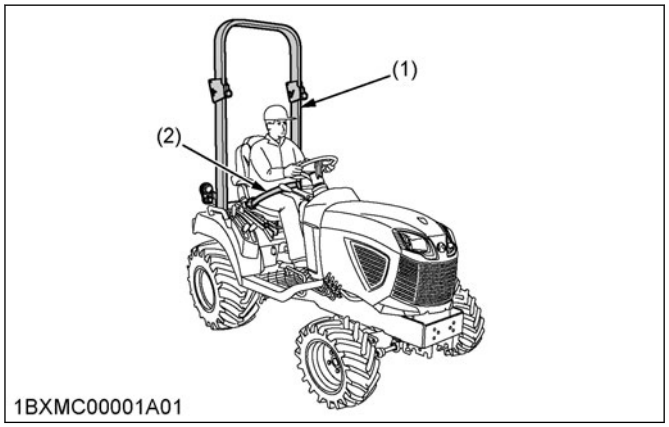
Do not use the seat belt if a foldable ROPS is down or there is no ROPS. Check the seat belt regularly and replace if frayed or damaged.



(1) ROPS *(2) Seat belt*

PRECAUTIONS FOR OPERATING THE TRACTOR

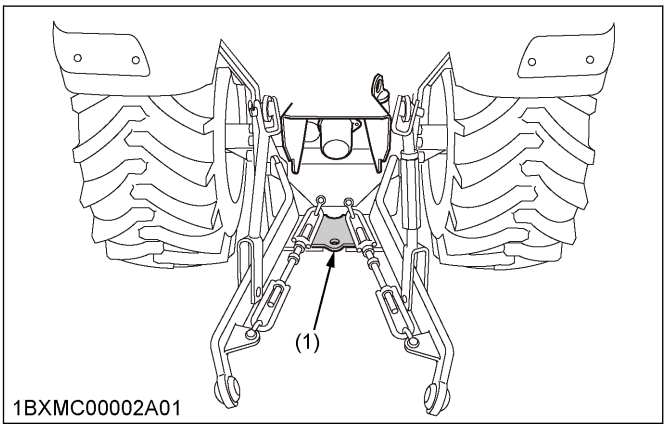
Operator safety is a priority. Safe operation, specifically with respect to overturning hazards, entails understanding the equipment and environmental conditions at the time of use. Some prohibited uses which can affect overturning hazards include traveling and turning with implements and loads carried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

1. Precautions for starting to operate the tractor

- Always sit in the operator's seat when starting the engine or operating levers or controls. Adjust seat per 1. Operator's seat on page 31. Never start the engine while you are 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 the power take-off (PTO) is disengaged or **off**. Fasten the seat belt if the tractor is equipped with a CAB, a fixed ROPS, or a foldable ROPS in the upright and locked position.
- Do not start the engine by shorting across starter terminals or bypassing the safety start switch. The tractor may start in gear and move if 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-system (OPC) are functioning correctly before each time you use the tractor. Test safety systems. See 2. Checking the engine start system on page 80 and 3. Checking the OPC (operator presence control) system on page 80.
  Do not operate unless they are functioning correctly.

2. Precautions for working the tractor

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



(1) Hitch

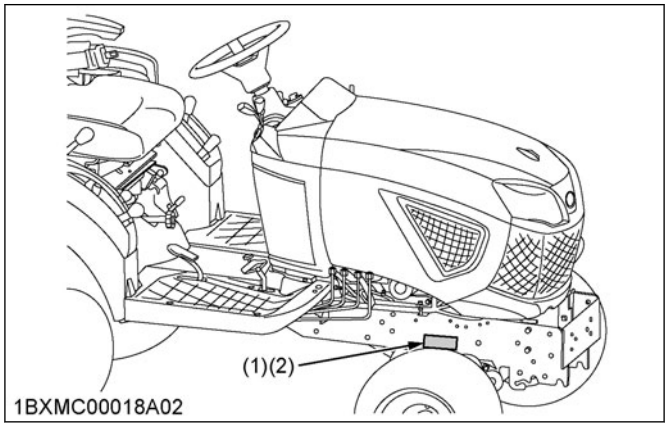
- Keep all shields and guards in place. Replace any shield or guard that are missing or damaged.
- Avoid sudden starts. To avoid upsets, slow down when turning, on uneven ground, and before stopping.
- The tractor cannot turn with the differential locked. Do not attempt to turn with the differential locked as it could be dangerous.
- Do not operate near ditches, holes, embankments, or other ground surface features which may collapse under the weight of the tractor. The risk of tractor upset is even higher when the ground is loose or wet. Tall grass can hide obstacles, so 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 you are operating levers or controls.
- Do not stand between the tractor and the implement or trailed vehicle unless parking brake is applied.
- Do not operate or tow at speeds exceeding specific travel speed.

SERVICING OF THE TRACTOR

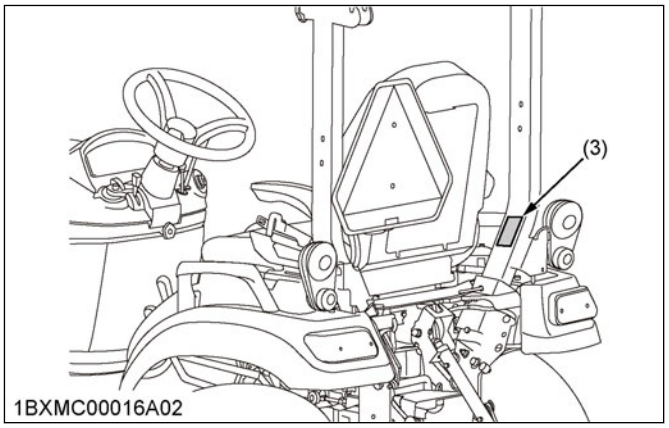
DEALER SERVICE

Your dealer has knowledge of your new tractor and has the desire to help you get the most value from it.
After reading this manual thoroughly, you will find that you can perform some of the regular maintenance yourself.
However, when your tractor needs parts or major service, be sure to see your KUBOTA Dealer.
For service, contact the KUBOTA Dealership from which you purchased your tractor or your local KUBOTA Dealer. When in need of parts, be prepared to give your dealer the serial numbers of both the tractor and the engine.
Locate the serial numbers now and record them in the space provided.

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

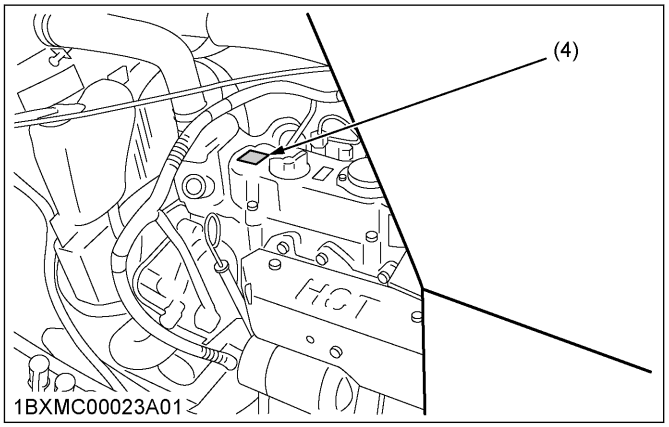


(1) Tractor identification plate (2) Tractor serial number

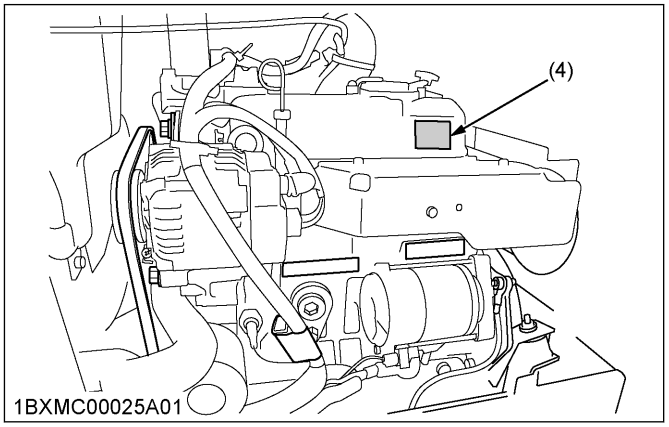


(3) ROPS identification plate (ROPS serial No.)

BX1880



BX2380



SPECIFICATIONS

Model			BX1880	BX2380	BX2680
Dimensions	Wheel base		1400 mm (55.1 in.)		
	Min. ground clearance		148 mm (5.8 in.)	166 mm (6.5 in.)	
	Tread	Front	930 mm (36.6 in.)		
		Rear	820 mm (32.2 in.)		
Weight (with ROPS)			606 kg (1336 lbs.)	660 kg (1455 lbs.)	690 kg (1521 lbs.)
Clutch			N/A		
Traveling system	Tire	Front Turf/Bar/ industrial	16x7.50-8	18x8.50-10	
		Rear Turf/Bar/ industrial	24x12.00-12	26x12.00-12	
	Steering		Hydrostatic type power steering		
	Transmission		Main: Hydrostatic transmission, High-Low gear shift (2 forward, 2 reverse)		
	Brake		Wet disk type		
	Min. turning radius		2.3 m (7.5 ft)		
Hydraulic unit	Hydraulic control system		Directional control, auto-return lever system		
	Pump capacity		23.5 L/min. (6.2 gals/min)		
	System pressure		12.3 MPa to 12.8 MPa (126 kgf/cm to 130 kgf/cm) [1790 psi to 1850 psi]		
	3-point hitch		SAE Category 1		
	Max. lift force*3	At lift points	5120 N to 5390 N (1151 lbs. to 1213 lbs.)		
		24in. behind lift points	3040 N (680 lbs.)		
	Remote control valve coupler (rear: Option)	System	2 valves		
		Coupler	ISO 7241-1 series A		
	Remote control valve coupler (front: Option)	System	2 valves		
		Coupler (fitting)	ISO 7241-1 series B		
PTO	Rear PTO		SAE 1-3/8, 6 splines		
		Revolution	STD (540 rpm)		
	Mid PTO		USA No.5 (KUBOTA 10-tooth) involute spline		
		Revolution	STD (2500 rpm)		

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

*1 Manufacturer's estimate

*2 SAE J1995

*3 See and check IMPLEMENT LIMITATION TABLES on page 22.

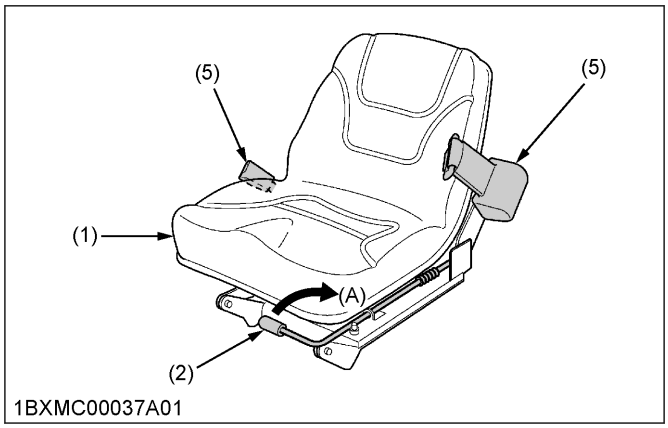
1. Operator's seat

WARNING

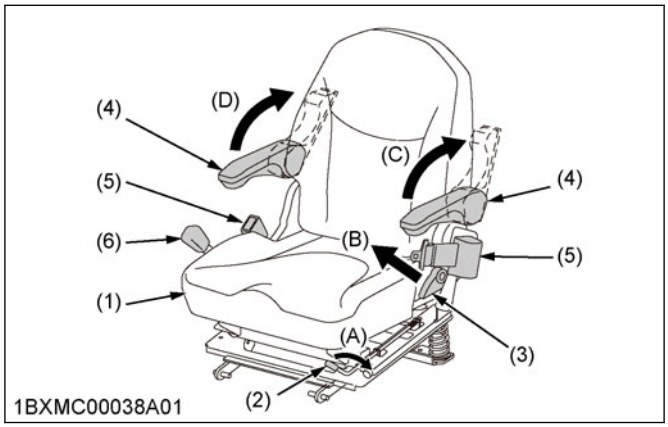
To avoid serious injury or death:

- **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.**

[BX1880]



[BX2380 and BX2680]



(1) Seat
(2) Position adjust lever
(3) Backrest tilt adjust lever
(4) Arm rest
(5) Seat belt
(6) Hydraulic control lever
(A) Pull up
(B) Pull
(C) 100 deg.
(D) 130 deg.

Travel adjustment

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

Tilt adjustment [BX2380 and BX2680]

Pull the backrest-tilt-adjust-lever and tilt the backrest to the desired position.

Arm rest

Arm rest LH opens to 100 deg..
Arm rest RH opens to 130 deg..

When operating hydraulic control lever, open the arm rest RH up to 130 deg.. Opening the arm rest RH up to 130 deg. will prevent your elbow from hitting the arm rest RH.

IMPORTANT :

- **After adjusting the operator's seat, be sure to check that the seat is properly locked.**
- **Be sure the operator's seat is out of contact with the top link.**

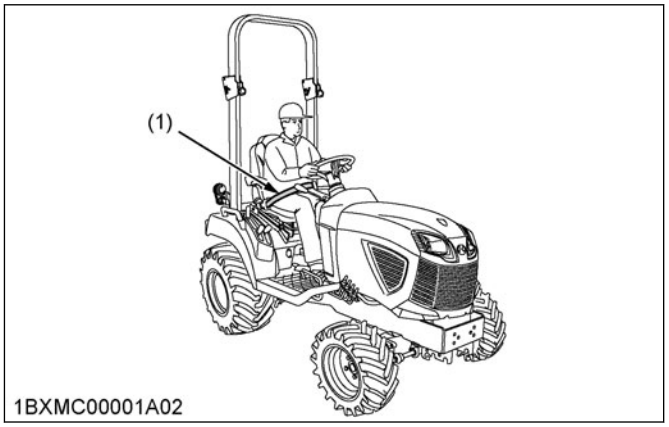
2. Seat belt

WARNING

To avoid serious injury or death:

- **Always use the seat belt when the ROPS is installed.**
- **Do not use the seat belt if the tractor is not equipped with ROPS.**

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



(1) Seat belt

3. Brake pedal and parking brake lock pedal

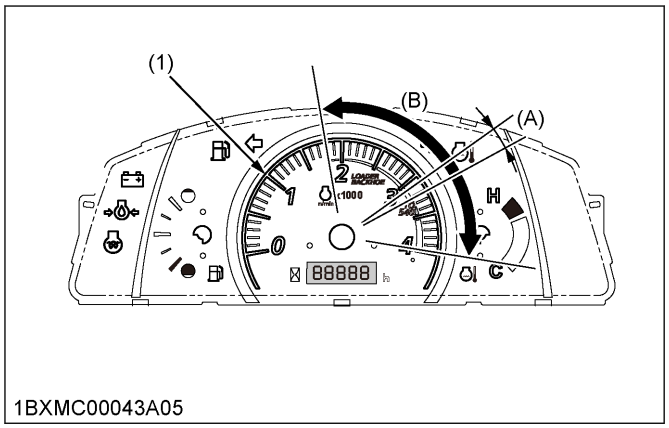
WARNING

To avoid serious injury or death:

- **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. Know the difference between 2-wheel drive and 4-wheel drive and use them carefully.**

Recommended Engine Speed

Implement	Recommended engine speed
PTO 540	Use within yellow range
Loader	Use within orange range



(1) Tachometer *(B) Orange range*
(A) Yellow range

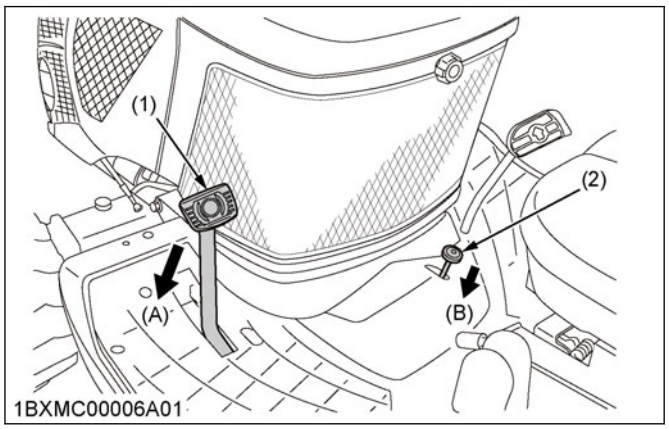
PARKING THE TRACTOR

When parking the tractor, be sure to set the parking brake.

WARNING

To avoid serious injury or death:
Before getting off the tractor

- **Always set the parking brake and lower all implements to the ground.**
  Leaving the transmission in gear with the engine stopped will not prevent the tractor from accidental rolling.
- **Stop the engine and remove the key.**



(1) Brake pedal *(B) Push down parking brake lock pedal while depressing brake pedal*
(2) Parking brake lock pedal
(A) Depress

Before getting off the tractor, follow the following procedure

1. Disengage the PTO.
2. Lower all implements to the ground.
3. Place all control levers in their **neutral** positions.
4. Set the parking brake.
   See *"To set the parking brake"* in 3.1 How to use the parking brake on page 32.
5. Stop the engine.
6. Remove the key.

If it is necessary to park the tractor on an incline, be sure to chock the wheels to prevent accidental rolling of the tractor.

TECHNIQUES FOR OPERATING THE TRACTOR

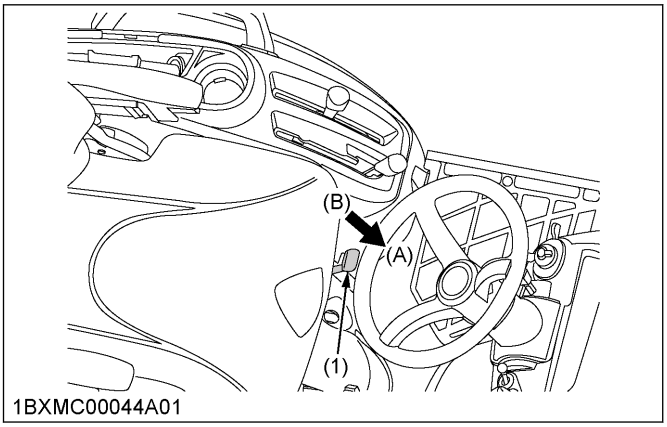
1. Differential lock

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 attempt to turn with the differential lock engaged.**
- **Be sure to 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 then turn together, which reduce slippage of the rear wheels.
The differential lock is maintained only while the differential-lock-pedal is depressed.



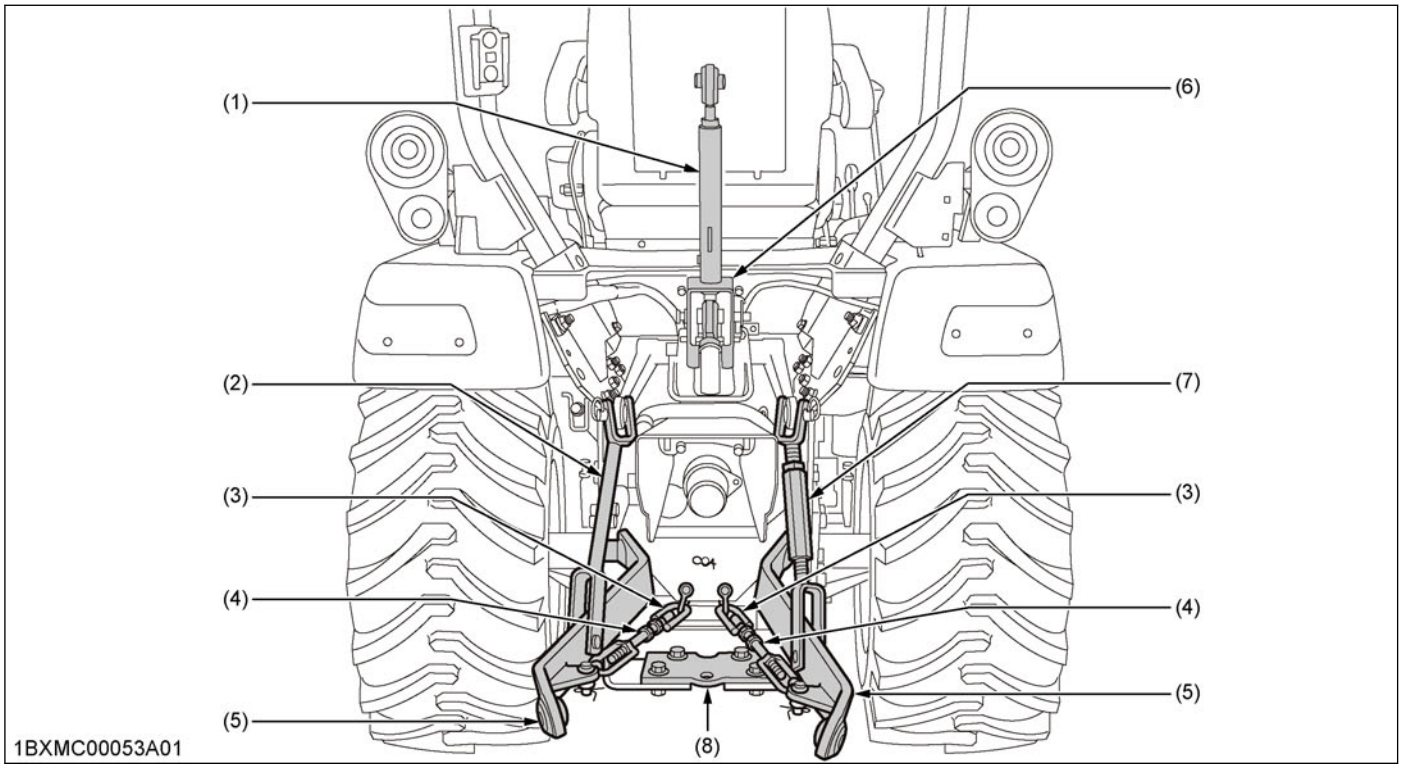
(1) Differential lock pedal *(B) Release to disengage*
(A) Press to engage

IMPORTANT :

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

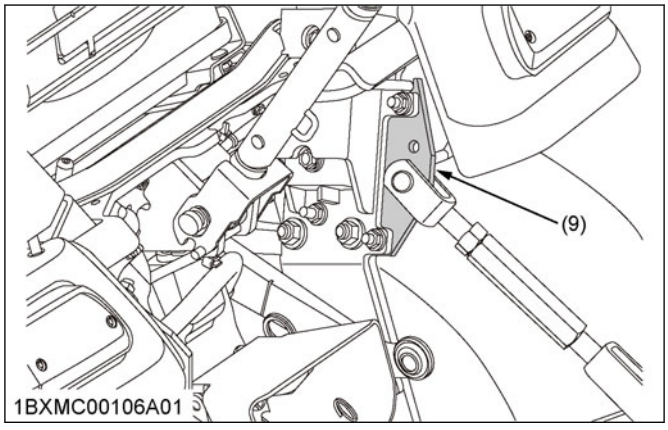
3-POINT HITCH AND DRAWBAR

OVERVIEW OF 3-POINT HITCH AND DRAWBAR



(1) Top link
(2) Lifting rod (left)
(3) Check chains
(4) Turnbuckle
(5) Lower link
(6) Top link holder
(7) Lifting rod (right)
(8) Hitch
(9) Holder plate

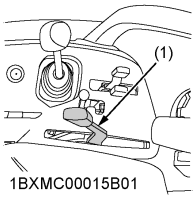
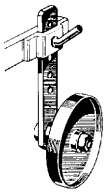
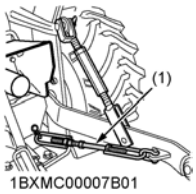
Use the holder plate to hold the lower link higher while mowing with mid-mount mower only over uneven terrain.



(9) Holder plate

2. Hydraulic control unit use reference chart

In order to use the hydraulics properly, the operator must know the following chart. Though this information may not be applicable to all types of implements and soil conditions, it is useful for general conditions.

Implement	 1AGAIAZAP122A **Soil condition**	 *(1) Hydraulic control lever*	 1AGAIAZAP070A **Gauge wheel**	 *(1) Check chains*
Moldboard plow	Light soil, medium soil, heavy soil	Hydraulic control	YES/NO	Loose Adjust the check chains so that the implement can move 5 cm to 6 cm (2.0 in. to 2.4 in.) laterally. The check chains should be tight enough to prevent excessive implement movement when implement is in raised position.
Disc plow	-			
Harrower (spike type, springtooth type, and disc type)				
Sub-soiler				
Weeder, ridger			YES	Tighten
Earthmove, digger scraper, and manure fork rear carrier			YES/NO For implements with gauge wheels, set the hydraulic control lever to the **lowered (down)** position all way.	
Mower (mid-and rear-mount type), hayrake, and tedder				

BALLAST

⚠ WARNING

To avoid serious injury or death:

- **You will need the additional ballast for transporting the 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

IMPORTANT :

- **Do not overload tires.**
- **Add no more weight than indicated in the following table.**

Maximum weight	125 kg (275 lbs.)

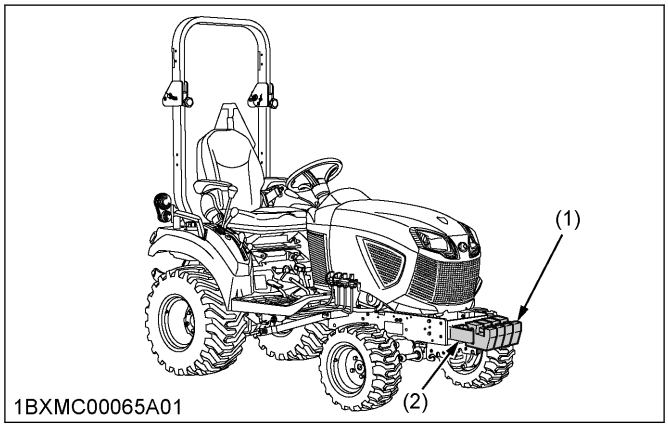
Add weights if needed to improve traction or for stability. Heavy pulling and heavy rear mounted implements tend to lift front wheels. Add enough ballast to maintain steering control and prevent tip over.
Remove weight when no longer needed.

Front end weights (option)

The front end weights can be attached to the bumper.
See your implement operator's manual for required number of weights or consult your local KUBOTA Dealer to use it.

NOTE :

- **Besides the weight, a front weight bracket and mounting bolt kit(s) are required for mounting the weight.**



(1) Front end weights (option) (2) Front weight bracket (option)

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.

Liquid ballast in rear tires

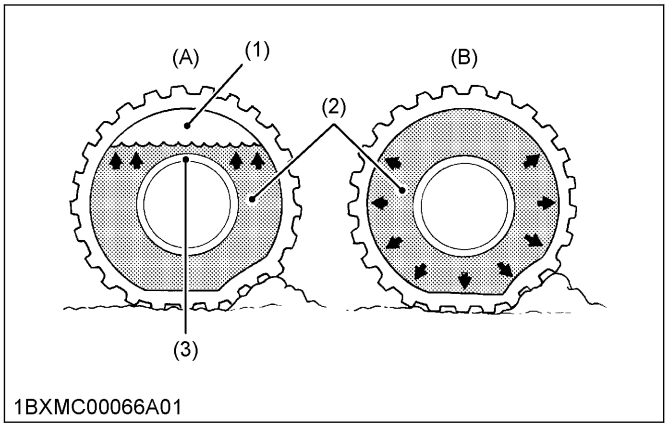
The weight should be added to the tractor in the form of liquid ballast.
Water and calcium chloride solution provides safe economical ballast. Using the liquid ballast properly will prevent tires, tubes, or rims from damaging. The addition of calcium chloride is recommended to prevent the water from freezing. The addition of calcium chloride for weighting the wheels has the full approval of the tire companies. See your tire dealer for this service.

Liquid weight per tire (75 percent filled)

Tire sizes	24x12.00-12 [BX1880]	26x12.00-12 [BX2380 and BX2680]
Slush free at -10 ℃ (14 ℉) Solid at -30 ℃ (-22 ℉) [Approx. 1 kg (2 lbs.) $CaCl_2$ per 4 L (1 gal) of water]	35 kg (77 lbs.)	45 kg (99 lbs.)
Slush free at -24 ℃ (-11 ℉) Solid at -47 ℃ (-52 ℉) [Approx. 1.5 kg (3.5 lbs.) $CaCl_2$ per 4 L (1 gal) of water]	38 kg (84 lbs.)	50 kg (110 lbs.)
Slush free at -47 ℃ (-52 ℉) Solid at -52 ℃ (-62 ℉) [Approx. 2.25 kg (5 lbs.) $CaCl_2$ per 4 L (1 gal) of water]	44 kg (97 lbs.)	56 kg (123 lbs.)

IMPORTANT :

- **Do not fill tires with water or solution more than the correct percentage of full capacity as shown in the following table to the level of valve stem at 12 o'clock position.**



(1) Air
(2) Water
(3) Valve stem
(A) Correct
(B) Incorrect

1. Biodiesel fuel (BDF)

B0-B20 biodiesel fuels (BDF)
You can use mixed diesel fuels containing 20% or less biodiesel under the following conditions.

IMPORTANT :
- **Concentrations greater than B5 (5%) are not approved for common rail engines and engines with aftertreatment device. Using concentrations greater than B5 (5%) can cause damage and reduce engine life.**
- **Refuel and use the fuel 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
- You can use blended diesel fuels containing 6% through 20% BDF (B6-B20) which comply with American society for testing and materials (ASTM) D7467 standard, as revised, without adversely affecting the performance and durability of the engine and the components of the fuel system.
- Any mineral-oil-diesel-fuel, if used, must conform to ASTM D975 (or the European EN590) Standard, as revised.
  B100 fuel used to generate 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.
- Allowable blended fuel is mineral-oil-diesel-fuel blended with B100 (for example 100% BDF).
  The blended fuel ratio shall be less than 20% B100 and 80% or more diesel fuel.
  Purchase the B100 source used for biodiesel blends from an accredited BQ-9000 marketer or producer.
  You can find more information about qualified marketer(s) and producer(s) at *http://www.bq-9000.org* .

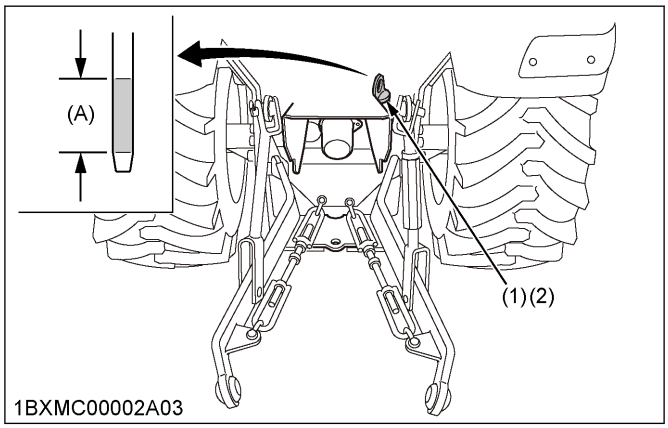
Product warranty, emission, and other precautions
- The engine-emission-control-system was certified according to current regulations based on the use of non-BDF. When using BDF, the owner is advised to check applicable local and federal emission regulations, and comply with all of them.
- BDF may cause restricted or clogged fuel filters during cold weather conditions, resulting in the engine not operating properly.
- BDF encourages the growth of microorganisms which may cause degradation of the fuel. degradation of the fuel may cause corrosion of the fuel line or reduce the fuel filter flow earlier than expected.
- BDF inherently absorbs moisture which may cause degradation of the fuel earlier than expected. To avoid absorbing moisture of BDF, drain the water separator and the fuel-filter-port often.
- Do not use biodiesel whose concentrations higher than 20% (for example, greater than B20).
  Higher concentrated biodiesel will affect engine performance and fuel consumption, and degradation of the fuel system components may occur.
- Do not readjust the engine-fuel-control-system because readjusting it will violate the emission-control-levels for which the equipment was approved.
- Compared with soybean-based and rapeseed-based feedstock, palm-oil-based feedstock has a thicker consistency (for example, higher viscosity) at lower temperatures.
  Consequently, palm-oil-based feedstock may reduce performance of the fuel filter, particularly during cold weather conditions.
- The KUBOTA warranty, as specified in the Owner's Warranty Information Guide, only covers flaws in product materials and workmanship. Accordingly, The KUBOTA warranty do not cover any problems that may arise due to the use of poor quality fuels that fail to meet the preceding requirements, whether biodiesel or mineral-oil-based.

Routine using
- Avoid spilling BDF onto painted surfaces because this may damage the finish. If the fuel is spilled, immediately wipe clean and flush with soapy water to avoid permanent damage.
- When using BDF, you are advised to maintain a full tank of the fuel, especially overnight and during short term storage, to reduce condensation within the tank. Be sure to tighten the fuel cap after refueling to prevent moisture build up within the tank. Water in the biodiesel mixture will damage the fuel filters and may damage the engine components.

Maintenance Requirements when using BDF B0 through B5
Follow the oil-change-intervals recommended by referring to the SERVICE INTERVALS on page 69. Extended oil-change-intervals may result in premature wear or engine damage.

Maintenance Requirements when using BDF B6 through B20
The maintenance interval for fuel related parts changes.
See the following table for the new maintenance interval.

3. If the transmission fluid level is too low, add new fluid to the prescribed level at the oil inlet.
   See LUBRICANTS, FUEL, AND COOLANT on page 71.



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

5. Checking the coolant level

WARNING

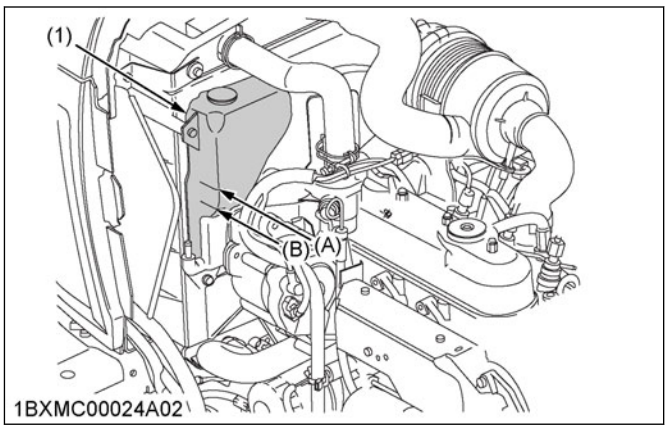
To avoid serious injury or death:

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

IMPORTANT :

- **If the radiator cap has to be removed, follow the preceding warning and securely retighten the radiator cap.**
- **Use clean, fresh, soft water and anti-freeze to fill the recovery tank.**
- **If water should leak, consult your local KUBOTA Dealer.**

1. Check to see that the coolant level is between the "**H**" and "**L**" marks of the recovery tank.
2. When the coolant level drops due to evaporation, add soft water only. In case of leakage, add antifreeze and soft water in the specified mixing ratio up to the "**H**" level.
   See 1. Flushing the cooling system and changing the coolant on page 90.



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

6. Cleaning the panel and the radiator screen

WARNING

To avoid serious injury or death:

- **Be sure to stop the engine and remove the key before removing the screen.**
- **Before checking or cleaning the panel, wait long enough until it cools down.**

IMPORTANT :

- **The panel and the radiator screen must be clean from debris to prevent the engine from overheating and to allow good air intake for the air cleaner.**
- **Be sure to reinstall the panel on the pillar completely to prevent the invasion of dust.**
- **Be sure to stop the engine to avoid personal injury and to allow good air intake for air cleaner.**

1. Check the panel and the radiator screen to be sure that they are clean from debris.

3. **Shift the range-gear-shift-lever to the neutral "N" position.**
4. **Check whether the speed-control-pedal is in the neutral position.**
5. **Shift the PTO-clutch-lever to the off position.**

[Test 1] Switches for the operator's seat and the speed control pedal

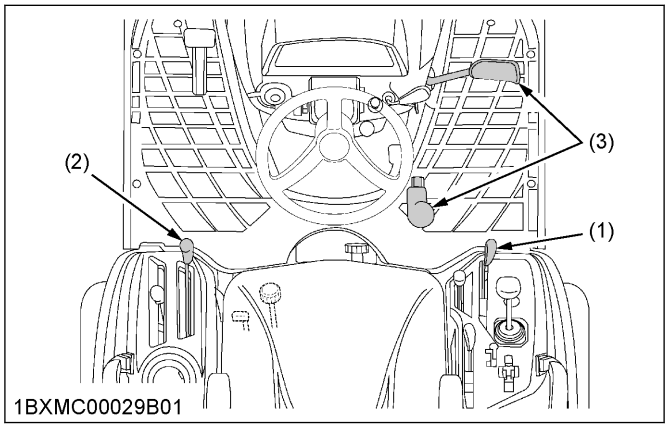
1. Start the engine.
2. Depress the speed-control-pedal.
3. Stand up.
   Do not get off the machine.

The engine must shut off after approximately one second. If it does not stop, consult your local KUBOTA Dealer.

[Test 2] Switches for the operator's seat and the PTO clutch lever

1. Start the engine.
2. Engage the PTO-clutch-lever.
3. Stand up.
   Do not get off the machine.

The engine must shut off after approximately one second. If it does not stop, consult your local KUBOTA Dealer.



(1) Range gear shift lever (Hi-Lo)
(2) PTO clutch lever
(3) Speed control pedal

4. Checking the wheel bolt torque

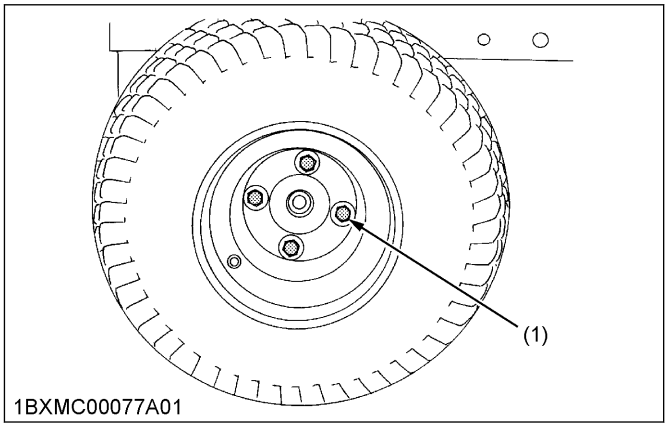
WARNING

To avoid serious injury or death:

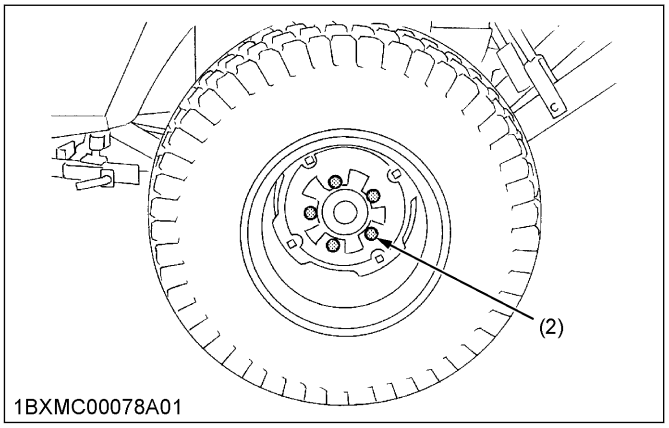
- **Never operate the tractor with a loose rim, wheel, or axle.**
- **Any time bolts are loosened, retighten to the specified torque.**
- **Check all bolts frequently and keep them tight.**

1. Check the wheel bolts regularly especially when new.
2. If they are loose, tighten them as follows.

Front



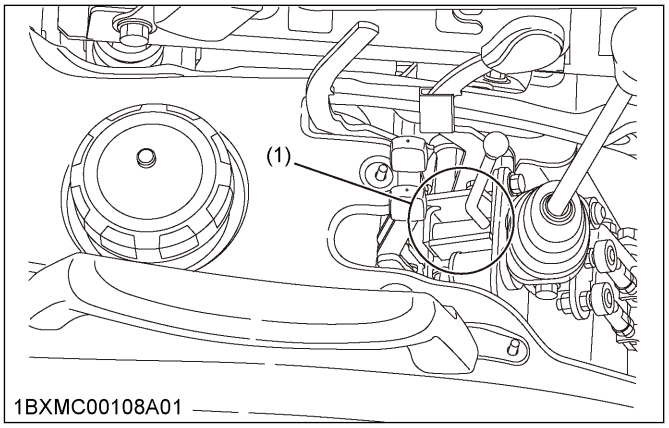
Rear



(1) 149.2 N·m to 179.0 N·m (15.2 kgf·m to 18.3 kgf·m) (110 lbf·ft to 132 lbf·ft)
(2) 108.5 N·m to 130.2 N·m (11.1 kgf·m to 13.3 kgf·m) (80 lbf·ft to 96 lbf·ft)

5. Cleaning the lock lever shaft

1. Before you use the lock lever, clean the lever-movable-area (1).

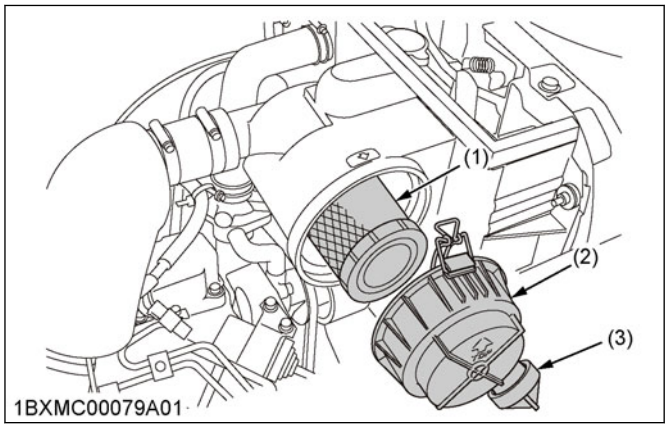


(1) Lever movable area

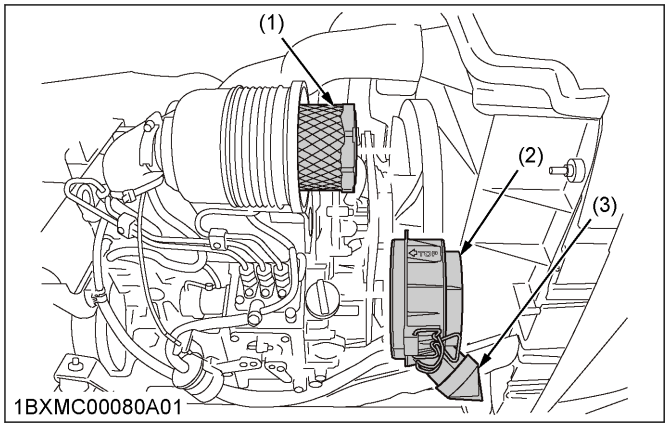
4. Replace the air cleaner element as the following table.

Replacing the air cleaner element	Every 1000 hours or every 1 year whichever comes faster

BX1880 and BX2380



BX2680



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

Evacuator valve

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

3. Checking the fuel filter

WARNING

To avoid serious injury or death:

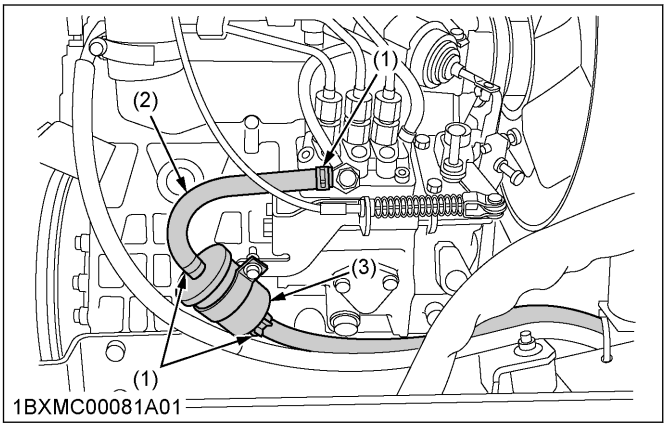
- **Stop the engine and remove the key before checking the fuel lines and the fuel filter.**
- **Check the fuel lines periodically. The fuel lines are subject to wear and aging. Fuel may leak out onto the running engine, causing a fire.**

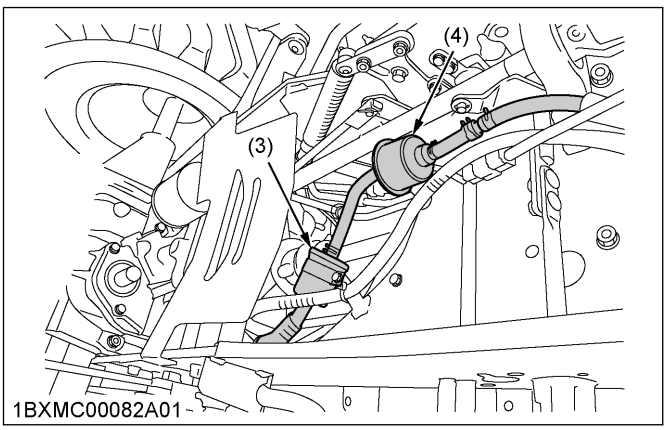
IMPORTANT :

- **When the fuel line is disconnected for maintenance or repair, plug both ends of the fuel line with a clean plug of suitable size to prevent dust and dirt from entering. You must take particular care of the fuel filter in order to avoid dust and dirt getting into the fuel system. Entrance of dust and dirt causes malfunction of the fuel pump.**

The fuel line is made of rubber and ages regardless of service period.

1. Inspect the fuel filter.
2. After inspection of the fuel filter, if the fuel line and clamps are found damaged or deteriorated, replace them.
3. Check the fuel filter. If the fuel filter is clogged by debris or contaminated by water, replace it.





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

NOTE :

- **If the fuel line is removed, be sure to properly bleed the fuel system.**
  See 1. Bleeding the fuel system on page 94.

4. Adjusting the fan belt tension

WARNING

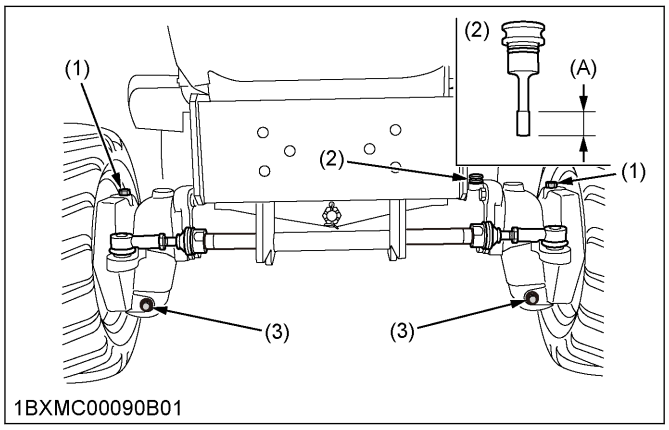
To avoid serious injury or death:

6. Fill with new front-axle-case-oil up to the upper notch on the dipstick.
   See LUBRICANTS, FUEL, AND COOLANT on page 71.

   IMPORTANT :
   - **After the following minutes, check the front-axle-case-oil level again. If the front-axle-case-oil level is lower than the prescribed level shown in the following figure, add the front-axle-case-oil to prescribed level.**

Checking the front axle case oil level	10 minutes after filling with new front axle case oil

7. After filling with front-axle-case-oil, reinstall the oil gauge and breather plugs.



(1) Breather plug
(2) Oil gauge with dipstick
(3) Drain plug
(A) Front axle case oil level is acceptable within this range

5. Replacing the fuel filter element

- Consult your local KUBOTA Dealer for replacing the fuel filter element.

SERVICE EVERY 800 HOURS

1. Adjusting the engine valve clearance

- Consult your local KUBOTA Dealer for adjusting the engine valve clearance.

SERVICE EVERY 1000 HOURS OR 1 YEAR

1. Replacing of the air cleaner element

Replace the air cleaner element every 1000 hours or every 1 year whichever comes faster.
See 2. Cleaning the air cleaner element on page 83.

SERVICE EVERY 1500 HOURS

1. Checking the injection pressure of the fuel injection nozzle

- Consult your local KUBOTA Dealer for checking the injection pressure of the fuel injection nozzle.

SERVICE EVERY 2000 HOURS OR 2 YEAR

1. Flushing the cooling system and changing the coolant

⚠ WARNING
To avoid serious injury or death:
- **Do not remove the radiator cap while the coolant is hot. When the coolant is cool, slowly rotate the radiator cap to the first stop and allow sufficient time for excess pressure to escape before removing the radiator cap completely.**

IMPORTANT :
- **Do not start the engine without coolant.**
- **Use clean, fresh soft water and the anti-freeze to fill the radiator and the recovery tank.**
- **When mixing the anti-freeze with water, the anti-freeze mixing ratio is the following percentage.**

Anti-freeze mixing ratio with water	50%

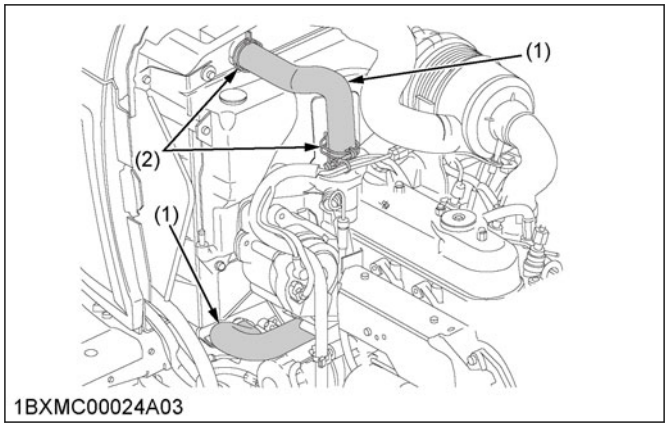
- **Securely tighten the radiator cap. If the radiator cap is loose or improperly fitted, water may leak out and the engine could overheat.**

Be sure to flush the cooling system and to change the coolant once every 2000 hours or every two years whichever comes faster.

Coolant capacity (with recovery tank)	BX1880	2.9 L (3.06 U.S.qts.)
	BX2380	3.1 L (3.3 U.S.qts.)
	BX2680	3.3 L (3.5 U.S.qts.)

1. Stop the engine and let it cool down.
2. To drain the coolant, open the radiator-drain-plug or the engine-drain-plug and remove the radiator cap. The radiator cap must be removed to completely drain the coolant.
3. After all coolant is drained, close the drain plug.
4. Fill the radiator with clean soft water and the cooling-system-cleaner.
5. Follow directions of the instruction of cooling-system-cleaner.

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



(1) Radiator hoses (2 pcs) (2) Hose clamps (4 pcs)

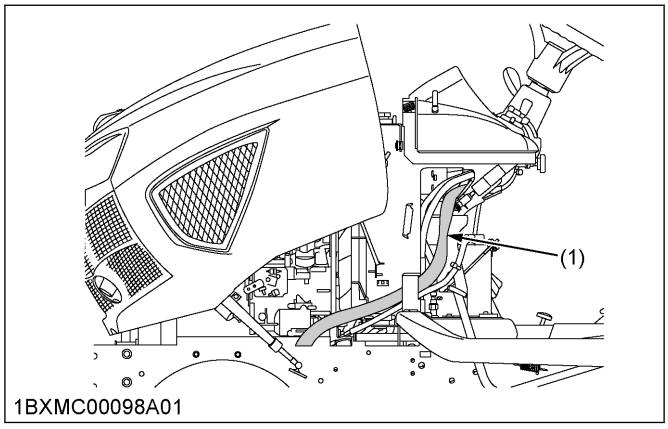
3. Checking the power steering line

WARNING

To avoid serious injury or death:

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

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



(1) Power steering pressure hose

4. Checking the fuel lines

WARNING

To avoid serious injury or death:

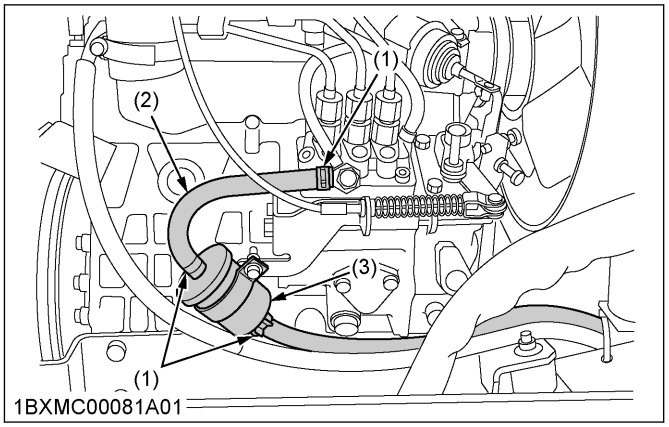
- **Stop the engine and remove the key before checking the fuel lines and fuel filter.**
- **Check the fuel lines periodically. The fuel lines are subject to wear and aging. Fuel may leak out onto the running engine, causing a fire.**

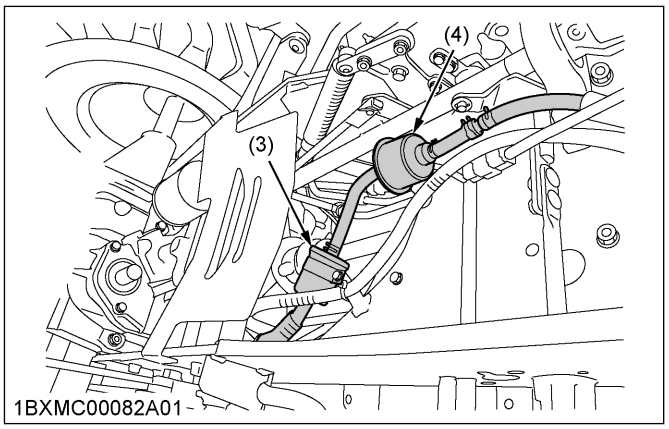
IMPORTANT :

- **When the fuel line is disconnected for maintenance or repair, plug both ends of the fuel line with a clean plug of suitable size to prevent dust and dirt from entering. You must take particular care of the fuel lines in order to avoid dust and dirt getting into the fuel system. Entrance of dust and dirt causes malfunction of the fuel pump.**

The fuel line is made of rubber and ages regardless of service period.

1. Inspect the fuel lines.
2. After inspection, if the fuel lines and clamps are found damaged or deteriorated, replace them.
3. Check the fuel filter. If the fuel filter is clogged by debris or contaminated by water, replace it.





(1) Pipe clamps (3) Fuel filter
(2) Fuel line (4) Fuel pump

OPTIONS

OPTION ITEMS

Consult your local KUBOTA Dealer for further details of the following options.

- 16 x 7.5-8 Bar Tire [BX1880]
- 24 x 12.0-12 Bar Tire [BX1880]
- 18 x 8.5-10 Bar Tire [BX2380 and BX2680]
- 26 x 12.0-12 Bar Tire [BX2380 and BX2680]
- 18 x 8.5-10 Ind. Tire [BX2380 and BX2680]
- 26 x 12.0-12 Ind. Tire [BX2380 and BX2680]
- Arm rest [BX1880]
- Speed set device (cruise control) [BX1880]
- Grille guard
- Engine block heater
  For facilitating starting and reducing warm-up-period in cold weather
- Rear work light
  For high visibility for night work
- Front end weights
  For front ballast
- Rear wheel weight
- Sunshade for ROPS
- Dual-double acting remote valve
- Ballast box
- Male quick hitch
- Mid PTO Driveline
  - Chute rotator
  - Chute deflector
  - Sweeper
- Tool box