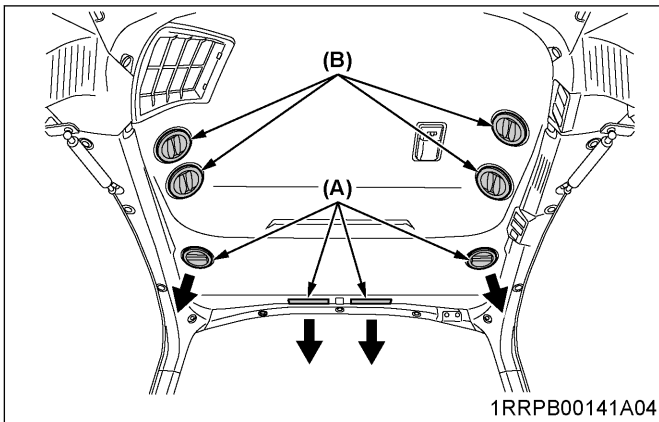
4.3 Foot warming and head cooling

- In the cooling or dehumidifying-heating mode, set the temperature control dial at the center position area.
- Open the front air outlet and the door air outlet direct it to your feet. Close the side air outlet.

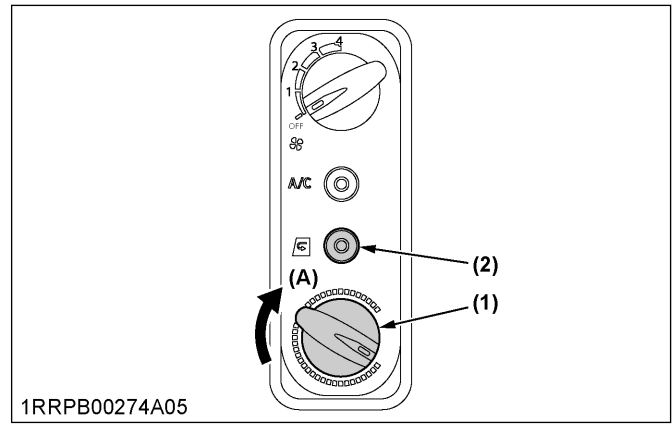
3. You can feel your head cool and your feet warm.



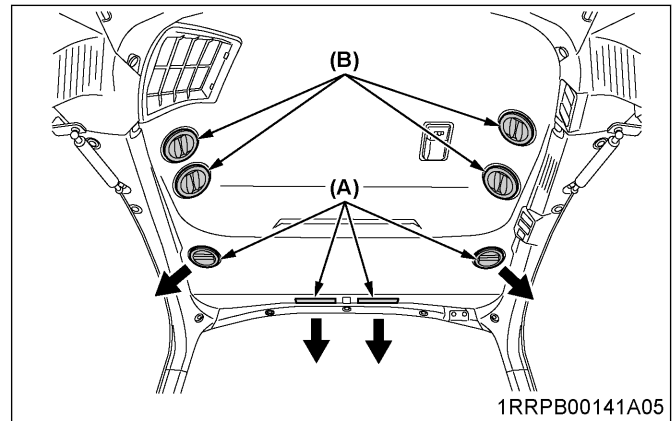
(1) Temperature control dial (A) Center position area



(A) Open
(B) Close



(1) Temperature control dial (A) "WARM"
(2) Recirculation or fresh air selection switch with indicator light



(A) Open
(B) Close

4.4 Defrosting or demisting

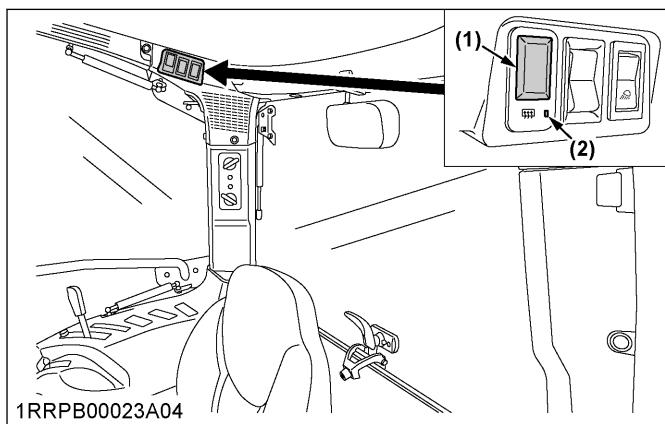
To defrost or demist the windshield, take the following steps.

1. Open the front air outlet and direct it to the windshield. Close the side air outlet.
2. Set the recirculation or fresh air selection lever to the "FRESH AIR" position.
3. Set the blower switch and the temperature control dial to the [4] and max "WARM" (end of clockwise) positions, respectively.

REAR AND SIDE DEFOGGER WITH TIMER (IF EQUIPPED)

To activate the rear and side window defoggers, press the switch marked  while the key switch is in the "ON" position. Then the yellow light on the switch turns on.

After about 30 minutes, the defoggers and the yellow light turn off automatically. To turn off the defogger, press the switch once more.



- (1) Defogger switch
(2) Yellow light

IMPORTANT :

The battery will discharge if the defogger and the key switch remain in the “ON” position or the “ACC” position with the engine stopped.

Always use the defogger with the engine running and avoid low rpm idling for an extended period of time.

HANGER

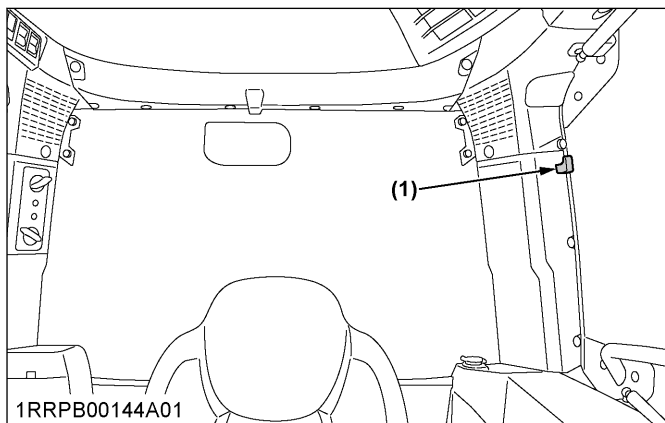


WARNING

To avoid personal injury or death:

- Do not hang anything that is heavier than 3 kg. The hanger may get damaged.
- Make sure anything hanging does not interfere with your operation.

Caps and other small objects can be hung.



- (1) Hanger

MAINTENANCE

SERVICE INTERVALS

Maintenance parts		Maintenance timing												Ref. page					
		Indication on hour meter											Months or years				Interval		
		50	100	150	200	250	300	350	400	450	500	...							
Engine oil	Change	○												Initial 50 hrs	203	*1			
Engine oil filter	Replace	○													203	*1			
Transmission oil filter	Replace	○													204	*1			
Hydraulic oil filter	Replace	○													204	*1			
Greasing	Lubricate	○	○	○	○	○	○	○	○	○	○	○		Every 50 hrs	193				
Engine start system	Check	○	○	○	○	○	○	○	○	○	○	○			195				
Operator presence control (OPC) system	Check	○	○	○	○	○	○	○	○	○	○	○			195				
Wheel bolt torque	Check	○	○	○	○	○	○	○	○	○	○	○			196				
Tie-rod dust cover	Check	○	○	○	○	○	○	○	○	○	○	○		196					
Air cleaner primary element	Clean		○		○		○		○		○			Every 100 hrs	196	*2	@		
Fan belt	Adjust		○		○		○		○		○				198				
Brake	Adjust		○		○		○		○		○				198				
Battery condition	Check		○		○		○		○		○				199	*3			
Toe-in	Adjust				○				○					Every 200 hrs	200				
Air conditioner belt tension [CAB model]	Adjust				○				○						201				
Inner air filter [CAB model]	Clean				○				○						202				
Fresh air filter [CAB model]	Clean				○				○						202				
Engine oil	Change									○			1 year	Every 400 hrs or 1 year	203	*4			
Engine oil filter	Replace									○						Every 400 hrs	203		
Transmission oil filter	Replace									○							204		
Hydraulic oil filter	Replace									○							204		
Transmission oil	Change									○			204						
Front axle case oil	Change									○			205						
Fuel filter	Replace									○			206				@		
Water separator	Clean									○			206						
	Replace									○			206						
Front axle pivot	Adjust											600 hrs		Every 600 hrs	207				
Engine valve clearance	Adjust											800 hrs		Every 800 hrs	207	*5			
Air cleaner primary element and secondary element	Replace											1000 hrs	1 year	Every 1000 hrs or 1 year	208	*6	@		
Exhaust manifold	Check														208	*5 *6			

(Continued)

Maintenance parts		Maintenance timing														Ref. page		
		Indication on hour meter											Months or years	Interval				
		50	100	150	200	250	300	350	400	450	500	...						
Fuel injector nozzle tip	Clean											1500 hrs		Every 1500 hrs	208	*5	@	
Positive crankcase ventilation (PCV) valve	Check														208	*5	@	
EGR cooler	Check														208	*5	@	
	Clean														208	*5		
Cooling system	Flush											2000 hrs	2 years	Every 2000 hrs or 2 years	208	*7		
Coolant	Change														208	*7		
Supply pump	Check											3000 hrs		Every 3000 hrs	210	*5	@	
EGR system	Check														210	*5		
	Clean														210	*5		
Turbocharger [Premium model]	Check																	210
DPF muffler	Clean											3000 hrs to 6000 hrs		Every 3000 hrs to 6000 hrs	210	*5	@	
Fuel line	Check											1 year		Every 1 year	210	*8	@	
Intake air line	Check														211	*8	@	
Radiator hose and clamp	Check														212	*8		
Power steering oil line	Check														213	*8		
Oil cooler line	Check														214	*8		
Oil separator hose	Check														214	*8		
Lift cylinder hose	Check														215	*8		
DPF differential pressure sensor pipe	Check														215	*5		
EGR pipe	Check														215	*5		
Antifrost heater for oil separator (if equipped)	Check														215			
Relief valve (if equipped)	Check														215			
CCV internal pressure switch (if equipped)	Check														216			
Air conditioner pipe and hose [CAB model]	Check														216	*8		
CAB isolation cushion [CAB model]	Check														216	*5		
Radiator hose and clamp	Check											2 years		Every 2 years	216	*5 *8		
Power steering oil line	Check														216	*5 *8		
Oil cooler line	Check														216	*5 *8		
Oil separator hose	Check														216	*5 *8		
Lift cylinder hose	Check														216	*5 *8		
Air conditioner pipe and hose [CAB model]	Check														216	*5		

(Continued)

MAINTENANCE

Maintenance parts		Maintenance timing													Ref. page			
		Indication on hour meter											Months or years	Interval				
		50	100	150	200	250	300	350	400	450	500	...						
DPF differential pressure sensor hose	Replace													2 years	Every 2 years	216	*5	
Fuel line	Replace													4 years	Every 4 years	216	*5 *8	@
Intake air line	Replace															216	*5 *8	@
Fuel system	Bleed													Service as required		216		
Clutch housing water	Drain															217		
Fuse	Replace															218		
Slow blow fuse	Replace															220		
Light bulb	Replace															222		
LED light	Replace															222		
Lubricating points [CAB model]	-															223		
Washer liquid [CAB model]	Add															223		
Amount of refrigerant (gas) [CAB model]	Check															223		
Tractor	Wash															223		
Fuel line	Replace															224	*8	@
Intake air line	Replace															224	*8	@
Radiator hose (water pipe)	Replace															224	*8	
Power steering oil line	Replace															225	*8	
Oil cooler line	Replace															225	*8	
Oil separator hose	Replace															225	*8	
Lift cylinder hose	Replace															225	*8	
Air conditioner pipe and hose [CAB model]	Replace															225	*8	

*1 The job must be done after the first 50 hours of operation.

*2 Air cleaner should be cleaned more often in dusty conditions than in normal conditions.

*3 When the battery is used for less than 100 hours per year, check the battery condition by reading the indicator annually.

*4 Every 400 hours or every 1 year, whichever comes first.

*5 Contact your local Kubota dealer for this service.

*6 Every 1,000 hours or every 1 year, whichever comes first.

*7 Every 2,000 hours or every 2 years, whichever comes first.

*8 Replace if any deterioration (crack, hardening, scar of deformation) or damage occurred.

IMPORTANT :

- The items marked with @ are registered as emission related critical parts by Kubota in the U.S.EPA nonroad emission regulation. As the engine owner, you are responsible for the performance of the required maintenance on the engine according to the instructions mentioned previously.
See the Warranty Statement for details.
- When using biodiesel, check the maintenance requirements of biodiesel fuel as the intervals will change for some of the items.

LUBRICANTS, FUEL, AND COOLANT

Lubricants, fuel, and coolant table

No.	Locations	Capacities						Lubricants	
		Deluxe		Premium					
		L3770	L4270	L3970	L4470	L5070	L6070		
1	Fuel	51 L (13.5 U.S.gals.)		48 L (12.7 U.S.gals.)				No.2-D S15 diesel fuel No.1-D S15 diesel fuel if temperature is below -10 °C (14 °F)	
2	Coolant	6.8 L (7.2 U.S. qts.)	8.2 L (8.7 U.S. qts.)	6.8 L (7.2 U.S. qts.)	8.2 L (8.7 U.S.qts.)			Fresh clean soft water with antifreeze	
		Coolant recovery tank: 1.0 L (1.0 U.S.qts.)							
3	Washer liquid [CAB model only]	2.0 L (2.1 U.S.qts.)						Automobile washer liquid	
4	Engine crankcase (with filter)	6.4 L (6.7 U.S. qts.)	8.4 L (8.9 U.S. qts.)	6.4 L (6.7 U.S. qts.)	8.4 L (8.9 U.S.qts.)			• Engine oil: API Service Classification	CJ-4 (DPF type engine)
								Above 25 °C (77 °F)	SAE30, SAE10W-30, SAE15W-40, or SAE0W-40
								-10 °C to 25 °C (14 °F to 77 °F)	SAE20, SAE10W-30, SAE15W-40, or SAE0W-40
								Below -10 °C (14 °F)	SAE10W-30 or SAE0W-40
5	Transmission case	46 L (12.1 U.S .gals.)	45 L (11.9 U.S. gals.)	46 L (12.1 U.S .gals.)	45 L (11.9 U.S.gals.)		47 L (12.4 U.S .gals.)	Kubota SUPER UDT-2 fluid	
6	Front axle case	6.5 L (6.9 U.S.qts.)				8.5 L (9.0 U.S.qts.)		Kubota SUPER UDT-2 fluid or SAE 80 - SAE 90 gear oil	

Greasing table

No.	Greasing	No. of greasing points						Capacity	Type of grease
		L3770	L4270	L3970	L4470	L5070	L6070		
1	Front wheel case support	—				2		Until grease overflows	Multipurpose grease NLGI-2 or NLGI-1 (GC-LB)
2	Front axle support	2							
3	Top link	2							
4	Lift rod	1							
5	Lift cylinder	4							
6	Battery terminal	2						Moderate amount	
7	Swivel seat	4							

NOTE :

The product name of Kubota genuine UDT fluid may be different from that in the operator's manual depending on countries or territories. Contact your local Kubota dealer for further details.

Engine oil

- The oil used in the engine should have an American Petroleum Institute (API) service classification and proper SAE engine oil according to the ambient temperatures shown in the previous table.
- Refer to the following table for the suitable API classification engine oil according to the diesel particulate filter (DPF) type engines and the fuel.

Fuel used	Engine oil classification (API classification)
	Oil class for engines with DPF
Ultra low sulfur fuel <0.0015 % (15 ppm)	CJ-4

Fuel

- Use the ultra low sulfur diesel fuel only (below 0.0015 % or 15 ppm) for these engines.
- Cetane number of 45 minimum. Cetane number greater than 50 is preferred, especially for temperatures below -20 °C (-4 °F) or elevations above 1500 m (5000 ft).
- 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

*Kubota SUPER UDT-2: For an enhanced ownership experience, we highly recommend SUPER UDT-2 to be used instead of standard hydraulic and transmission fluid.

SUPER UDT-2 is a proprietary Kubota formulation that delivers superior performance and protection in all operating conditions.

Regular UDT is also permitted for use in this machine.

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

1. Biodiesel fuel (BDF) B0-B20

B0-B20 Biodiesel fuels (BDF): mixed diesel fuels containing 20 % or less biodiesel can be utilized under the following conditions.

IMPORTANT :

Refueling and handling fuel should be done with caution in order to avoid contact with the fuel and spillage that could create a potential environmental or fire hazard. Wear appropriate protective equipment when refueling.

Applicable BDF:

1. Blended diesel fuels containing 6 % through 20 % BDF (B6 - B20) which comply with American Society for Testing and Materials (ASTM) D7467 Standard, as revised, can be used without adversely affecting the performance and durability of the engine and fuel system components.
2. Any mineral oil diesel fuel, if used, must conform to ASTM D975 (or the European EN590) Standard, as revised. B100 fuel used to make Biodiesel blended fuels must meet ASTM D6751 (or EN14214) Standard, as revised. The final blended fuel B20 must conform to ASTM D7467 Standard, as revised. Straight vegetable oil is not allowed in any blended fuel.
3. Allowable blended fuel is mineral oil diesel fuel blended with B100 (meaning, 100 % BDF). The blended fuel ratio shall be less than 20 % B100 and 80 % or more diesel fuel. The B100 source used for Biodiesel blends must be purchased from an accredited BQ-9000 marketer or producer. More information about qualified marketer(s) and producer(s) can be found at <http://www.bq-9000.org>.

Preparation:

1. Before using BDF concentrations greater than B5, you are advised to replace the engine oil, engine oil filter and fuel filter with new oil and filters. Details regarding the replacement procedures can be found in a different section. (See Changing the engine oil on page 203 and Replacing the engine oil filter on page 203.)

Product warranty, emission and other precautions:

1. The engine emission control system was certified according to current regulations based on the use of non-BDF. When using BDF, the owner is advised to check applicable local and federal emission regulations and comply with all of them.
2. BDF may cause restricted or clogged fuel filters during cold weather conditions, resulting in the engine not operating properly.
3. BDF encourages the growth of microorganisms which may cause degradation of the fuel. This in turn may cause fuel line corrosion or reduce fuel filter flow earlier than expected.
4. BDF inherently absorbs moisture which may cause degradation of the fuel earlier than expected. To avoid this, drain the water separator and fuel filter port often.
5. Do not use Biodiesel concentrations higher than 20 % (namely, greater than B20). Engine performance and fuel consumption will be affected, and degradation of the fuel system components may occur.
6. Do not readjust the engine fuel control system as this will violate emission control levels for which the equipment was approved.
7. Compared with soybean-based and rapeseed-based feedstock, palm oil-based feedstock has a thicker consistency (that is, higher viscosity) at lower temperatures. Consequently, fuel filter performance may be reduced, particularly during cold weather conditions.
8. The Kubota Warranty, as specified in the owner's warranty information guide, only covers defects in product materials and workmanship. Accordingly, any problems that may arise due to the use of poor quality fuels that fail to meet the above requirements, whether biodiesel or mineral oil based, are not covered by the Kubota Warranty.

Routine handling:

1. Avoid spilling BDF onto painted surfaces as this may damage the finish. If fuel is spilled immediately wipe clean and flush with soapy water to avoid permanent damage.
2. When using BDF, you are advised to maintain a full tank of fuel, especially overnight and during short term storage, to reduce condensation within the tank. Tighten the fuel cap after refueling to prevent moisture build up within the tank. Water in the biodiesel mixture will damage fuel filters and may damage engine components.

Maintenance requirements when using BDF B0 through B5:

Follow the recommended oil change intervals. (See MAINTENANCE on page 174.)

Extended oil change intervals may result in premature wear or engine damage.

Maintenance requirements when using BDF B6 through B20:

The maintenance intervals for fuel related parts changes.

See the following table for the new maintenance intervals.

Items		Interval	Remarks
Fuel filter	Clean	Every 50 hrs	
	Replace	Every 200 hrs	
Fuel hose	Check	Every 6 months	Replace if any deterioration (crack, hardening, scar or deformation) or damage occurred.
	Replace	Every 2 years	Contact your local Kubota dealer for this service.

Long term storage:

1. BDF easily deteriorates due to oxygen, water, heat and foreign substances.
Do not store B6 through B20 longer than 1 month and B5 longer than 3 months.
2. When using B6 through B20 and storing the machine longer than 1 month, drain the fuel from the tanks and replace with light mineral oil diesel fuel.
Subsequently, run the engine at least 30 minutes to remove all of the Biodiesel from the fuel lines.
3. When using B5 fuel and storing machine longer than 3 months, drain the fuel from the tanks and replace with light mineral oil diesel fuel.
Subsequently, run the engine at least 30 minutes to remove all of the Biodiesel from the fuel lines.

PERIODIC SERVICE

WARNING

To avoid personal injury or death, do not work under any hydraulically supported devices. Such devices can settle, suddenly leak, or be accidentally lowered. If necessary to work under the tractor or any machine elements for servicing or adjustments, securely support them with stands or suitable blocking beforehand.

WASTE DISPOSAL

- The improper disposal or burning of waste causes environmental pollution and can be punishable by your local laws and regulations.
 - When draining fluids from the tractor, place a container underneath the drain port.
 - Do not pour waste onto the ground, down a drain, or into any water source (such as rivers, streams, lakes, marshes, seas and oceans).
 - Waste products such as used oil, fuel, coolant, hydraulic fluid, aqueous urea solution (DEF (AdBlue)), refrigerant, solvent, filters, rubber, batteries and harmful substances, can harm the environment, people, pets and wildlife. Please dispose properly. See your local recycling center or Kubota dealer to learn how to recycle or get rid of waste products.

HOW TO OPEN THE HOOD

WARNING

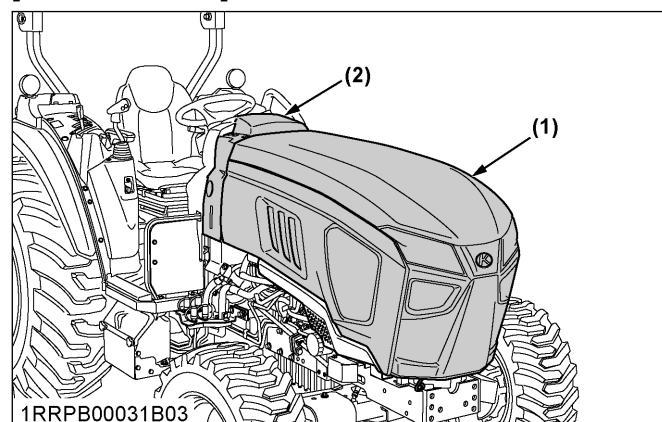
To avoid personal injury or death from contact with moving parts:

- Never open the hood or the engine side cover while the engine is running.
- Do not touch the muffler or exhaust pipes while they are hot. You may get severely burned.
- Support the hood with the other hand while unlocking the support link.

1. Hood

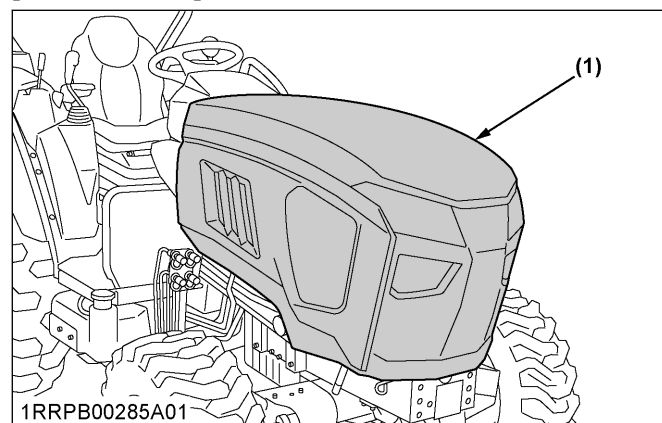
1. To open the hood, hold the hood, pull the release lever and then open the hood.

[Premium model]

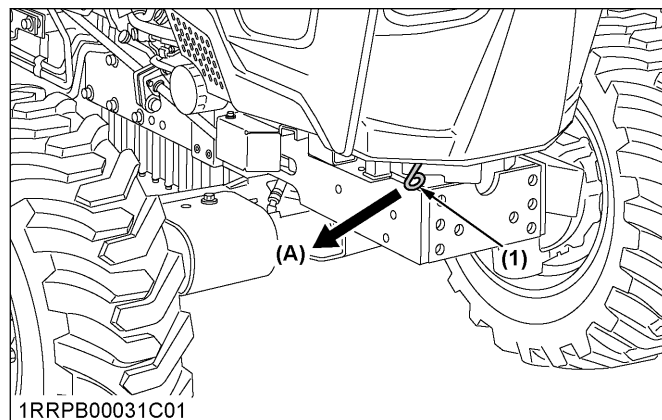


- (1) Hood
(2) Rear hood

[Deluxe model]



- (1) Hood



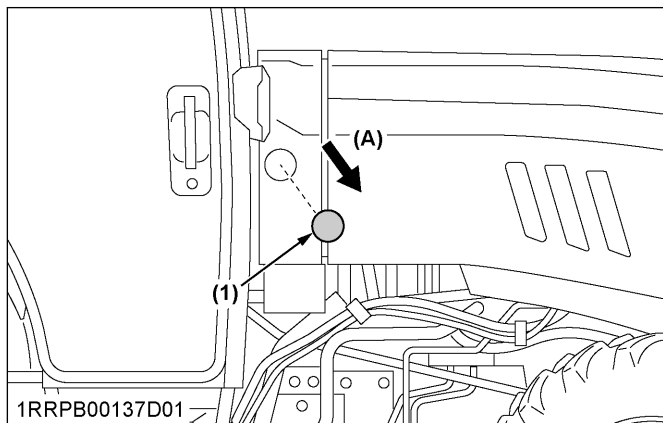
- (1) Release lever (A) Pull

NOTE :

To close the hood, push the hood into position using both hands.

2. Rear hood side cap [Premium model]

1. Remove the right side cap of the rear hood.



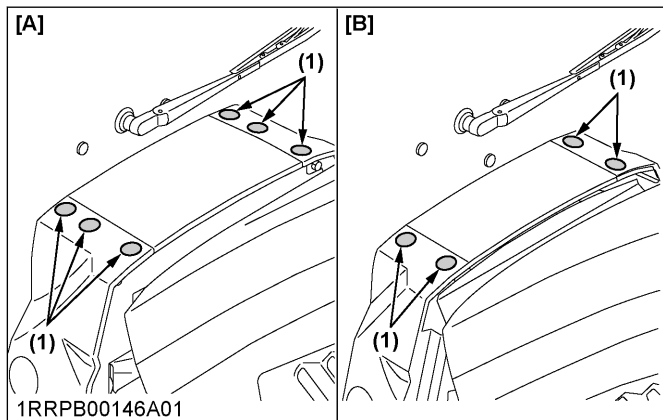
(1) Rear hood side cap

(A) Pull

3. Rear hood upper cover [Premium model]

1. Remove the caps on the top of the rear hood.

[CAB model]

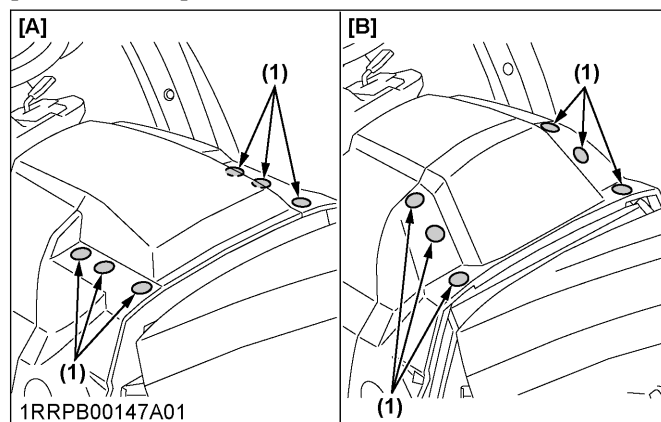


(1) Cap

[A] L6070

[B] L3970, L4470, L5070

[ROPS model]



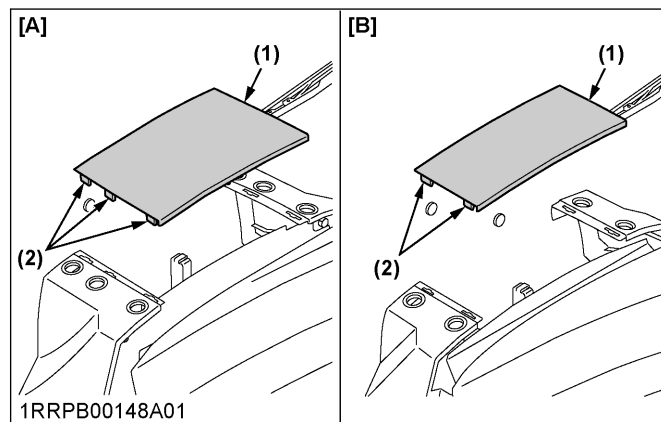
(1) Cap

[A] L6070

[B] L3970, L4470, L5070

2. Insert your finger into the holes, disengage the clips of the rear hood, and then take off the rear hood cover.

[CAB model]



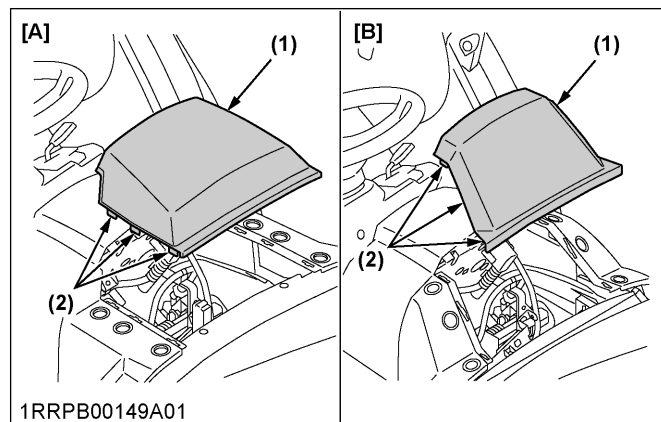
(1) Rear hood upper cover

(2) Clip

[A] L6070

[B] L3970, L4470, L5070

[ROPS model]



(1) Rear hood upper cover

(2) Clip

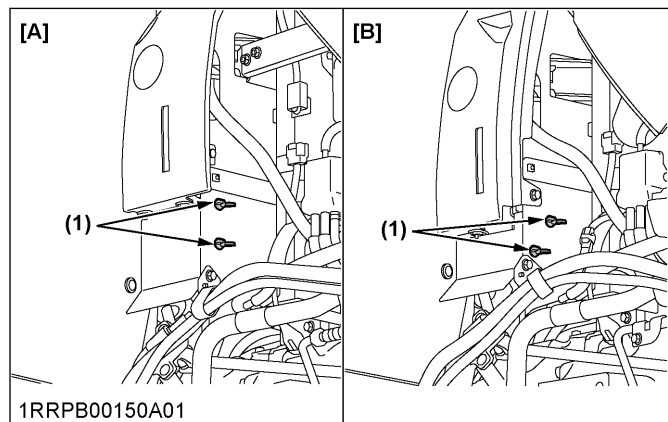
[A] L6070

[B] L3970, L4470, L5070

4. Rear hood under cover [Premium model]

1. Remove the wing bolts of the rear hood under cover.

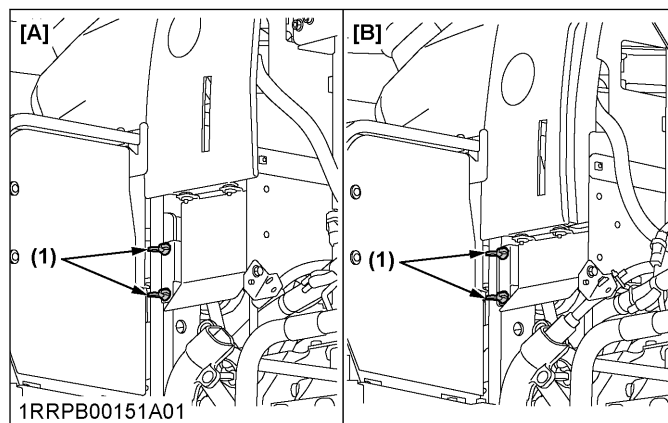
[CAB model]



(1) Wing bolt

[A] L6070
[B] L3970, L4470, L5070

[ROPS model]

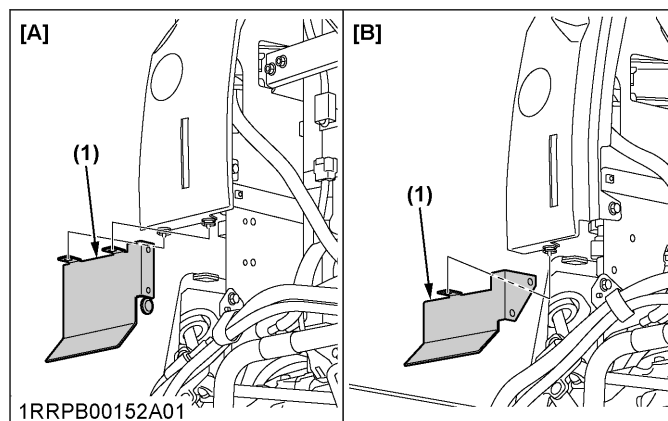


(1) Wing bolt

[A] L6070
[B] L3970, L4470, L5070

2. Remove the rear hood under cover.

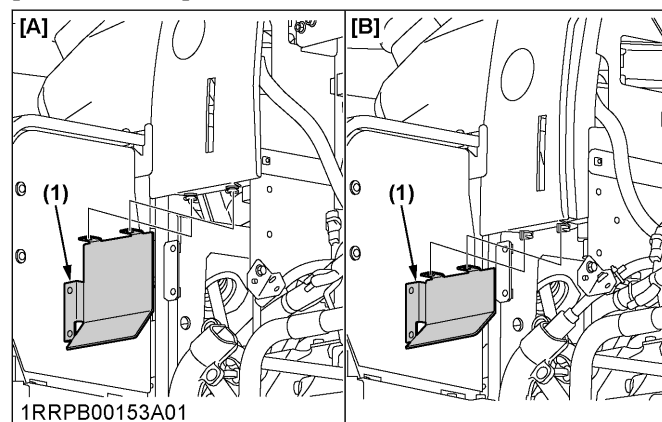
[CAB model]



(1) Rear hood under cover

[A] L6070
[B] L3970, L4470, L5070

[ROPS model]



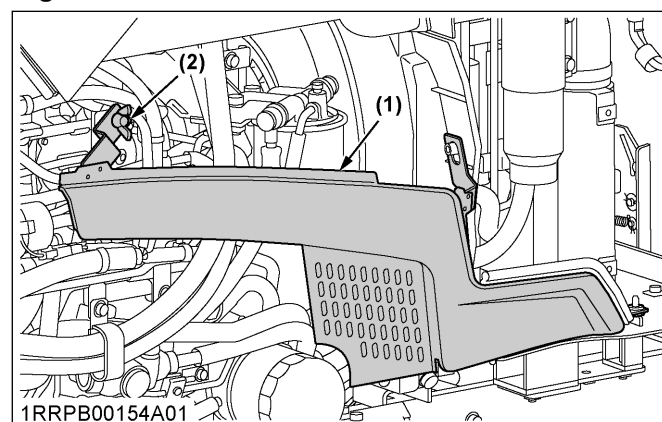
(1) Rear hood under cover

[A] L6070
[B] L3970, L4470, L5070

5. Side cover

Remove the bolts as follows.

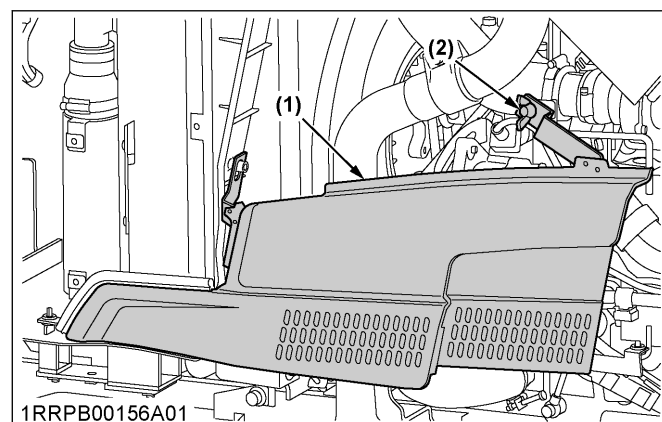
Right side



(1) Side cover

(2) Wing bolt

Left side



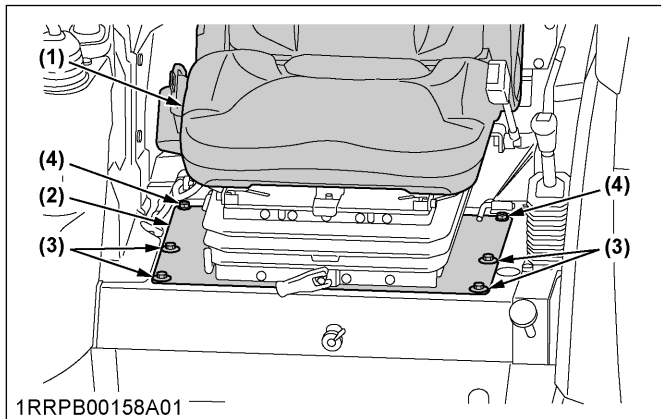
(1) Side cover

(2) Wing bolt

6. Floor sheet

1. Remove the bolts on the floor sheet cover.

2. Hoist the seat with nylon slings.

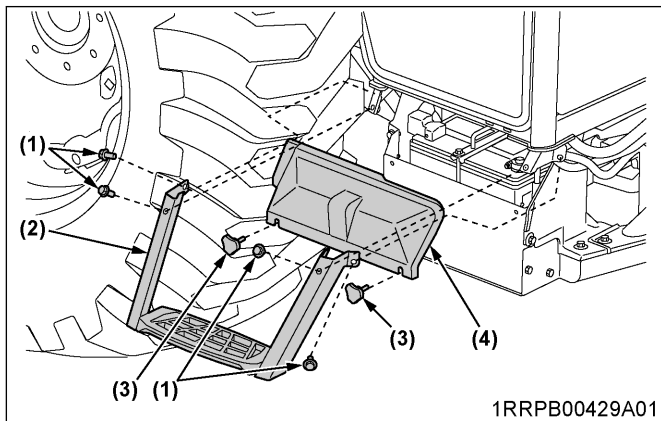


- (1) Seat
- (2) Floor sheet cover
- (3) Bolt
- (4) Nut

7. Removing and attaching the battery cover [Premium model]

[CAB model]

1. Remove the bolts and then take off the step.
2. Remove the knob and then take off the battery cover.

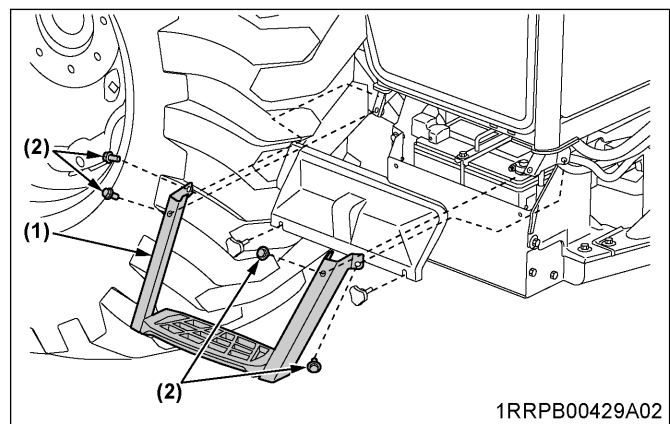


- (1) Bolt
- (2) Step
- (3) Knob
- (4) Battery cover

3. To reassemble, follow the steps in reverse order.

IMPORTANT :

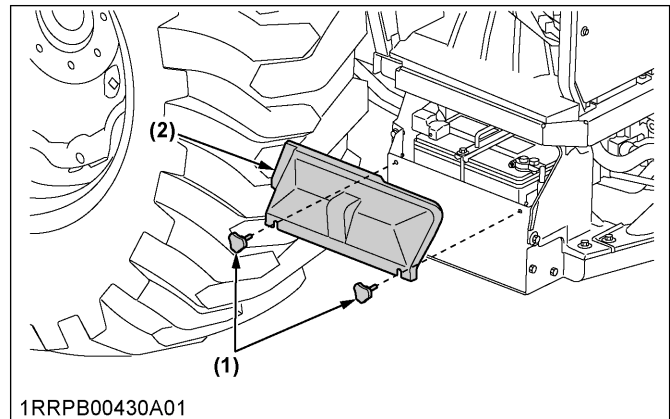
Tighten the step fixing bolts to the specified torque below.



- (1) Step
- (2) Bolt: 48.1 N·m to 55.9 N·m (4.9 kgf·m to 5.7 kgf·m, 36 lbf·ft to 41 lbf·ft)

[ROPS model]

1. Remove the knob and then take off the battery cover.
2. To reassemble, follow the steps in reverse order.



- (1) Knob
- (2) Battery cover

DAILY CHECK

For your own safety and maximum service life of the machine, make a thorough daily inspection before operating the machine to start the engine.

WARNING

To avoid personal injury or death:

Take the following precautions when checking the tractor.

- Park the machine on firm and level ground.
- Set the parking brake.
- Lower the implement to the ground.
- Release all residual pressure from the hydraulic system.
- Stop the engine and remove the key.

1. Walk around inspection

Look around and under the tractor for items such as loose bolts, trash build-up, oil or coolant leaks, broken or worn parts.

2. Checking the fuel tank and refueling



WARNING

To avoid personal injury or death:

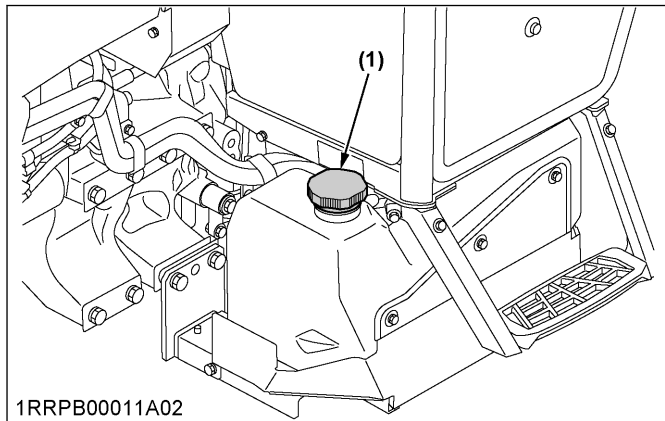
- Never use fire.
- Do not smoke while refueling.
- Stop the engine and remove the key before refueling.
- Use properly grounded fueling systems. Make sure that there is no static discharge.
- Close the fuel tank cap after refueling.

To avoid allergic skin reaction:

- Wash hands immediately after contact with diesel fuel.

1. Turn the key switch to the "ON" position, check the amount of fuel by fuel gauge.
2. Fill fuel tank when fuel gauge shows 1/4 or less fuel in tank.

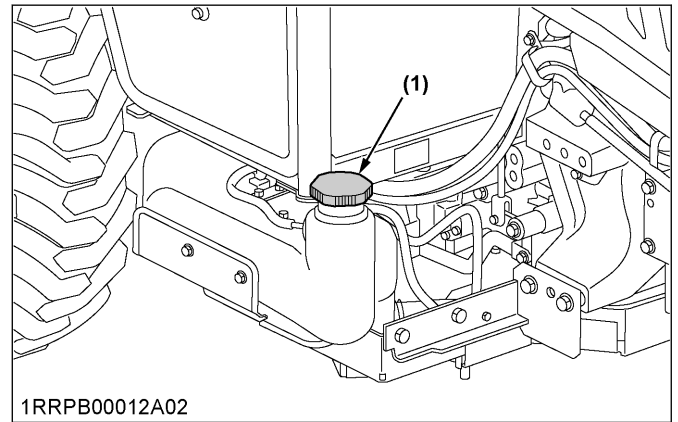
[Premium model]



1RRPB00011A02

(1) Fuel tank cap

[Deluxe model]



1RRPB00012A02

(1) Fuel tank cap

Refueling alarm

If you would like to refuel using the audible alarm, place the key switch in the "ON" position. When you start refueling, the buzzer sounds intermittently. When the tank gets close to full, the buzzer starts sounding continuously. Stop refueling just when the buzzer sound turns from intermittent to continuous.

Fuel tank capacity

Models	Capacities
L3970, L4470, L5070, L6070	48 L (12.7 U.S.gals.)
L3770, L4270	51 L (13.5 U.S.gals.)

IMPORTANT :

- Use ultra low sulfur fuel (S15).
- Do not permit dirt or trash to get into the fuel system.
- Be careful not to let the fuel tank become empty. Otherwise, air will enter the fuel system, necessitating bleeding before the next engine start.
- If the engine runs out of fuel and stalls, engine components may become damaged.
- Be careful not to spill during refueling. If a spill occurs wipe it off at once or it may cause a fire.
- To prevent condensation (water) accumulation in the fuel tank, fill the tank before parking overnight.
- Do not turn the key switch to "OFF" while refueling. Once the key switch is turned to "OFF", the buzzer may not sound even if the key switch is turned to "ON" again.
- The buzzer might not sound if you refuel while the needle of the fuel gauge is near "F".

3. Checking the antifrost heater for oil separator (if equipped)

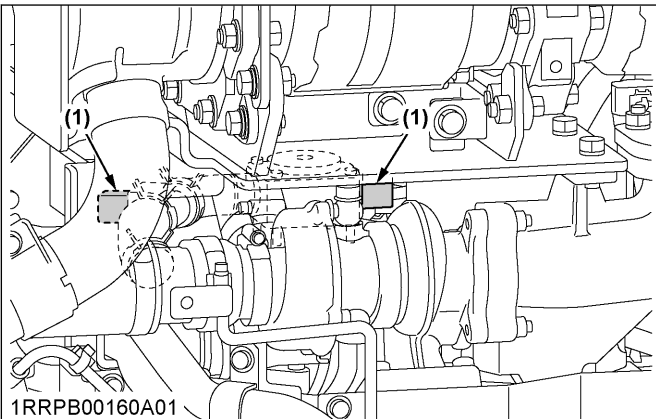
WARNING

To avoid personal injury or death, keep the engine off during inspection because there are rotating parts like the fan, and so on, near the inspection position.

When operating tractors with heater for oil separator in cold regions (below the freezing point: 0 °C / 32 °F), carry out inspection by using the following procedure before starting work:

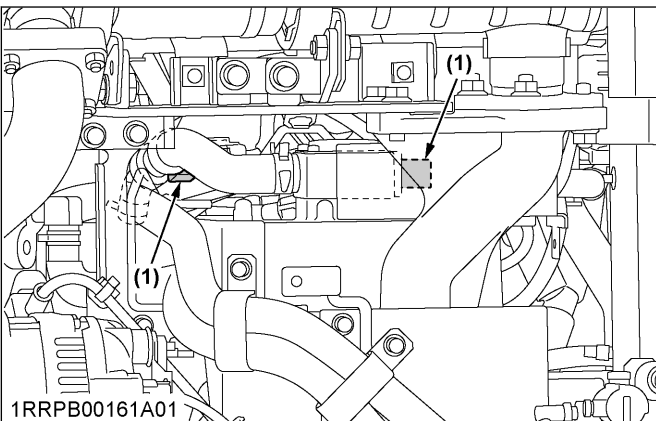
1. Turn the key switch to the "ON" position.
2. After 1 minute, inspect by touch whether the heater is working. If the heater is working, its temperature will rise to roughly 70 °C (158 °F), so you will be able to feel its warmth.
3. If the heater is not warm, it is not working. In this case, contact your local Kubota dealer without starting the engine.

[Premium model]



(1) Heater for oil separator

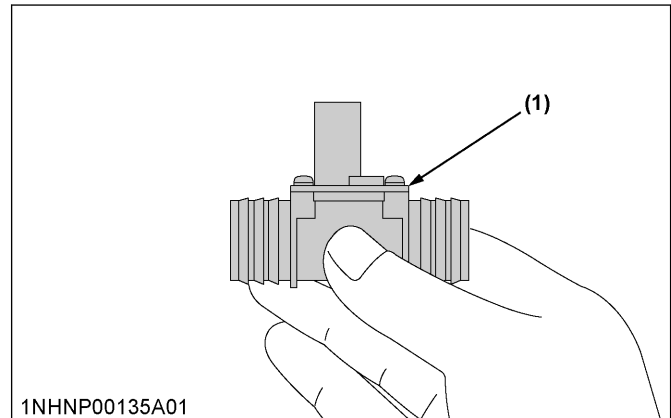
[Deluxe model]



(1) Heater for oil separator

IMPORTANT :

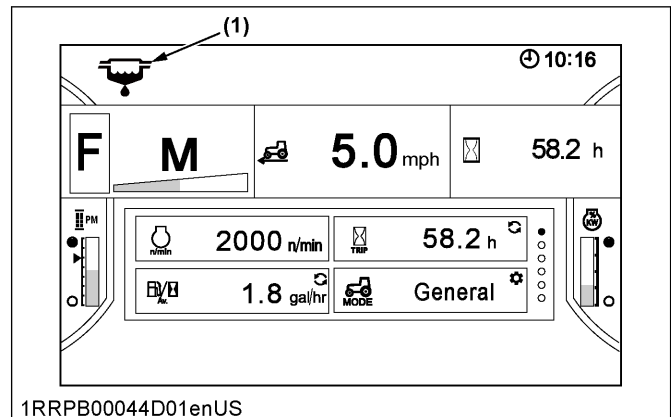
Refer to the following figure for the heater inspection position.



(1) Heater

4. Checking the water separator

1. When the water has collected up to the upper limit in the water separator, the water separator indicator appears on the LCD monitor, and a warning buzzer sounds.

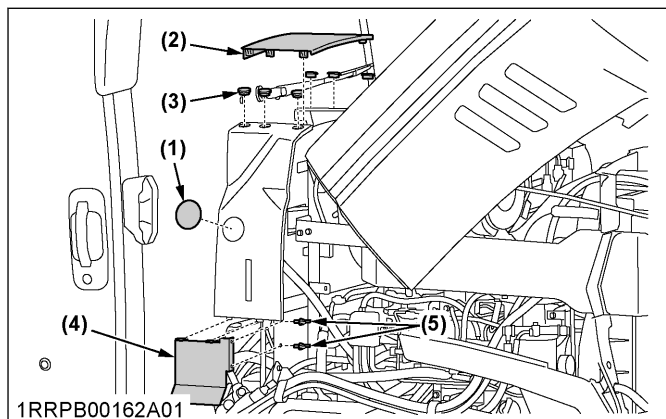


(1) Water separator indicator

2. In this case, close the fuel shut-off valve, and loosen the air plug by several turns, and loosen the drain plug.
3. Allow the water to drain. When no more water comes out and fuel starts to flow out, retighten the air plug and drain plug.

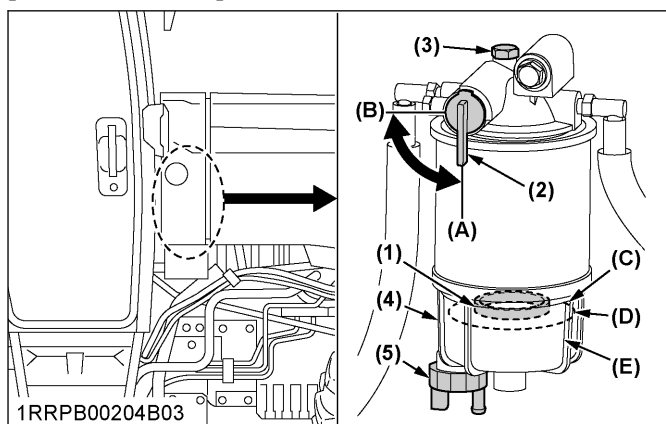
4. Bleed the fuel system.
(See Bleeding the fuel system on page 216.)

[Premium model]



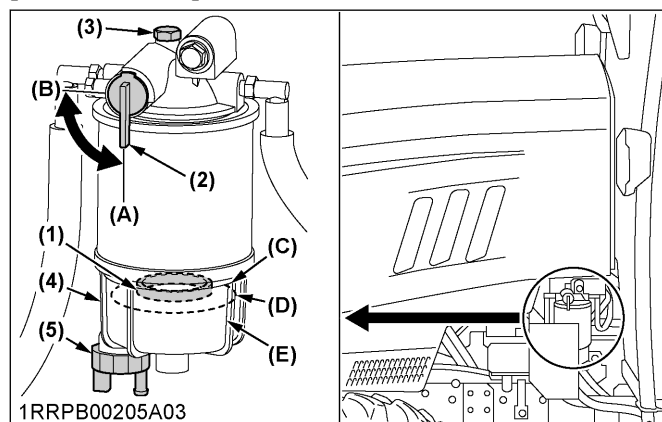
- (1) Rear hood side cap
(2) Rear hood upper cover
(3) Cap
(4) Rear hood under cover
(5) Wing bolt

[Premium model]



- (1) Red float
(2) Fuel shut-off valve
(3) Air plug
(4) Cup
(5) Drain plug
- (A) On
(B) Off
(C) Fuel
(D) Upper limit
(E) Water

[Deluxe model]



- (1) Red float
(2) Fuel shut-off valve
(3) Air plug
(4) Cup
(5) Drain plug
- (A) On
(B) Off
(C) Fuel
(D) Upper limit
(E) Water

IMPORTANT :

If water is drawn through to the fuel pump, extensive damage will occur.

NOTE :

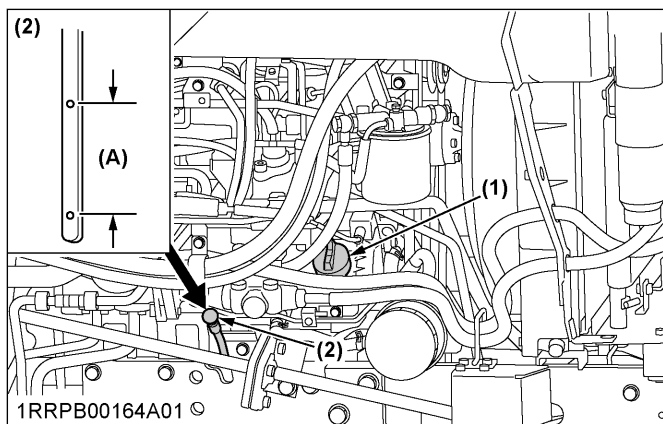
When the red float reaches near the upper limit level, start from step 2 in the above procedure to drain water from the water separator.

5. Checking the engine oil level

⚠ WARNING

To avoid personal injury or death, stop the engine before checking the oil level.

1. Park the machine on a flat surface.
2. Check the engine oil before starting the engine or 5 minutes or more after the engine has stopped.
3. To check the oil level, draw out the dipstick, wipe it clean, replace it, and draw it out again. Check to see that the oil level lies between the 2 notches. If the level is too low, add new oil to the prescribed level at the oil inlet.
(See LUBRICANTS, FUEL, AND COOLANT on page 177.)



(1) Oil inlet
(2) Dipstick

(A) Oil level is acceptable within this range.

IMPORTANT :

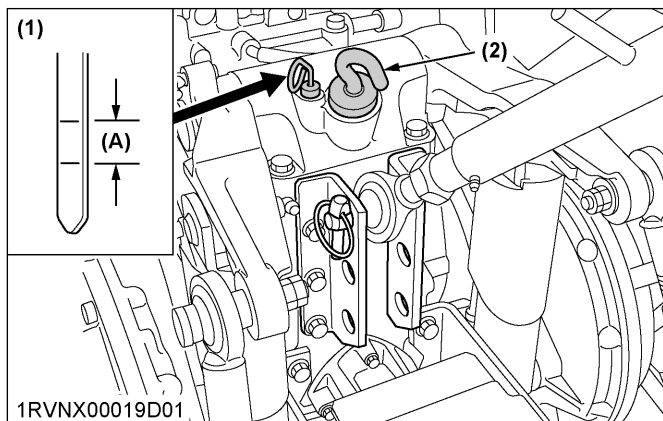
- When using an oil of different manufacturer or viscosity from the previous one, remove all of the old oil.
Never mix 2 different types of oil.
- If the oil level is low, do not run the engine.

NOTE :

At times, a small amount of fuel, which is used to regenerate the DPF, may get mixed with the engine oil and the engine oil may increase in volume.

6. Checking the transmission oil level

1. Park the machine on a flat surface, lower the implement and shut off the engine.
2. To check the oil level, draw out the dipstick, wipe it clean, replace it, and draw it out again. Check to see that the oil level lies between the 2 notches.
If the level is too low, add new oil to the prescribed level at the oil inlet.
(See LUBRICANTS, FUEL, AND COOLANT on page 177.)



(1) Dipstick
(2) Oil inlet

(A) Oil level is acceptable within this range.

IMPORTANT :

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

7. Checking the coolant level

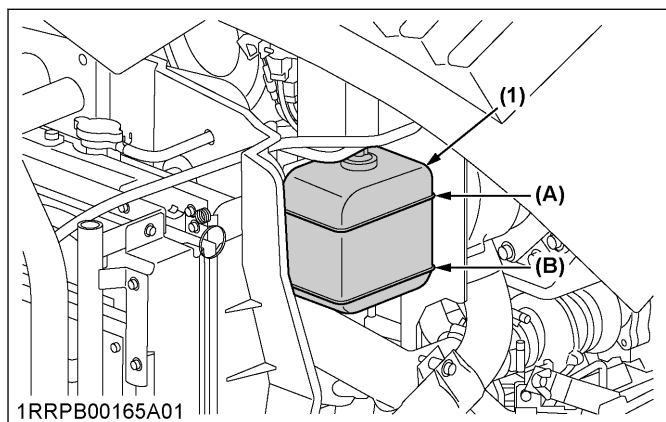


WARNING

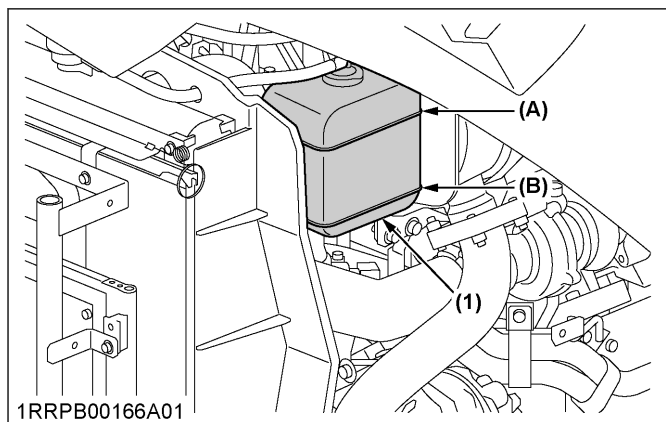
To avoid personal injury or death, do not remove the radiator cap while the coolant is hot. When cool, slowly rotate the cap to the first stop and allow sufficient time for excess pressure to escape before removing the cap completely.

1. Check to see that the coolant level is between the **[FULL]** and **[LOW]** marks of the coolant recovery tank.
2. When the coolant level drops due to evaporation, add soft water only up to the full level.
In case of leakage, add antifreeze and soft water in the specified mixing ratio up to the full level.
(See Flushing the cooling system and changing the coolant on page 208.)

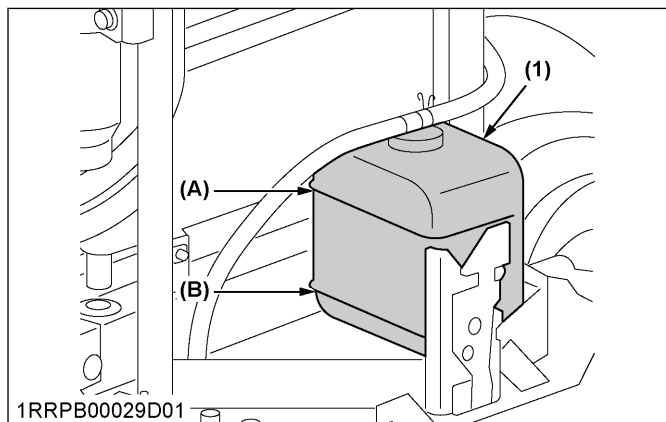
3. When the coolant level is lower than the **[LOW]** mark of the coolant recovery tank, remove the radiator cap and check to see that the coolant level is just below the port. If the level is low, add coolant.

[L6070]

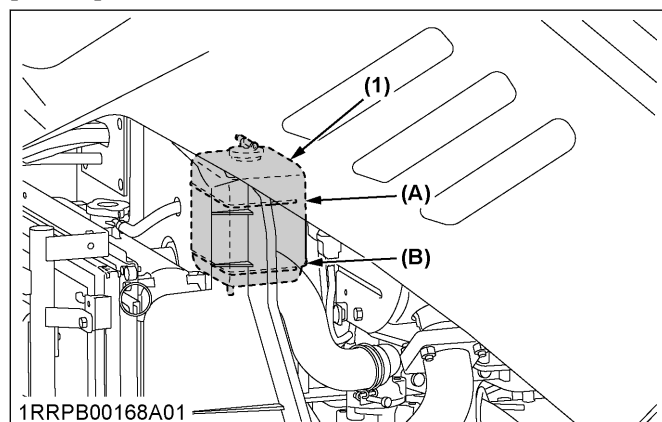
(1) Coolant recovery tank (A) Full
(B) Low

[L4270, L4470, L5070]

(1) Coolant recovery tank (A) Full
(B) Low

[L3970]

(1) Coolant recovery tank (A) Full
(B) Low

[L3770]

(1) Coolant recovery tank (A) Full
(B) Low

IMPORTANT :

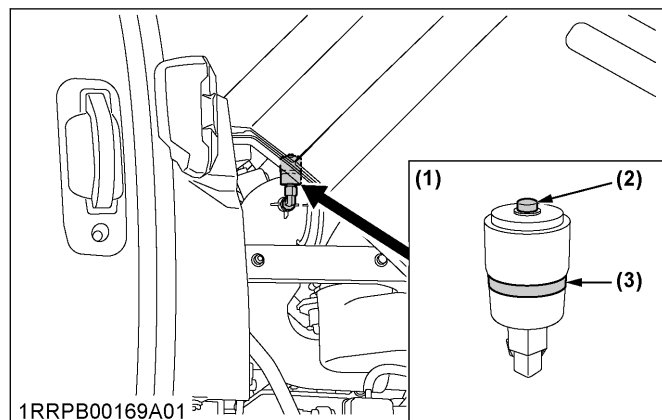
- If the radiator cap has to be removed, follow the previous caution and securely retighten the cap.
- Use clean, fresh soft water and antifreeze to fill the radiator.
- If coolant should leak, contact your local Kubota dealer.

8. Checking the dust indicator

There is a dust indicator on the air cleaner body. If the red signal on the dust indicator is visible, clean the element immediately.

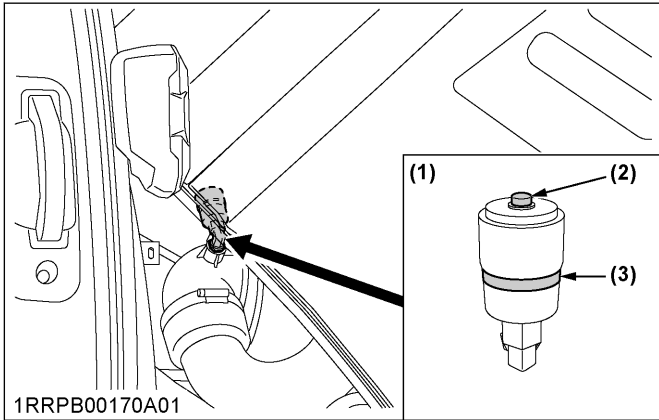
(See Cleaning the air cleaner primary element on page 196.)

Reset the red signal by pushing a "RESET" button after cleaning.

[L6070]

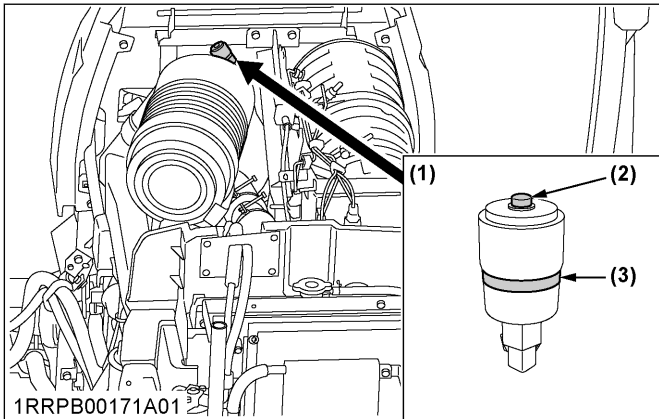
(1) Dust indicator
(2) Reset button
(3) Red signal

[L4270, L4470, L5070]



- (1) Dust indicator
(2) Reset button
(3) Red signal

[L3770, L3970]



- (1) Dust indicator
(2) Reset button
(3) Red signal

9. Cleaning the grille, the radiator screen, the oil cooler, and the fuel cooler [ROPS model]

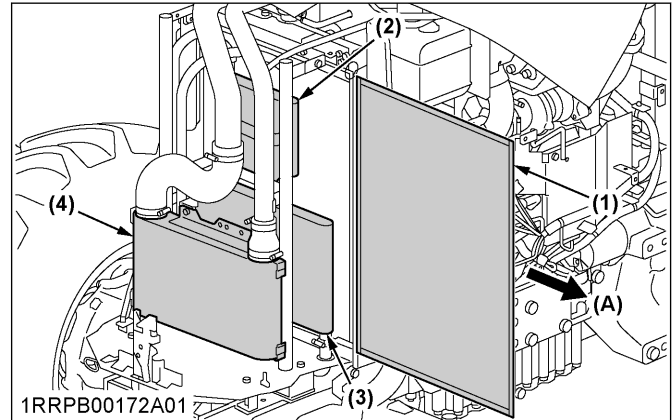
WARNING

To avoid personal injury or death:

- Stop the engine before removing the screen.
- Before checking or cleaning the radiator screen, stop the engine and wait until it cools down enough.

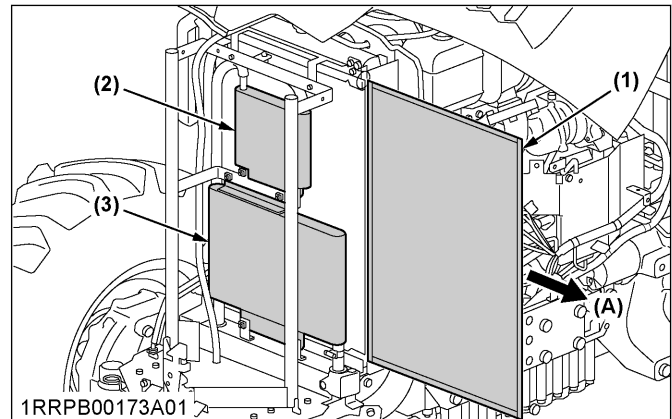
1. Check the front grille and the side screens to be sure they are clean of debris.
2. Detach the radiator screen and remove all foreign materials.
3. Check radiator, oil cooler, and fuel cooler to be sure that they are clean from debris.

[L6070]



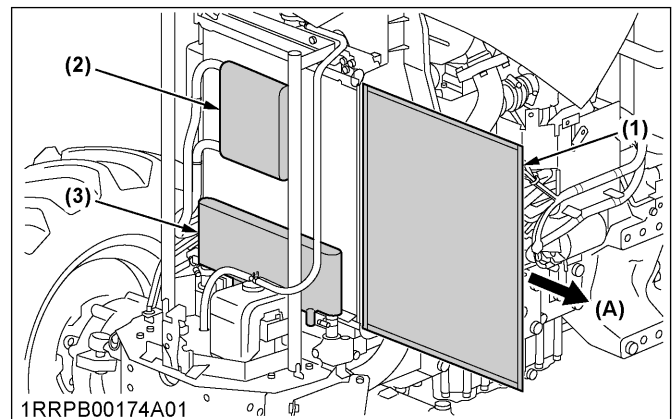
- (1) Radiator screen
(2) Fuel cooler
(3) Oil cooler
(4) Intercooler
(A) Pull

[L4470, L5070]

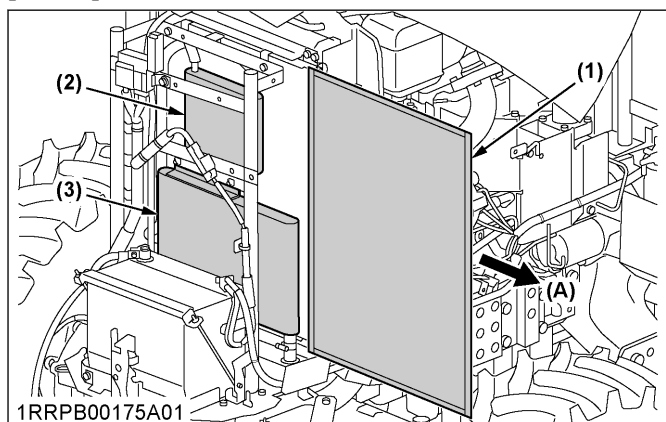


- (1) Radiator screen
(2) Fuel cooler
(3) Oil cooler
(A) Pull

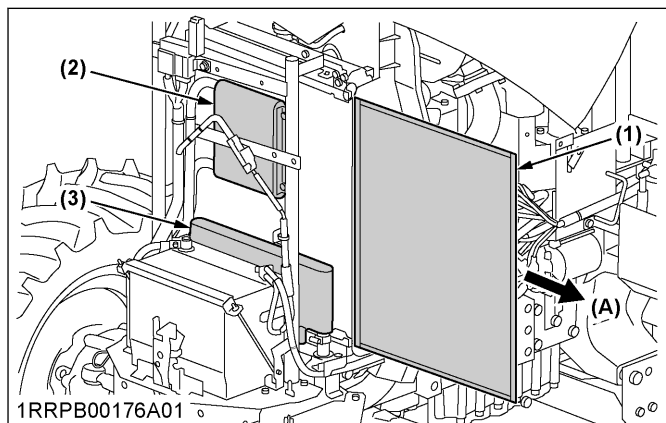
[L3970]



- (1) Radiator screen
(2) Fuel cooler
(3) Oil cooler
(A) Pull

[L4270]

- (1) Radiator screen (A) Pull
 (2) Fuel cooler
 (3) Oil cooler

[L3770]

- (1) Radiator screen (A) Pull
 (2) Fuel cooler
 (3) Oil cooler

IMPORTANT :

The grille and screen must be clean from debris to prevent the engine from overheating and to allow good air intake for the air cleaner.

10. Cleaning the grille, the radiator screen, the oil cooler, the fuel cooler, and the air conditioner condenser [CAB model]

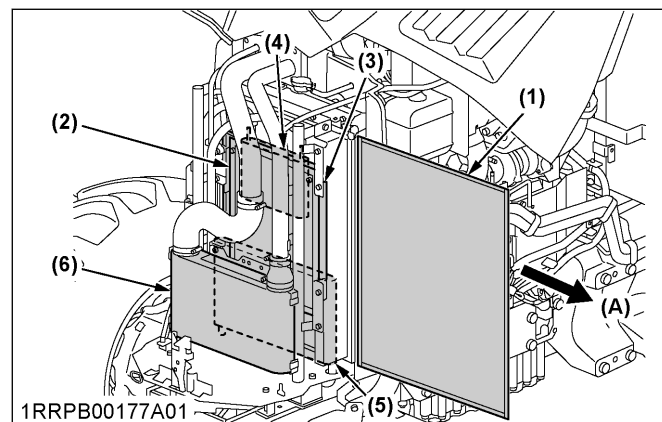
WARNING

To avoid personal injury or death:

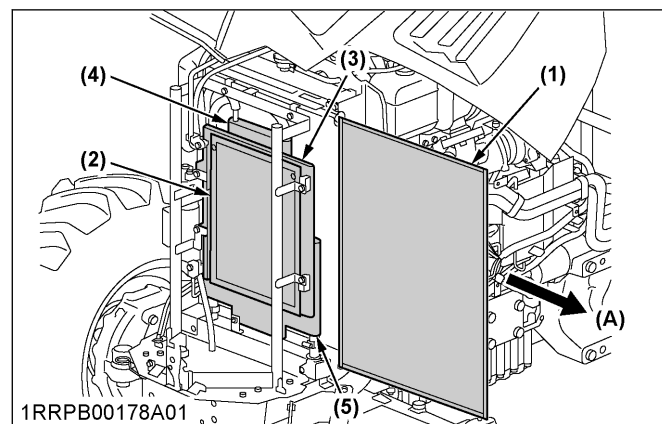
- Stop the engine before removing the screen.
- The condenser and receiver become hot while the air conditioner is running. Before checking or cleaning them, wait long enough until they cool down.

1. Check the front grille and the side screens to be sure they are clean of debris.

2. Detach the radiator screen and the air conditioner condenser screen to remove all foreign materials.
3. Check radiator, oil cooler, fuel cooler, and air conditioner condenser to be sure they are clean from debris.

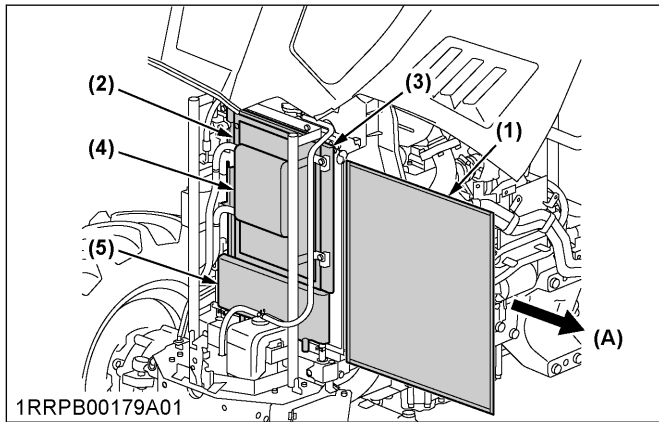
[L6070]

- (1) Radiator screen (A) Pull
 (2) Air conditioner condenser screen
 (3) Air conditioner condenser
 (4) Fuel cooler
 (5) Oil cooler
 (6) Intercooler

[L4470, L5070]

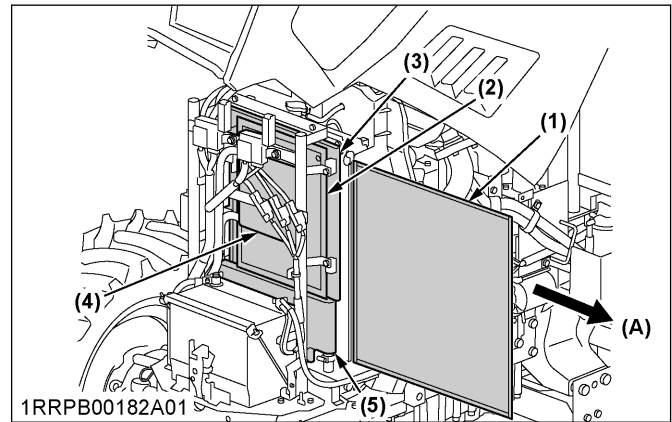
- (1) Radiator screen (A) Pull
 (2) Air conditioner condenser screen
 (3) Air conditioner condenser
 (4) Fuel cooler
 (5) Oil cooler

[L3970]



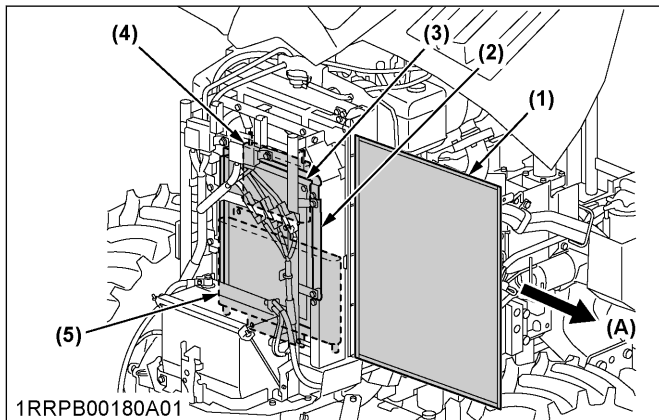
- (1) Radiator screen (A) Pull
- (2) Air conditioner condenser screen
- (3) Air conditioner condenser
- (4) Fuel cooler
- (5) Oil cooler

[L3770]



- (1) Radiator screen (A) Pull
- (2) Air conditioner condenser screen
- (3) Air conditioner condenser
- (4) Fuel cooler
- (5) Oil cooler

[L4270]



- (1) Radiator screen (A) Pull
- (2) Air conditioner condenser screen
- (3) Air conditioner condenser
- (4) Fuel cooler
- (5) Oil cooler

IMPORTANT :

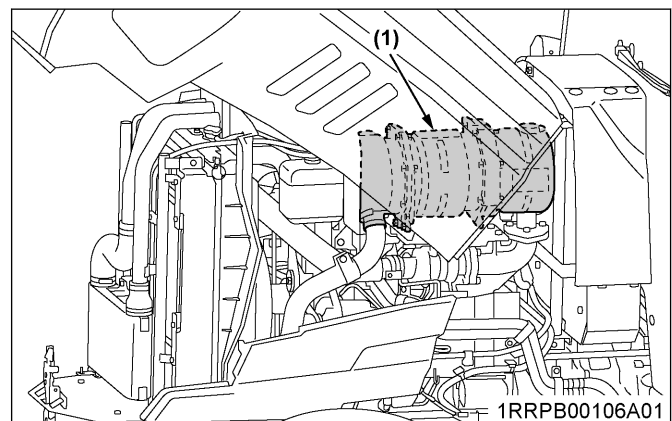
The grille and screen must be clean from debris to prevent the engine from overheating and to allow good air intake for the air cleaner.

11. Checking the DPF muffler

! WARNING

To avoid personal injury or death, stop the engine and wait until it has cooled down enough before checking or cleaning the DPF muffler.

1. Check the DPF muffler and its surroundings for a buildup of anything flammable. Otherwise, a fire may result.



- (1) DPF muffler

12. Checking the brake pedal



WARNING

To avoid personal injury or death, make sure that the brake pedals have equal adjustments when being locked together. Incorrect or unequal brake pedal adjustments can cause the tractor to swerve or roll-over.

1. Inspect the brake pedals for free travel and smooth operation.
2. Adjust if incorrect measurement is found.
(See Adjusting the brake pedal on page 198.)

13. Checking the gauges, the meter and the Easy Checker

1. Inspect the instrument panel for broken gauge(s), meter(s) and Easy Checker indicators.
2. Replace if broken.

14. Checking the headlight, the turn signal light, the hazard light, and so on

1. Inspect the lights for broken bulbs and lenses.
2. Replace if broken.

15. Checking the seat belt and the ROPS

1. Always check the condition of the seat belt attaching hardware and ROPS before operating the tractor.
2. Replace if damaged.

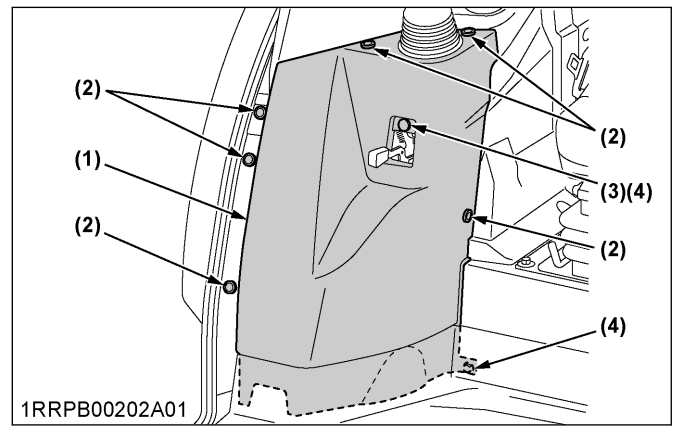
16. Checking the movable part

If any of the movable parts, such as levers and pedals, do not move smoothly because of rust or sticky material, do not force them into motion.

In the above case, remove the rust or the sticky material and apply oil or grease to the relevant spot. Otherwise, the machine may be damaged.

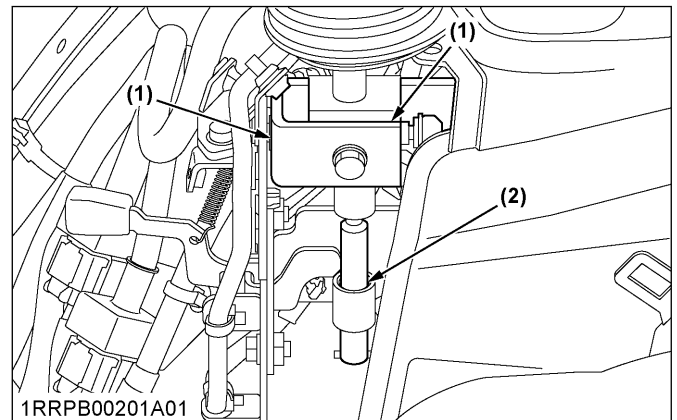
16.1 Lubricating the loader lever

1. Remove the fixing parts from the cover on the lower right console.
2. Remove the console cover, paying attention to the wire harnesses.



- (1) Right console cover (lower)
- (2) Rivet
- (3) Cap
- (4) Bolt

3. Move the loader lever and apply grease to the sliding surfaces.
4. Apply grease to the sleeve of the loader lock lever.



- (1) Sliding surface
- (2) Sleeve

EVERY 50 HOURS

1. Lubricating the grease fitting

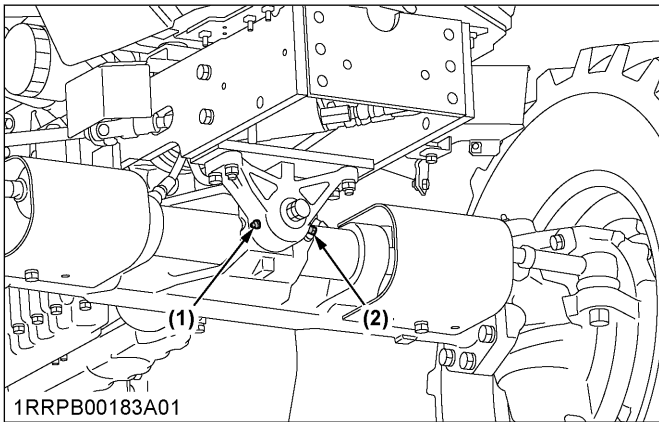
Apply a small amount of multipurpose grease to the following points every 50 hours.

If you have been operating the machine in extremely wet and muddy conditions, lubricate the grease fittings more often.

When apply grease to forward front axle support, remove the breather plug and apply grease until grease overflows from breather plug port.

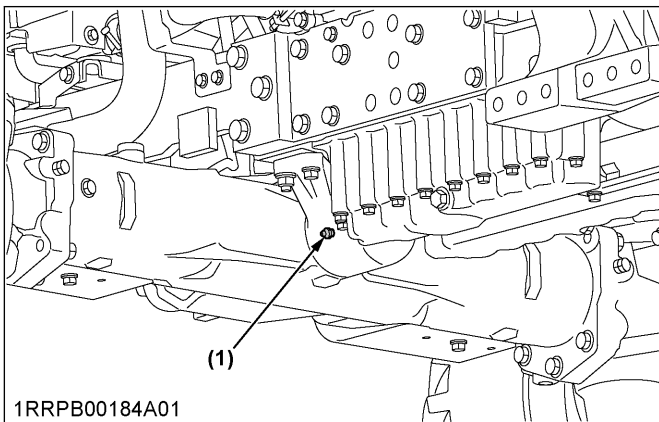
After greasing reinstall the breather plug.

All models



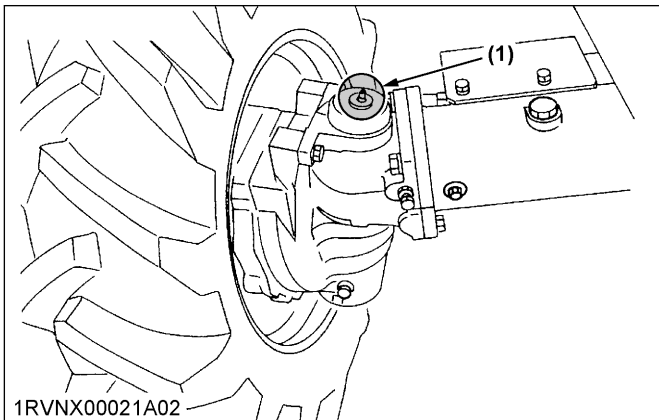
- (1) Grease fitting (front axle support)
- (2) Breather plug

All models



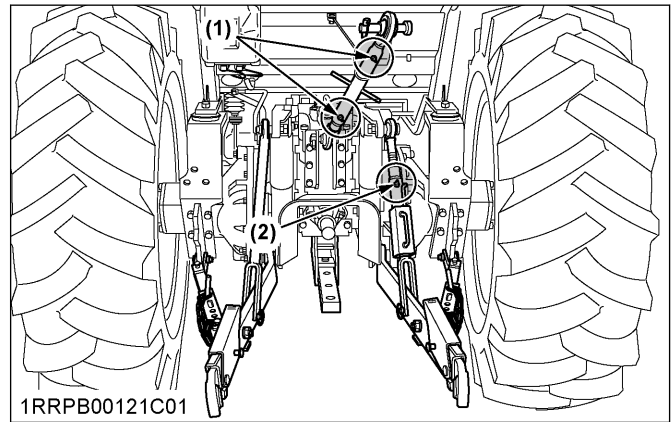
- (1) Grease fitting (front axle support)

[L5070, L6070]



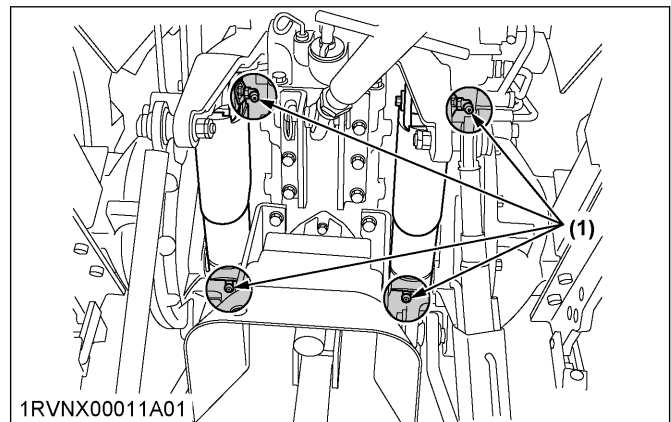
- (1) Grease fitting (front wheel case support) - RH, LH

All models



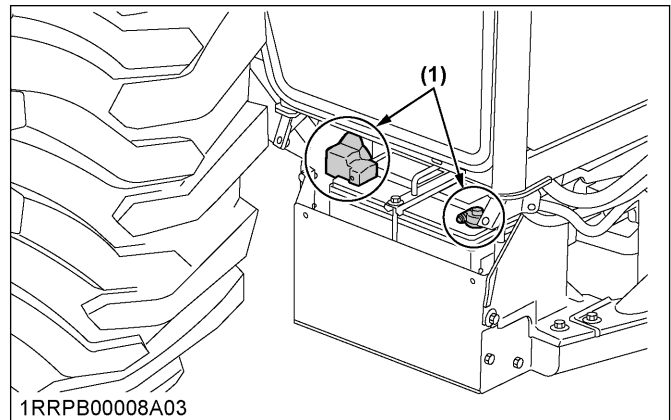
- (1) Grease fitting (top link)
- (2) Grease fitting (lifting rod) - RH

All models

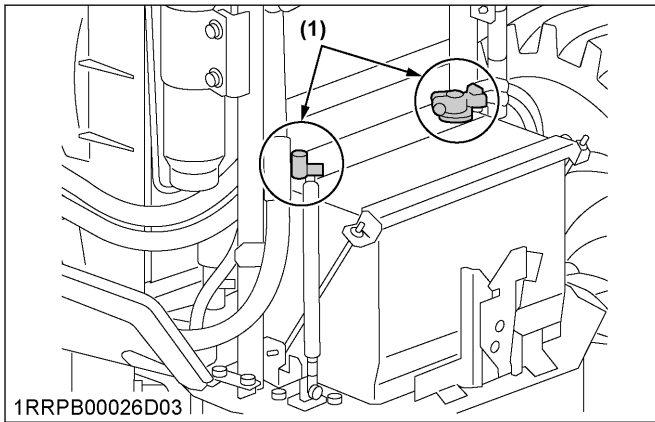


- (1) Grease fitting (lift cylinder)

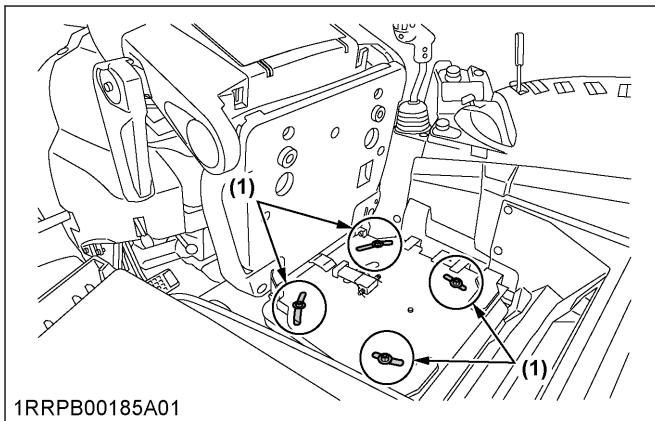
[Premium model]



- (1) Battery terminals

[Deluxe model]

(1) Battery terminals

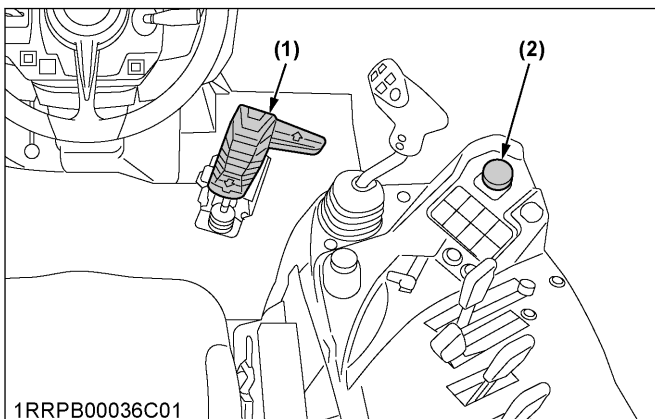
All models (if equipped)

(1) Swivel seat

2. Checking the engine start system**! WARNING**

To avoid personal injury or death:

- Do not allow anyone near the tractor while testing.
- If the tractor does not pass the test, do not operate the tractor.



(1) Speed control pedal
(2) PTO clutch control switch

Preparation before testing

1. Place all control levers in the "NEUTRAL" position.
2. Set the parking brake and stop the engine.

Testing the switch for the speed control pedal

1. Sit on the operator's seat.
2. Depress the speed control pedal to the desired direction.
3. Disengage the PTO clutch control switch.
4. Turn the key to the "START" position.
5. The engine must not crank.
6. If it cranks, contact your local Kubota dealer for this service.

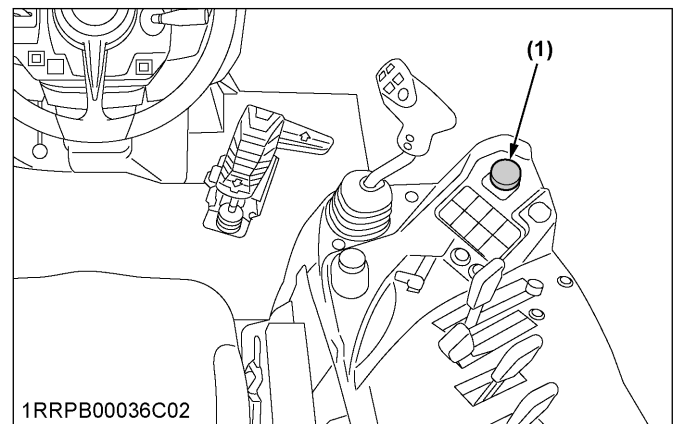
Testing the switch for the PTO clutch control switch

1. Sit on the operator's seat.
2. Engage the PTO clutch control switch.
3. Place the speed control pedal in neutral position.
4. Turn the key to the "START" position.
5. The engine must not crank.
6. If it cranks, contact your local Kubota dealer for this service.

3. Checking the operator presence control (OPC) system**WARNING**

To avoid personal injury or death:

- Do not allow anyone near the tractor while testing.
- If the tractor does not pass the test, do not operate the tractor.



(1) PTO clutch control switch

Preparation before testing

1. Place all control levers in the "NEUTRAL" position.
2. Set the parking brake and stop the engine.

Testing switch for the operator's seat

1. Sit on the operator's seat.
2. Start the engine.
3. Engage the PTO clutch control switch.
4. Stand up. Do not get off the machine.

5. The engine must shut off after approximately 1 second.
6. If it does not stop, contact your local Kubota dealer for this service.

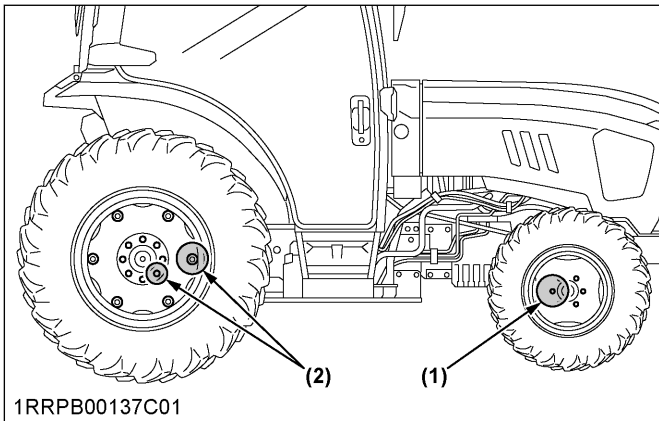
4. Checking the wheel bolt torque

WARNING

To avoid personal injury or death:

- Never operate the tractor with a loose rim, wheel or axle.
- Any time bolts and nuts are loosened, retighten to the specified torque.
- Check all bolts and nuts frequently and keep them tight.

Check wheel bolts and nuts regularly, especially when new. If they are loose, tighten them as follows.

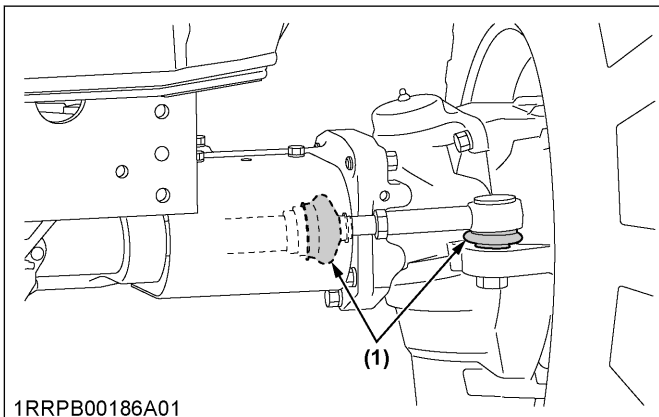


- (1) 185 N·m (19 kgf·m, 136 lbf·ft)
 (2) 215 N·m (22 kgf·m, 160 lbf·ft)

5. Checking tie-rod dust cover

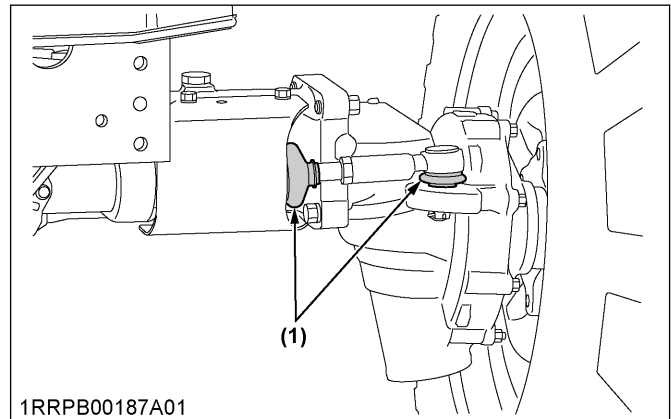
Check to see that dust covers are not damaged. If dust covers are damaged, contact your local Kubota dealer for this service.

[L5070, L6070]



- (1) Dust cover (both sides, RH not shown in illustration)

[L3770, L3970, L4270, L4470]



- (1) Dust cover (both sides, RH not shown in illustration)

IMPORTANT :

If dust covers are cracked, water and dust can cause premature wear of the tie-rod.

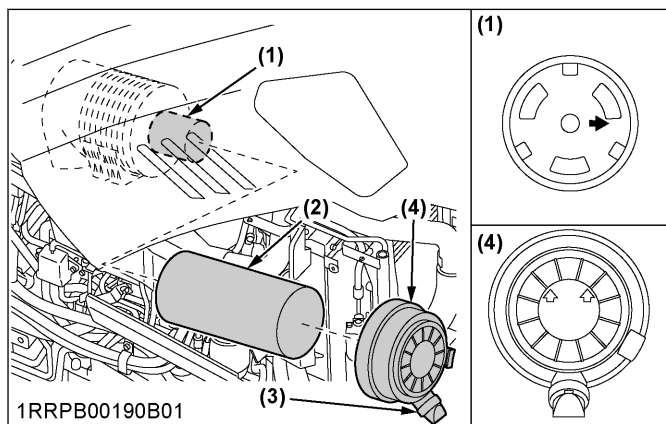
EVERY 100 HOURS

1. Cleaning the air cleaner primary element

1. Remove the air cleaner cover and primary element. (See Removing the air cleaner cover [L6070] on page 197.)
 (See Removing the air cleaner cover [except L6070] on page 198.)
2. Clean the primary element:
 - When dry dust adheres to the element, blow compressed air from the inside, turning the element. Pressure of compressed air must be under 205 kPa (2.1 kgf/cm², 30 psi).
 - When carbon or oil adheres to the element, soak the element in detergent for 15 minutes, then wash it several times in water, rinse with clean water and dry it naturally. After the element has fully dried, inspect inside the element with a light and check for damage.
3. Replace the air cleaner primary element once every 1000 hours or yearly, whichever comes first.

NOTE :

Check to see if the evacuator valve is blocked with dust.



- (1) Secondary (safety) element
(2) Primary element
(3) Evacuator valve
(4) Cover

IMPORTANT :

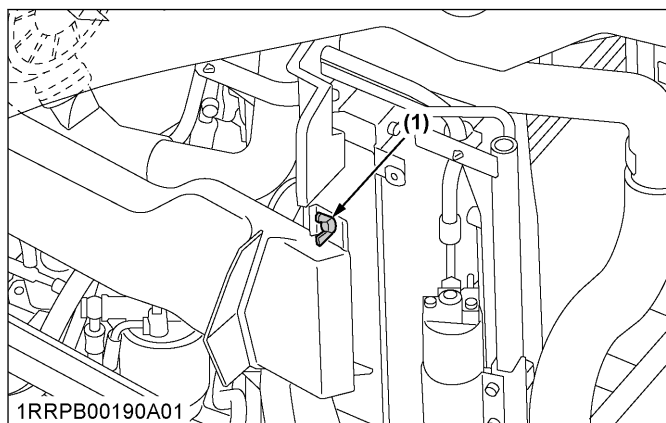
- The air cleaner uses a dry element. Never apply oil.
- Do not run the engine with the filter element removed.
- Refit the cover with the arrow ↑ (on the rear of the cover) upright. If the cover is improperly fitted, the evacuator valve will not function and dust will adhere to the element.
- Do not touch the secondary element except in cases where replacing is required.
- Replace the secondary element with the arrow facing to the right.

Evacuator valve

Open and clean the evacuator valve to get rid of large particles of dust and dirt (once a week under ordinary conditions, or daily when used in a dusty place).

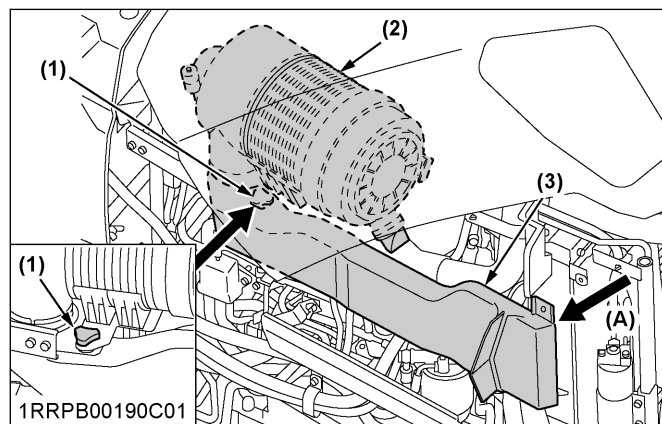
1.1 Removing the air cleaner cover [L6070]

1. Remove the wing bolt.



- (1) Wing bolt

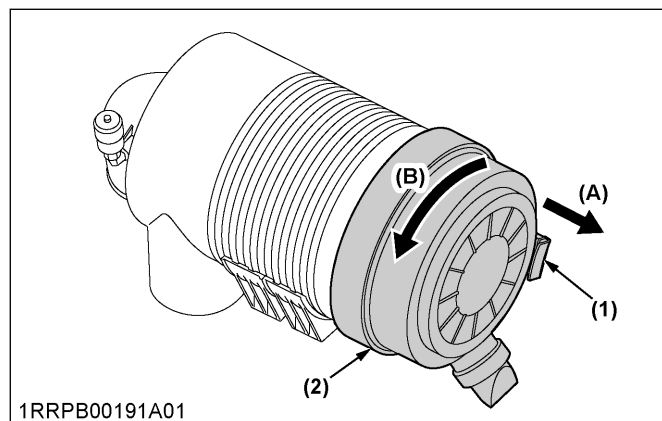
2. Loosen the knob and move the air cleaner outward along with the inlet duct.



- (1) Knob
(2) Air cleaner
(3) Inlet duct

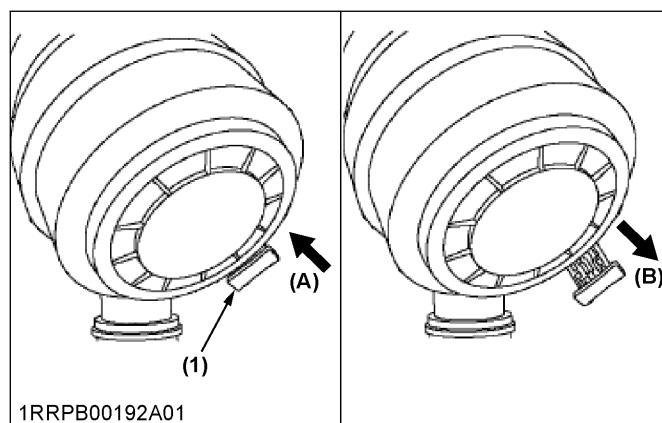
(A) Move

3. Pull the latch handle outward from the air cleaner cover, and rotate the cover counterclockwise until it stops turning.



- (1) Latch handle
(2) Air cleaner cover

(A) Pull
(B) Rotate

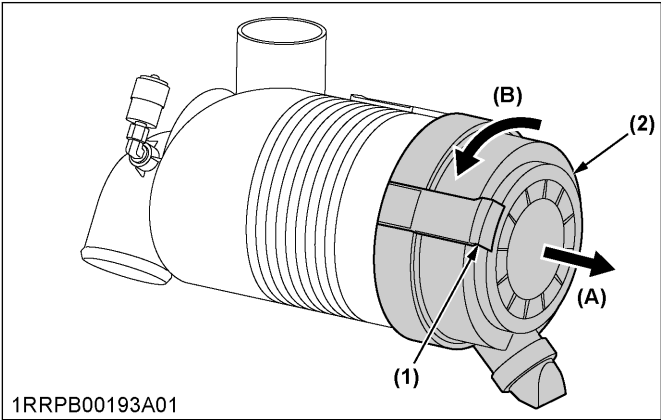


- (1) Latch handle

(A) Lock
(B) Release

1.2 Removing the air cleaner cover [except L6070]

1. Pull the latch handle outward from the air cleaner cover, and rotate the cover counterclockwise until it stops turning.



- (1) Latch handle
- (A) Pull
- (2) Air cleaner cover
- (B) Rotate

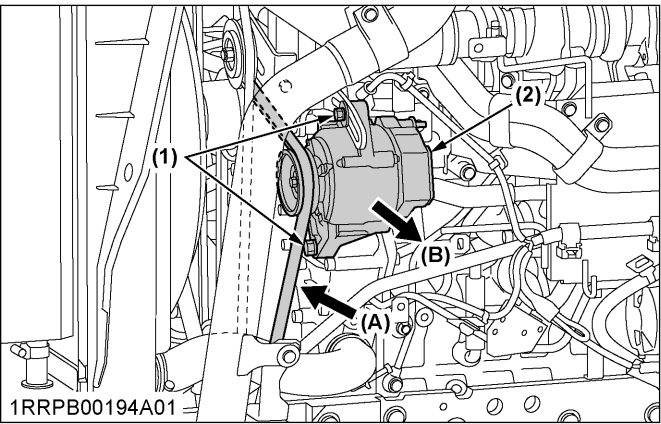
NOTE :
The position of the latch handle varies depending on the model.

2. Adjusting the fan belt tension

WARNING
To avoid personal injury or death, stop the engine before checking the belt tension.

Proper fan belt tension	A deflection of between 7 to 9 mm (0.28 to 0.34 in.) when the belt is pressed in the middle of the span.
-------------------------	--

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



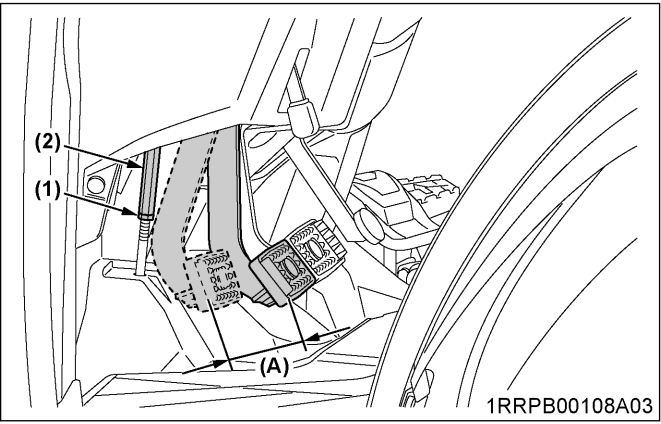
- (1) Bolt
- (A) Apply pressure to check the belt tension
- (B) Pull the alternator to tighten the fan belt tension

3. Adjusting the brake pedal

WARNING
To avoid personal injury or death, park on flat ground, stop the engine, and chock the wheels before checking the brake pedal.

Proper brake pedal free travel	15 to 20 mm (0.6 to 0.8 in.) on the pedal
	Keep the free travel in the right and left brake pedals equal.

- Adjusting procedure**
1. Release the parking brake.
 2. Slightly depress the brake pedals and measure free travel at the top of pedal stroke.
 3. If adjustment is needed, loosen the lock nut and turn the turnbuckle to adjust the rod length within acceptable limits.
 4. Retighten the lock nut.



- (1) Lock nut
- (A) Free travel
- (2) Turnbuckle

4. Checking the battery condition



DANGER

To avoid the possibility of battery explosion for the refillable type battery, follow the instructions in this section.

Do not use or charge the refillable type battery if the fluid level is below the [LOWER] (lower limit level) mark. Otherwise, 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.



WARNING

To avoid personal injury or death:

- Never remove the battery cap while the engine is running.
- Keep electrolyte away from eyes, hands, and clothes. If you are splattered with electrolyte, 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 the battery.

NOTE :

The factory-installed battery is a non-refillable type. If the indicator turns white, do not charge the battery but replace it with a new one.

Mishandling the battery shortens the service life and adds to maintenance costs.

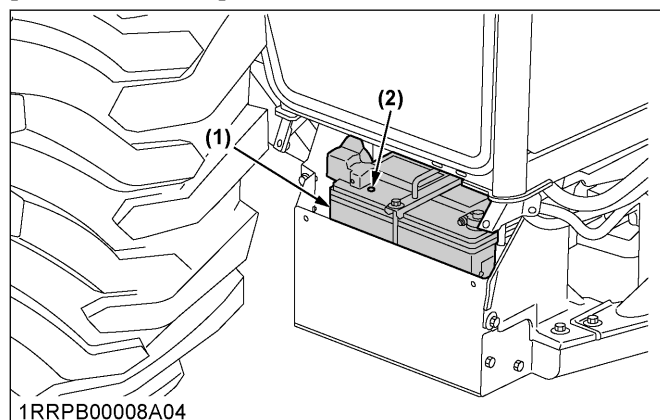
The original battery is maintenance-free, but needs some servicing.

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.

[Premium model]

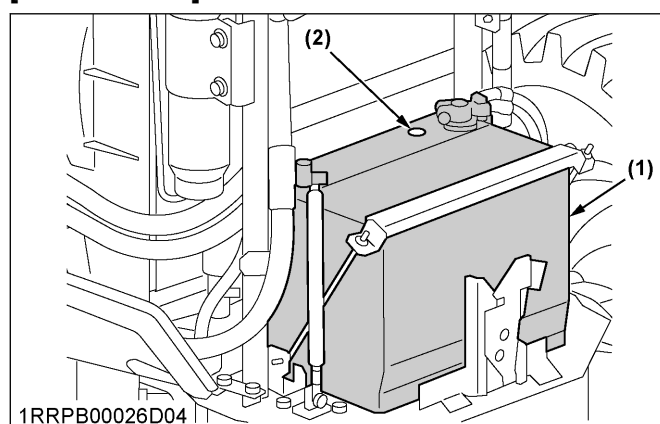
To open the battery cover, refer to Removing and attaching the battery cover [Premium model] on page 184.

[Premium model]



- (1) Battery
(2) Indicator

[Deluxe model]



- (1) Battery
(2) Indicator

How to read the indicator

Check the battery condition by reading the indicator.

Green	Specific gravity of electrolyte and quality of electrolyte are both in good condition.
Black	Battery needs charging.
White	Battery needs replacing.

4.1 Charging the battery



WARNING

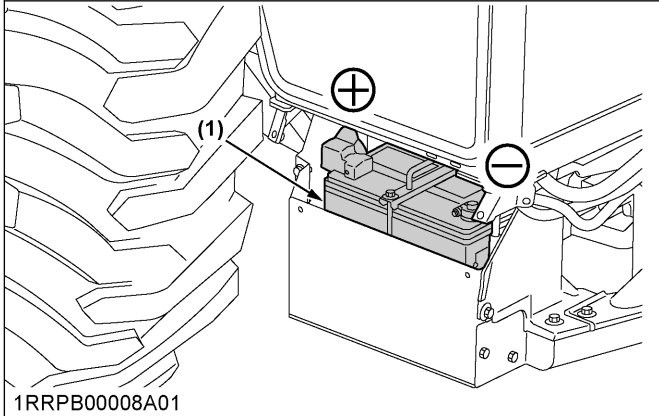
To avoid personal injury or death:

- 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.
- When charging the battery, ensure the vent caps are securely in place (if equipped).
- 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.

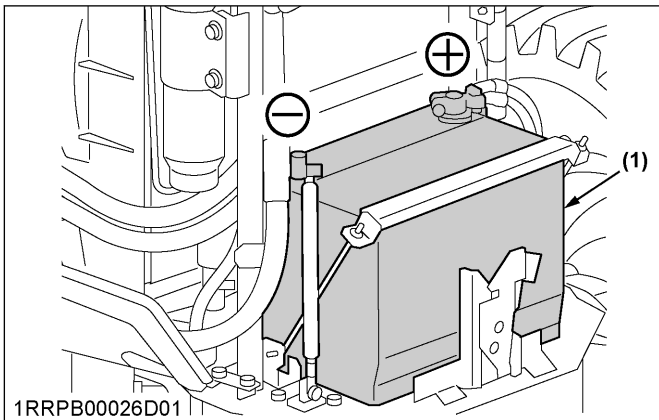
- Never check battery charge by placing a metal object across the posts. Use a voltmeter or hydrometer.

[Premium model]



(1) Battery

[Deluxe model]



(1) Battery

1. To slow charge the battery, connect the battery positive terminal to the charger positive terminal and the negative to the negative, then recharge in the standard fashion.
2. A boost charge is only for emergencies. Using a boost charge 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 soon as possible. Failure to recharge the battery as soon as possible will shorten the battery's service life.
3. The battery is charged when the indicator display turns from black to green.
4. When exchanging an old battery for a new one, use a battery of equivalent specification to those shown in the following table.

[Except premium model for cold climate]

Battery type	Volts (V)	Capacity at 5H.R (A.H)
80D26R	12	55

Reserve capacity (min)	Cold cranking amps	Normal charging rate (A)
133	582	6.5

[Premium model for cold climate]

Battery type	Volts (V)	Capacity at 20H.R (A.H)
90D26R	12	80

Reserve capacity (min)	Cold cranking amps	Normal charging rate (A)
150	680	6.5

4.2 Direction for the battery storage

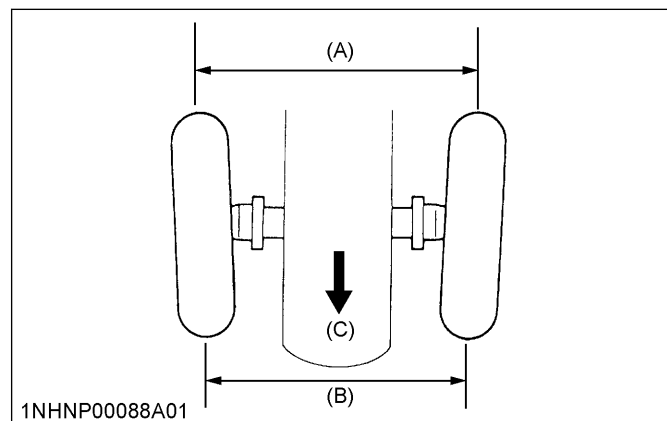
1. When storing the tractor for long periods of time, remove the battery from the tractor, adjust the electrolyte to the proper level and store in a dry place out of direct sunlight.
2. The battery self-discharges while the battery is stored. Recharge the battery once every 3 months in hot seasons and once every 6 months in cold seasons.

NOTE :

After stopping the engine, wait at least 15 minutes before disconnecting the battery cable. This is to prevent damage to the system device.

EVERY 200 HOURS

1. Adjusting toe-in



(A) Wheel-to-wheel distance at the rear

(B) Wheel-to-wheel distance at the front

(C) Front

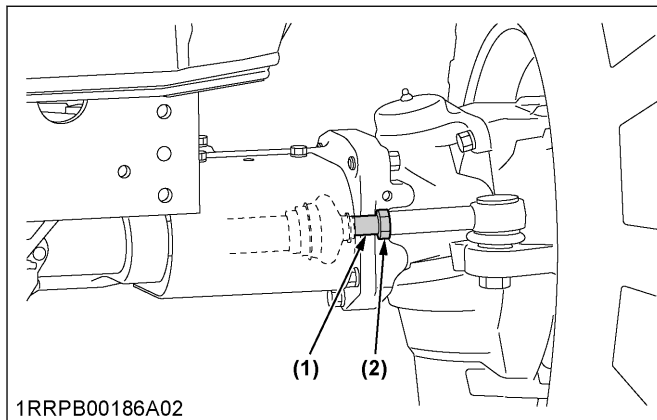
Proper toe-in	2 to 8 mm (0.08 to 0.31 in.)
---------------	------------------------------

1. Park the tractor on a flat surface.
2. Turn the steering wheel so that the front wheels are in the straight ahead position.
3. Lower the implement, apply the parking brake and stop the engine.
4. Measure the distance between the tire beads at the front of the tire, at hub height.
5. Measure the distance between the tire beads at the rear of the tire, at hub height.
6. The front distance should be shorter than the rear distance. If not, adjust the tie-rod length.

1.1 Adjusting toe-in procedure

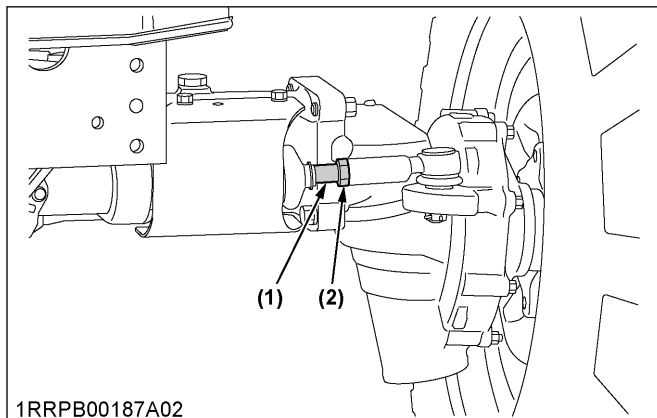
1. Loosen the tie-rod nut.
2. Turn the tie-rod joint to adjust the rod length until the proper toe-in measurement is obtained.
3. Retighten the tie-rod nut.

[L5070, L6070]



- (1) Tie-rod joint
- (2) Tie-rod nut

[L3770, L3970, L4270, L4470]



- (1) Tie-rod joint
- (2) Tie-rod nut

2. Adjusting the air conditioner belt tension [CAB model]

⚠ WARNING

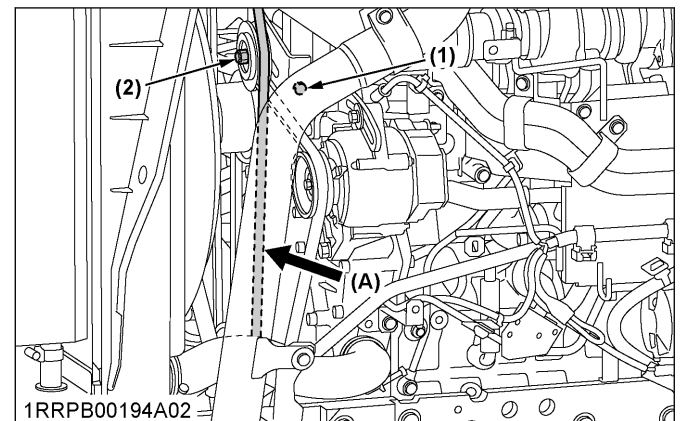
To avoid personal injury or death, stop the engine before checking the belt tension.

Proper air conditioner belt tension

A deflection of between 10 to 12 mm (0.4 to 0.48 in.) when the belt is pressed (98 N / [10 kgf, 22.1 lbf]) in the middle of the span.

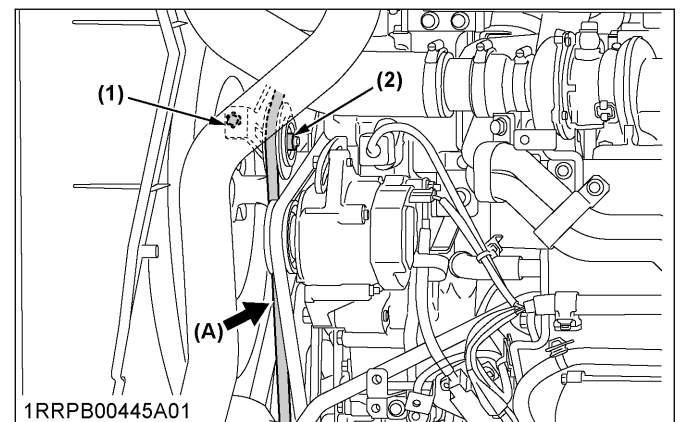
1. Stop the engine and remove the key.
2. Apply moderate thumb pressure to belt between pulleys.
3. If the tension is incorrect, loosen the tension pulley mounting nut and turn the adjusting bolt to adjust the belt tension within acceptable limits.
4. Replace the air conditioner belt if it is damaged.

[L4270, L4470, L5070, L6070]



- (1) Adjusting bolt
- (2) Tension pulley mounting nut
- (A) Apply pressure to check belt tension

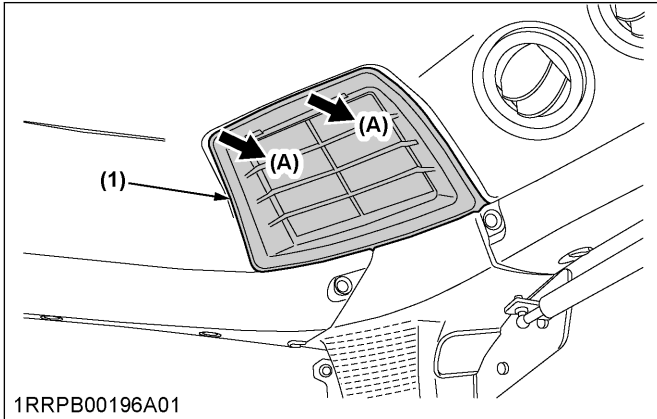
[L3770, L3970]



- (1) Adjusting bolt
- (2) Tension pulley mounting nut
- (A) Apply pressure to check belt tension

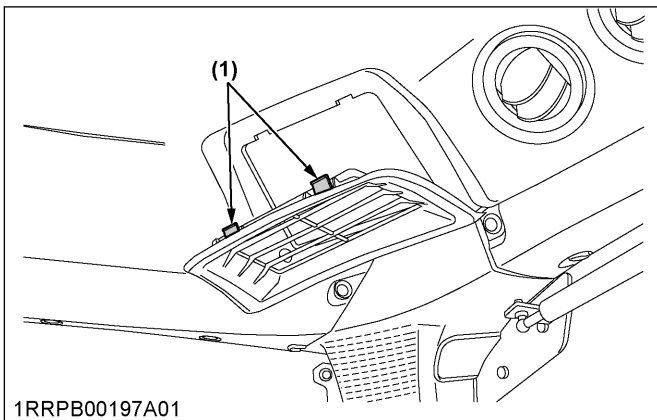
3. Cleaning the inner air filter [CAB model]

Press the inner air filter in the arrow-marked directions to unlock it, and remove the inner filter. Blow air from the direction opposite to the filter's normal air flow. Pressure of compressed air must be under 205 kPa (2.1 kgf/cm² / 30 psi).



(1) Inner air filter

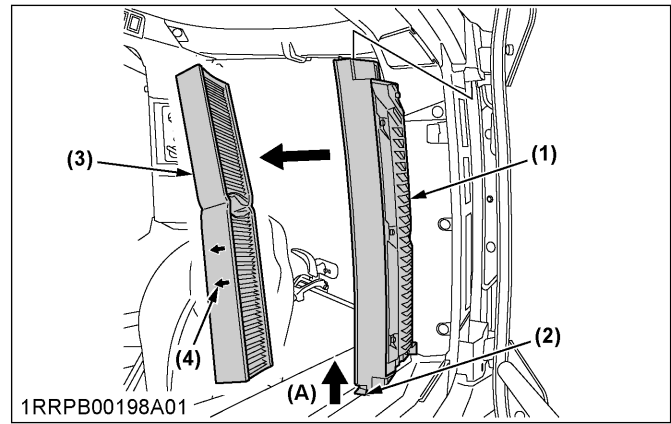
(A) Push



(1) Clip

4. Cleaning the fresh air filter [CAB model]

1. Press the clip and remove the air filter cover.
2. Remove the fresh air filter from the air filter cover.



- (1) Air filter cover
(2) Clip
(3) Fresh air filter
(4) Air flow direction

(A) Press

NOTE :

After cleaning, attach the filter and cover as shown in the previous illustration.

4.1 Cleaning the filter

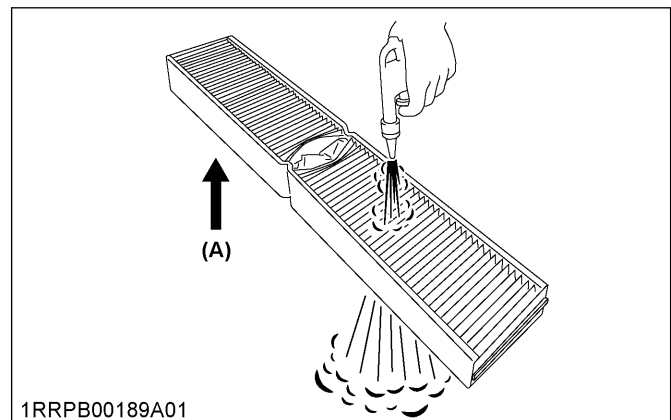
Normal use

Blow air from the opposite direction to the filter's normal air flow.

Pressure of compressed air must be under 205 kPa (2.1 kgf/cm², 30 psi).

IMPORTANT :

Do not hit the filter. If the filter becomes deformed, dust may enter into the air-conditioner, which may cause damage and malfunction.



(A) Air conditioner airflow

NOTE :

If the filter is very dirty:

Dip the filter in lukewarm water with mild dishwashing detergent.

Move the filter up and down as well as left and right to loosen dirt. Rinse the filter with clean water and let it air-dry.

IMPORTANT :

Do not use gasoline, thinner or similar chemicals to clean the filter as damage to the filter may occur. Cleaning the filter with such chemicals may also cause an unpleasant odor in the CAB next time the system is used.

EVERY 400 HOURS OR 1 YEAR

Perform the following servicing once every 400 hours or yearly, whichever comes first.

1. Changing the engine oil**WARNING**

To avoid personal injury or death:

- Stop the engine before changing the oil.
- Allow the engine to cool down sufficiently. Oil can be hot and can burn.

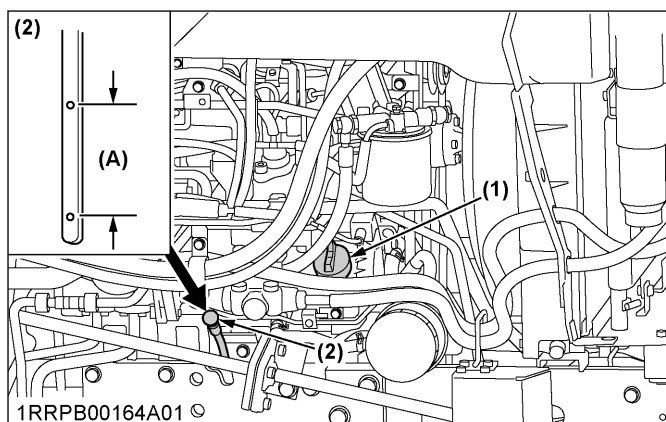
1. To drain the used oil, remove the drain plug at the bottom of the engine and drain the oil completely into the oil pan.
2. After draining, reinstall the drain plug.
3. Fill with new oil up to the upper notch on the dipstick.
(See LUBRICANTS, FUEL, AND COOLANT on page 177.)

Oil capacity with filter

Models	Capacities
L3770, L3970	6.4 L (6.7 U.S.qts.)
L4270, L4470, L5070, L6070	8.4 L (8.9 U.S.qts.)

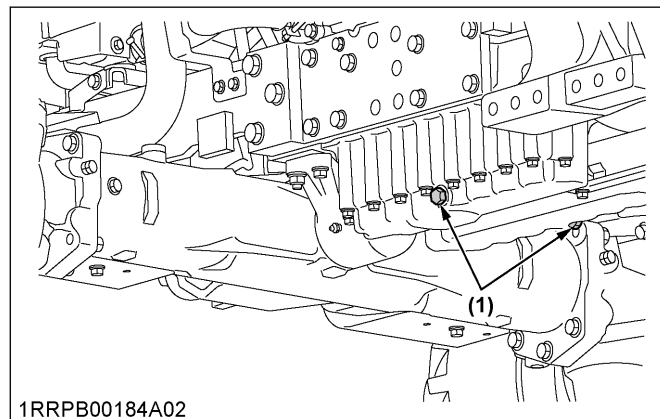
IMPORTANT :

Use DPF-compatible oil (CJ-4) for the engine.



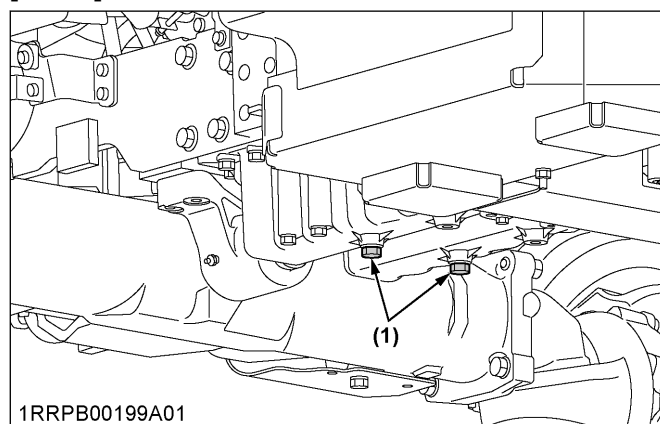
(1) Oil inlet
(2) Dipstick

(A) Oil level is acceptable within this range.

Except [L4270]

1RRPB00184A02

(1) Drain plug

[L4270]

1RRPB00199A01

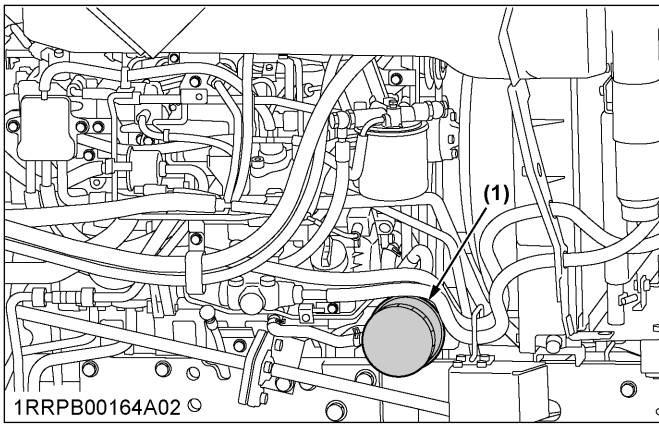
(1) Drain plug

EVERY 400 HOURS**1. Replacing the engine oil filter****WARNING**

To avoid personal injury or death:

- Stop the engine before replacing the oil filter cartridge.
- Allow the engine to cool down sufficiently. Oil can be hot and can burn.

1. Remove the oil filter.
2. Put a film of clean engine oil on the rubber seal of the new filter.
3. Tighten the filter quickly until it contacts the mounting surface.
Tighten the filter by hand only an additional half a turn.
4. After the new filter has been replaced, the engine oil normally decreases by a small amount. Make sure that the engine oil does not leak through the seal and check the oil level on the dipstick. Then fill the engine oil up to the prescribed level.



(1) Engine oil filter

IMPORTANT :

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

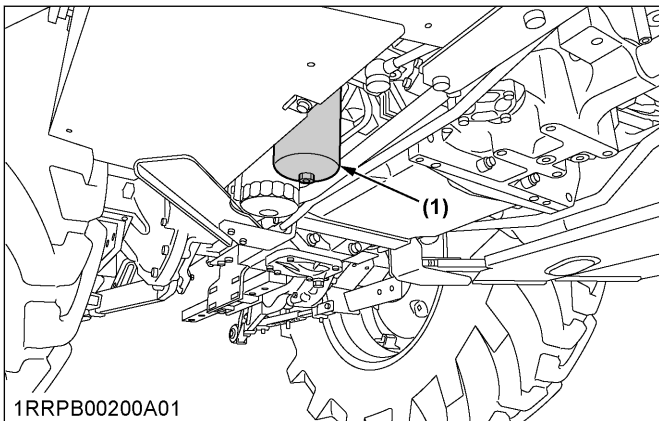
2. Replacing the transmission oil filter

WARNING

To avoid personal injury or death:

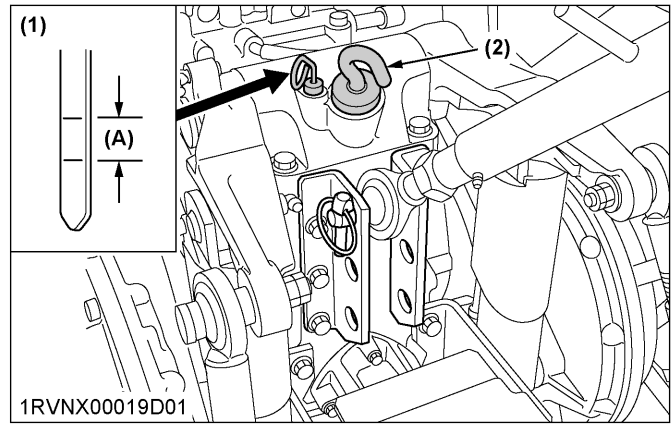
- Stop the engine before changing the oil filter cartridge.
- Allow engine to cool down sufficiently, oil can be hot and can burn.

1. Place the oil pan underneath the transmission oil filter and remove the filter.
Do not remove the hydraulic oil filter. Otherwise, the oil comes out.



(1) Transmission oil filter

2. Put a film of clean transmission oil on the rubber seal of the new filter.
3. Quickly tighten the filter until it contacts the mounting surface, and then tighten it with a filter wrench an additional 1 turn only.
4. After the new filter has been replaced, fill the transmission oil up to the upper limit on the dipstick.

(1) Gauge
(2) Oil inlet

(A) Oil level is acceptable within this range.

5. After running the engine for a few minutes, stop the engine and check the oil level again, add oil to the prescribed level.
6. Make sure that the transmission oil does not leak past the seal on the filter.

IMPORTANT :

- To prevent serious damage to the hydraulic system, use only a Kubota genuine filter.
- Do not operate the tractor immediately after changing the transmission oil.
Run the engine at medium speed for a few minutes to prevent damage to the transmission.

3. Changing the transmission oil and replacing the hydraulic oil filter

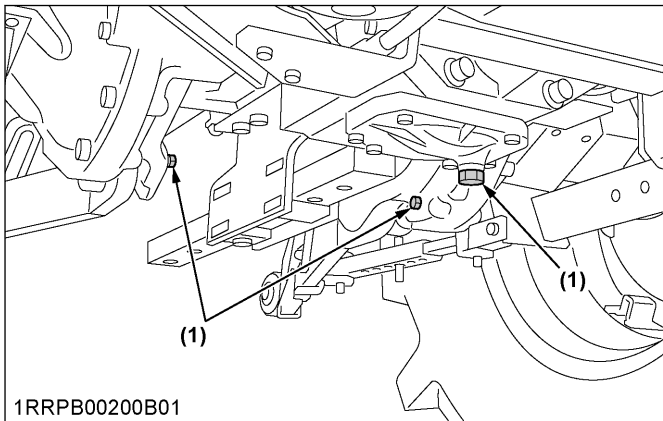
WARNING

To avoid personal injury or death:

- Stop the engine before changing the oil filter cartridge.
- Allow the engine to cool down sufficiently. Oil can be hot and can burn.

1. Remove the drain plugs at the bottom of the transmission case and drain the oil completely into an oil pan.

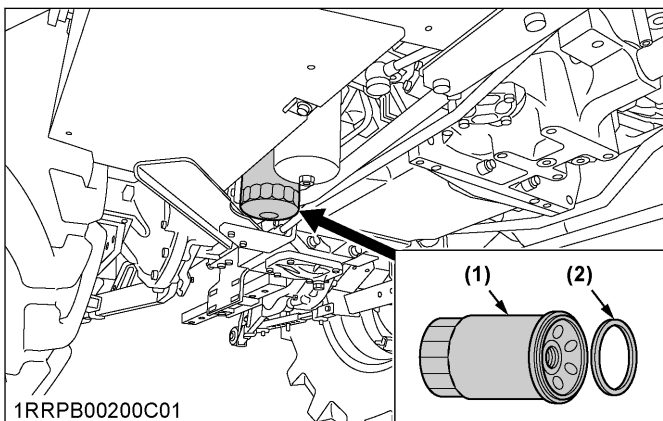
2. After draining reinstall the drain plugs.



(1) Drain plug

3. Remove the oil filter.

4. Wipe off metal filings from the magnetic filter with a clean rag.

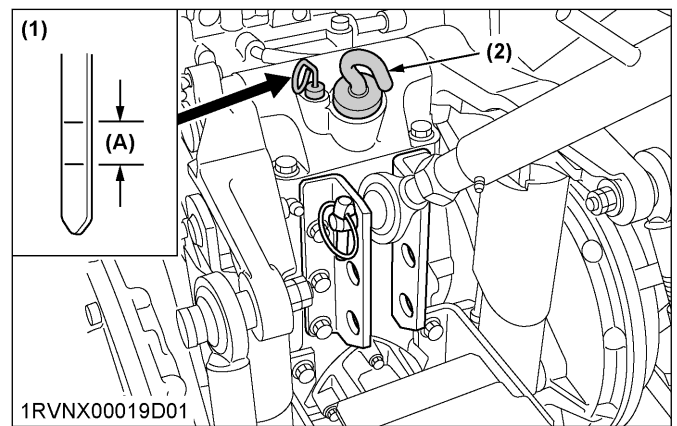


(1) Hydraulic oil filter
(2) Magnetic filter (wipe off metal filings)

5. Put a film of clean transmission oil on the rubber seal of the new filter.
6. Tighten the filter quickly until it contacts the mounting surface.
Tighten filter by hand an additional 1/2 turn only.
7. Fill with the new **Kubota SUPER UDT** fluid up to the upper notch on the dipstick.
(See LUBRICANTS, FUEL, AND COOLANT on page 177.)
8. After running the engine for a few minutes, stop the engine and check the oil level again, add oil to the prescribed level.
9. Make sure that the transmission oil does not leak past the seal on the filter.

Oil capacity

Models	Capacities
L3770, L3970	46 L (12.1 U.S.gals.)
L4270, L4470, L5070	45 L (11.9 U.S.gals.)
L6070	47 L (12.4 U.S.gals.)



(1) Gauge
(2) Oil inlet

(A) Oil level is acceptable within this range.

IMPORTANT :

- To prevent serious damage to the hydraulic system, use only a Kubota genuine filter.
- Do not operate the tractor immediately after changing the transmission oil.
Run the engine at medium speed for a few minutes to prevent damage to the transmission.

4. Changing the front axle case oil

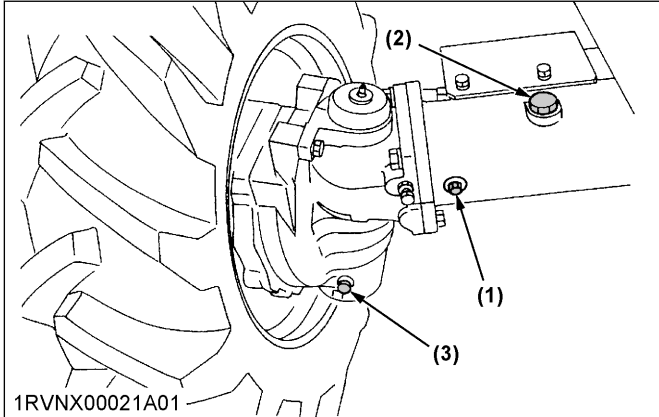
1. To drain the used oil, remove the right and left drain plugs and filling plug at the front axle case and let out the oil completely into the oil pan.
2. After draining, reinstall the drain plugs.
3. Gently pour new oil through the filling port. Required oil quantities are written in the following table. Pour the specified amounts. If oil overflows before pouring any of the specified amounts, wait a couple of minutes and try again.
(See LUBRICANTS, FUEL, AND COOLANT on page 177.)
4. After filling, reinstall the filling plug.
5. Run the vehicle a few minutes in order for the oil to flow through the front axle case.
6. Remove the oil level check plug and check to see if the oil flows out of its port. If not, add the oil through the filling port until it flows out of the oil level check port.

- Reinstall and tighten the oil level check plug and filling plug.

Oil capacity

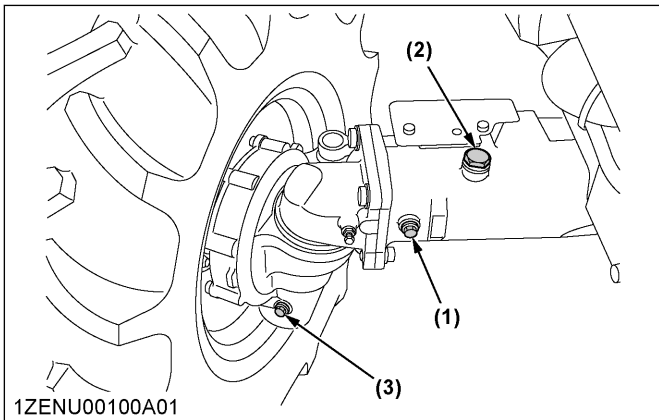
Models	Capacities
L3770, L3970, L4270, L4470	6.5 L (6.9 U.S.qts.)
L5070, L6070	8.5 L (9.0 U.S.qts.)

[L5070, L6070]

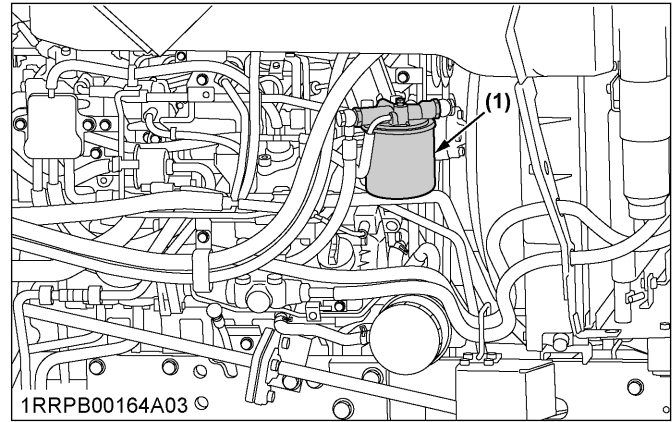


- Check plug
- Filling plug
- Drain plug

[L3770, L3970, L4270, L4470]



- Check plug
- Filling plug
- Drain plug



(1) Fuel filter

6. Cleaning and replacing the water separator

This job should not be done in the field, but in a clean environment.

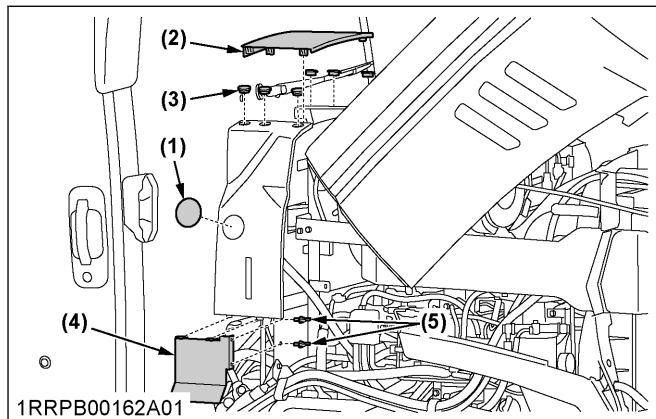
- Close the fuel shut-off valve.
- Disconnect the water sensor connector.
- Unscrew the cup and remove it, then rinse the inside with kerosene.
- Take out the water separator cartridge and replace it with a new one.
- After cleaning, reassemble the water separator, keeping out dust and dirt.
- Connect the water sensor connector.

5. Replacing the fuel filter

- Remove the fuel filter.
- Put a film of clean fuel on the rubber seal of the new filter.
- Tighten the filter quickly until it contacts the mounting surface.
Tighten the filter by hand only an additional half a turn.
- Bleed the fuel system.
(See Bleeding the fuel system on page 216.)

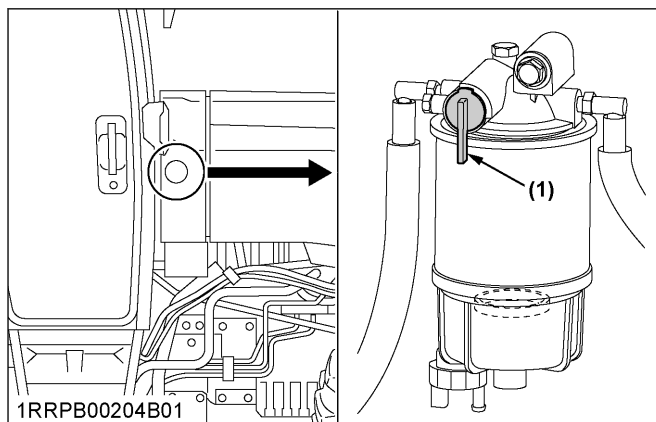
7. Bleed the fuel system.
(See Bleeding the fuel system on page 216.)

[Premium model]



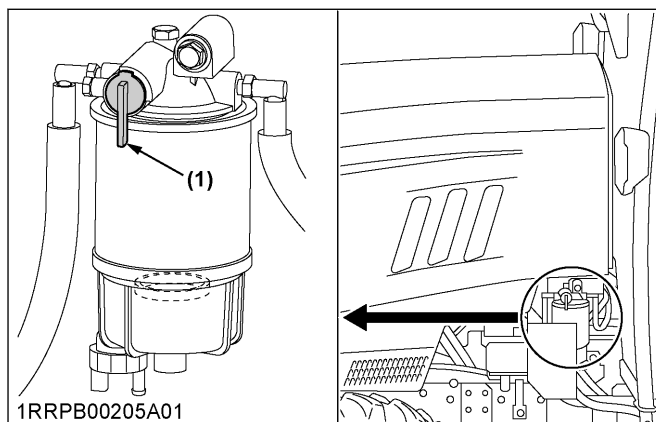
- (1) Rear hood side cap
(2) Rear hood upper cover
(3) Cap
(4) Rear hood under cover
(5) Wing bolt

[Premium model]

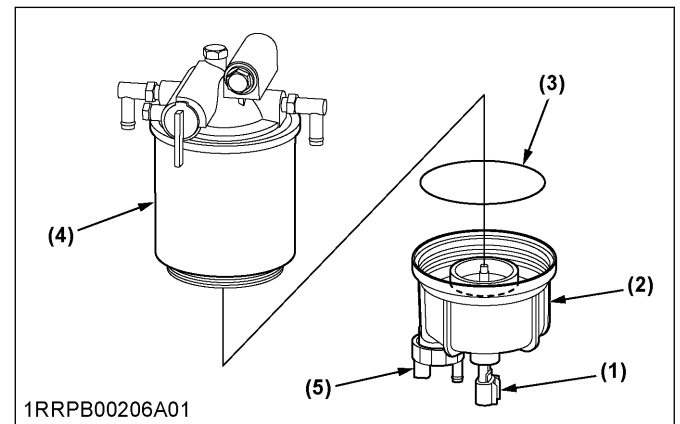


- (1) Fuel shut-off valve

[Deluxe model]



- (1) Fuel shut-off valve



- (1) Water sensor connector
(2) Cup
(3) O-ring
(4) Water separator cartridge
(5) Drain plug

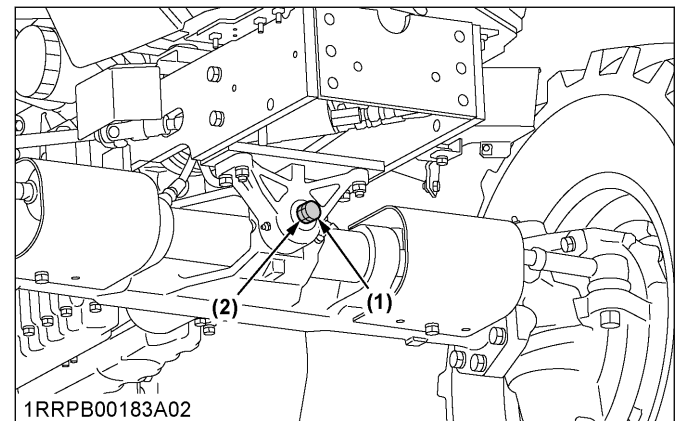
EVERY 600 HOURS

1. Adjusting the front axle pivot

If the front axle pivot pin adjustment is incorrect, front wheel vibration can occur, causing vibration in the steering wheel.

Adjusting procedure

1. Loosen the lock nut and screw in the adjusting screw until seated.
2. Tighten the screw by an additional 1/6 turn.
3. Re-tighten the lock nut.



- (1) Adjusting screw
(2) Lock nut

EVERY 800 HOURS

1. Adjusting the engine valve clearance

Contact your local Kubota dealer for this service.

EVERY 1000 HOURS OR 1 YEAR

Perform the following servicing once every 1000 hours or yearly, whichever comes first.

1. Replacing the air cleaner primary element and secondary element

(See Cleaning the air cleaner primary element on page 196.)

2. Checking the exhaust manifold

Contact your local Kubota dealer for this service.

EVERY 1500 HOURS

1. Cleaning the fuel injector nozzle tip

Contact your local Kubota dealer for this service.

2. Checking the positive crankcase ventilation (PCV) valve

Contact your local Kubota dealer for this service.

3. Checking and cleaning the EGR cooler

Contact your local Kubota dealer for this service.

EVERY 2000 HOURS OR 2 YEARS

Perform the following servicing once every 2000 hours or biennially, whichever comes first.

1. Flushing the cooling system and changing the coolant

WARNING

To avoid personal injury or death, do not remove the radiator cap while the coolant is hot. When cool, slowly rotate the cap to the first stop and allow sufficient time for excess pressure to escape before removing the cap completely.

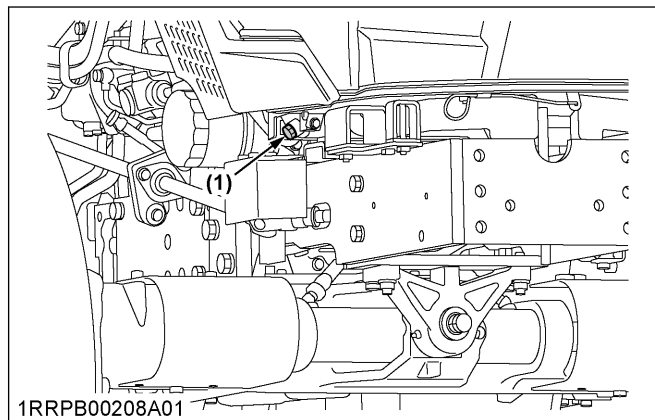
1. Stop the engine, remove the key and let it cool down.
2. To drain the coolant, open the radiator drain plug and remove the radiator cap. The radiator cap must be removed to completely drain the coolant.
3. After the coolant has drained, reinstall the drain plug.

4. Fill with clean soft water and cooling system cleaner.
5. Follow the cleaner instructions.
6. After flushing, fill with clean soft water and antifreeze until the coolant level is just below the radiator cap.
Install the radiator cap securely.
7. Fill with coolant up to the **[FULL]** mark of the coolant recovery tank.
8. Start up and operate the engine for a few minutes.
9. Stop the engine, remove the key and let it cool down.
10. Check the coolant level of the coolant recovery tank and add coolant if necessary.
11. Properly dispose of the used coolant.

Coolant capacity

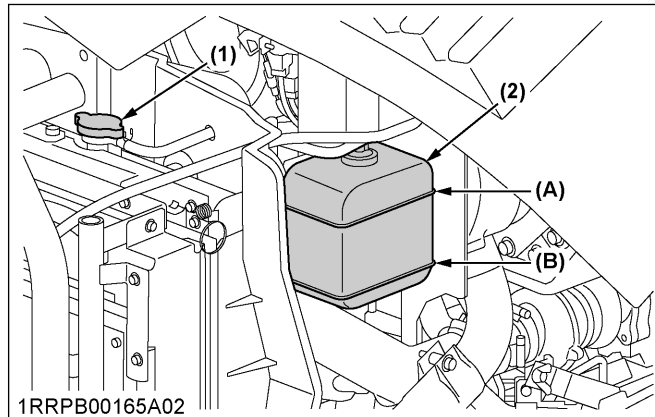
Models	Capacities
L3770, L3970	6.8 L (7.2 U.S.qts.)
L4270, L4470, L5070, L6070	8.2 L (8.7 U.S.qts.)

[All models]



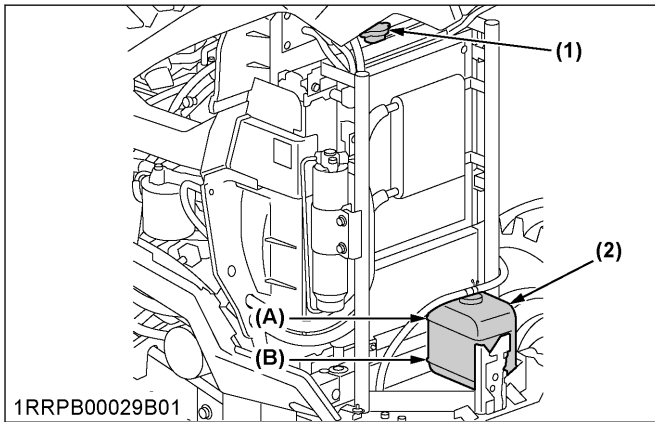
(1) Drain plug

[L4270, L4470, L5070, L6070]

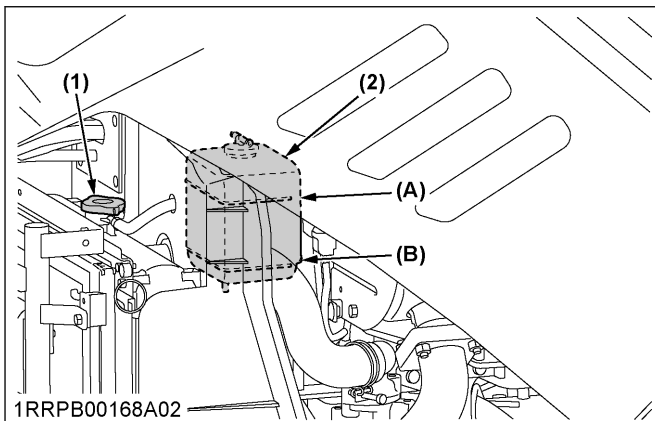


(1) Radiator cap
(2) Coolant recovery tank

(A) Full
(B) Low

[L3970]

- (1) Radiator cap (A) Full
(2) Coolant recovery tank (B) Low

[L3770]

- (1) Radiator cap (A) Full
(2) Coolant recovery tank (B) Low

IMPORTANT :

- Do not start the engine without any coolant.
- Use clean, fresh soft water and antifreeze to fill the radiator and coolant recovery tank.
- When mixing the antifreeze with water, the antifreeze mixing ratio is 50 %.
- Securely tighten the radiator cap. If the cap is loose or improperly fitted, water may leak out and the engine could overheat.

NOTE :

On cab type machines, coolant circulates through the heater. This means that one more liter or so of coolant is required. In changing coolant, pour coolant up to the filler port of the coolant recovery tank. Turn on the heater (shift the temperature control lever toward [WARM]), and run the engine for a while in order to warm coolant. Then stop the engine. When coolant has cooled down, some of the coolant in the coolant recovery tank is sucked. Now the coolant recovery tank is appropriately filled with coolant.

2. Antifreeze**WARNING**

To avoid personal injury or death:

- When using antifreeze, put on some protection such as rubber gloves (antifreeze contains poison).
- If you swallow the antifreeze, seek immediate medical help. Do not make a person throw up unless told to do so by a poison control or a healthcare 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 antifreeze comes in contact with the skin or clothing, wash it off immediately.
- Do not mix different types of antifreeze. The mixture can produce chemical reactions resulting in harmful substances.
- Antifreeze is extremely flammable and explosive under certain conditions. Keep fire and children away from antifreeze.
- When draining fluids from the engine, place a container underneath the engine body.
- Do not pour waste onto the ground, down a drain, or into any water source.
- Also, observe the relevant environmental protection regulations when disposing of antifreeze.

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

Contact 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 pour it into the radiator.

4. The procedure for the mixing of water and antifreeze differs according to the make of the antifreeze and the ambient temperature. Refer to SAE J1034 standard, more specifically also to SAE J814c.

Vol % antifreeze	Freezing point		Boiling point*1	
	°C	°F	°C	°F
50	-37	-34	108	226

*1 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
 - a. Add only water if the mixture level is reduced by evaporation.
 - b. If there is a mixture leak, add LLC of the same manufacturer and type in the same mixture percentage.

IMPORTANT :

Never add any long-life coolant from a 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 an 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. Change the coolant every 2000 hours or every 2 years, whichever comes first.

NOTE :

The above data represents industry standards that necessitate a minimum glycol content in the concentrated antifreeze.

EVERY 3000 HOURS

1. Checking the supply pump

Contact your local Kubota dealer for this service.

2. Checking and cleaning the EGR system

Contact your local Kubota dealer for this service.

3. Checking the turbocharger [Premium model]

Contact your local Kubota dealer for this service.

EVERY 3000 HOURS TO 6000 HOURS

1. Cleaning the DPF muffler

1. Remove the ash.

The longer the DPF operates, the more ash (the burnt residue) is collected in the filter. Too much ash build-up adversely affects the DPF performance. Contact your local Kubota dealer to clean the filter.

IMPORTANT :

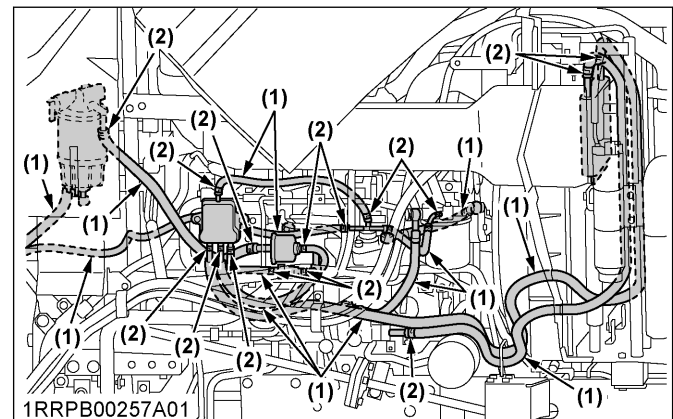
The DPF needs to be cleaned with a specific cleaning device. Do not disassemble the DPF for cleaning or attempt to clean it yourself. Contact your local Kubota dealer.

EVERY 1 YEAR

1. Checking the fuel line

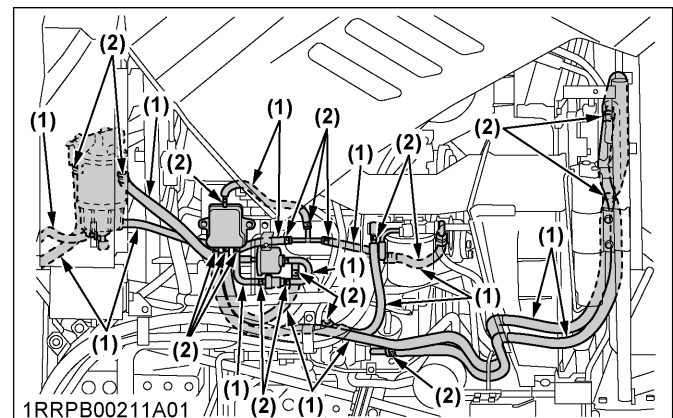
1. Check to see that all the lines and the hose clamps are tight and not damaged.
2. If the hoses and the clamps are found to be worn or damaged, replace or repair them at once.

[L4470, L5070, L6070]

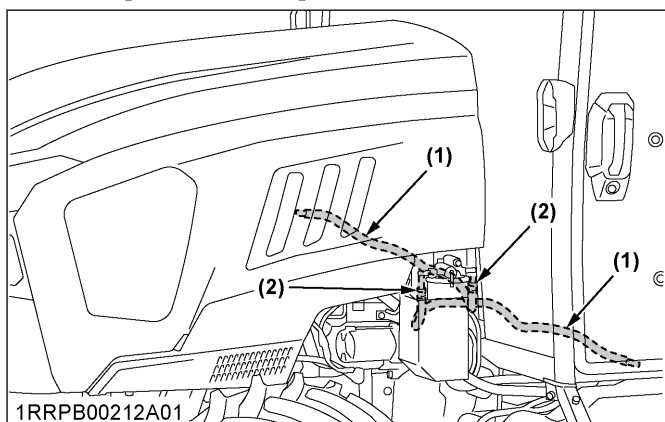


- (1) Fuel line
(2) Clamp band

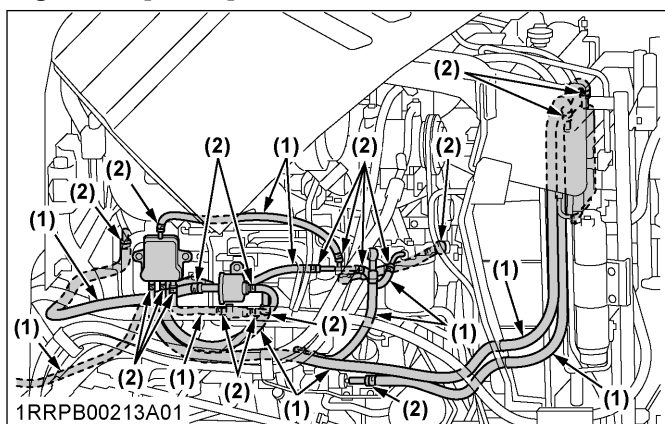
[L3970]



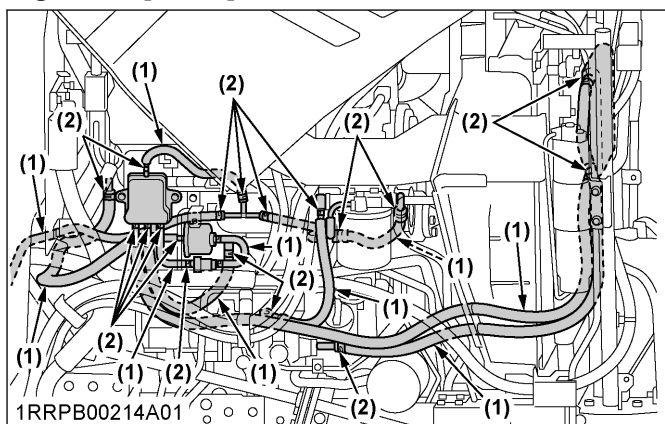
- (1) Fuel line
(2) Clamp band

Left side [L3770, L4270]

- (1) Fuel line
(2) Clamp band

Right side [L4270]

- (1) Fuel line
(2) Clamp band

Right side [L3770]

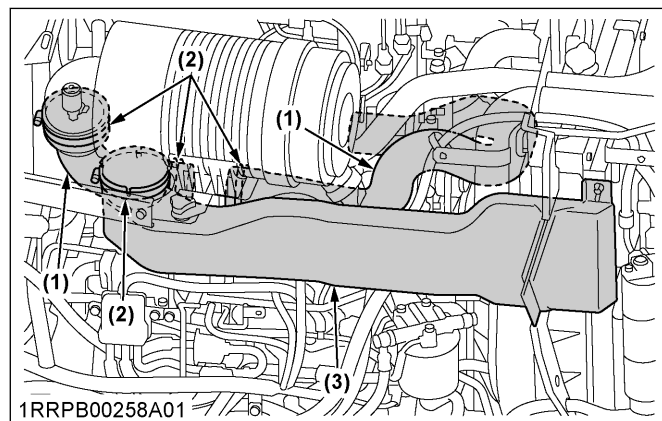
- (1) Fuel line
(2) Clamp band

NOTE :

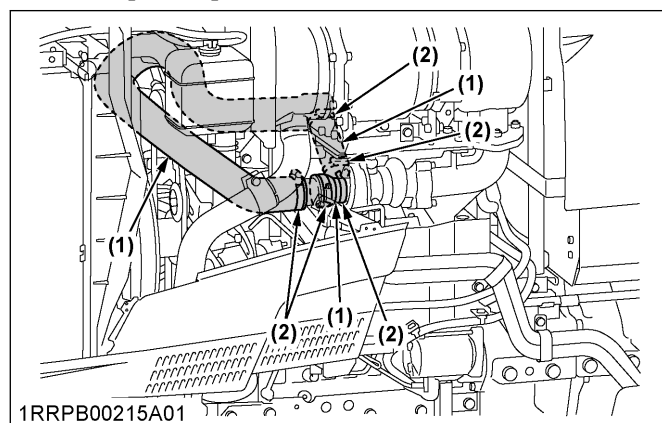
If the fuel line has been replaced, properly bleed the fuel system.
(See Bleeding the fuel system on page 216.)

2. Checking the intake air line

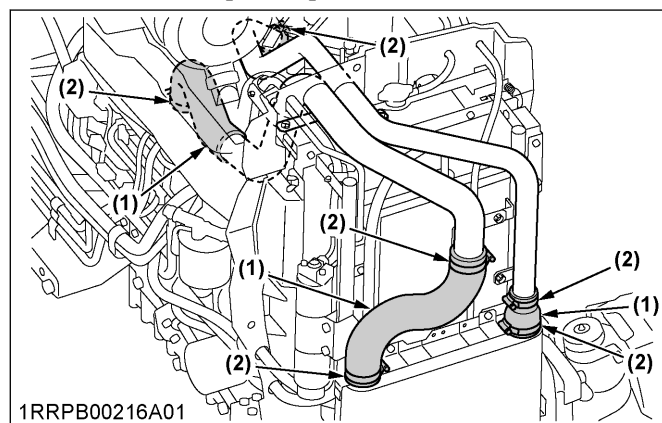
1. Check to see that the hoses and the hose clamps are tight and not damaged.
2. If the hoses and the clamps are found to be worn or damaged, replace or repair them at once.

Right side [L6070]

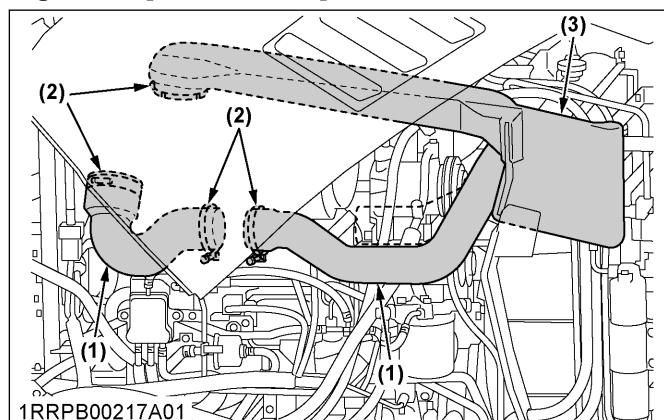
- (1) Hose
(2) Hose clamp
(3) Inlet duct

Left side [L6070]

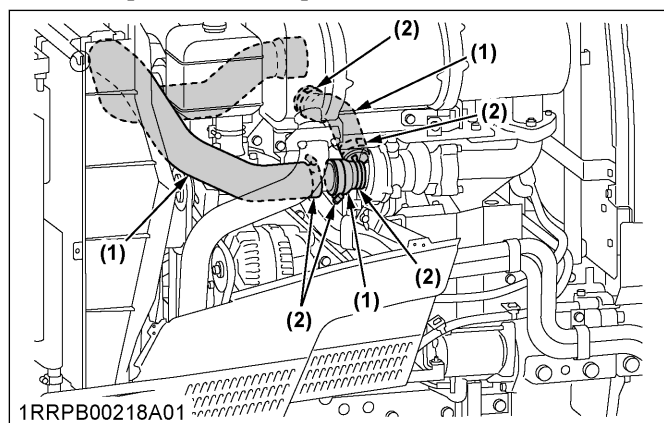
- (1) Hose
(2) Hose clamp

Intercooler hose [L6070]

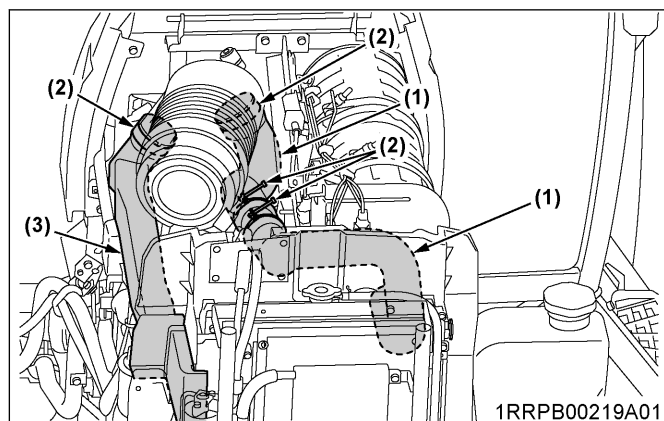
- (1) Hose
(2) Hose clamp

Right side [L4470, L5070]

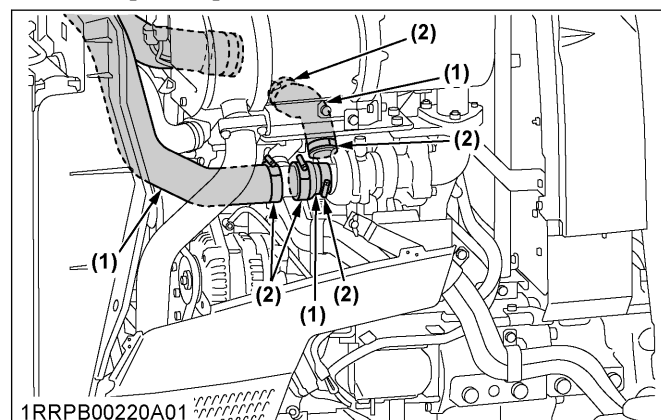
- (1) Hose
- (2) Hose clamp
- (3) Inlet duct

Left side [L4470, L5070]

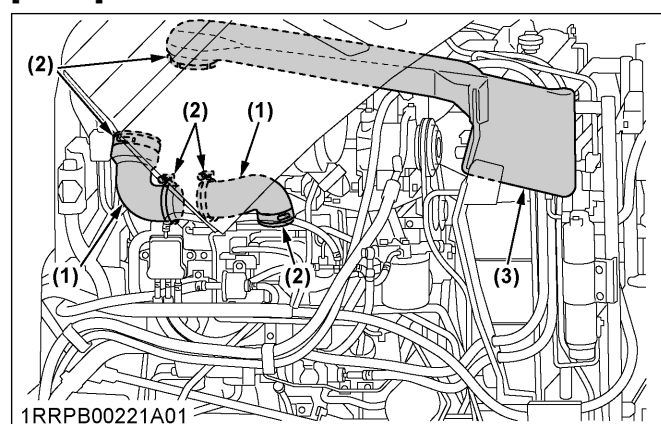
- (1) Hose
- (2) Hose clamp

Right side [L3970]

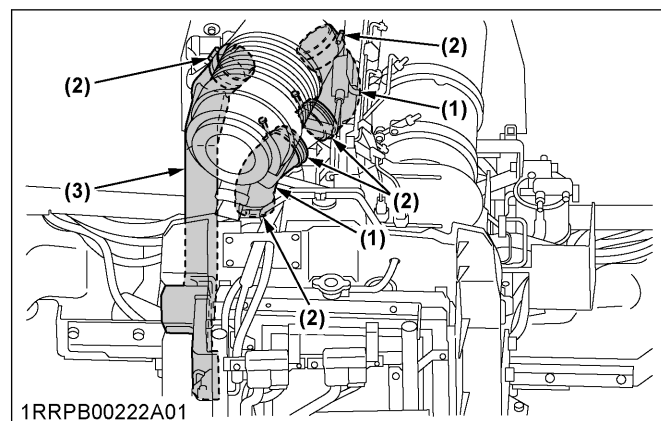
- (1) Hose
- (2) Hose clamp
- (3) Inlet duct

Left side [L3970]

- (1) Hose
- (2) Hose clamp

[L4270]

- (1) Hose
- (2) Hose clamp
- (3) Inlet duct

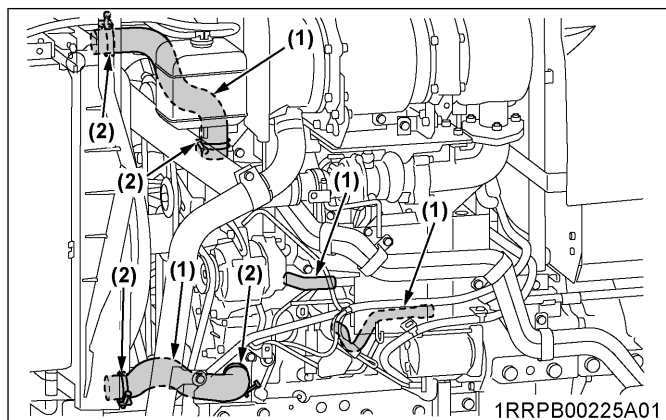
[L3770]

- (1) Hose
- (2) Hose clamp
- (3) Inlet duct

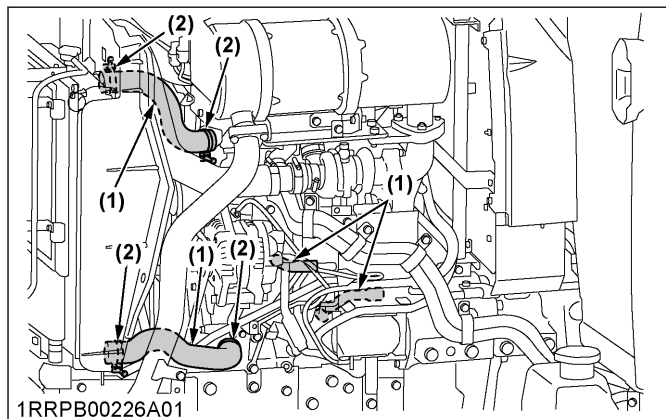
3. Checking the radiator hose and the clamp

Check to see if the radiator hoses are properly fixed every year.

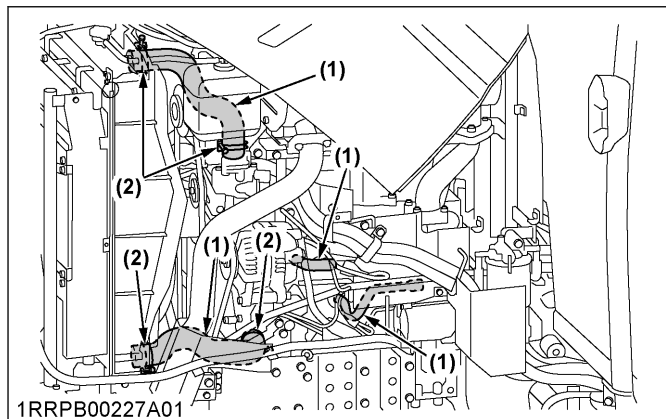
1. If the hose clamps are loose or water leaks, tighten the bands securely.
2. Replace the hoses and tighten the hose clamps securely, if the radiator hoses are swollen, hardened or cracked.

Left side [L4470, L5070, L6070]

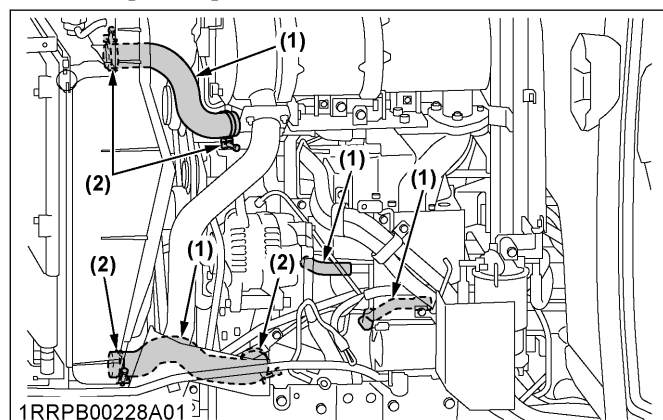
- (1) Radiator hose
(2) Clamp band

Left side [L3970]

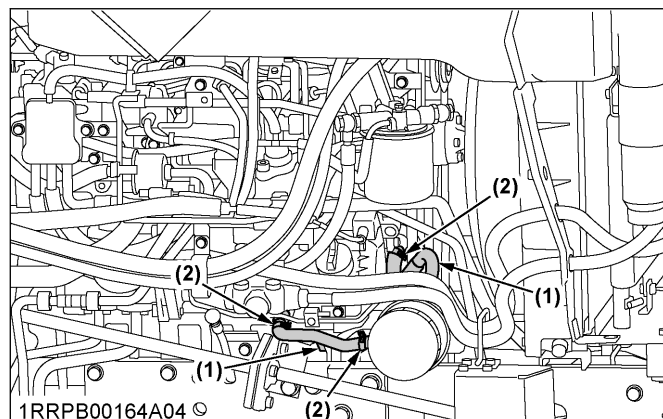
- (1) Radiator hose
(2) Clamp band

Left side [L4270]

- (1) Radiator hose
(2) Clamp band

Left side [L3770]

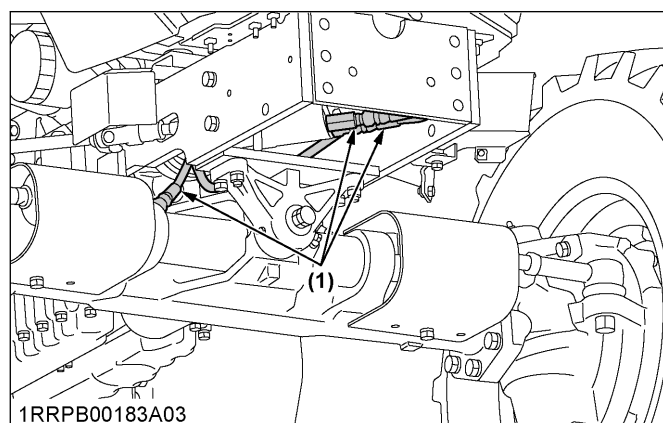
- (1) Radiator hose
(2) Clamp band

Right side [All models]

- (1) Radiator hose
(2) Clamp band

4. Checking the power steering line

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

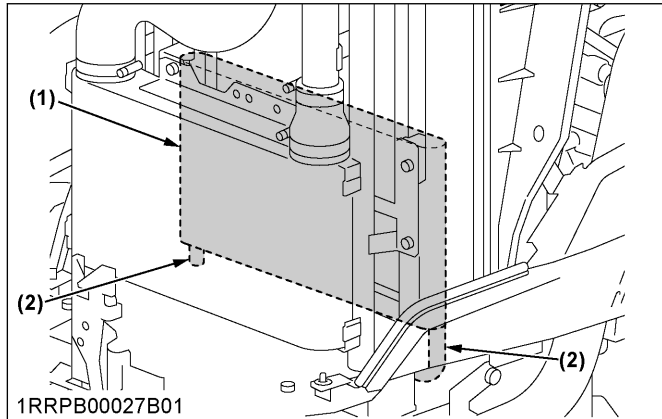


- (1) Power steering pressure hose

5. Checking the oil cooler line

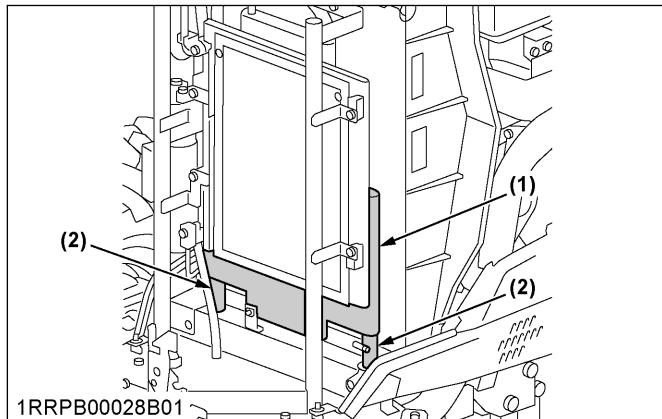
1. Check to see that all the lines and the hose clamps are tight and not damaged.
2. If the hoses and the clamps are found worn or damaged, replace or repair them at once.

[L6070]



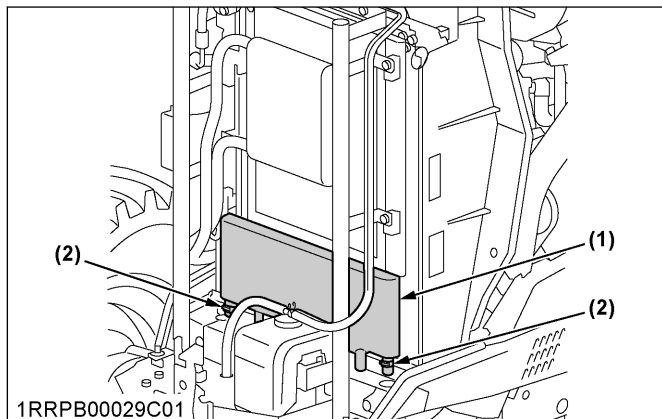
- (1) Oil cooler
(2) Oil cooler line

[L4470, L5070]



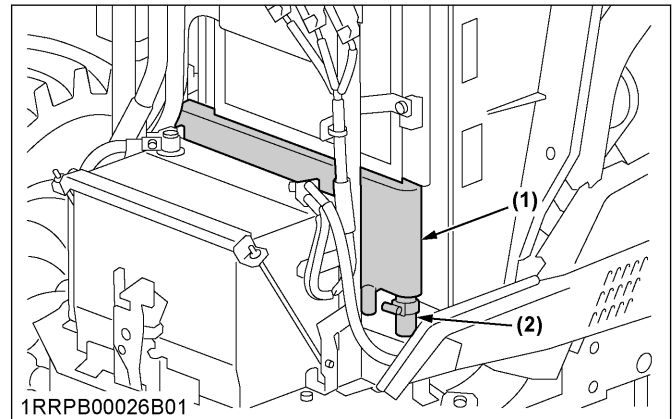
- (1) Oil cooler
(2) Oil cooler line

[L3970]



- (1) Oil cooler
(2) Oil cooler line

[L3770, L4270]

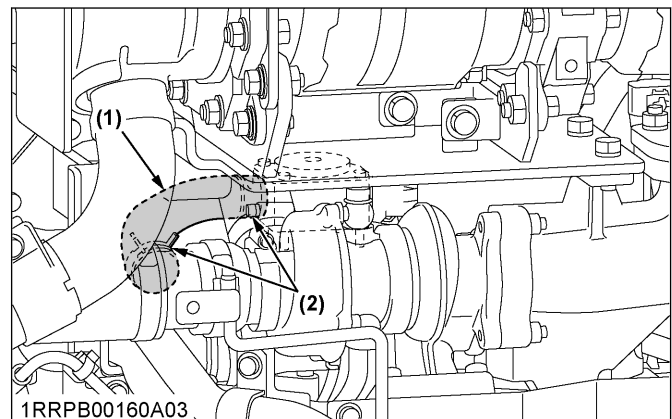


- (1) Oil cooler
(2) Oil cooler line

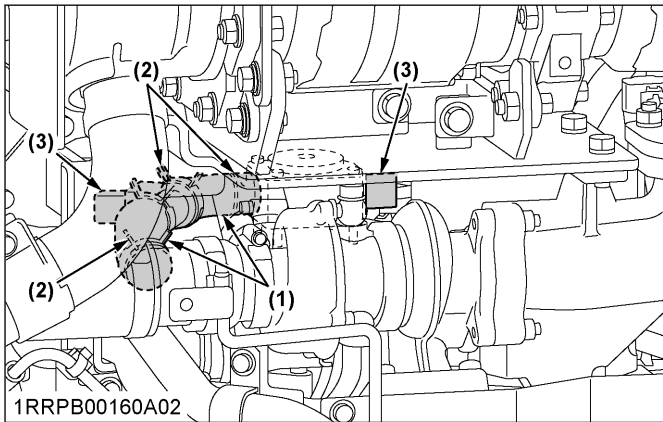
6. Checking the oil separator hose

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

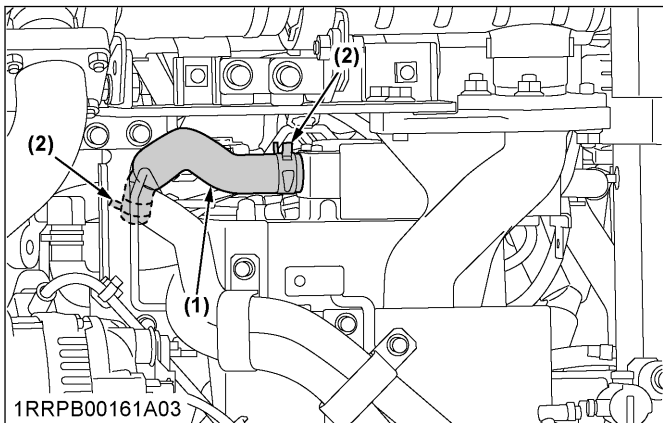
[Premium model without heater]



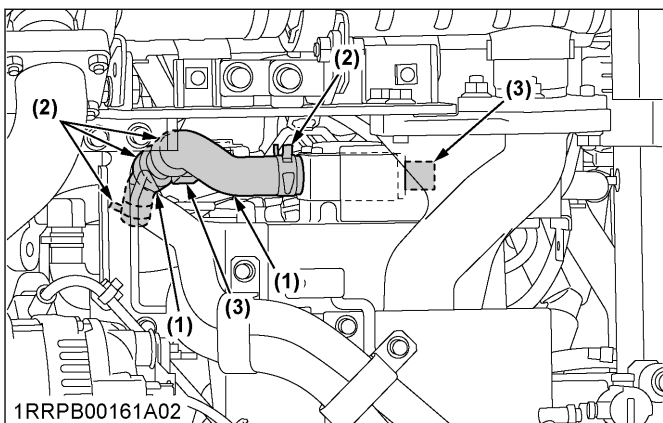
- (1) Oil separator hose
(2) Clamp band

[Premium model with heater]

- (1) Oil separator hose
- (2) Hose clamp
- (3) Antifrost heater for oil separator

[Deluxe model without heater]

- (1) Oil separator hose
- (2) Clamp band

[Deluxe model with heater]

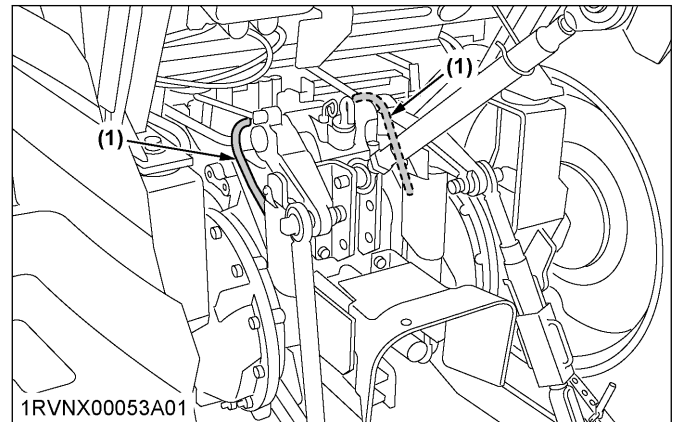
- (1) Oil separator hose
- (2) Hose clamp
- (3) Antifrost heater for oil separator

7. Checking the antifrost heater for oil separator (if equipped)

Contact your local Kubota dealer for this service.

8. Checking the lift cylinder hose

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



- (1) Lift cylinder hose

9. Checking the DPF differential pressure sensor pipe

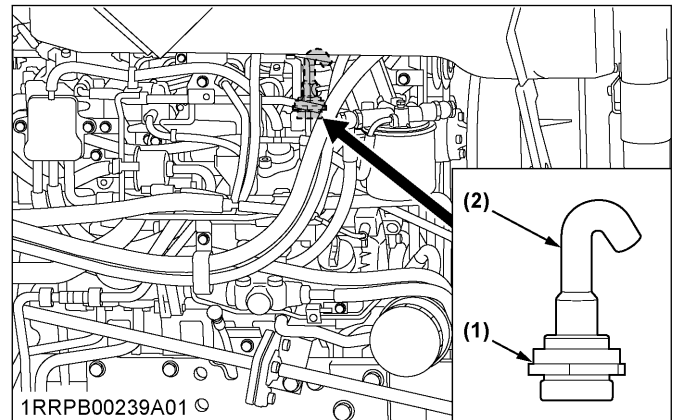
Contact your local Kubota dealer for this service.

10. Checking the EGR pipe

Contact your local Kubota dealer for this service.

11. Checking the relief valve (if equipped)

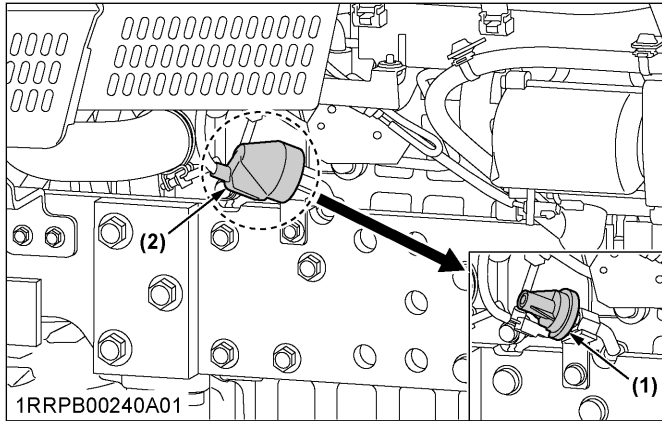
1. Check the breather tube for crack and gas leakage and replace them if necessary.
2. Before winter, check the hoses for crack and the hole of the breather tube for any foreign object stuck in it, and replace them if necessary.



- (1) Relief valve
- (2) Breather tube

12. Checking the CCV internal pressure switch (if equipped)

1. Remove the internal pressure switch cover.
2. Check the terminals, the internal pressure switch, and the others.
3. If any damage or corrosion are found, do not use the machine and contact your local Kubota dealer for repair request.



- (1) CCV internal pressure switch
(2) CCV internal pressure switch cover

13. Checking the air conditioner pipe and hose [CAB model]

1. Check to see that all lines and hose clamps are tight and not damaged.
2. If the hoses and the clamps are found to be worn or damaged, contact your local Kubota dealer for this service.

14. Checking the CAB isolation cushion [CAB model]

Check the cushion for any breakage or fatigue. Replace the cushion if it has deteriorated.

EVERY 2 YEARS

1. Checking the radiator hose (water pipes)

Check the hoses and the clamps.
(See Checking the radiator hose and the clamp on page 212.)

2. Checking the power steering hose

Contact your local Kubota dealer for this service.

3. Checking the oil cooler line

Contact your local Kubota dealer for this service.

4. Checking the oil separator hose

Contact your local Kubota dealer for this service.

5. Checking the lift cylinder hose

Contact your local Kubota dealer for this service.

6. Checking the air conditioner hose [CAB model]

Contact your local Kubota dealer for this service.

7. Replacing the DPF differential pressure sensor hose

Contact your local Kubota dealer for this service.

EVERY 4 YEARS

1. Replacing the fuel hose

Contact your local Kubota dealer for this service.

2. Replacing the intake air line

Contact your local Kubota dealer for this service.

SERVICE AS REQUIRED

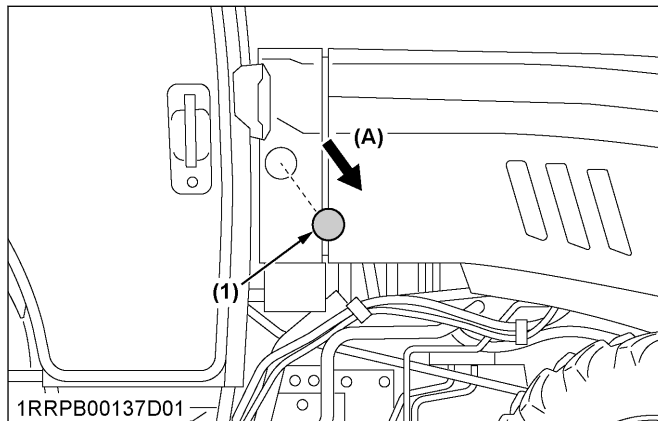
1. Bleeding the fuel system

Air must be removed:

- When the fuel filter or lines are removed.
- When the water is drained from the water separator.
- When the tank is completely empty.
- After the tractor has not been used for a long period of time.

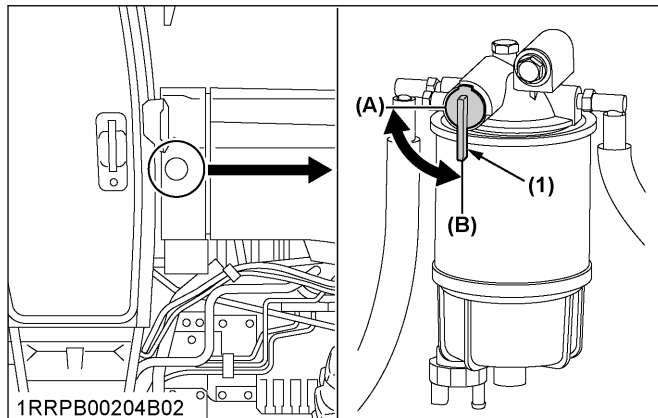
Bleeding procedure is as follows:

1. Fill the fuel tank with fuel, and open the fuel shut-off valve.

[Premium model]

(1) Cap

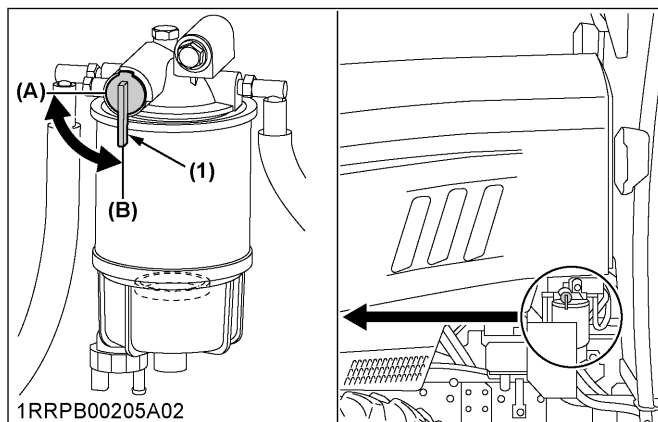
(A) Remove

[Premium model]

(1) Fuel shut-off valve

(A) Close

(B) Open

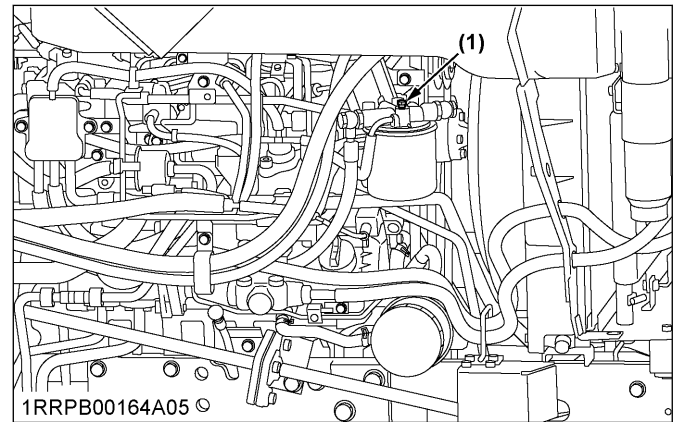
[Deluxe model]

(1) Fuel shut-off valve

(A) Close

(B) Open

2. Loosen the air vent plug on the fuel filter 2 turns or so.



(1) Air vent plug

3. Turn on the key switch and wait for about 1 minute. Then tighten up the air vent plug.
4. Set the hand throttle lever at the minimum speed position and turn the key to the "START" position. If the engine does not start, try it several times at 30 second intervals.

IMPORTANT :

Do not hold key switch at engine start position for more than 10 seconds continuously. If more engine cranking is needed, try again after 30 seconds.

5. Accelerate the engine to remove the small portion of air left in the fuel system.
6. If air still remains and the engine stops, repeat the previous steps.

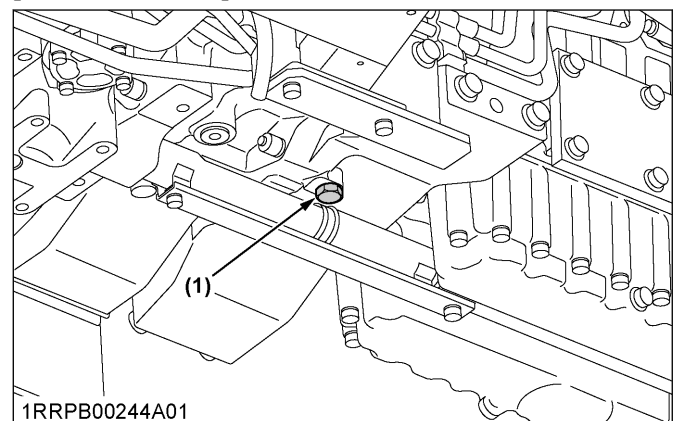
2. Draining the clutch housing water

The tractor is equipped with a drain plug under the clutch housing.

After operating in the rain or snow, or if the tractor has been washed, water may get into the clutch housing.

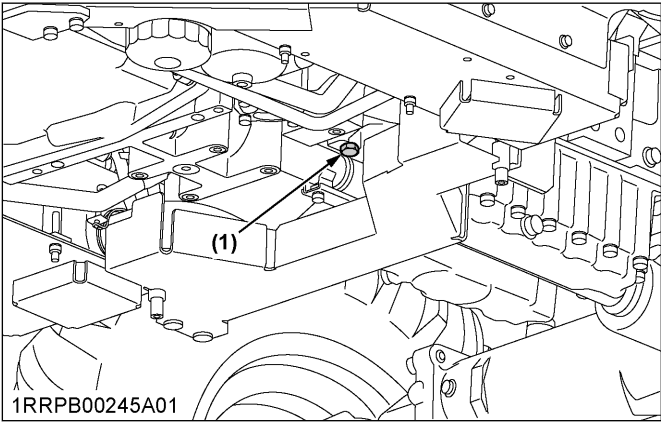
Check it by pushing in the split pin.

If water has entered into the clutch housing, remove the plug and drain the water, then install the plug again.

[Premium model]

(1) Split pin plug

[Deluxe model]



(1) Split pin plug

NOTE :

Since the seal of the HST input shaft has a high internal pressure, the oil seal might not follow and a small amount of oil leak might occur during high speed at low temperature.
There is no need to replace the oil seal when this happens as this is not a failure of the part.

3. Fuses

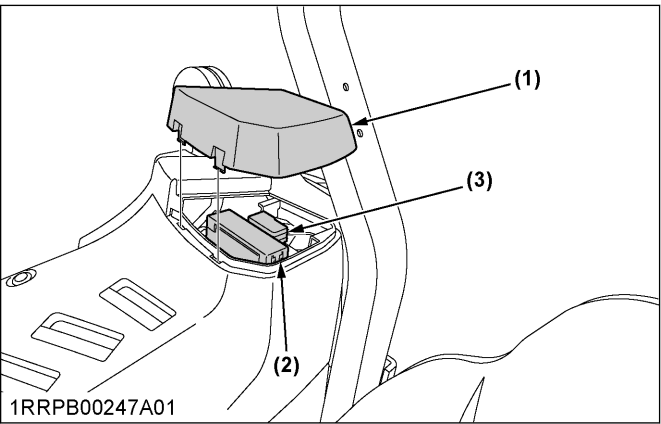
The tractor electrical system is protected from potential damage by fuses.
A blown fuse indicates that there is an overload or short somewhere in the electrical system.
If any of the fuses should blow, replace with a new one of the same capacity.

IMPORTANT :

Before replacing a blown fuse, determine why the fuse blew and make any necessary repairs. Failure to follow this procedure may result in serious damage to the tractor electrical system.
For specific information dealing with electrical problems, read the troubleshooting section of this manual or contact your local Kubota dealer.
(See TROUBLESHOOTING on page 227.)

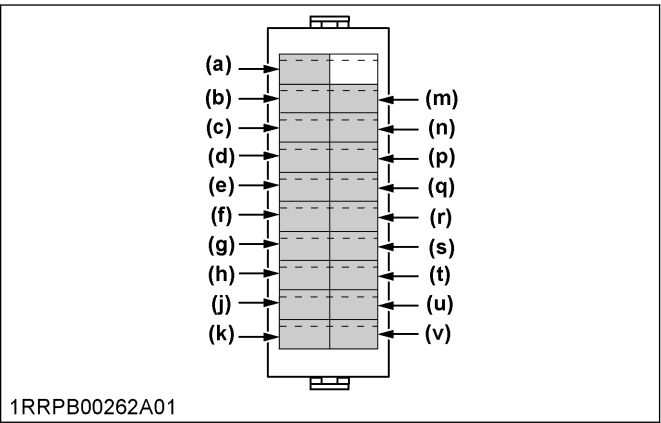
3.1 Replacing the fuse [ROPS model]

1. Remove the fuse cover and replace fuses with new fuses according to the following figures and tables.



(1) Fuse cover
(2) Fuse box 1
(3) Fuse box 2

Fuse box 1



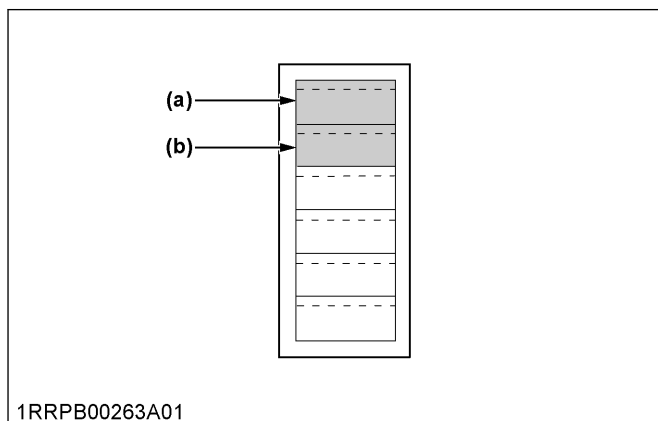
Fuse No.	Capacity (A)	Protected circuit
(a)	5	Instrument panel ignition
(b)	10	ECU ignition
		Diagmaster
(c)	10	Main ECU ignition
(d)	5	Seat switch
		Travel speed sensor
		Rear PTO switch
(e)	5	Jog dial [Premium model]
		DPF switch
		Cruise switch
		Multi-function switch [Premium model]
		Front loader speed up [Deluxe model]
		Panel control switch [Deluxe model]
(f)	10	Light
(g)	5	Head light high beam

(Continued)

Fuse No.	Capacity (A)	Protected circuit
(h)	5	Hood work light
		Signature light [Premium model]
(j)	5	Combination switch (turn)
(k)	15	Electrical power outlet
(m)	5	Instrument panel +B
(n)	20	ECU +B
(p)	5	Main ECU +B
(q)	15	Hazard light
		Flasher
(r)	20	Antifrost heater for oil separator*1
(s)	5	K-OBD connector
(t)	30	Key switch
(u)	30	Starter
(v)	5	Main ECU

*1 This is standard on the cold climate model. For models other than the cold climate model, this is optional.

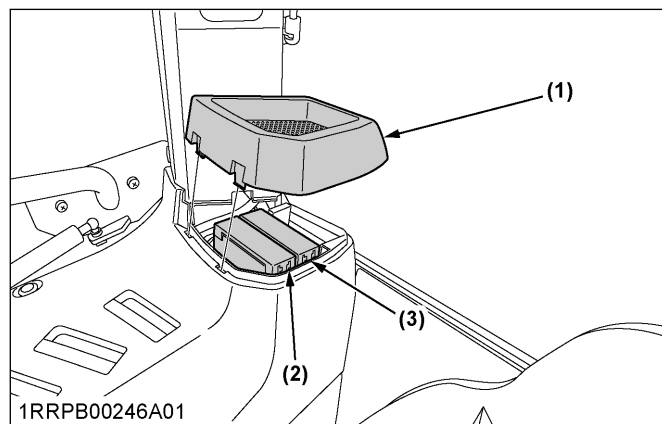
Fuse box 2



Fuse No.	Capacity (A)	Protected circuit
(a)	5	EGR valve
		Air flow sensor
(b)	5	SCV (suction control valve)

3.2 Replacing the fuse [CAB model]

1. Remove the fuse cover, replace with a new fuse according to the following figures and tables.

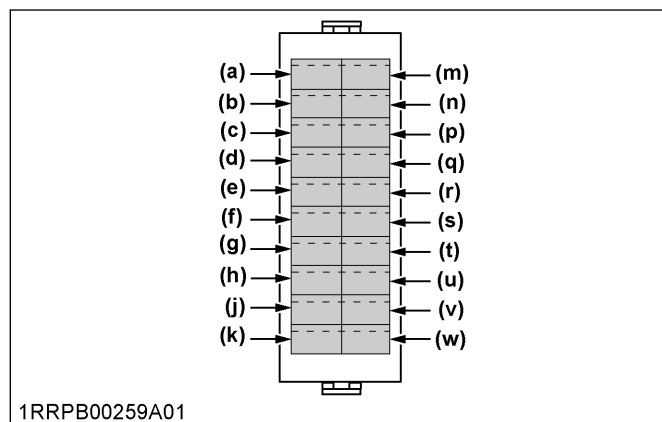


(1) Fuse cover

(2) Fuse box 1

(3) Fuse box 2

Fuse box 1



Fuse No.	Capacity (A)	Protected circuit
(a)	5	Instrument panel ignition
(b)	10	ECU ignition
		Diagmaster
(c)	5	Radio ignition
(d)	10	Main ECU ignition
(e)	5	Seat switch
		Travel speed sensor
		Rear PTO switch
(f)	5	Jog dial [Premium model]
		DPF switch
		Cruise switch
		Multi-function switch [Premium model]
		Front loader speed up [Deluxe model]
(g)	25	Panel control switch [Deluxe model]
		Electrical power outlet

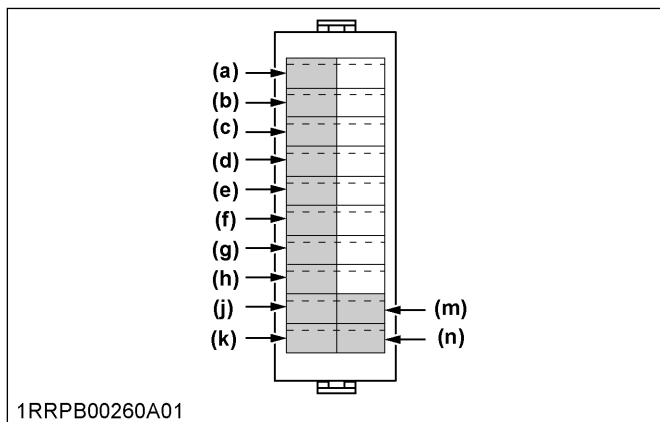
(Continued)

Fuse No.	Capacity (A)	Protected circuit
(h)	15	Cigarette socket [Premium model]
(j)	10	Front loader
(k)	5	Beacon light ^{*1}
(m)	10	Air conditioner control panel
(n)	10	Light
(p)	5	Head light high beam
(q)	5	Hood work light
		Signature light [Premium model]
(r)	5	Back buzzer ^{*1}
(s)	5	Combination switch (turn)
		Horn
(t)	10	Front work light
		Rear work light ^{*2}
(u)	15	Front wiper
		Front washer
(v)	15	Rear wiper ^{*2}
		Rear washer ^{*2}
(w)	5	Main ECU

*1 This is optional on the cold climate model. For models other than the cold climate model, this is not available.

*2 This is standard on the cold climate model. For models other than the cold climate model, this is optional.

Fuse box 2



Fuse No.	Capacity (A)	Protected circuit
(a)	5	Instrument panel +B
(b)	20	ECU +B
(c)	5	Main ECU +B
(d)	10	Hazard light
		Flasher
(e)	25	Blower +B
(f)	20	Antifrost heater for oil separator ^{*1}
(g)	5	Radio +B
		Room light +B
(h)	25	Side defogger ^{*1}
(j)	30	Rear defogger ^{*1}
(k)	5	K-OBD connector
(m)	5	EGR valve
		Air flow sensor
(n)	5	SCV (suction control valve)

*1 This is standard on the cold climate model. For models other than the cold climate model, this is optional.

4. Slow blow fuses

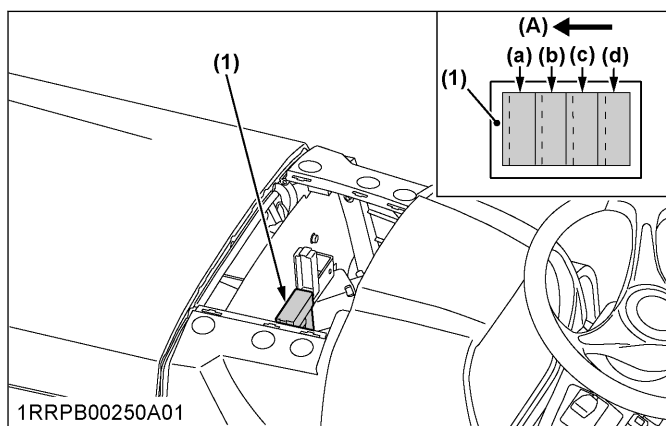
The slow blow fuses are intended to protect the electrical cabling. If any of them has blown out, pinpoint the cause. Never use any substitute, use only a Kubota genuine part. A blown fuse indicates that there is an overload or short somewhere in the electrical system. If replacing with a new fuse, make sure that it has the same capacity.

4.1 Replacing the slow blow fuse [ROPS model]

For Premium model

1. Remove the rear hood upper cover, replace with a new slow blow fuse according to the following figure and table.

To remove the rear hood upper cover, see Rear hood upper cover [Premium model] on page 182.



(1) Slow blow fuse 1

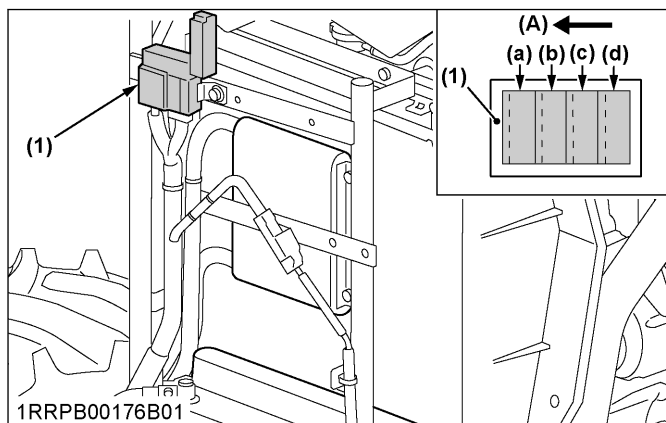
(A) Left side of the tractor

Fuse No.	Capacity (A)	Protected circuit
(a)	50	Alternator
(b)	60	Glow plug
		Starter
(c)	40	ECU +B
		Engine
		Antifrost heater for oil separator*1
(d)	50	Head light
		Combination switch (turn)
		Key switch

*1 This is standard on the cold climate model. For models other than the cold climate model, this is optional.

For Deluxe model

1. Open the hood, replace with a new slow blow fuse according to the following figure and table.



(1) Slow blow fuse 1

(A) Left side of the tractor

Fuse No.	Capacity (A)	Protected circuit
(a)	50	Alternator
(b)	60	Glow plug
		Starter
(c)	40	ECU +B
		Engine
		Antifrost heater for oil separator*1
(d)	50	Head light
		Combination switch (turn)
		Key switch

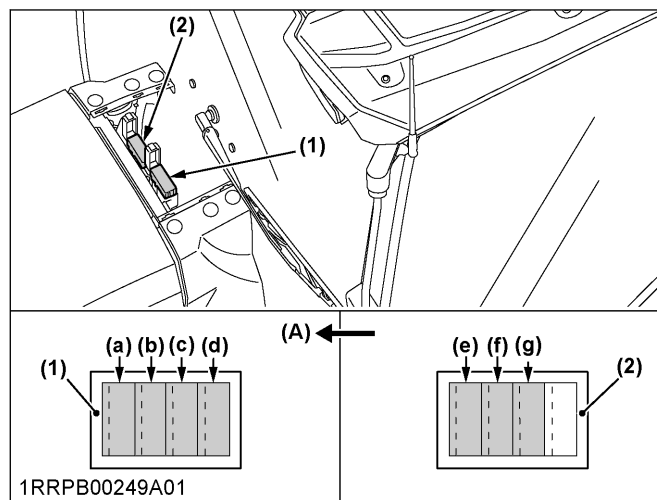
*1 This is standard on the cold climate model. For models other than the cold climate model, this is optional.

4.2 Replacing the slow blow fuse [CAB model]

For Premium model

1. Remove the rear hood upper cover, replace with a new slow blow fuse according to the following figure and table.

To remove the rear hood upper cover, see Rear hood upper cover [Premium model] on page 182.



(1) Slow blow fuse 1

(2) Slow blow fuse 2

(A) Left side of the tractor

Slow blow fuse 1

Fuse No.	Capacity (A)	Protected circuit
(a)	50	Glow plug
(b)	50	Light
		Front wiper
		Front washer
		Buzzer*1
(c)	40	Main ECU
		Alternator switch
(d)	20	Key switch

Slow blow fuse 2

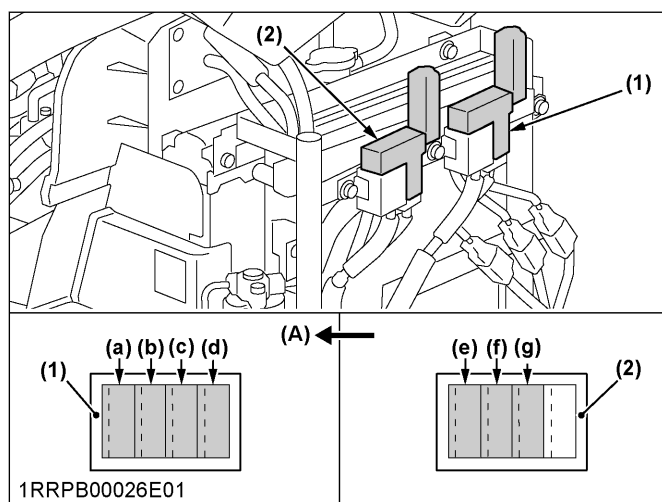
Fuse No.	Capacity (A)	Protected circuit
(e)	50	Rear defogger*2
(f)	50	ECU +B
		Engine
		Antifrost heater for oil separator*2
(g)	30	Starter relay
		Side defogger*2

*1 This is optional on the cold climate model. For models other than the cold climate model, this is not available.

*2 This is standard on the cold climate model. For models other than the cold climate model, this is optional.

For Deluxe model

- Open the hood, replace with a new slow blow fuse according to the following figure and table.



(1) Slow blow fuse 1

(2) Slow blow fuse 2

(A) Left side of the tractor

Slow blow fuse 1

Fuse No.	Capacity (A)	Protected circuit
(a)	50	Glow plug
(b)	50	Light
		Front wiper
		Front washer
		Buzzer*1
(c)	40	Main ECU
		Alternator switch
(d)	20	Key switch

Slow blow fuse 2

Fuse No.	Capacity (A)	Protected circuit
(e)	50	Rear defogger*2
(f)	50	ECU +B
		Engine
		Antifrost heater for oil separator*2
(g)	30	Starter relay
		Side defogger*2

*1 This is optional on the cold climate model. For models other than the cold climate model, this is not available.

*2 This is standard on the cold climate model. For models other than the cold climate model, this is optional.

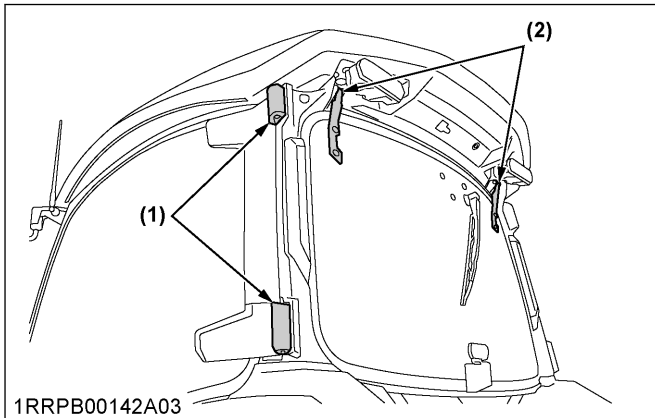
5. Replacing the light bulb

Light	Capacity	
	ROPS	CAB
Headlight	LED	
Tail light	5 W	LED
Hazard and turn signal light (rear)	21 W	LED
Hazard and turn signal light (front)	-	LED
Front work light (hood)	LED	
Room light	-	5 W
Work light	-	LED

6. Replacing the LED light

If the LED head light or the side work LED light is no longer functioning, contact your local Kubota dealer for replacing the LED light.

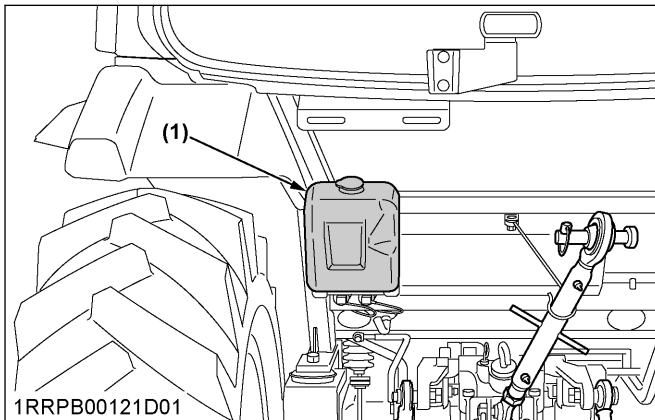
7. Lubricating points [CAB model]



- (1) Door hinge
(2) Rear window hinge

8. Adding washer liquid [CAB model]

Add a proper amount of automobile washer liquid.



- (1) Washer liquid tank

Washer tank capacity	2.0 L (2.1 U.S.qts.)
----------------------	----------------------

9. Checking amount of refrigerant (gas) [CAB model]

WARNING

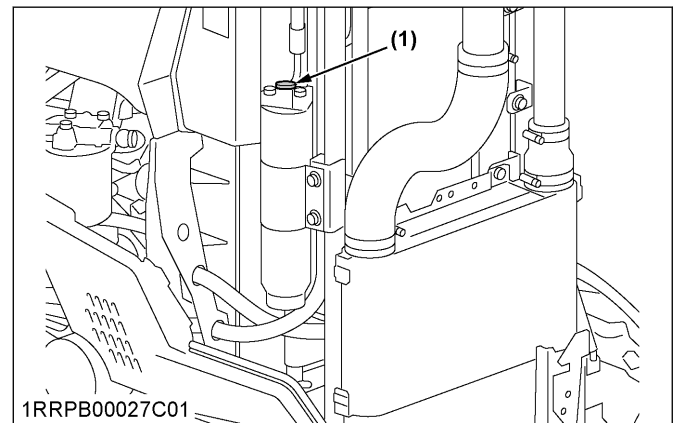
To avoid personal injury or death:

- Liquid contact with eyes or skin may cause frostbite.
- In the event of a leakage, wear safety goggles. Escaping refrigerant can cause severe injuries to eyes.
- In contact with a flame, R134a refrigerant produces a toxic gas.
- Do not disconnect any part of the refrigeration circuit of the air conditioning system. Contact your local Kubota dealer for assistance and service.

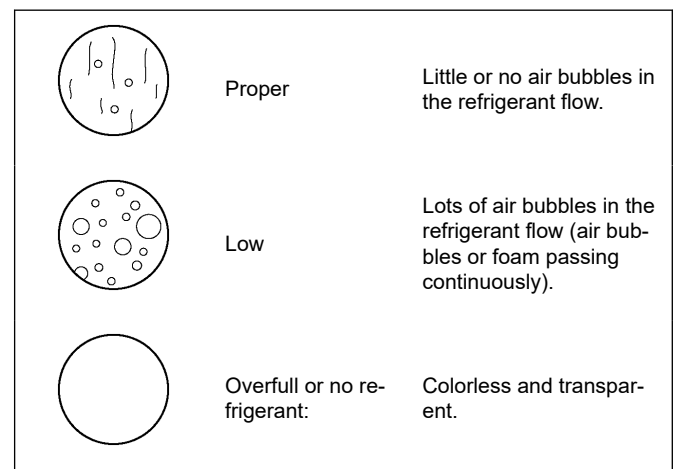
A shortage of refrigerant impairs the air conditioner performance. Check the following points. If it is indicated that the amount of refrigerant is extremely low, ask your dealer to inspect and refill.

Checking procedure

1. Run the air conditioner in the following conditions.
 - Engine speed - About 1500 rpm
 - Temperature control dial - Maximum cooling position
 - Fan switch - Highest blow (Hi)
 - Air conditioner switch - "ON"
2. Look into the sight glass to see if and how the refrigerant is flowing through the circuit.



- (1) Sight glass



IMPORTANT :

Charge only with R134a not R12 refrigerant (gas).

10. Washing the tractor

Misuse of the high pressure washer may cause personal injury or machine damage, as well as the failure or malfunction of the machine. Follow the instruction manual and the labels on the high pressure washer, and use it properly.

CAUTION

To avoid personal injury, set the washing nozzle to spreading water, and keep the distance 2 m away from the machine to prevent the machine from being damaged.

When the water is directed at a pin point area, or when the machine is washed from too close a position with a high pressure flow:

- The cover of the wirings may be damaged or the wiring may be cut off, causing fire.
- The hydraulic hose may be damaged, causing a high pressure oil blow out. This may cause injury.

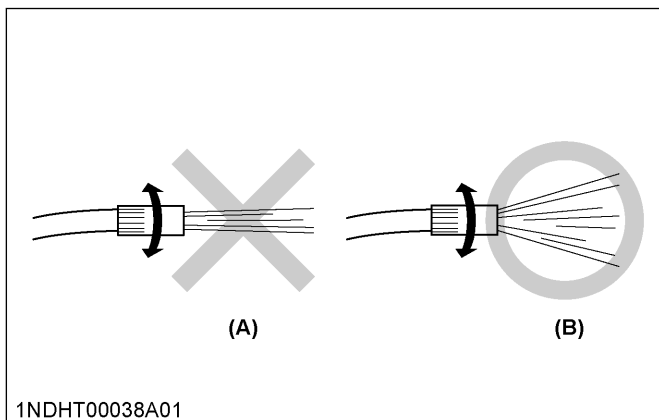
IMPORTANT :

If the machine is not washed as specified, the following peel-off, damage or malfunction may result.

Examples:

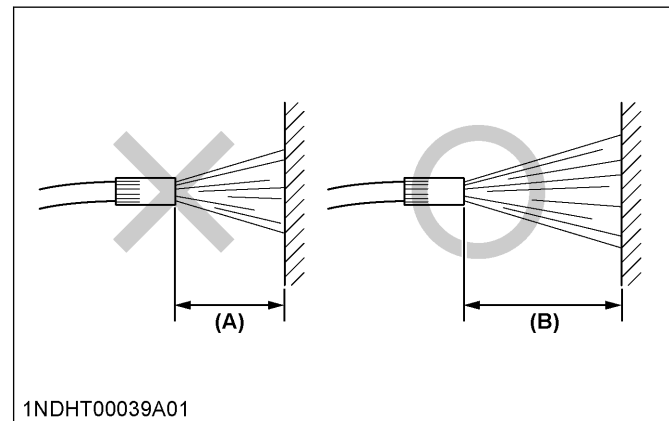
- The stickers or labels may peel away.
- The electronic components, engine compartment, transmission case, CAB and others may get wet inside and adversely affected.
- The crawlers, tires, oil seals and other rubber-based components, the decorative covers and other plastic-based components, and the windows and other glass-based components may get damaged.
- The paints, coatings and platings may peel away.

No high pressure-washer



(A) High pressure
(B) Low pressure

No pressure-washer at short range

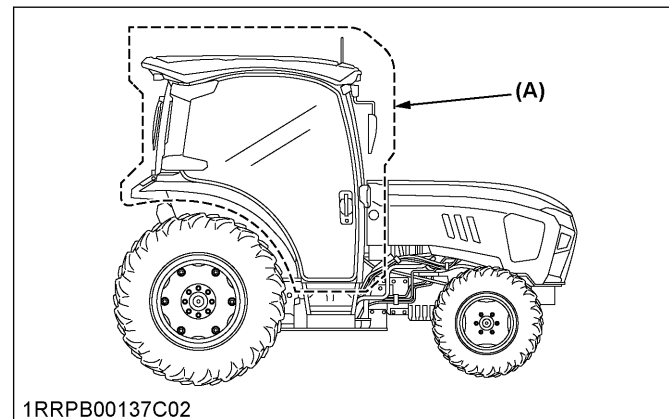


(A) Less than 2 m
(B) More than 2 m

IMPORTANT :

Do not apply high pressure water to the glass part of the CAB or the roof part while washing.

Please lower the pressure or spread the water flow. It will cause water leakage inside the CAB and cause damage to electrical parts.



(A) No high pressure-washer

11. Replacing the fuel hose

Contact your local Kubota dealer for this service.

12. Replacing the intake air line

Contact your local Kubota dealer for this service.

13. Replacing the radiator hose (water pipe)

Contact your local Kubota dealer for this service.

14. Replacing the power steering hose

Contact your local Kubota dealer for this service.

15. Replacing the oil cooler line

Contact your local Kubota dealer for this service.

16. Replacing the oil separator hose

Contact your local Kubota dealer for this service.

17. Replacing the lift cylinder hose

Contact your local Kubota dealer for this service.

18. Replacing the air conditioner hose [CAB model]

Contact your local Kubota dealer for this service.

STORAGE

WARNING

To avoid personal injury or death:

- Do not clean the machine while the engine is running.
- To avoid the danger of exhaust fume poisoning, do not operate the engine indoors without proper ventilation.
- When storing the tractor, remove the key from the key switch to prevent unauthorized persons from operating the tractor and getting injured.

TRACTOR STORAGE

If you intend to store your tractor for an extended period of time, the procedures outlined in this section. These procedures will ensure that the tractor is ready to operate with minimum preparation when it is removed from storage.

1. Check the bolts and nuts for looseness and tighten if necessary.
2. Apply grease to tractor areas where bare metal will rust, and also to pivot areas.
3. Detach the weights from the tractor body.
4. Inflate the tires to a pressure a little higher than usual.
5. Change the engine oil and run the engine to circulate oil throughout the engine block and internal moving parts for about 5 minutes.
6. Keep the PTO clutch control switch at the "DISENGAGE" position while the tractor is stored for a long period of time.
7. With all the implements lowered to the ground, coat any exposed hydraulic cylinder piston rods with grease.
8. Remove the battery from the tractor. Store the battery according to the battery storage procedures. (See Checking the battery condition on page 199.)
9. Keep the tractor in a dry place where the tractor is sheltered from the elements. Cover the tractor.
10. Store the tractor indoors in a dry area that is protected from sunlight and excessive heat.
If the tractor must be stored outdoors, cover it with a waterproof tarpaulin.
Jack the tractor up and place blocks under the front and rear axles so that all 4 tires are off the ground. Keep the tires out of direct sunlight and extreme heat.

IMPORTANT :

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

REMOVING THE TRACTOR FROM STORAGE

1. Check the tire air pressure and inflate the tires if needed.
2. Jack the tractor up and remove the support blocks from under the front and rear axles.
3. Install the battery. Before installing the battery, be sure that it is fully charged.
4. Check the fan belt tension.
5. Check all fluid levels (engine oil, transmission/hydraulic oil, engine coolant, and any attached implements).
6. Start the engine. Observe all gauges.
If all the gauges are functioning properly and have normal readings, move the tractor outside.
Once outside, park the tractor and let the engine idle for at least 5 minutes. Shut off the engine and walk around the tractor and make a visual inspection looking for evidence of oil or water leaks.
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 something is wrong with the engine, refer to the following table for the cause and its corrective measure.

Trouble		Cause	Countermeasure
Engine is difficult to start or will not start.		No fuel flow.	Check the fuel tank and the fuel filter. Replace filter if necessary.
		Air or water is in the fuel system.	- Check to see if the fuel line coupler bolt and nut are tight. - Bleed the fuel system (See Bleeding the fuel system on page 216.)
		In winter, oil viscosity increases, and engine revolution is slow.	- Use oils of different viscosities, depending on ambient temperatures. - Use engine block heater (optional).
		Battery becomes weak and the engine does not turn over quick enough.	- Clean battery cables and terminals. - Charge the battery. - In cold weather, always remove the battery from the engine, charge and store it indoors. Install the battery on the tractor only when the tractor is going to be used.
Insufficient engine power.		- Insufficient or dirty fuel. - The air cleaner is clogged.	- Check the fuel system. - Clean or replace the element.
Engine stops suddenly.		Insufficient fuel.	- Refuel. - Bleed the fuel system if necessary.
Exhaust fumes are colored.	Black	- Fuel quality is poor. - Too much oil. - The air cleaner is clogged.	- Change the fuel and fuel filter. - Check the proper amount of oil. - Clean or replace the element.
	Blue white	- The inside of the exhaust muffler is damp with fuel. - Injection nozzle trouble. - Fuel quality is poor.	- Heat the muffler by applying load to the engine. - Check the injection nozzle. - Change the fuel and fuel filter.
Engine overheats.		Engine overloaded.	Shift to lower gear or reduce load.
		Low coolant level.	Fill cooling system to the correct level. Check radiator and hoses for loose connections or leaks.
		Loose or damaged fan belt.	Adjust or replace fan belt.
		Dirty radiator core or grille screens.	Remove all trash.
		Coolant flow route corroded.	Flush cooling system.

If you have any questions, contact your local Kubota dealer.

Electric control unit	SPN	FMI	DTC	Type of trouble	Action
ECU	101	0	P1C09	Crankcase internal pressure error	If the CCV freezing warning system is activated, stop the engine and contact your local Kubota dealer immediately.
ECU	3246	0	P3004	Exhaust gas temperature sensor 2 voltage (DPF outlet port): Abnormal	Contact your local Kubota dealer. If you want to start the engine, wait for a while until the engine temperature drops.
ECU	3701	0	P3008	Excessive PM5	DPF needs to be replaced; contact your local Kubota dealer.
ECU	3701	15	P3006	Excessive PM3	Immediately park the vehicle and perform regeneration.
ECU	3701	16	P3007	Excessive PM4	Stop driving and contact your local Kubota dealer. Continuing to drive may cause irreparable harm to the DPF and/or engine.
ECU	523589	17	P3012	Low coolant temperature in parked regeneration	Check engine warm-up conditions.
ECU	523590	16	P3013	Parked regeneration time out	The regeneration process failed to finish properly. Contact your local Kubota dealer if you see this frequently.
ECU	523602	0	P3024	High frequency of regeneration	Contact your local Kubota dealer.
ECU	523605	6	P062D	Internal injector drive circuit short	Contact your local Kubota dealer. If you want to start engine, wait for a while until the engine temperature drops.
VCU	29	3	—	Hand throttle sensor (Main)	Contact your local Kubota dealer. With the STALL GUARD or AUTO H-DS/ STALL GUARD mode being selected, the tractor automatically gets in the MANUAL mode.
VCU	29	4	—	Hand throttle sensor (Main)	
VCU	29	8	—	Hand throttle sensor (Main)	
VCU	751	14	—	H-DS high/low switch	Data error; contact your local Kubota dealer.
VCU	1321	4	—	Starter motor relay	Contact your local Kubota dealer. The engine cannot start.
VCU	1321	5	—	Starter motor relay	
VCU	2625	3	—	Hand throttle sensor (Sub)	Contact your local Kubota dealer. With the STALL GUARD or AUTO H-DS/ STALL GUARD mode being selected, the tractor automatically gets in the MANUAL mode.
VCU	2625	4	—	Hand throttle sensor (Sub)	
VCU	3452	14	—	Rear PTO switch	Data error; contact your local Kubota dealer.
VCU	5131	3	—	Range shift lever sensor	Contact your local Kubota dealer. The speed range (H, M and L) is not displayed in the LCD screen. The range gear shift lever still works to select the H, M and L speeds. In selecting M or L, however, the feeling is somewhat different at a start, stop and other actions.
VCU	5131	4	—	Range shift lever sensor	
VCU	5360	4	—	PTO solenoid valve	Contact your local Kubota dealer. The PTO shaft cannot rotate.
VCU	5360	5	—	PTO solenoid valve	
VCU	5360	12	—	PTO solenoid valve	
VCU	520350	19	—	CAN communication error (DBM) If the symptom persists, please contact your dealer.	CAN communication error; contact your local Kubota dealer. if you see this frequently.
VCU	520352	19	—	CAN communication error (ECU) If the symptom persists, please contact your dealer.	CAN communication error; contact your local Kubota dealer if you see this frequently.

(Continued)

TROUBLESHOOTING

Electric control unit	SPN	FMI	DTC	Type of trouble	Action
VCU	521578	19	—	CAN communication error (SWBOX) If the symptom persists, please contact your dealer.	CAN communication error; contact your local Kubota dealer if you see this frequently.
VCU	521407	3	—	iHST swashplate sensor (Main)	Contact your local Kubota dealer. The tractor can travel both forward and backward, but with a drop in maximum speed.
VCU	521407	4	—	iHST swashplate sensor (Main)	
VCU	521407	8	—	iHST swashplate sensor (Main)	
VCU	521408	3	—	iHST swashplate sensor (Sub)	
VCU	521408	4	—	iHST swashplate sensor (Sub)	
VCU	521417	3	—	iHST pedal sensor (Main)	Contact your local Kubota dealer. The speed control pedal cannot be used to run the tractor.
VCU	521417	4	—	iHST pedal sensor (Main)	
VCU	521417	8	—	iHST pedal sensor (Main)	
VCU	521418	3	—	iHST pedal sensor (Sub)	
VCU	521418	4	—	iHST pedal sensor (Sub)	
VCU	521460	4	—	Hi-Lo solenoid valve	Contact your local Kubota dealer. Using the H-DS lever, the Lo speed alone can be selected (Hi speed not selectable). In the HST mode, only the STALL GUARD and MANUAL modes can be selected.
VCU	521460	5	—	Hi-Lo solenoid valve	
VCU	521460	12	—	Hi-Lo solenoid valve	
VCU	521480	4	—	OPC output	Contact your local Kubota dealer. The Operator Presence Control (OPC) system gets activated, and the engine stops itself.
VCU	521480	5	—	OPC output	
VCU	521480	12	—	OPC output	
VCU	524107	5	—	Proportional solenoid valve (iHST forward)	Contact your local Kubota dealer. The tractor cannot travel forward (backward only).
VCU	524107	6	—	Proportional solenoid valve (iHST forward)	
VCU	524107	8	—	Proportional solenoid valve (iHST forward)	
VCU	524107	12	—	Proportional solenoid valve (iHST forward)	
VCU	524107	20	—	Proportional solenoid valve (iHST forward)	
VCU	524107	21	—	Proportional solenoid valve (iHST forward)	
VCU	524107	23	—	Proportional solenoid valve (iHST forward)	
VCU	524108	5	—	Proportional solenoid valve (iHST reverse)	Contact your local Kubota dealer. The tractor cannot travel backward (forward only).
VCU	524108	6	—	Proportional solenoid valve (iHST reverse)	
VCU	524108	8	—	Proportional solenoid valve (iHST reverse)	
VCU	524108	12	—	Proportional solenoid valve (iHST reverse)	
VCU	524108	20	—	Proportional solenoid valve (iHST reverse)	
VCU	524108	21	—	Proportional solenoid valve (iHST reverse)	
VCU	524108	23	—	Proportional solenoid valve (iHST reverse)	

OPTIONS

LIST OF OPTIONS

Contact your local Kubota dealer for further details.

- Engine block heater for extremely cold weather starting
- Front end weights for front ballast
- Rear wheel weights for rear ballast
- Double acting remote hydraulic control valve
- Top and tilt kit (for scraper)
- Swinging drawbar
- Clevis for drawbar
- Audio [Deluxe CAB model]
- Rear view monitor [CAB model]
- Trailer coupler
- Beacon switch [CAB model]
- Rear wiper [CAB model]
- Rear work light [CAB model]
- Rear defogger [CAB model]
- Side defogger [CAB model]
- Door mirror [CAB model]
- Mid PTO [Premium CAB model]
- Antifrost heater for oil separator
- Label kit (Canada, French)

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