

OPERATOR'S MANUAL

KUBOTA TRACTOR

MODELS L2800 · L3400



1AGAPAAAP0020

READ AND SAVE THIS MANUAL

KUBOTA



SAFE OPERATION

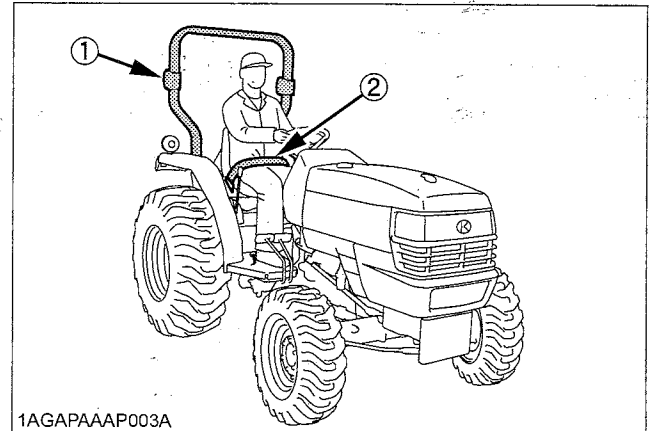
Careful operation is your best insurance against an accident.

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.

1. BEFORE OPERATING THE TRACTOR

1. Know your equipment and its limitations. Read this entire manual before attempting to start and operate the tractor.
2. Pay special attention to the danger, warning and caution labels on the tractor.
3. 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. 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.) 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 a ROPS because welding, bending, drilling, grinding, or cutting may weaken the structure. A damaged CAB or ROPS structure must be replaced, not repaired or revised. If any structural member of the CAB or ROPS is damaged, replace the entire structure at your local KUBOTA Dealer.

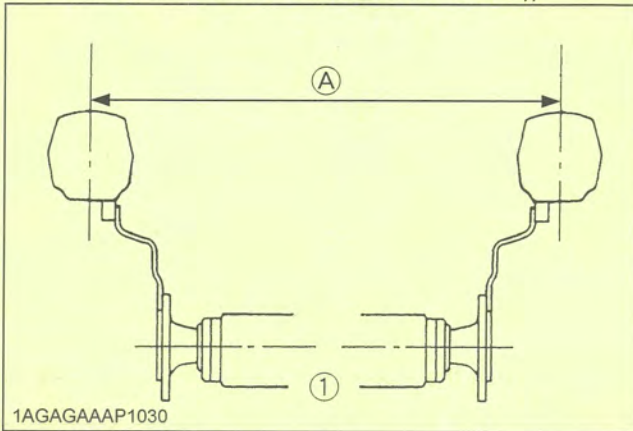


(1) ROPS

(2) Seat belt

4. 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 or there is no ROPS. Check the seat belt regularly and replace if frayed or damaged.
5. Do not operate tractor or any implement attached to it while under the influence of alcohol, medication, controlled substances or while fatigued.
6. Carefully check the vicinity before operating tractor or any implement attached to it. Check for overhead clearance which may interfere with a CAB or ROPS. Do not allow any bystanders around or near tractor during operation.
7. Before allowing other people to use your tractor, explain how to operate and have them read this manual before operation.
8. Never wear loose, torn, or bulky clothing around tractor. It may catch on moving parts or controls, leading to the risk of an accident. Use additional safety items, e.g. hard hat, safety boots or shoes, eye and hearing protection, gloves, etc., as appropriate or required.
9. Do not allow passengers to ride on any part of the tractor at anytime. The operator must remain in the tractor seat during operation.
10. Check brakes, clutch, and other mechanical parts for improper adjustment and wear. Replace worn or damaged parts promptly. Check the tightness of all nuts and bolts regularly. (For further details, see "MAINTENANCE" section.)
11. Keep your tractor clean. Dirt, grease, and trash build up may contribute to fires and lead to personal injury.
12. Use only implements meeting the specifications listed under "IMPLEMENT LIMITATIONS" in this manual or implements approved by KUBOTA.

13. 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 improve stability. Follow the safe operating procedures specified in the implement or attachment manual.
14. 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" section))



(1) Rear wheels

(A) Tread Width

15. Do not modify the tractor. Unauthorized modification may affect the function of the tractor, which may result in personal injury.

2. OPERATING THE TRACTOR

◆ Starting

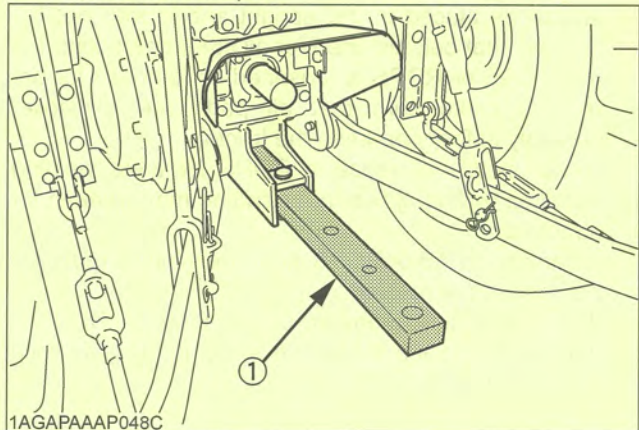
1. Always sit in the operator's seat when starting engine or operating levers or controls.
2. Before starting the engine, make sure that all levers (including auxiliary control levers) are in their neutral positions, that the parking brake is engaged, and that both the clutch and the Power Take-Off (PTO) are disengaged or "OFF".

Fasten the seat belt if the tractor has a CAB, a fixed ROPS or a foldable ROPS in the upright and locked position.

3. Do not start engine by shorting across starter terminals or bypassing the safety start switch. Machine may start in gear and move if normal starting circuitry is bypassed.
 4. Do not operate or idle engine in a non-ventilated area. Carbon monoxide gas is colorless, odorless, and deadly.
 5. Check before each use that operator presence controls are functioning correctly. Test safety systems. (See "EVERY 50 HOURS, Checking Engine Start System" in "PERIODIC SERVICE" section)
- Do not operate unless they are functioning correctly.

◆ Working

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



(1) Drawbar

2. Keep all shields and guards in place. Replace any that are missing or damaged.
3. Avoid sudden starts. To avoid upsets, slow down when turning, on uneven ground, and before stopping.
4. The tractor cannot turn with the differential locked and attempting to do so could be dangerous.

5. 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.
6. Watch where you are going at all times. Watch for and avoid obstacles. Be alert at row ends, near trees, and other obstructions.
7. When working in groups, always let the others know what you are going to do before you do it.
8. Never try to get on or off a moving tractor.

◆ 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 they do.

1. Never assume that children will remain where you last saw them.
2. Keep children out of the work area and under the watchful eye of another responsible adult.
3. Be alert and shut your machine down if children enter the work area.
4. Never carry children on your machine. There is no safe place for them to ride. They may fall off and be run over or interfere with your control of the machine.
5. Never allow children to operate the machine even under adult supervision.
6. Never allow children to play on the machine or on the implement.
7. Use extra caution when backing up. Look behind and down to make sure area is clear before moving.
8. When parking your machine if at all possible park on a firm, flat and level surface; if not, park across a slope. Set the parking brake(s), lower the implements to the ground, remove the key from the ignition and lock the cab door (if equipped) and chock the wheels.

◆ Operating on slopes

Slopes are major factor related to loss-of-control and tip-over accidents, which can result in severe injury or death. All slopes require extra caution.

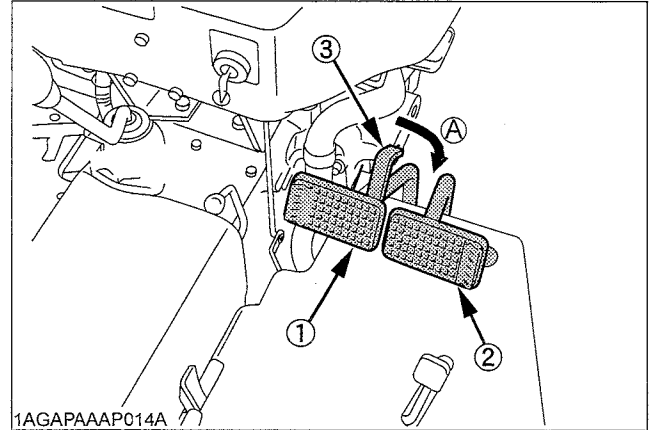
1. To avoid upsets, always back up steep slopes. If you cannot back up the slope or if you feel uneasy on it, do not operate on it. Stay off slopes too steep for safe operation.
2. Driving forward out of a ditch, mired condition or up a steep slope increases the risk of a tractor to be upset backward. Always back out of these situations. Extra caution is required with four-wheel drive models because their increased traction can give the operator false confidence in the tractor's ability to climb slopes.
3. Keep all movement on slopes slow and gradual. Do not make sudden changes in speed or direction.
4. Avoid disengaging the clutch or changing gears speed when climbing or going down a slope. If on a slope disengaging the clutch or changing gears to neutral could cause loss of control.

5. To improve stability on slope, set widest wheel tread as shown in "TIRE, WHEEL AND BALLAST" section. Follow recommendations for proper ballasting.

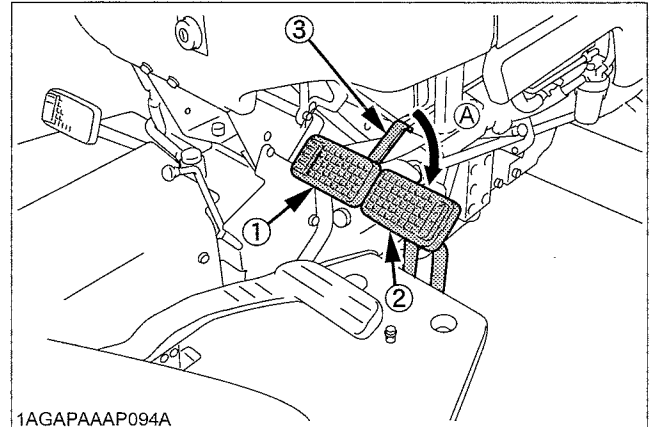
◆ Driving the tractor on the road

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

[Manual Transmission Type]



[HST Type]

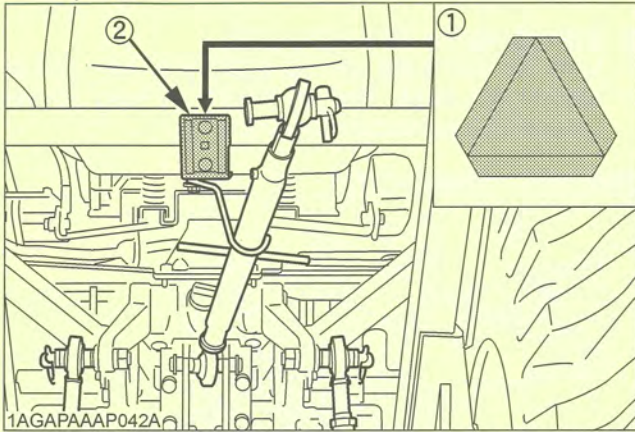


- (1) Brake Pedal (LH) (A) Whenever travelling on the road
 (2) Brake Pedal (RH)
 (3) Brake Pedal Lock

2. Check the front wheel engagement. The braking characteristics are different between two and four wheel drive. Be aware of the difference and use carefully.
3. Always slow the tractor down before turning. Turning at high speed may tip the tractor over.

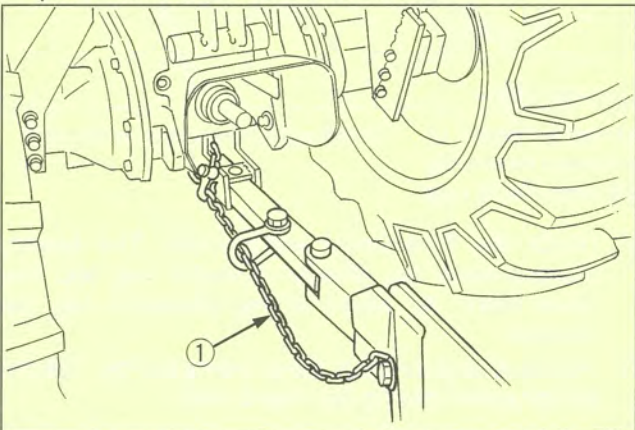
4 SAFE OPERATION

- Make sure that the Slow Moving Vehicle (SMV) sign is clean and visible. Use hazard lights and turn signals as required.



(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.
- Do not operate an implement while the tractor is on the road. Lock the 3-point hitch in the raised position.
- When towing other equipment, use a safety chain and place an SMV emblem on it as well.



(1) Safety chain

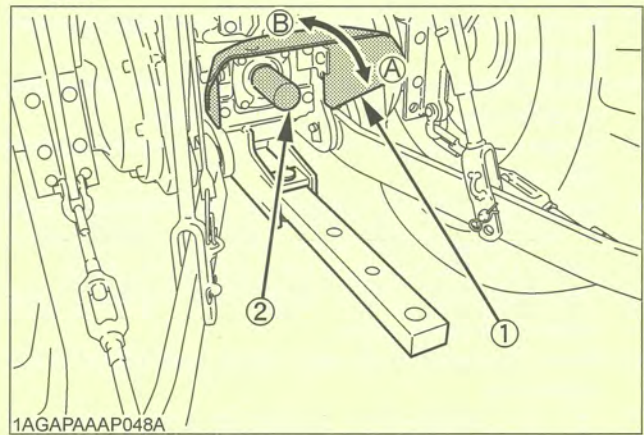
3. PARKING THE TRACTOR

- Disengage the PTO, lower all implements to the ground, place all control levers in their neutral positions, set the parking brake, stop the engine, and remove the key.

- Make sure that the tractor has come to a complete stop before dismounting.
- Avoid parking on steep slopes, if possible park on flat ground, if not, park across a slope, always with attachment on the ground.

4. 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. Replace the PTO shaft cap when the shaft is not in use.



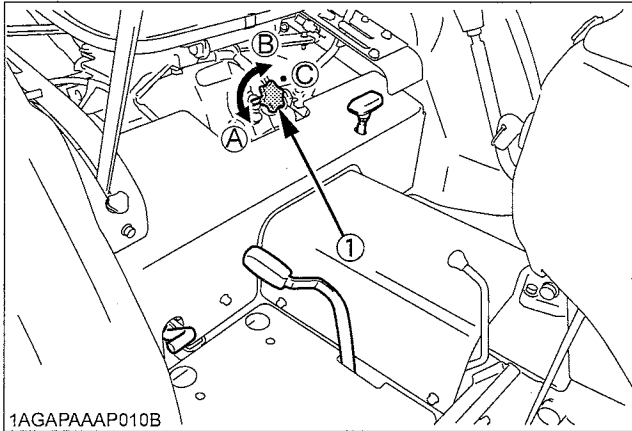
(1) PTO Shaft cover
(2) PTO Shaft cap
(A) "NORMAL POSITION"
(B) "RAISED POSITION"

- 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.

5. USING 3-POINT HITCH

- Use the 3-point hitch only with equipment designed for 3-point hitch usage.
- When using a 3-point hitch mounted implement, be sure to install the proper counterbalance weight on the front of the tractor.

3. When transporting on the road, set the implement lowering speed knob in the "LOCK" position to hold the implement in the raised position.



(1) 3-point hitch lowering speed knob

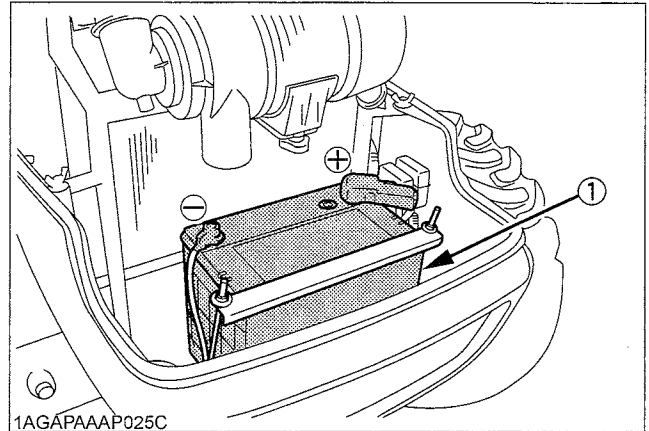
(A) "FAST"
(B) "SLOW"
(C) "LOCK"

6. 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.

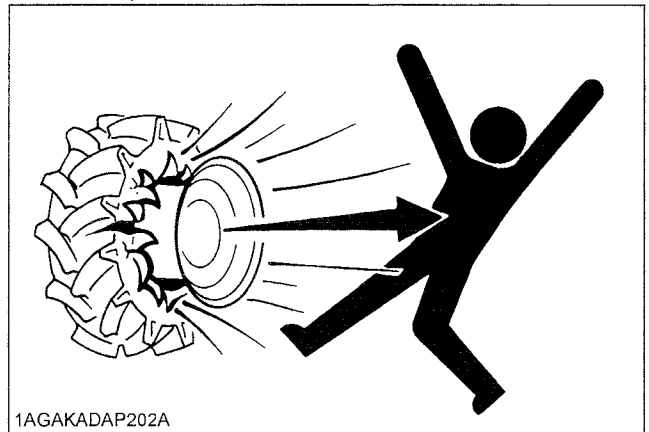
1. Allow the tractor time to cool off before working on or near the engine, muffler, radiator, etc.
2. Always stop the engine before refueling. Avoid spills and overfilling.
3. Do not smoke when working around battery or when refueling. Keep all sparks and flames away from battery and fuel tank. The battery presents an explosive hazard, because it gives off hydrogen and oxygen especially when recharging.
4. Before "jump starting" a dead battery, read and follow all of the instructions. (See "JUMP STARTING" in "OPERATING THE ENGINE" section)
5. Keep first aid kit and fire extinguisher handy at all times.
6. 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 tank, not the radiator. (See "CHECKING COOLANT LEVEL" in "MAINTENANCE" section)
7. Disconnect the battery's ground cable before working on or near electric components.
8. 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 between the UPPER and LOWER levels.

9. To avoid sparks from an accidental short circuit, always disconnect the battery's ground cable (-) first and reconnect it last.



(1) Battery

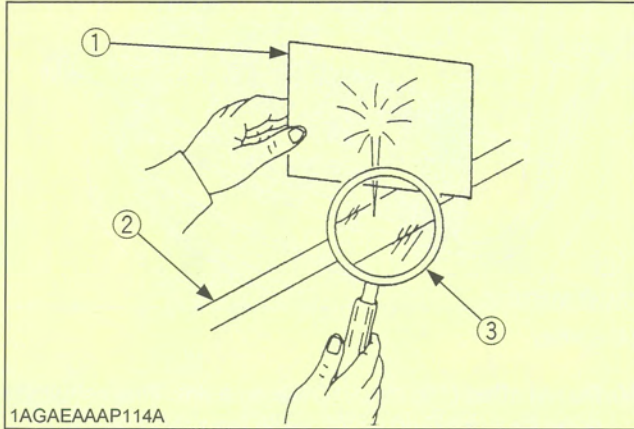
10. Do not attempt to mount a tire on a rim. This should be done by a qualified person with the proper equipment.
11. Do not work under any hydraulically supported devices. They can settle, suddenly leak down, or be accidentally lowered. If necessary to work under tractor or any machine elements for servicing or adjustment, securely support them with stands or suitable blocking beforehand.
12. Always maintain the correct tire pressure. Do not inflate tires above the recommended pressure shown in the operator's manual.



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13. Securely support the tractor when either changing wheels or adjusting the wheel tread width.
14. Make sure that wheel bolts have been tightened to the specified torque.

15. Escaping hydraulic fluid under pressure has sufficient force to penetrate skin, causing serious personal injury. Before disconnecting hydraulic lines, be sure to 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.

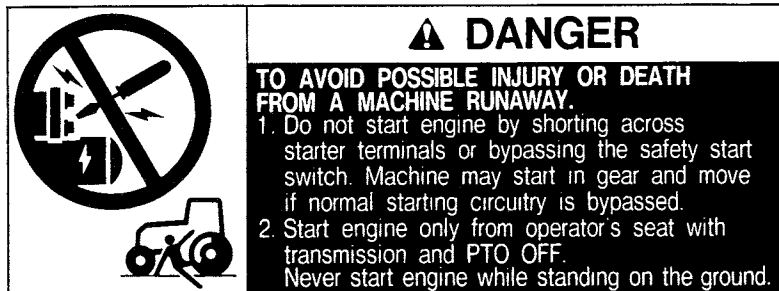


- (1) Cardboard
- (2) Hydraulic line
- (3) Magnifying glass

Fluid escaping from pinholes may be invisible. Do not use hands to search for suspected leaks; 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 reaction.

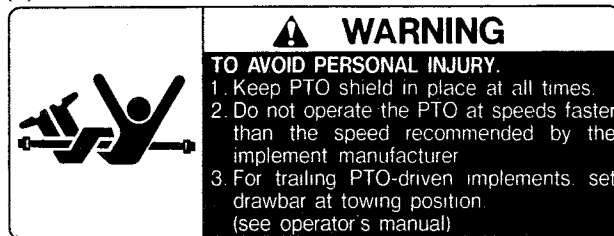
7. DANGER, WARNING AND CAUTION LABELS

(1)Part No.TA040-4965-2



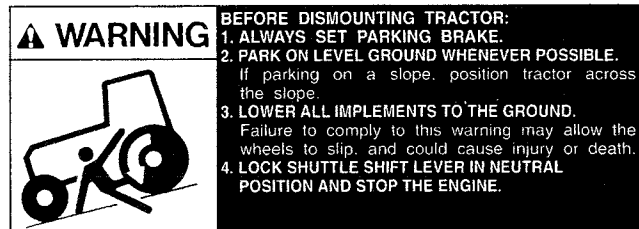
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(2)Part No.TA040-4959-3



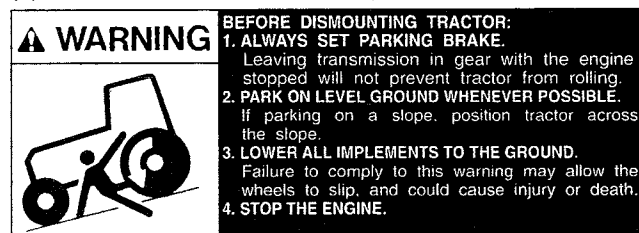
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(3)Part No.TA140-4933-1 [Manual Transmission type]



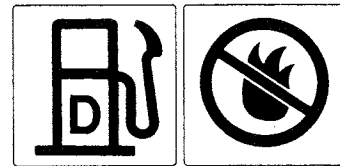
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(3)Part No.TA240-4933-2 [HST type]



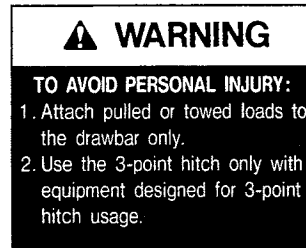
1AGAMAAAP3720

(4)Part No.TA040-4956-2
Diesel fuel only. No fire

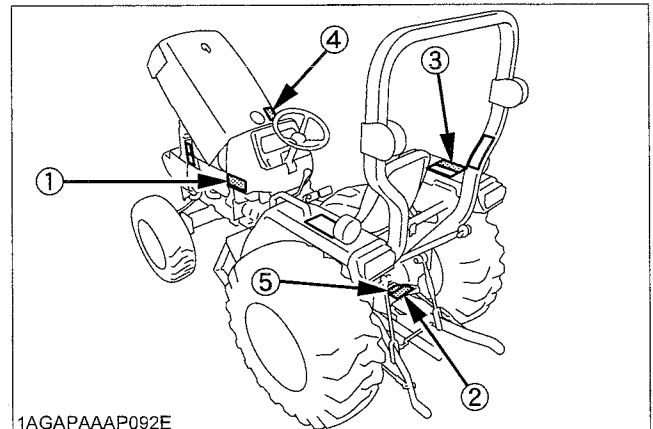


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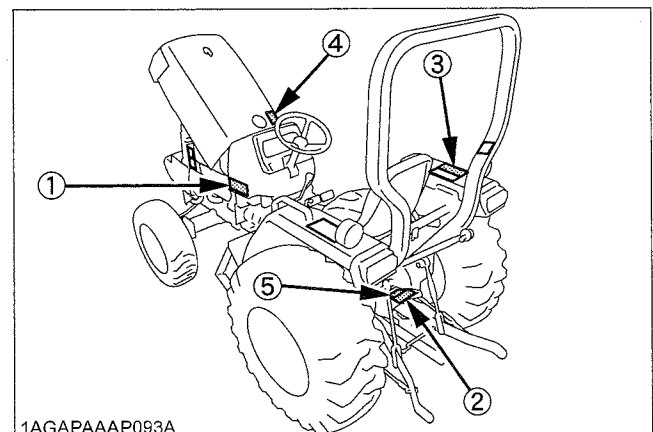
(5)Part No.TA040-4935-1



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1AGAPAAAP092E



1AGAPAAAP093A

(1) Part No. 35260-3491-4

CAUTION**TO AVOID PERSONAL INJURY:**

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.

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(3) Part No.
6C090-4958-2

Stay clear of engine fan and fan belt.



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(2) Part No. TD030-3012-2

 NS70MF 12V AMP. HR (SHR) 52 RESERVE CAPACITY (MIN) 123 COLD CRANKING AMPS (-18°C) 490	 FLAMMABLES SHIELD EYES KEEP OUT OF THE REACH OF CHILDREN CAUTIONS OF SULFURIC ACID READ INSTRUCTION MANUAL CAREFULLY EXPLOSIVE	HYDROMETER OK CHARGE REPLACE BATTERY BATTERY DK B2109
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• 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)

NS70MF

75D26R

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

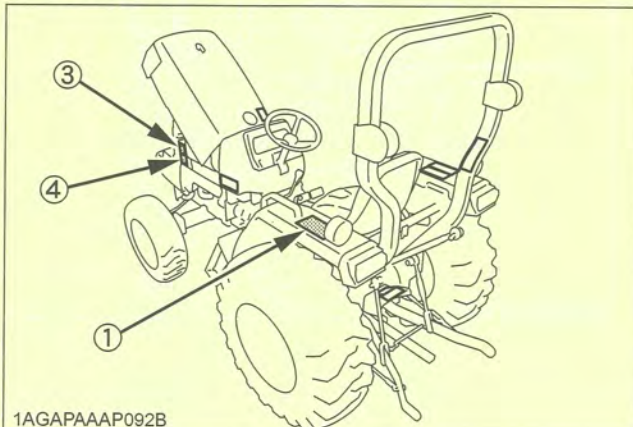
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(4) Part No.
TC030-4958-1

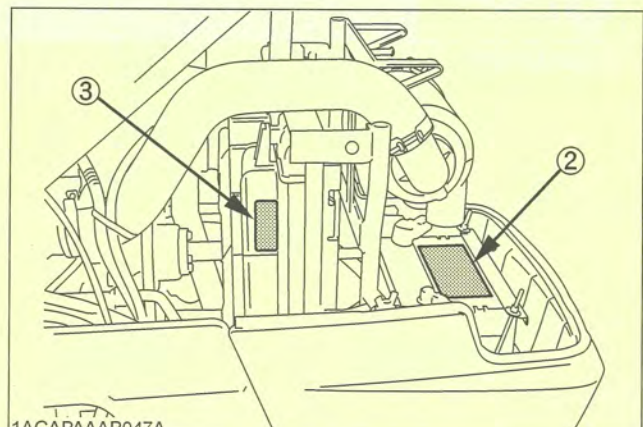
Do not touch hot surface like muffler, etc.



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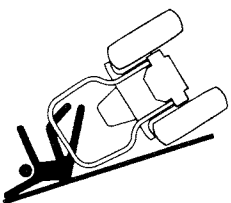


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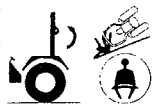
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(1)Part No.TA040-4932-2 [Rigid ROPS type]

	⚠ WARNING TO AVOID PERSONAL INJURY OR DEATH FROM ROLL-OVER:
	1. Kubota recommends the use of a Roll-Over Protective Structures (ROPS) and seat belt in almost all applications 2. Remove the ROPS only when it substantially interferes with operation or itself presents a safety risk. (Examples include work in orchards and vineyards) ALWAYS REINSTALL IT BEFORE USING THE TRACTOR IN OTHER APPLICATIONS 3. Never use just the seat belt or just the ROPS. They must be used together. For further details, consult your Operator's Manual or your local dealer.

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(2)Part No.TA240-9848-1[Foldable ROPS type]

	⚠ 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

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(3)Part No.6C140-4746-1
[Rigid ROPS type]

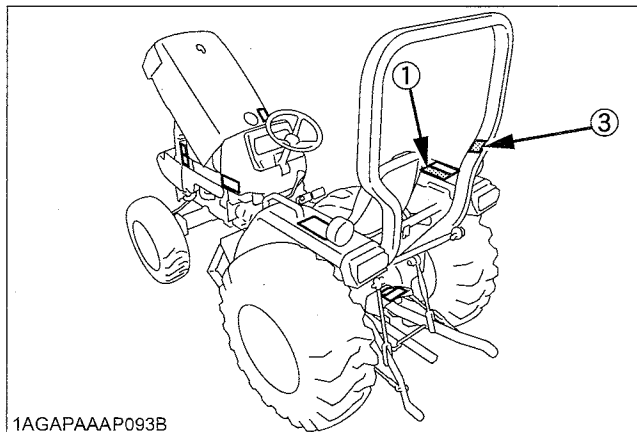
⚠ WARNING TO AVOID PERSONAL INJURY: Do not modify or repair a ROPS because welding, grinding, drilling or cutting any portion may weaken the structure.

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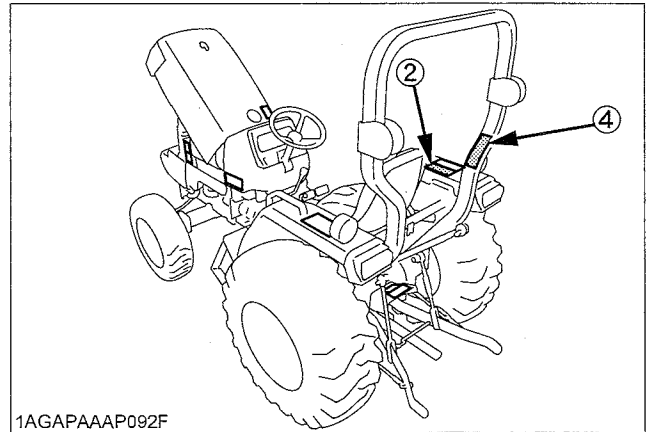
(4)Part No.3A111-9554-1
[Foldable ROPS type]

⚠ WARNING Never modify or repair a ROPS because welding, grinding, drilling or cutting any portion may weaken the structure.
⚠ CAUTION TO AVOID INJURY WHEN RAISING OR FOLDING ROPS: • Set parking brake and stop engine. • Remove any obstruction that may prevent raising or folding of the ROPS. • Do not allow any bystanders. • Always perform function from a stable position at the rear of the tractor. • Hold the top of the ROPS securely when raising or folding. • Make sure all pins are installed and locked.

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8. CARE OF DANGER, WARNING AND CAUTION LABELS

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

SERVICING OF TRACTOR

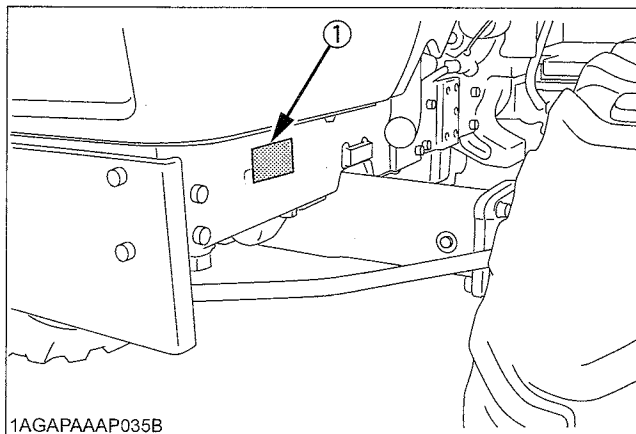
Your dealer is interested in your new tractor and has the desire to help you get the most value from it. After reading this manual thoroughly, you will find that you can do some of the regular maintenance yourself.

However, when in need of parts or major service, be sure to see your KUBOTA Dealer.

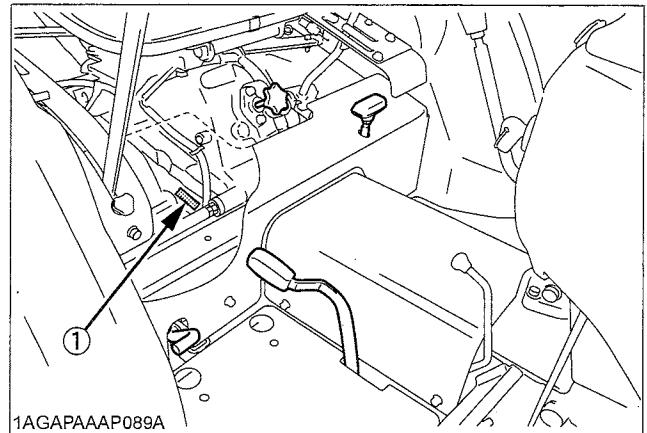
For service, contact the KUBOTA Dealership from which you purchased your tractor or your local KUBOTA Dealer. When in need of parts, be prepared to give your dealer both the tractor and engine serial numbers.

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

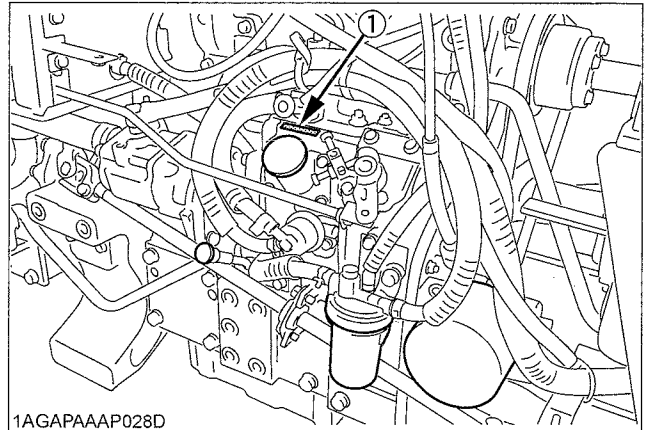
	Type	Serial No.
Tractor		
Engine		
Date of Purchase		
Name of Dealer		
(To be filled in by purchaser)		



(1) Tractor identification plate



(1) Tractor serial number



(1) Engine serial number

SPECIFICATIONS

SPECIFICATION TABLE

Model				L2800			L3400		
				Manual Transmission		HST	Manual Transmission		HST
				2WD	4WD	4WD	2WD	4WD	4WD
PTO power* kW (HP)				17.9 (24.0)		16.8 (22.5)	21.6 (29.0)		20.5 (27.5)
Engine	Maker			KUBOTA					
	Model			D1403-M-E2A			D1703-MA-E2A		
	Type			Indirect injection, Vertical, Water-Cooled 4 cycle diesel					
	Number of cylinders			3					
	Bore and stroke		mm (in)	80 X 92.4 (3.1 x 3.6)			87 x 92.4 (3.4 x 3.6)		
	Total displacement		L (cu.in.)	1.393 (85.0)			1.647 (100.5)		
	Engine gross power*		kW (HP)	21.6 (29.0)			25.9 (34.7)		
	Engine net power*		kW (HP)	20.5 (27.5)			24.8 (33.3)		
	Rated revolution		rps (rpm)	46.7 (2800)			45.0 (2700)		
	Maximum torque		N-m (ft-lb)	89.2 (65.8)			108.3 (79.9)		
	Battery			12V. RC : 123 min, CCA : 490 A					
Fuel			Diesel fuel No.1-D, No.2-D						
Capacities	Fuel tank L (U.S.gals.)			34 (9.0)					
	Engine crankcase (with filter) L(U.S.qts.)			5.7 (6.0)					
	Engine coolant L (U.S.qts.)			6.0 (6.3)					
	Transmission case L (U.S.gals.)			27.0 (7.1)	27.5 (7.3)	23.5 (6.2)	27.0 (7.1)	27.5 (7.3)	23.5 (6.2)
Dimensions	Overall length (without 3p)		mm (in.)	2810 (110.6)	2705 (106.5)		2810 (110.6)	2705 (106.5)	
	Overall width (min.tread)		mm (in.)	1305 (51.4)					
	Overall height (with ROPS)		mm (in.)	2160 (85.0)					
	Overall height (Top of steering wheel)		mm (in.)	1475 (58.1)					
	Wheel base		mm (in.)	1610 (63.3)					
	Min. ground clearance		mm (in.)	345 (13.6)	340 (13.4)		345 (13.6)	340 (13.4)	
	Tread	Front	mm (in.)	1050 (41.3)	1095 (43.1)		1050 (41.3)	1095 (43.1)	
		Rear	mm (in.)	1020 (40.2), 1115 (43.8), 1195 (47.1), 1290 (50.8)					
Weight (with*ROPS) kg (lbs.)				1070(2359)	1150(2536)	1180(2600)	1090(2403)	1170(2580)	1180(2600)
Traveling system	Tires	AG Front	5.00 - 15	7 - 16		5.00 - 15	7 - 16		
		AG Rear	11.2 - 24						
	Indust. (option)	Front	N / A	27 x 8.50 - 15		N / A	27 x 8.50 - 15		
		Rear	N / A	15 - 19.5R4		N / A	15 - 19.5R4		
	Clutch		Dry type Single stage				Dry type Dual stage		Dry type Single stage
	Steering		Integral type power steering						
	Transmission		Gear shift, 8 forward and 4 reverse		Hydrostatic transmission, 3 range speed	Gear shift, 8 forward and 4 reverse		Hydrostatic transmission, 3 range speed	
	Brake		Wet disk type						
Min. turning radius (with brake)		2.4 (7.9)	2.5 (8.2)		2.4 (7.9)	2.5 (8.2)			
Hydraulic unit	Hydraulic control system			Position control					
	Pump capacity (main) L / min (gal / min)		24.7 (6.5)				23.9 (6.3)		
	Pump capacity (PS) L / min (gal / min)		15.0 (4.0)				14.5 (3.8)		
	Three point hitch			Category 1					
	Max. lift force	At lift points	kg (lbs.)	906 (1998)					
		24in. behind lift points	kg (lbs.)	651 (1435)					
	System pressure MPa (kgf / cm ²)			15.7 (160)					
	PTO	Rear PTO	PTO shaft size	SAE 1-3 / 8, 6-splines					
Type			Transmission driven with overrunning clutch		Live-continuous with overrunning clutch	Live-continuous running		Live-continuous with overrunning clutch	
PTO / Engine speed		rpm	540 / 2430		540 / 2580	540 / 2425		540 / 2580	

NOTE: *Manufacturer's estimate The company reserves the right to change the specifications without notice.

TRAVELING SPEEDS

[Manual Transmission Type]

(At rated engine rpm)

Model			L2800		L3400	
Tire size (Rear)			11.2-24			
	Range gear shift lever	Main gear shift lever	km/h	mph	km/h	mph
Forward 	Low 	1	1.8	1.1	1.7	1.1
		2	2.3	1.4	2.2	1.4
		3	3.3	2.1	3.2	2.0
		4	5.8	3.6	5.6	3.5
	High 	1	6.8	4.2	6.6	4.1
		2	8.8	5.5	8.5	5.3
		3	12.7	7.9	12.2	7.6
		4	22.0	13.7	21.2	13.2
Reverse 	Reverse	1	2.4	1.5	2.4	1.5
		2	3.2	2.0	3.1	1.9
		3	4.6	2.9	4.4	2.7
		4	7.9	4.9	7.6	4.7

[HST Type]

(At rated engine rpm)

Model		L2800		L3400	
Tire size (Rear)		11.2-24			
	Range shift lever	km/h	mph	km/h	mph
Forward 	L	6.5	4.0	6.3	3.9
	M	11.4	7.1	10.9	6.8
	H	23.6	14.7	22.7	14.1
Reverse 	L	5.9	3.6	5.6	3.5
	M	10.2	6.4	9.9	6.1
	H	21.2	13.2	20.5	12.7

IMPLEMENT LIMITATIONS

The KUBOTA 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 below, or which are otherwise unfit for use with the KUBOTA 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 tires			Lower link end max. lifting capacity W ₀
	Front		Rear	
	2WD	4WD		
L2800	1050 mm (41.3 in.)	1095 mm (43.1 in.)	1290 mm (50.8 in.)	900 kg (1985 lbs.)
L3400				

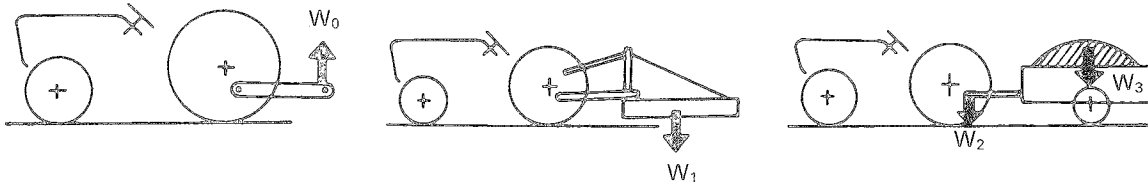
	Actual figures		
	Implement weight W_1 and/or size	Max. Drawbar Load W_2	Trailer loading weight W_3 Max. capacity
L2800	As in the following list (Shown on the next page)	330 kg (730 lbs.)	1000 kg (2200 lbs.)
L3400			

Lower link end max. hydraulic lifting capacity W_0

Implement weight The implement's weight which can be put on the lower link : W_1

Max. drawbar load W_2

Trailer loading weight The max. loading weight for trailer (without trailer's weight) : W_3



NOTE :

- ⊗ Implement size may vary depending on soil operating conditions.

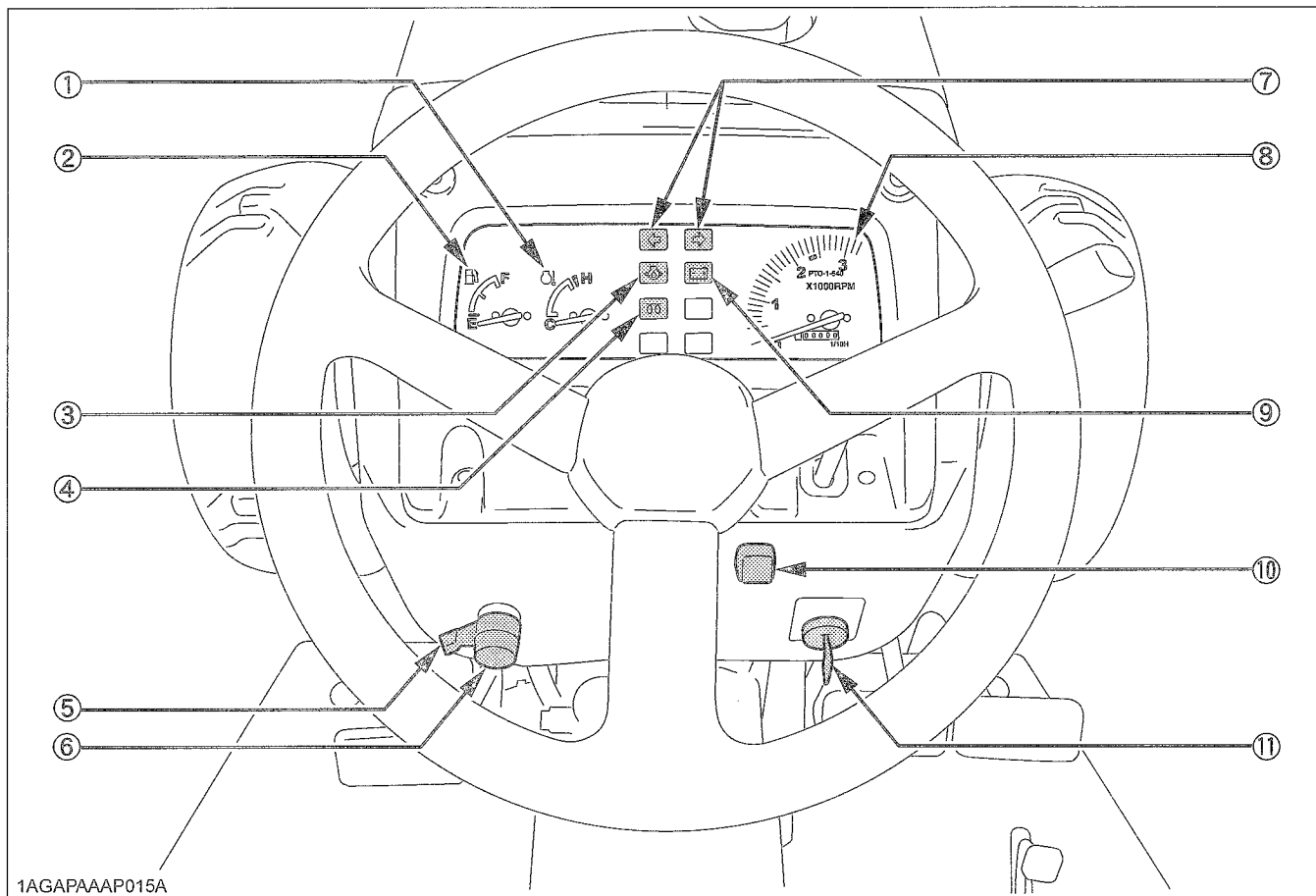
No.	Implement		Remarks	L2800	L3400
1	Trailer		Max. load capacity kg(lbs.)	1000 (2200)	
			Max. drawbar load kg (lbs.)	330 (730)	
2	Mower	Rotary-Cutter	Max. cutting width mm (in.)	1829 (72)	
			Max. weight kg (lbs.)	350 (770)	
		Flail Mower	Max. cutting width mm (in.)	1270 (50)	
			Max. weight kg (lbs.)	350 (770)	
		Sickle Bar	Max. cutting width mm (in.)	1829 (72)	
			Max. weight kg (lbs.)	400 (880)	
3	Sprayer	Rear mounted	Max. tank capacity L (gals.)	300 (80)	
		Pull type	Max. tank capacity L (gals.)	800 (210)	
4	Rotary Tiller		Max. tilling width mm (in.)	1370 (54)	
5	Bottom Plow		Max. size	12 in. x 2, 16 in. x 1	
6	Disk harrow : Pull type		Max. harrowing width mm (in.)	1524 (60)	
			Max. weight kg (lbs.)	300 (660)	
7	Chisel Plow		Max. width mm (in.)	1829 (72)	
			Max. weight kg (lbs.)	350 (770)	
8	Broad Caster		Max. tank capacity L (gals.)	200 (53)	
			Max. weight kg (lbs.)	100 (220)	
9	Manure Spreader		Max. capacity kg (lbs.)	1000 (2200)	
10	Cultivator		Max. width mm (in.)	1524 (60)	
			Number of rows	1	
			Max. weight kg (lbs.)	250 (550)	
11	Front Blade		Max. cutting width mm (in.)	1829 (72)	
			Max. oil pressure MPa (psi)	15.9 (2311)	
			Sub frame	Necessary	
12	Rear Blade		Max. cutting width mm (in.)	1829 (72)	
			Max. oil pressure MPa (psi)	15.9 (2311)	
13	Front-end Loader		Max lifting capacity kg (lbs.)	460 (1014)	
			Max. oil pressure MPa (psi)	15.9 (2311)	
			Sub frame	Not necessary	
14	Box Blade		Max. cutting width mm (in.)	1321 (52)	
			Max. weight kg (lbs.)	315 (694)	
15	Back Hoe		Max. digging depth mm (in.)	2288 (90)	
			Max. weight kg (lbs.)	420 (926)	
			Sub frame	Necessary	
16	Snow Blade		Max. width mm (in.)	1524 (60)	
			Max. weight kg (lbs.)	300 (660)	
17	Snow Blower		Max. working width mm (in.)	1524 (60)	
			Max. weight kg (lbs.)	250 (550)	

NOTE :

- Implement size may vary depending on soil operating conditions.

INSTRUMENT PANEL AND CONTROLS

■ Instrument Panel, Switches and Hand Controls



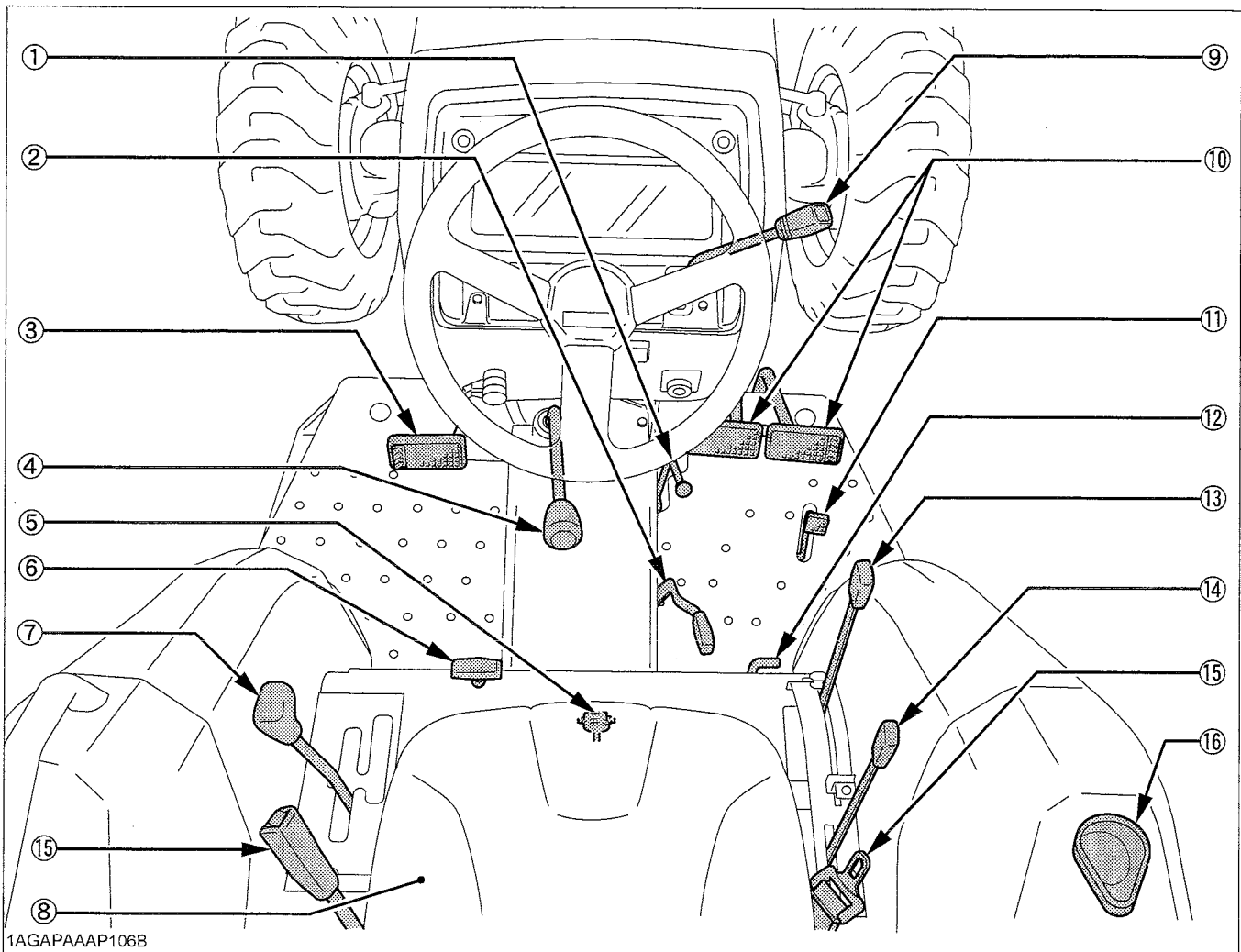
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ILLUSTRATED CONTENTS

(1) Coolant temperature gauge.....	26
(2) Fuel gauge.....	26
(3) Engine oil Pressure lamp.....	10
(4) Glow plug indicator.....	10
(5) Turn signal switch.....	19
(6) Head light switch.....	19
(7) Turn signal / Hazard light indicator.....	19
(8) Hourmeter / Tachometer.....	27
(9) Electrical charge lamp.....	10
(10) Hazard light switch.....	19
(11) Key switch.....	10

■ Foot and Hand Controls

◆ Manual Transmission Type



ILLUSTRATED CONTENTS

(1) Parking brake lever.....	10,27
(2) PTO gear shift lever.....	10,30
(3) Clutch pedal.....	21,21
(4) Main gear shift lever.....	10,21
(5) 3-Point hitch lowering speed knob.....	35
(6) Front wheel drive lever.....	23
(7) Range gear shift lever (Shuttle shift lever).....	10,21
(8) Operator's seat.....	18
(9) Hand throttle lever.....	10,24
(10) Brake pedal.....	20,24
(11) Foot throttle.....	10,24
(12) Differential lock pedal.....	28
(13) Position control lever.....	10,35
(14) Draft control lever (If equipped).....	10,35
(15) Seat belt.....	19
(16) Cup holder	-

◆ HST Type



ILLUSTRATED CONTENTS

(1) Parking brake lever	10,27
(2) 3-Point hitch lowering speed knob	35
(3) Clutch pedal	21,21
(4) Front wheel drive lever	23
(5) Differential lock pedal	28
(6) Range gear shift lever	10,22
(7) Cruise control lever	25
(8) Operator's seat	18
(9) Hand throttle lever	10,24
(10) Brake pedal	20,24
(11) Speed control pedal	24
(12) Position control lever	10,35
(13) Draft control lever (If equipped)	10,35
(14) Seat belt	19
(15) Cup holder	-
(16) PTO gear shift lever	10,30

PRE-OPERATION CHECK

DAILY CHECK

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



CAUTION

To avoid personal injury:

- Be sure to check and service the tractor on a level surface with the engine shut off and the parking brake "ON" and implement lowered to the ground.

Check item

- Walk around inspection
- Check engine oil level
- Check transmission oil level
- Check coolant level
- Clean grill and radiator screen
- Clean oil cooler
- Check air cleaner evacuator valve
(When used in a dusty place)
- Check brake pedal
- Check indicators, gauges and meter
- Check lights
- Check seat belt and ROPS
- Refuel
(See "DAILY CHECK" in Periodic Service section)
- Care of danger, warning and caution labels
(See "DANGER, WARNING AND CAUTION LABELS" in Safe Operation section)

OPERATING THE ENGINE



CAUTION

To avoid personal injury:

- Read "Safe Operation" in the front of this manual.
- Read the danger, warning and caution 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 engine while standing on ground. Start engine only from operator's seat.
- Make it a rule to set all shift levers to the "NEUTRAL" positions and to place PTO lever in "OFF" position before starting the engine.

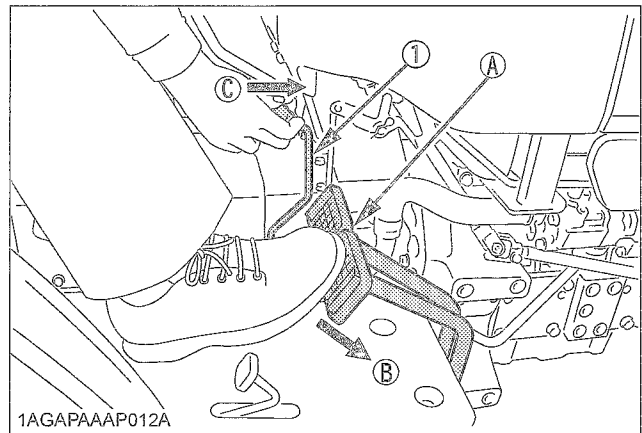
IMPORTANT :

- 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.

STARTING THE ENGINE

1. Make sure the parking brake is set.

1. To set the parking brake;
 - (1) Interlock the brake pedals.
 - (2) Depress the brake pedals.
 - (3) Latch the brake pedals with the parking brake lever.
2. To release the parking brake, depress the brake pedals again.



(1) Parking brake lever

(A) Interlock the brake pedals

(B) "DEPRESS"

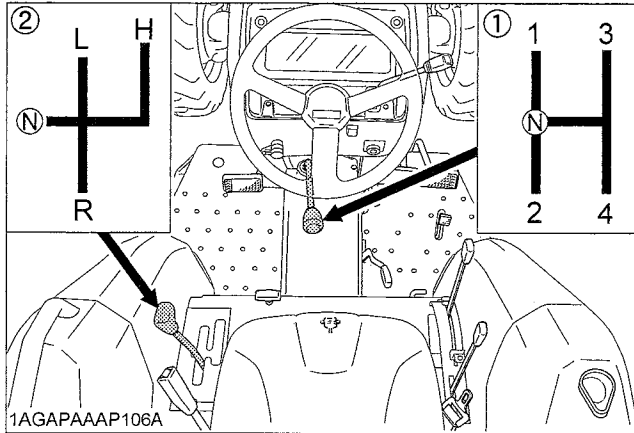
(C) "PUSH"

IMPORTANT :

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

- Place the shift levers in "NEUTRAL" position.

[Manual Transmission Type]

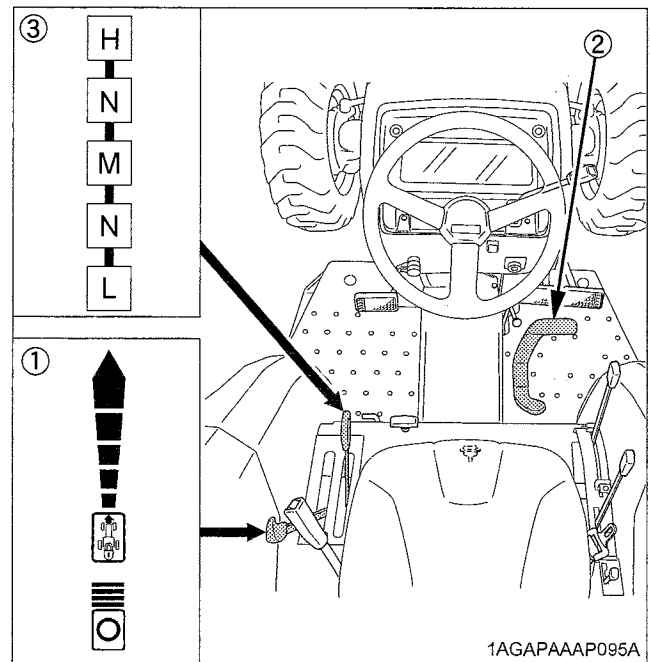


- (1) Main gear shift lever
(2) Range gear shift lever
(Shuttle shift lever)

(H) "HIGH"
(N) "NEUTRAL POSITION"
(L) "LOW"
(R) "REVERSE"

- Make sure the cruise control lever is in "NEUTRAL" position.
Place the Speed control Pedal in "NEUTRAL" position.
Place the range gear shift lever in "NEUTRAL" position.

[HST Type]



- (1) Cruise control lever
(2) Speed control pedal
(3) Range gear shift lever

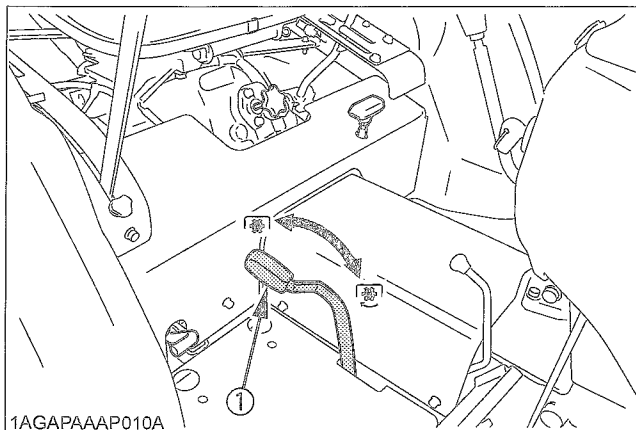
(N) "NEUTRAL POSITION"
○ "NEUTRAL POSITION"

NOTE :

- Depress the both brake pedals together, doing so the cruise control lever automatically returns to the off position.
- Step out the foot from speed control pedal, doing so the pedal automatically returns to the neutral position.

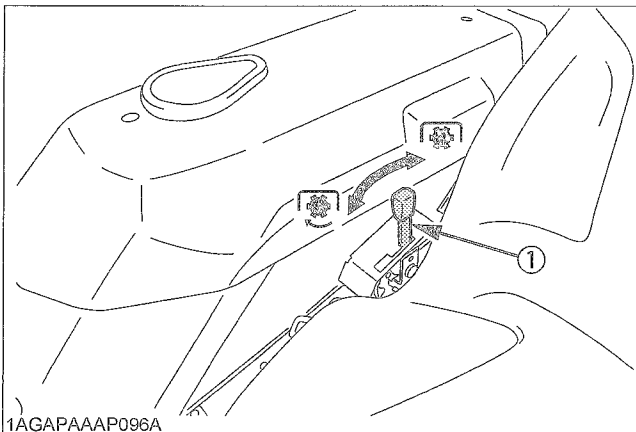
3. Place the PTO gear shift lever in "OFF" position

[Manual Transmission Type]



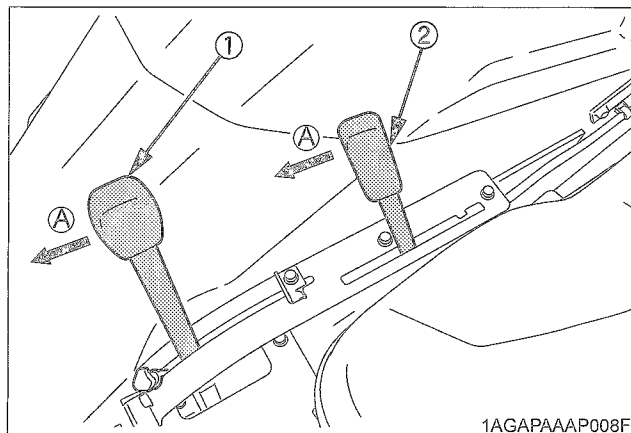
(1) PTO gear shift lever
 "ON"
 "OFF"

[HST Type]



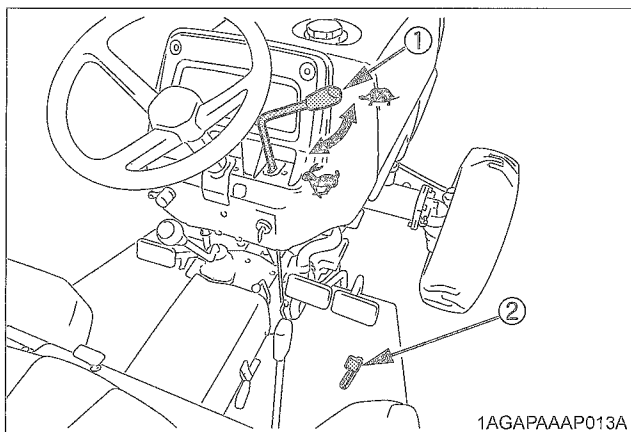
(1) PTO gear shift lever
 "ON"
 "OFF"

4. Place the hydraulic control levers in "LOWEST" position



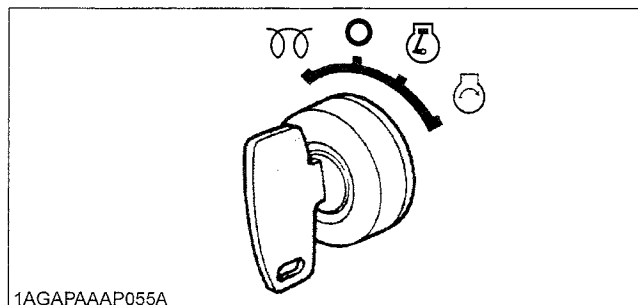
(1) Position control lever
 (2) Draft control lever (if equipped)
 (A) "DOWN"

5. Set the throttle lever to about 1/2 way.



(1) Hand Throttle lever
 (2) Foot Throttle
 "INCREASE"
 "DECREASE"

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



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○ "OFF"

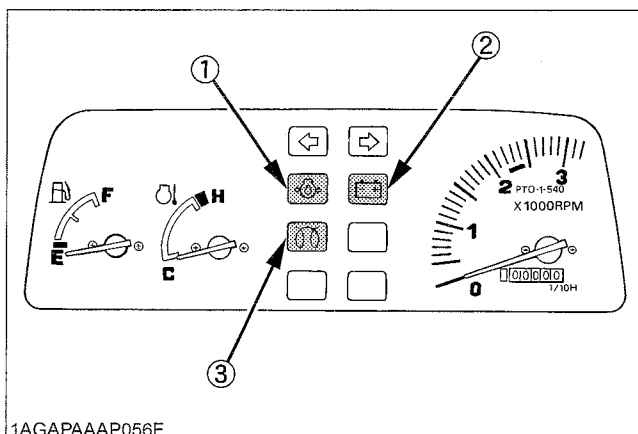
● "ON"

⌚ "START"

⌚ "PREHEAT"

◆ Check Warning lamps:

When the key is turned "ON", lamps ① ② should come on. If trouble should occur at any location while the engine is running, the warning lamp corresponding to that location comes on.



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(1) Engine oil pressure

(2) Electrical charge

(3) Glow plug indicator

IMPORTANT :

- Daily checks with the warning lamps only are not sufficient. Never fail to conduct physical daily checks carefully by referring to Daily Check section. (See "DAILY CHECK" in Periodic Service Section)

7. Fully depress the clutch pedal, turn the key to "PREHEAT" position and hold it for the preheating.

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

Temperature	Preheating Time
Over 0°C(32°F)	2 to 3 sec.
0 to -5°C(32 to 23°F)	5 sec.
-5 to -15°C(23 to 5°F)	10 sec.

NOTE :

- Glow plug indicator (3) comes on while engine is being preheated.

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

IMPORTANT :

[Manual Transmission Type]

- Because of the safety devices, the engine will not start except when the PTO gear shift lever is in the "OFF" position and the range gear shift lever is in the "NEUTRAL" position.

[HST Type]

- Because of the safety devices, the engine will not start except when the PTO gear shift lever is placed in the "OFF" position, speed control pedal is placed in the "NEUTRAL" position and clutch pedal is disengaged.

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

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

10. Release the clutch pedal.

◆ Cold Weather Starting

When the ambient temperature is below -5°C (23°F) and the engine is very cold. (if the engine fails to start after 10 seconds, turn off the key for 30 seconds. Then repeat steps 7 and 8. To protect the battery and the starter, make sure that the starter is not continuously turned for more than 10 seconds.)

STOPPING THE ENGINE

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

NOTE :

- ⊗ If key does not stop the engine, consult your local KUBOTA Dealer.

WARMING UP



CAUTION

To avoid personal injury:

- ⊗ Be sure to set the parking brake during warm-up.
- ⊗ Be sure to set all shift levers to the "NEUTRAL" positions and to place PTO lever in "OFF" position during warm-up.

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

■ Warm-Up Transmission Oil in the Low Temperature Range

Hydraulic oil serves as transmission fluid. In cold weather, the oil may be cold with increased viscosity. This can cause delayed oil circulation or abnormally low hydraulic pressure for some time after engine start-up. This in turn can result in trouble in the hydraulic system. To prevent the above, observe the following instructions:

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

Ambient temperature	Warm-up time requirement
Above 0 °C (32 °F)	At least 10 minutes
0 to -10 °C (32 to 14 °F)	10 to 20 minutes
-10 to -20 °C (14 to -4 °F)	20 to 30 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



CAUTION

To avoid personal injury:

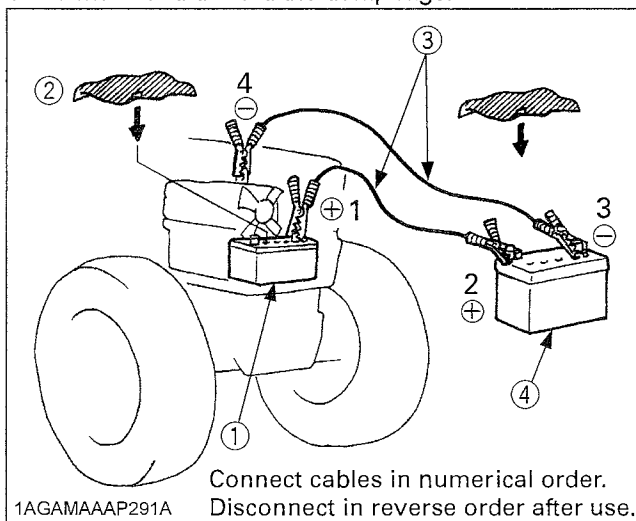
- Battery gases can explode. Keep cigarettes, sparks, and flames away from battery.
- If tractor battery is frozen, do not jump start engine.
- Do not connect other end of negative (-) jumper cable to negative (-) terminal of tractor battery.

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

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

IMPORTANT :

- This machine has a 12volt negative (-) ground starting system.
 - Use only 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.



- (1) Dead battery
- (2) Lay a damp rag over the vent caps
- (3) Jumper cables
- (4) Helper battery

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, of course, 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.

■ 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 fast speed.

The above precautions are not limited only to new tractors, but to all tractors. But it should be especially observed in the case of new tractors.

■ Changing Lubricating Oil for New Tractors

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, care should be taken to change the lubricating oil a little earlier than would ordinarily be required.

For further details of change interval hours.

(See "MAINTENANCE" section)

OPERATING FOLDABLE ROPS (if equipped)

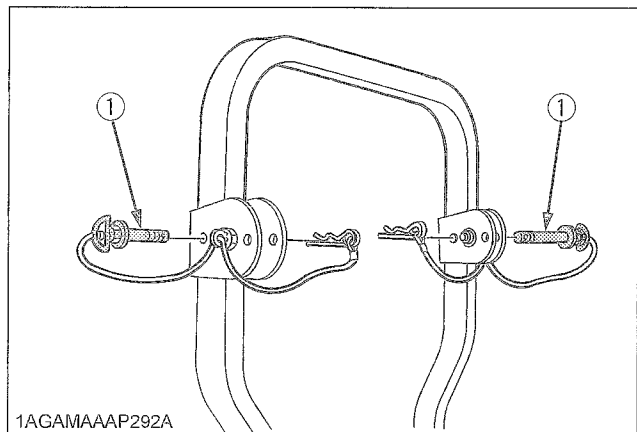


CAUTION

- When raising or folding the ROPS, apply parking brake, stop the engine and remove the key. Always perform function from a stable position at the rear of 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 ROPS, check for any possible interference with installed implements and attachments. If interference occurs, contact your KUBOTA Dealer.

■ To Fold the ROPS

1. Remove both set bolts.



(1) Set bolt

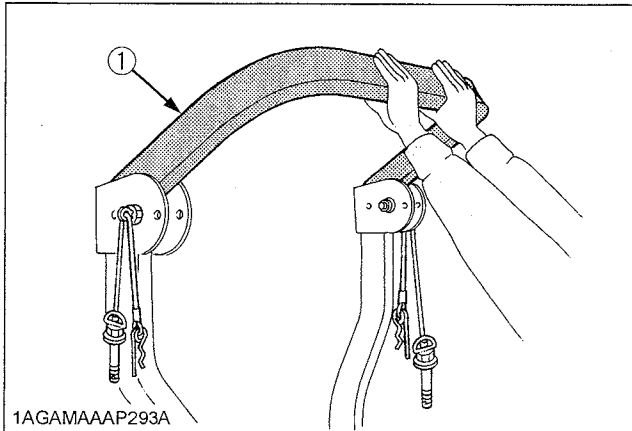
2. Fold the ROPS.



CAUTION

To avoid personal injury:

- Hold the ROPS tightly with both hands and fold the ROPS slowly and carefully.



(1) ROPS

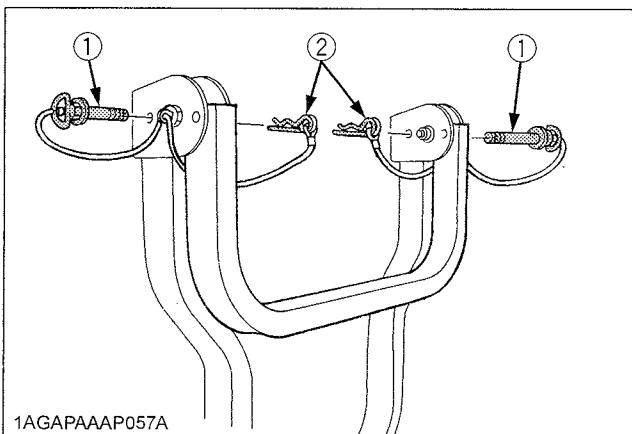
3. Align set bolt holes and insert both set bolts. Slightly tighten the set bolts and secure them with the hair pin cotters.



CAUTION

To avoid personal injury:

- Make sure that both set pins are properly installed and secured with the hair pin cotters.

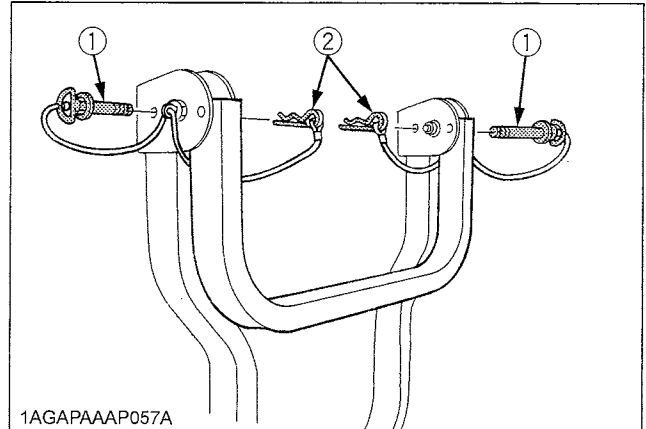


(1) Set bolt

(2) Hair pin cotter

■ To Raise the ROPS to Upright Position

1. Remove both hair pin cotters and set bolts:



(1) Set bolt

(2) Hair pin cotter

2. Raise ROPS to the upright position.



CAUTION

To avoid personal injury:

- Raise the ROPS slowly and carefully.

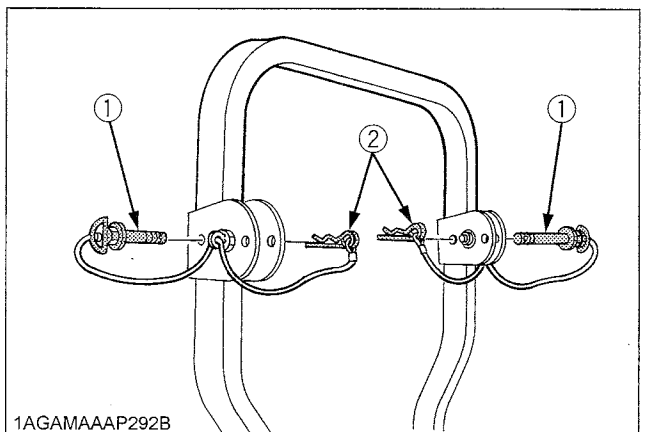
3. Align lock pin holes, insert both set bolts. Slightly tighten the set bolts and secure them with the hair pin cotters.



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.

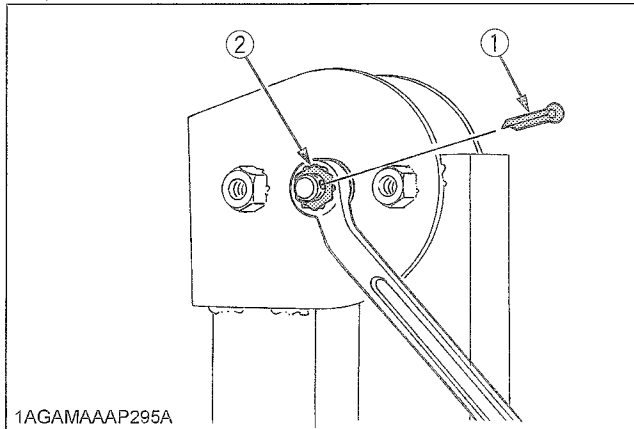


(1) Set bolt

(2) Hair pin cotter

■ Adjustment of 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.



(1) Cotter pin
(2) Nut

STARTING

1. Adjusting the operator's position.

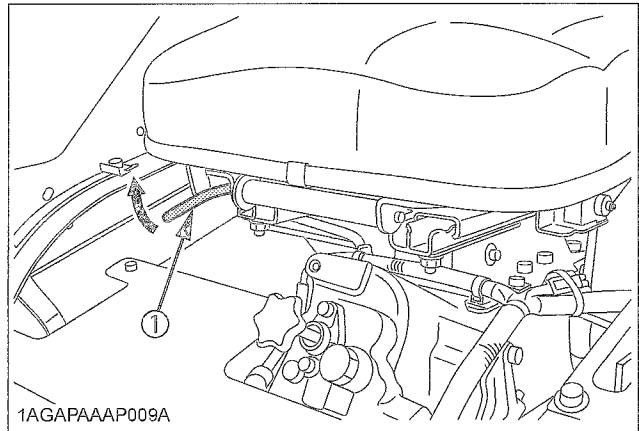
■ Operator's Seat



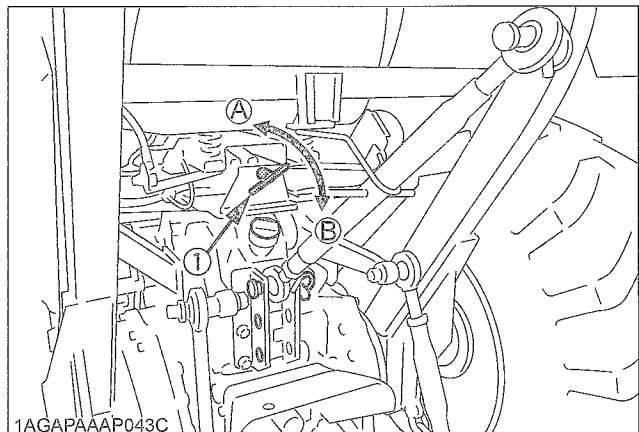
CAUTION

To avoid personal injury:

- 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 driver to ride on the tractor.



(1) Travel adjust lever



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

◆ Travel adjustment

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

◆ Suspension adjustment knob

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

IMPORTANT :

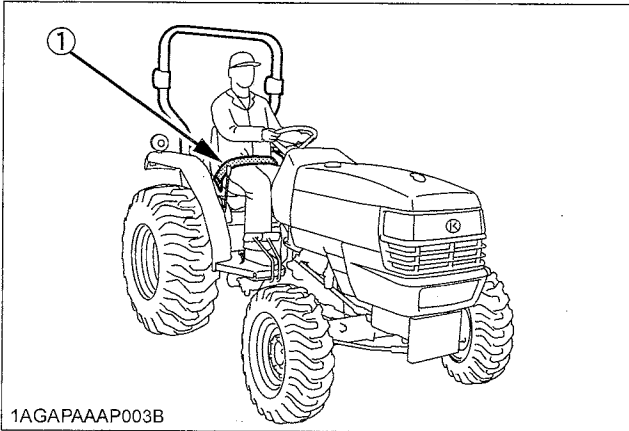
- After adjusting the operator's seat, be sure to check to see that the seat is properly locked.
- Position the suspension adjust knob at the horizontal position

■ Seat Belt**WARNING**

To avoid personal injury:

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

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



(1) Seat belt

2. Selecting light switch positions.**■ Head Light / Turn Signal / Hazard Light Switch****◆ Head Light Switch**

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

- (A) OFF.... Head lights OFF.
- (B) ☰ Head lights ON, high beam.
- (C) ☷ Head lights dimmed, low beam.

◆ Hazard Light Switch

When hazard light switch is pushed, the hazard lights flash along with the indicator on the instrument panel. Press the hazard light switch again to turn off the light.

◆ Turn Signal with Hazard Light

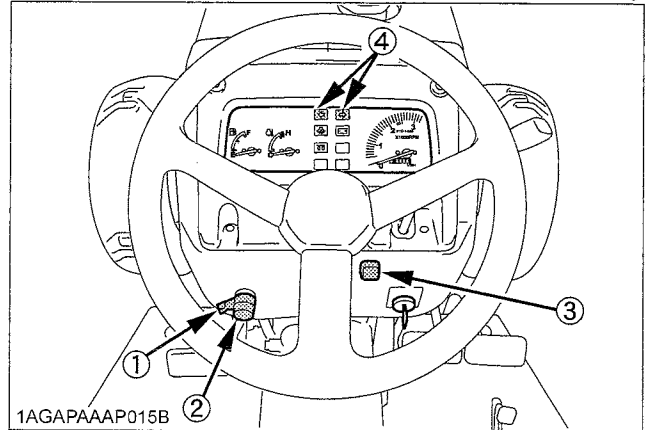
1. To indicate a right turn with the hazard lights already flashing (hazard on), turn the knob clockwise.
2. To indicate a left turn with the hazard lights already flashing, turn the knob counterclockwise.
3. When the left or right turn signal is activated in combination with the hazard lights, the indicated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

◆ Turn Signal without Hazard light

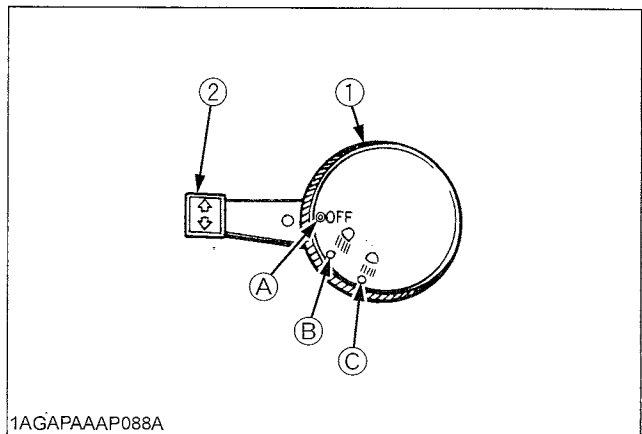
1. To indicate a right turn without hazard lights (hazard off), turn the knob clockwise.
2. To indicate a left turn without hazard lights, turn the knob counterclockwise.
3. When the left or right turn signal is activated without the hazard lights, the indicated turning light will flash and the other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

NOTE :

- Be sure to return switch to center position after turning.



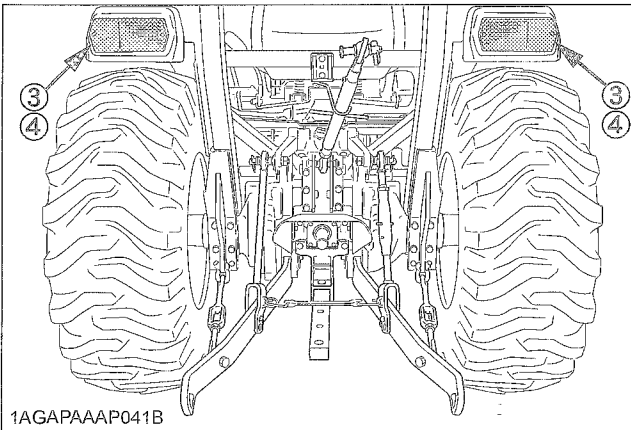
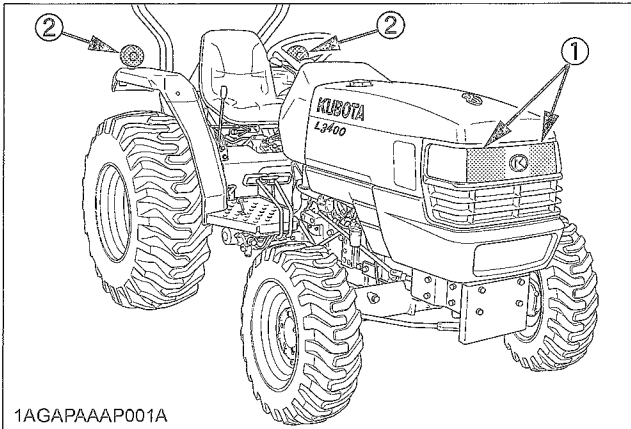
- (1) Turn signal light switch
- (2) Head light switch
- (3) Hazard light switch
- (4) Hazard / Turn signal indicator



- (1) Head light switch
- (2) Turn signal light switch
- (A) "OFF"
- (B) "ON (LOW)"
- (C) "ON (HIGH)"

Tractor Lights

- ① Head light
- ② Side turn signal / Hazard light
- ③ Tail light
- ④ Rear turn signal / Hazard light



3. Checking the brake pedal.

Brake Pedals (Right and Left)



WARNING

To avoid personal injury:

- Be sure to 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 brake pedals have equal adjustment when using locked together. Incorrect or unequal brake pedal adjustment can cause the tractor to swerve or roll-over.

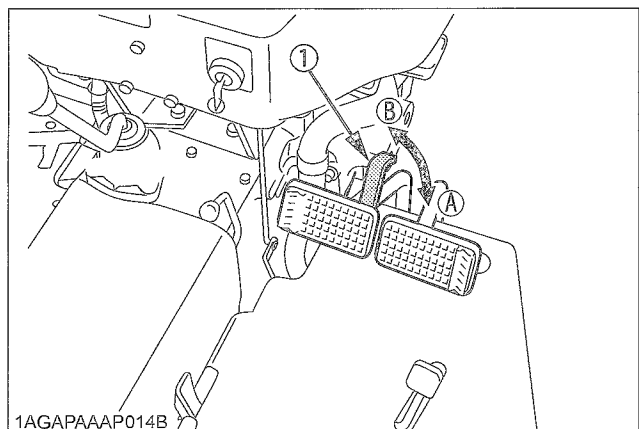


CAUTION

To avoid personal injury:

- Do not make sudden braking. An accident may occur such as by 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 the tractor is correctly ballasted, operated at reduced speed, operated with front wheel drive engaged (if equipped).
- The braking characteristics are different between two and four wheel drive. Be aware of the difference and use carefully.

1. Before operating the tractor on the road or before applying the parking brake, be sure to interlock the right and left pedals as illustrated below.
2. Use individual brakes to assist in making sharp turns at slow speeds (Field Operation Only). Disengage the brake pedal lock and depress only one brake pedal.
3. Be sure brake pedals have equal adjustment when using locked together.

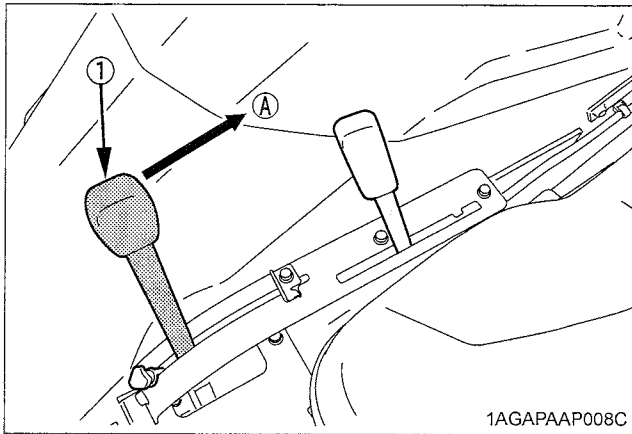


(1) Brake pedal lock

(A) "LOCK"

(B) "RELEASE"

4. Raise the implement. (See "HYDRAULIC UNIT" section)



(1) Position control lever (A) "UP"

5. Depress the clutch pedal.

■ Clutch Pedal

[L2800 Manual Transmission Type], [HST Type]

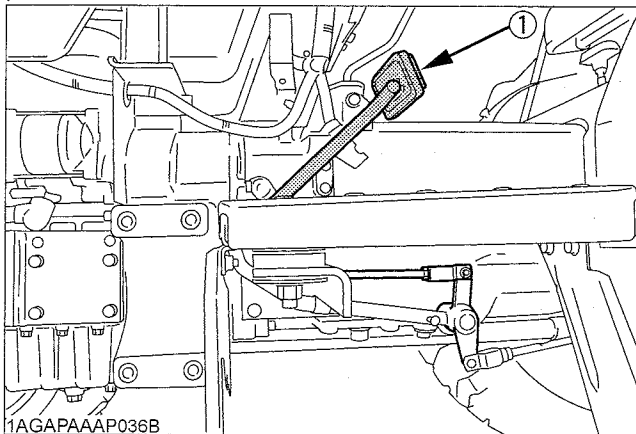


CAUTION

To avoid personal injury:

- Sudden release of the clutch may cause the tractor to lunge in an unexpected manner.

The clutch is disengaged when the clutch pedal is fully pressed down.



(1) Clutch pedal

IMPORTANT :

To help prevent premature clutch wear:

- The clutch pedal must be quickly disengaged and be slowly engaged.
- Avoid operating the tractor with your foot resting on the clutch pedal.

- Select proper gear and engine speed depending on the type of job.

■ Clutch Pedal [with Dual Clutch] [L3400 Manual Transmission Type]

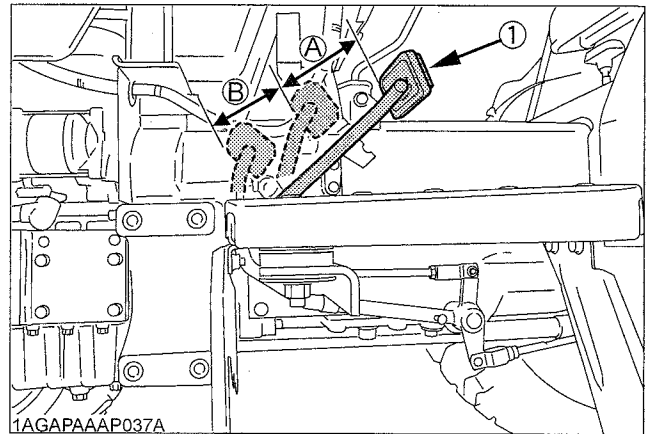


CAUTION

To avoid personal injury:

- Sudden release of the clutch may cause the tractor to lunge in an unexpected manner.

The transmission clutch is disengaged when the clutch pedal is pressed down half-way (A). The PTO clutch remains engaged. Both transmission and PTO clutch are disengaged when the pedal is fully pressed down (B).



(1) Clutch pedal

IMPORTANT :

To help prevent premature clutch wear:

- The clutch pedal must be quickly disengaged and be slowly engaged.
- Avoid operating the tractor with your foot resting on the clutch pedal.
- Select proper gear and engine speeds depending on the type of job.

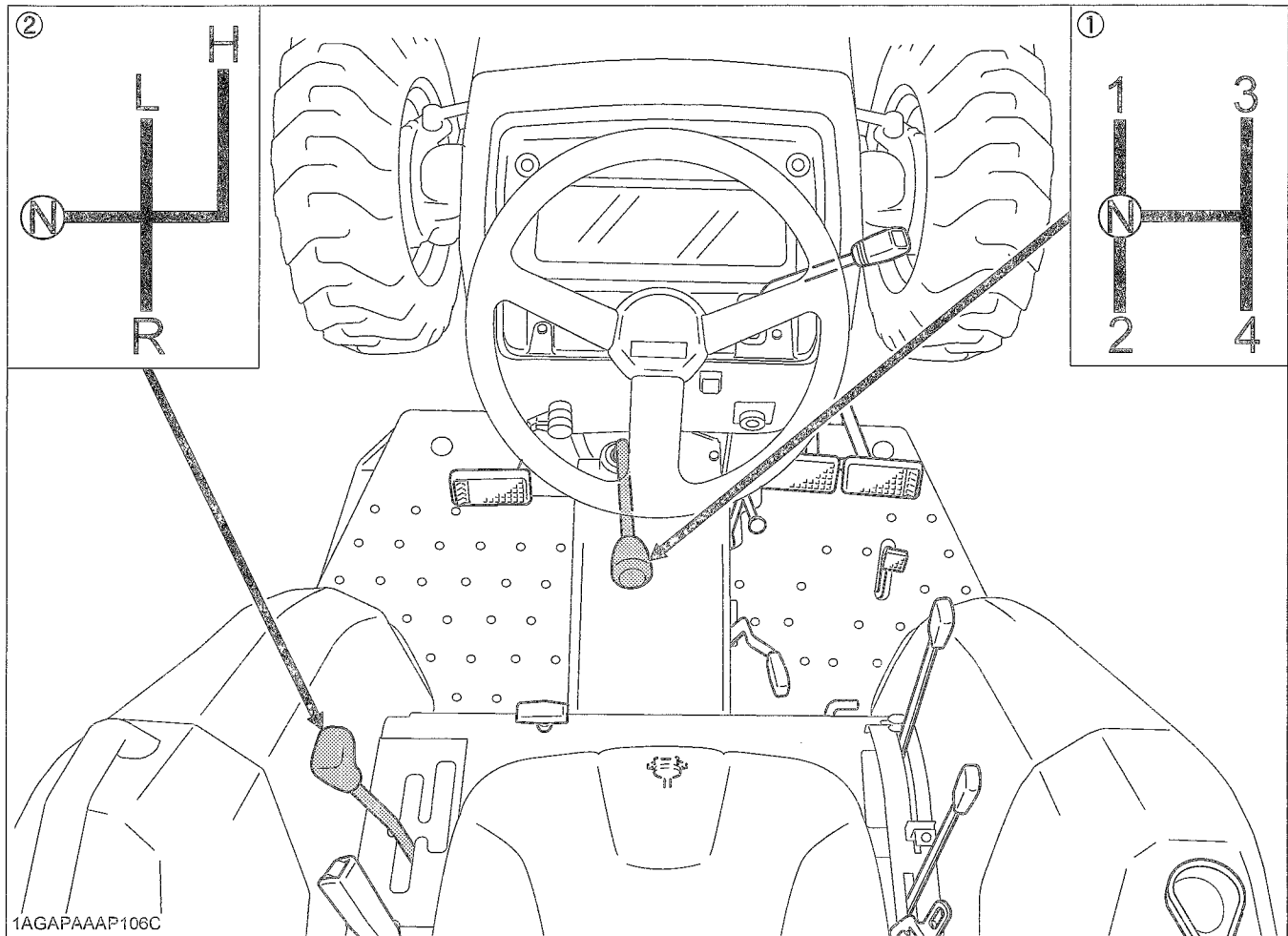
6. Selecting the Travel Speed.

■ Main Gear Shift Lever & Range Gear Shift Lever

[Manual Transmission Type]

The main gear shift lever pattern is in the form of a "H". The range gear shift lever moves in the form of a "┐" in 3 stages, "HIGH", "LOW" and "REVERSE".

By combination and use of the main gear shift lever and the range gear shift lever, eight forward speeds and four reverse speeds are obtained.



- (1) Main gear shift lever
(2) Range gear shift lever (Shuttle shift lever)

- (L) "LOW"
(N) "NEUTRAL"
(H) "HIGH"
(R) "REVERSE"

IMPORTANT :

- To change speeds, press the clutch pedal completely down and stop the tractor before attempting to proceed with speed change.

NOTE :

- When you stand up from the seat with the range gear shift at "FORWARD" or "REVERSE", the engine will stop regardless of whether the machine is moving or not.
This is because the tractor is equipped with Operator Presence Control system (OPC).

Range Gear Shift Lever (L-M-H)

[HST Type]

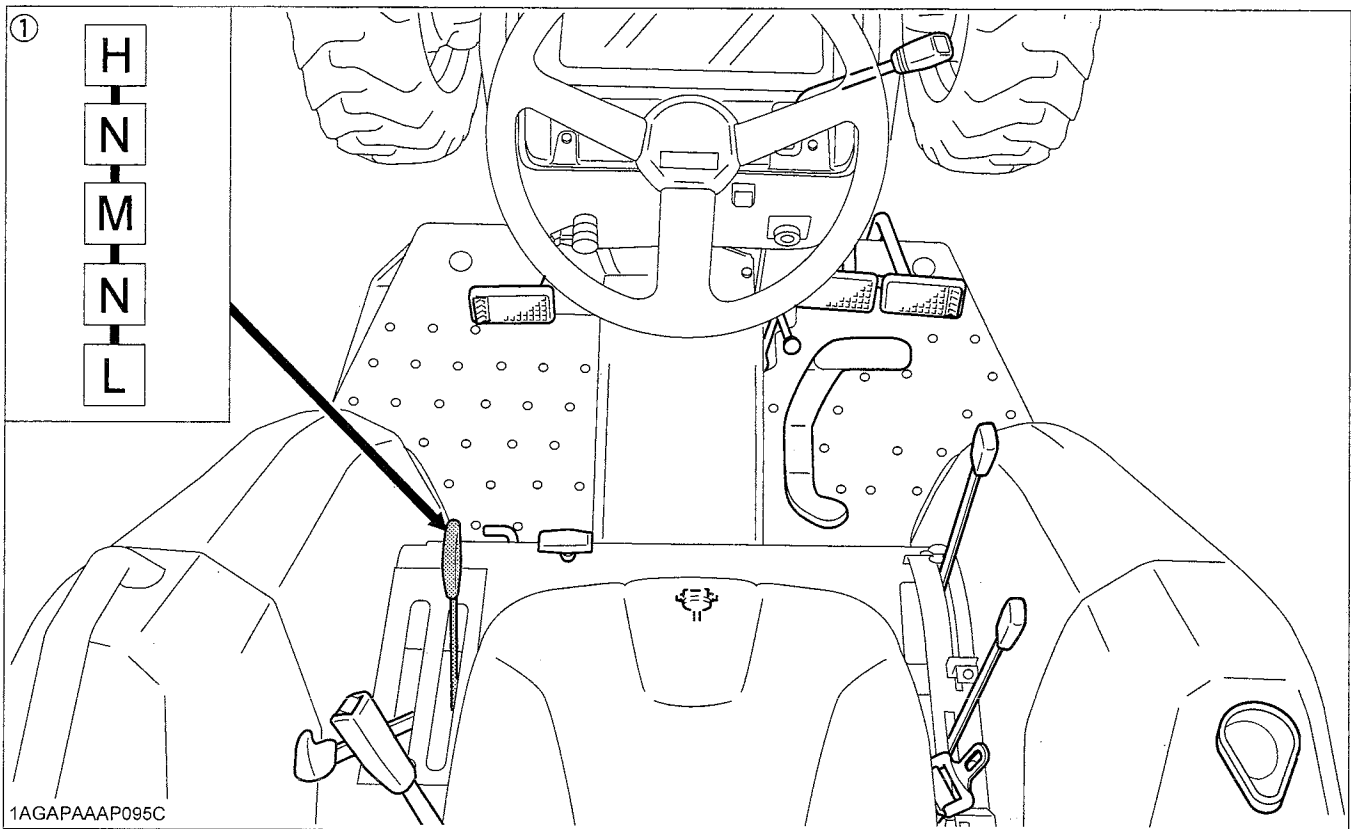
The range gear shift can only be shifted when the tractor is completely stopped and the speed control pedal is neutral position.

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 be sure to set the parking brake before starting the procedure.
 - (1) Slightly depress the speed control pedal to rotate the gears inside of transmission.
 - (2) Release the speed control pedal to neutral position.

- (3) Depress the clutch pedal, wait for a moment and then shift the lever.



(1) Range gear shift lever (L-M-H)

(H) "HIGH"

(L) "LOW"

(M) "MIDDLE"

(N) "NEUTRAL POSITION"

■ Front Wheel Drive Lever

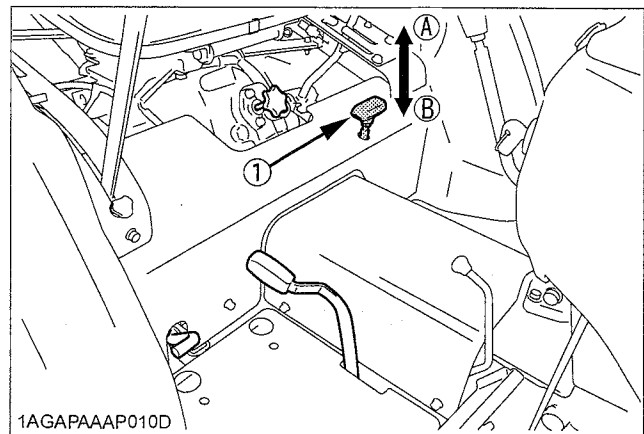


CAUTION

To avoid personal injury:

- 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.
- An accident may occur if the tractor is suddenly braked, such as by heavy towed loads shifting forward or loss of control.
- The braking characteristics are different between two and four wheel drive. Be aware of the difference and use carefully.

Use the lever to engage the front wheels with the tractor stopped. Shift the lever to "ON" to engage the front wheel drive.



(1) Front wheel drive lever

(A) "ON"

(B) "OFF"

IMPORTANT :

- Depress the clutch pedal before engaging the front wheel drive lever.
- If the front wheel drive lever is difficult to set to OFF, stop the tractor, turn the steering wheel and move the lever.
- Tires will wear quickly if front wheel drive is engaged on paved roads.

◆ Front wheel drive is effective for the following jobs:

1. 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.
2. When working in sandy soil.
3. When working on a hard soil where a rotary tiller might push the tractor forward.
4. For increased braking at reduced speed.

7. Accelerate the engine.

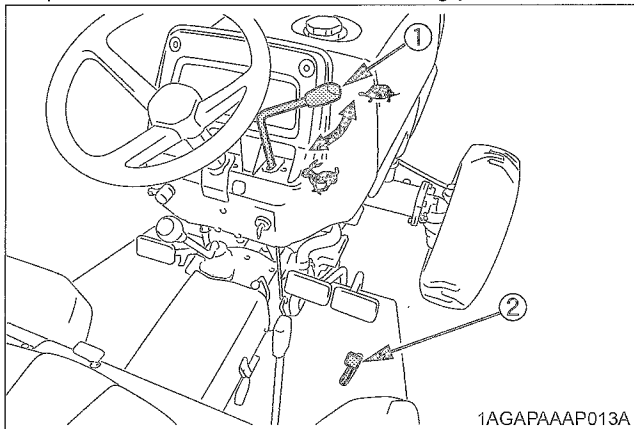
■ Hand Throttle Lever

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

■ Foot Throttle

[Manual Transmission Type]

Use the foot throttle when traveling on the road. Press down on it for higher speed. The foot throttle is interlocked with the hand throttle lever; when using the foot throttle, keep the hand throttle lever in low idling position.

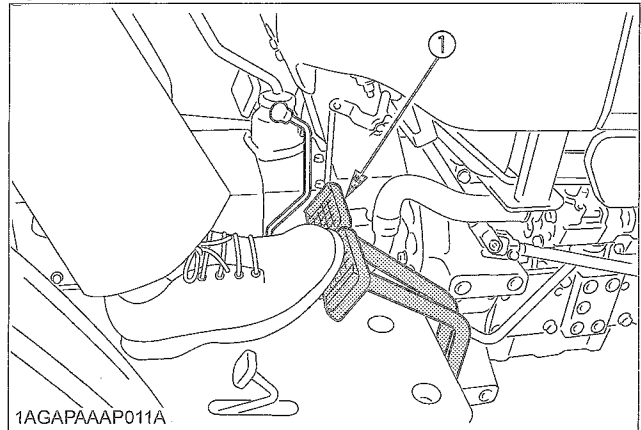


- (1) Hand throttle lever ↑ "INCREASE"
(2) Foot throttle ↓ "DECREASE"

8. Unlock the parking brake and slowly release the clutch.

■ Parking Brake Lever

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



(1) Brake pedals

9. Depress the Speed Control Pedal. [HST Type]

■ Speed Control Pedal



WARNING

To avoid personal injury:

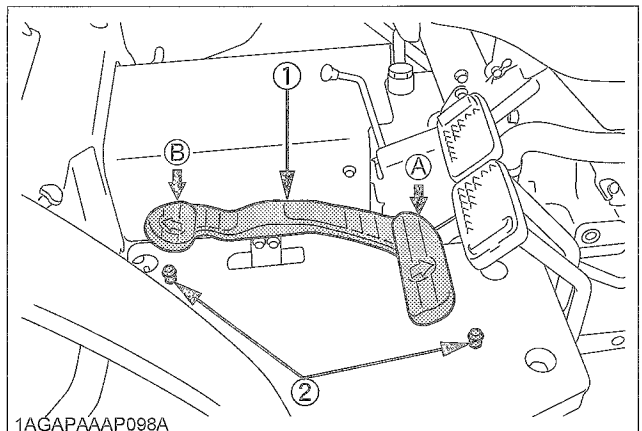
- ⊗ Do not operate if tractor moves on level ground with foot off of Speed Control Pedal.
- ⊗ Consult your local KUBOTA Dealer.

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 of your right foot to move backward.



- (1) Speed control Pedal (A) "FORWARD"
(2) Stopper bolt (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 lever engaged (ON), the engine will stop regardless of whether the machine is moving or not. This is because the tractor is equipped with Operator Presence Control system (OPC).

■Cruise Control Lever**CAUTION**

To avoid personal injury:

- Pull the cruise control lever completely to the rear before starting the engine.
- Do not use the cruise control when driving on the road.
- Be sure to connect both the left and the right brakes to release the cruise control. The speed cruise control won't 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 by mechanically holding the cruise control lever at the selected position.

◆ To engage Cruise Control Device

1. The proper forward speed will be maintained if you apply the cruise control lever at any position.
2. To operate faster than the set speed, depress the speed control pedal further down in this condition. The set speed will be resumed if you release the pedal.

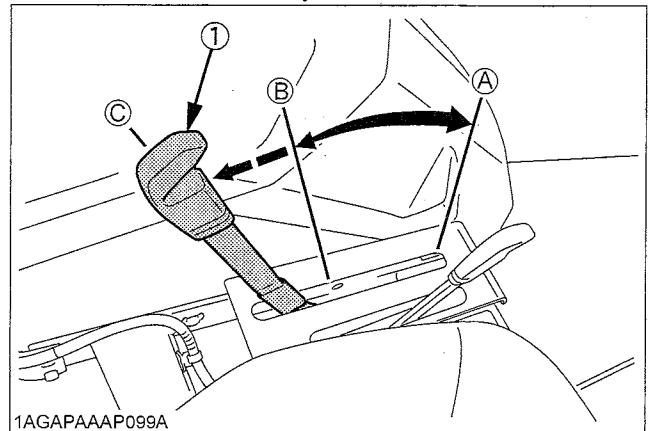
◆ To disengage Cruise Control Device

- Move the lever all the way back and then to "NEUTRAL" position to release the cruise control.
- Depress both brake pedals.

NOTE :

- Cruise control will be disengaged automatically when both brake pedals are depressed.
- The cruise control device does not disengage when the individual right or left brake is applied.
- Cruise control device will not operate in reverse.
- Preferably set the cruise control lever, while holding down the speed control pedal. This makes the setting smoother.

- When releasing the cruise mode, be sure to return the cruise control lever fully backward.



(1) Cruise control lever

(A) "INCREASE"

(B) "DECREASE"

(C) "NEUTRAL"

NOTE :

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

STOPPING**■Stopping**

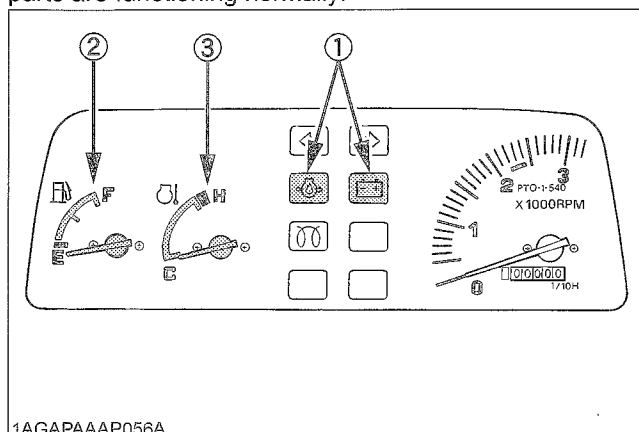
1. Slow down the engine.
2. Step on the clutch and brake pedal.
3. After the tractor has stopped, disengage the PTO, lower the implement to the ground, shift the transmission to neutral, release the clutch pedal, and set the parking brake.

CHECK DURING DRIVING

■ Immediately Stop the Engine if:

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

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



- (1) Easy checker(TM)
 (2) Fuel gauge
 (3) Coolant temperature gauge

■ Easy Checker(TM)

If the indicators in the Easy Checker(TM) come on during operation, immediately stop the engine, and find the cause as shown below.

Never operate the tractor while Easy Checker(TM) lamp is on.

⚠ Engine oil pressure

If the oil pressure in the engine goes below the prescribed level, the indicator in the Easy Checker(TM) will come on.

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

(See "Checking Engine Oil Level" in daily check in Periodic Service section)

🔋 Electrical charge

If the alternator is not charging the battery, the indicator in the Easy Checker(TM) will come on.

If this should happen during operation, check the electrical charging system or consult your local KUBOTA Dealer.

NOTE :

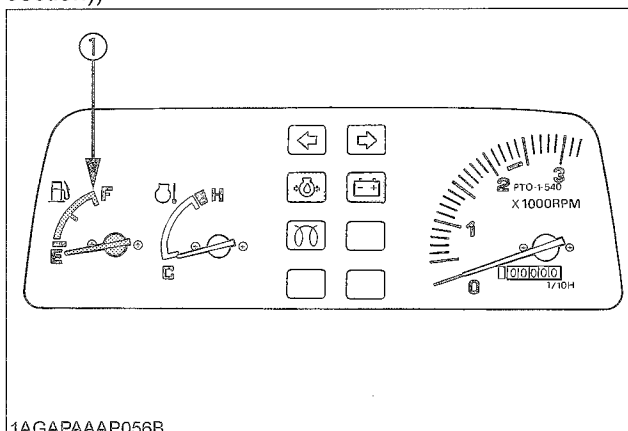
- For checking and servicing of your tractor, consult your local KUBOTA Dealer for instructions.

■ Fuel Gauge

When the key switch is on, the fuel gauge indicates the fuel level.

Be careful not to empty the fuel tank. Otherwise air may enter the fuel system.

Should this happen, the system should be bled. (See "Bleeding Fuel System" in as required in Periodic Service section))



- (1) Fuel gauge
 (E) "EMPTY"
 (F) "FULL"

■ Coolant Temperature Gauge

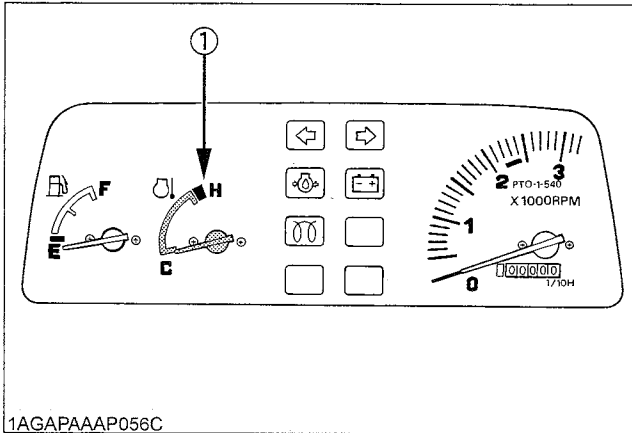


CAUTION

To avoid personal injury:

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

1. With the key switch at "ON", this gauge indicates the temperature of the coolant. "C" for "cold" and "H" for "hot".
2. If the indicator reaches the "H" position (red zone), engine coolant is overheated. Check the tractor by referring to "Troubleshooting" section.

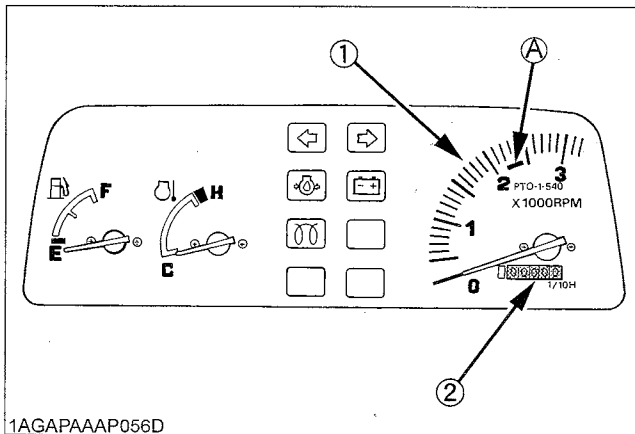


(1) Coolant temperature gauge

Hourmeter/Tachometer

This meter gives readings for engine speed, PTO shaft speed and the hours the tractor has been operated.

1. The tachometer indicates the engine speed and the 540 PTO shaft speed location on the dial.
2. The hourmeter indicates in five digits the hours the tractor has been used; the last digit indicates 1/10 of an hour.



(1) Engine revolution
(2) Hours used

(A) PTO : 540rpm

PARKING

■ Parking



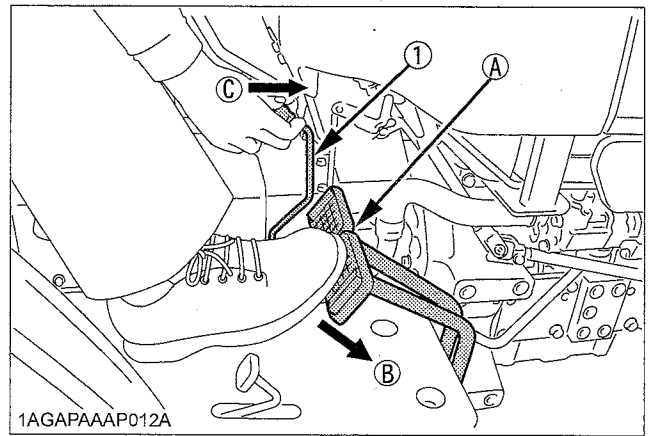
CAUTION

To avoid personal injury:

BEFORE DISMOUNTING TRACTOR

- ALWAYS SET PARKING BRAKE AND LOWER ALL IMPLEMENTS TO THE GROUND.
- STOP THE ENGINE AND REMOVE THE KEY.

1. When parking, be sure to set the parking brake.
To set the parking brake;
 - (1) Interlock the brake pedals.
 - (2) Depress the brake pedals.
 - (3) Latch the brake pedals with the parking brake lever.



(1) Parking brake lever

(A) Interlock the brake pedals

(B) "DEPRESS"

(C) "PUSH"

IMPORTANT :

- To prevent damage to the parking brake lever, make sure that brake pedals are fully depressed before pushing the parking brake lever.
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, be sure to chock the wheels to prevent accidental rolling of the machine.

OPERATING TECHNIQUES

■ Differential Lock



WARNING

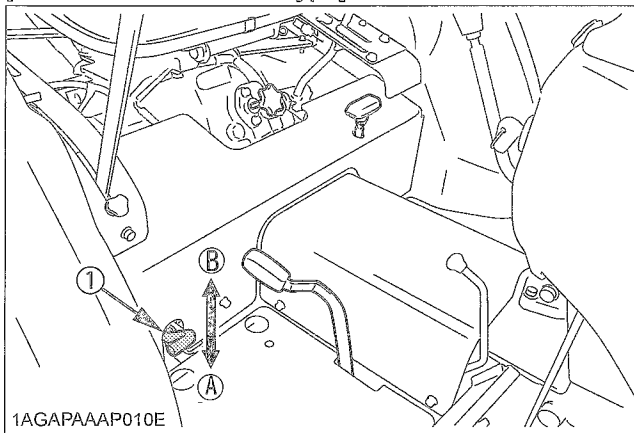
To avoid personal injury due to loss of steering control:

- 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.

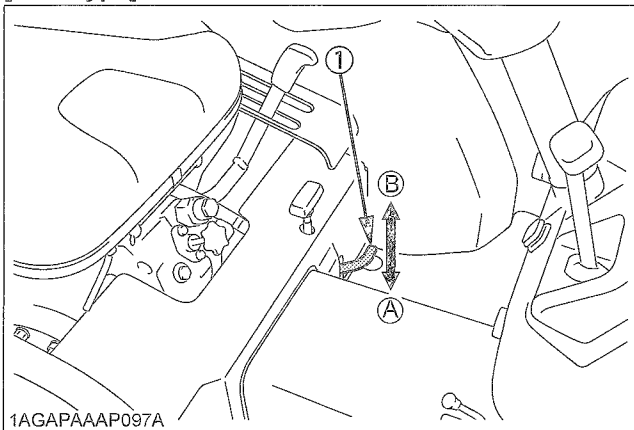
If one of the rear wheels should slip, step on the differential lock pedal. Both wheels will then turn together, reducing slippage.

Differential lock is maintained only while the pedal is depressed.

[Manual Transmission Type]



[HST Type]



(1) Differential lock pedal

(A) Press to "ENGAGE"

(B) Release to "DISENGAGE"

IMPORTANT :

- When using the differential lock, always slow the engine down.

- To prevent damage to power train, do not engage differential lock when one wheel is spinning and the other is completely stopped.
- If the differential lock cannot be released, step lightly on the brake pedals alternately.

■ Operating the Tractor on a Road



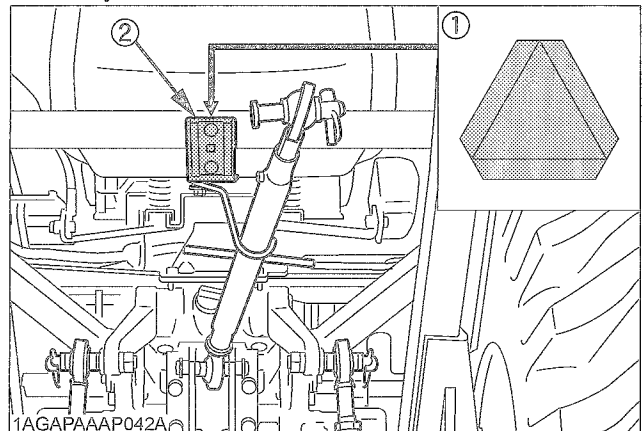
CAUTION

To avoid personal injury:

- 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 road with 3-point hitch mounted implement attached, be sure to have sufficient front weight on the tractor to maintain steering ability.

Be sure SMV emblem and warning lamps are clean and visible. If towed or rear-mounted equipment obstructs these safety devices, install SMV emblem and warning lamps on equipment.

Consult your local KUBOTA Dealer for further details.



(1) SMV emblem

(2) Bracket

■ Operating on Slopes and Rough Terrain



CAUTION

To avoid personal injury:

- 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 wheel tread is adjusted to provide maximum stability.
(See "Wheel Adjustment" in Tires, Wheels and Ballast section)
 2. Slow down for slopes, rough ground, or sharp turns, especially when transporting heavy, rear mounted equipment.
 3. Before descending a slope, shift to a gear low enough to control speed without using brakes.

■ Directions for Use of Power Steering

1. Power steering is activated only while the engine is running. Slow engine speeds make the steering a little heavier. While the engine is stopped, the tractor functions in the same manner as tractors without power steering.
2. 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.
3. Avoid turning the steering wheel while the tractor is stopped, or tires may wear out sooner.
4. The power steering mechanism makes the steering easier. Be careful when driving on a road at high speeds.

PTO

PTO OPERATION



CAUTION

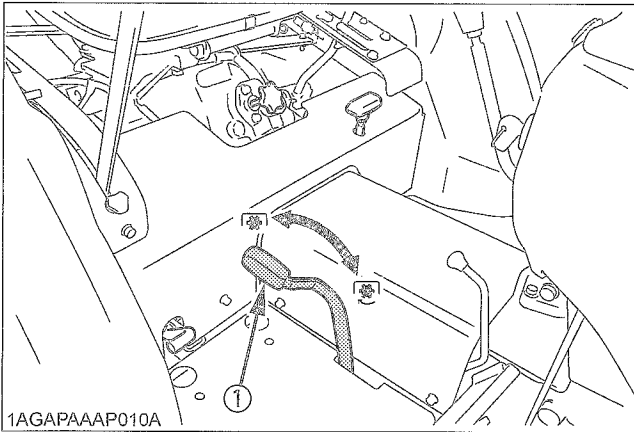
To avoid personal injury:

- Disengage PTO, stop engine, and allow all rotating components to come to a complete stop before connecting, disconnecting, adjusting, or cleaning any PTO driven equipment.

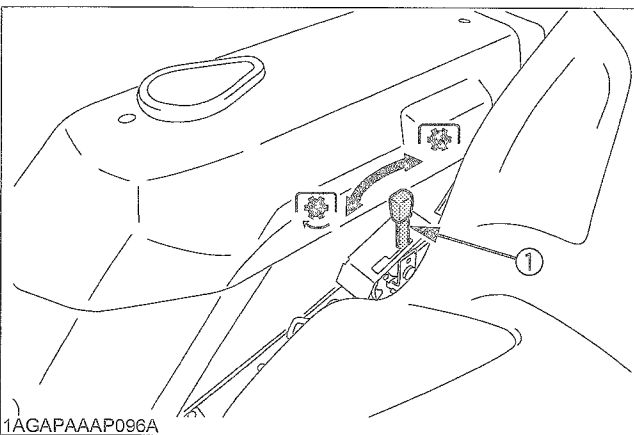
PTO Gear Shift Lever

1. The tractor has a 540 rpm speed position.
2. PTO shifting needs clutch operation. Press the clutch pedal down completely to stop the tractor movement and any PTO driven equipment movement before shifting the PTO gear shift lever.

[Manual Transmission Type]



[HST Type]



(1) PTO gear shift lever

☑ "ON"
☐ "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 transmission, before shifting the PTO gear shift lever, fully disengage the main clutch.

Model		Engine Speed rpm	Shaft	PTO Speed rpm
Manual Transmission	L2800	2430	6-Spline	540
	L3400	2425	6-Spline	540
HST	L2800,3400	2580	6-Spline	540

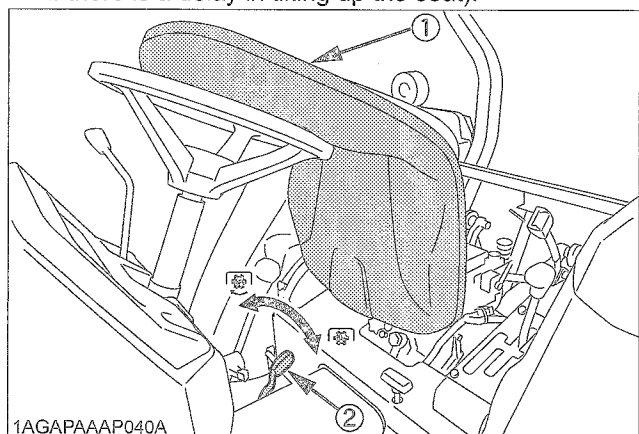
NOTE :

- There is a PTO-1 (540 rpm) indicated mark on the tachometer board.
- Tractor engine will not start if PTO gear shift lever is in the engaged "ON" position.

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 the shift levers are at NEUTRAL, and start the engine.
3. Set the PTO gear shift lever to engage "ON".
4. Set the engine speed to provide recommended PTO speed.
5. Dismount the seat and tilt up quickly (engine will stop if there is a delay in tilting up the seat).



(1) Seat

(2) PTO gear shift lever

☑ "ON"
☐ "OFF"

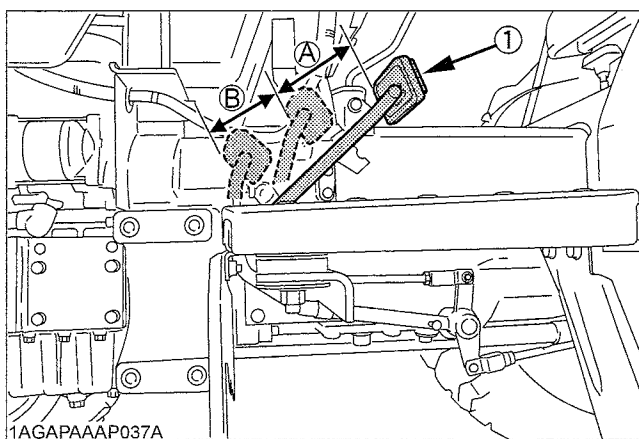
NOTE :

- If the PTO system is engaged and you stand up from the seat or the seat is not tilted forward, the engine stops automatically after standing up.

■ Live PTO Operation

[with Dual Clutch]

1. Fully depressed the clutch pedal (1), and move the PTO gear shift lever to "ON" position and select the traveling speed.
2. Release the clutch pedal half-way (B) and the PTO will be engaged, but transmission clutch remains disengaged.
3. Release the clutch pedal (A) and start the tractor.



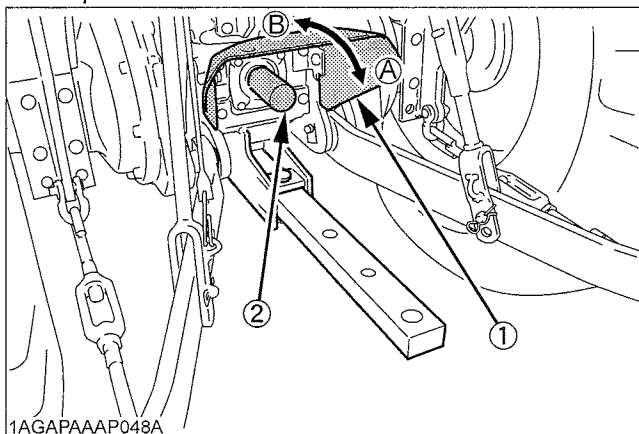
(1) Clutch pedal

■ PTO Shaft Cover and Shaft Cap

Keep the PTO shaft cover in place at all times.

Replacing the PTO shaft cap when the shaft is not in use.

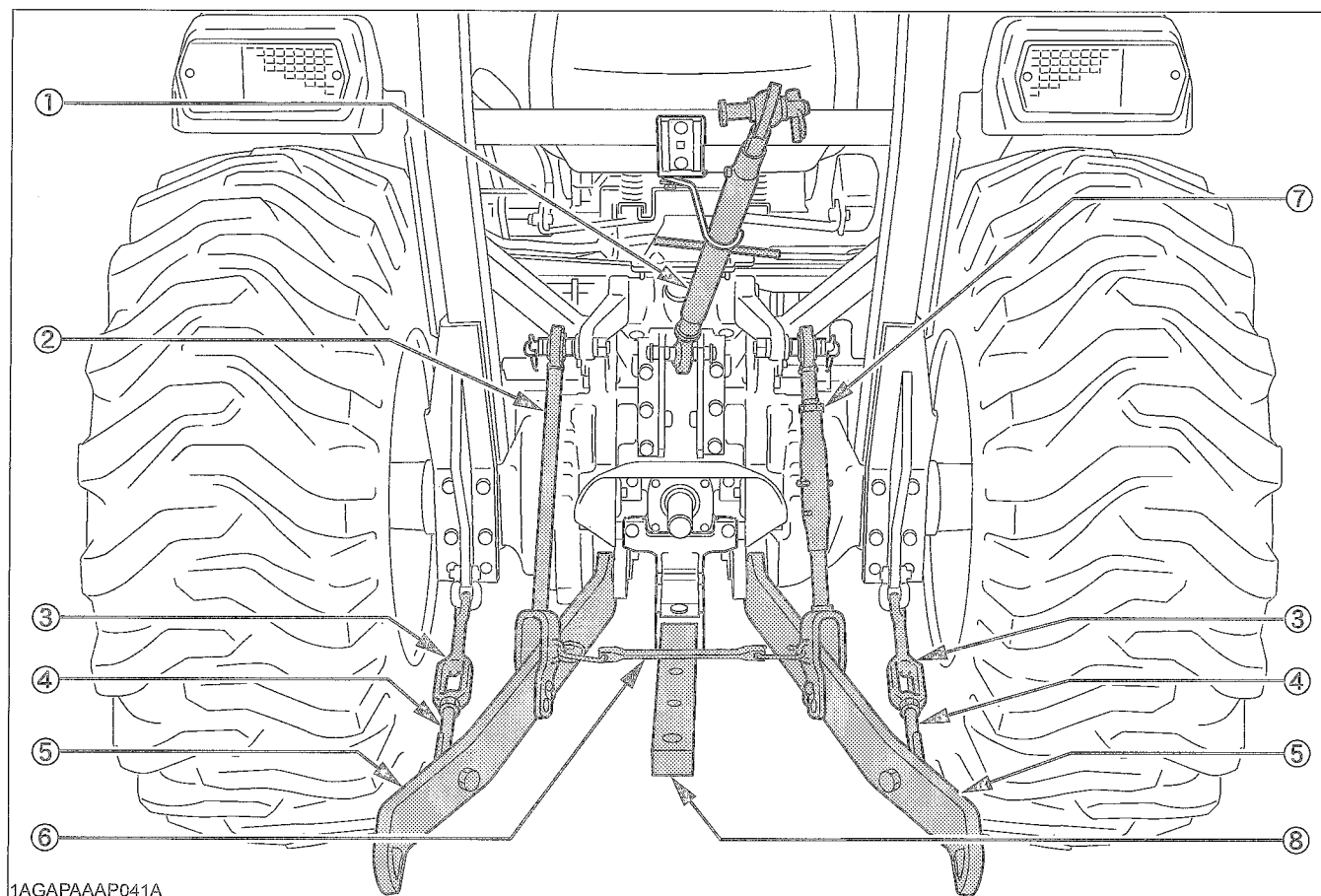
When connecting or disconnecting the joint to PTO shaft, raise up the PTO shaft cover.



(1) PTO shaft cover
(2) PTO shaft cap

(A) "NORMAL POSITION"
(B) "RAISED POSITION"

THREE-POINT HITCH & DRAWBAR



1AGAPAAAP041A

- (1) Top link
- (2) Lifting rod(Left)
- (3) Turn buckle
- (4) Check chains
- (5) Lower link
- (6) Lower link holder
- (7) Lifting rod(Right)
- (8) Drawbar

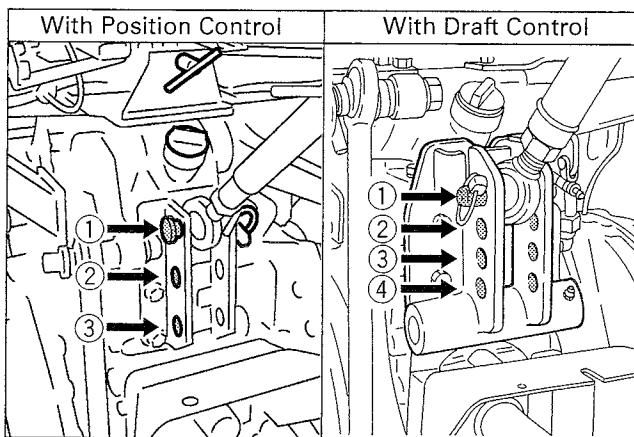
3-POINT HITCH

1. Make preparations for attaching implement.

■ Selecting the top link mounting holes

Select the proper set of holes by referring to the "Hydraulic Control Unit Use Reference Chart" in Hydraulic Unit section.

If the hydraulic unit is set for draft control, draft response is more sensitive when an implement is connected to the upper set of top link mounting holes. If draft control is not required, it is recommended to use the low set (4).



■ Drawbar

Remove the drawbar if close mounted implement is being attached.

2. Attaching and detaching implements



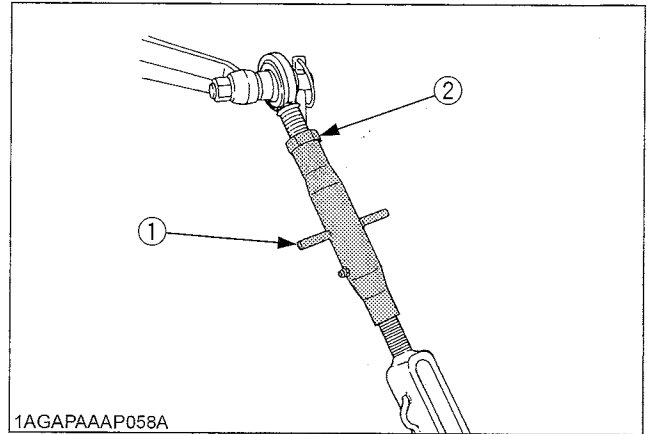
CAUTION

To avoid personal injury:

- Be sure to stop the engine.
- Do not stand between tractor and implement unless parking brake is applied.
- Before attaching or detaching 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)

Level a 3-point mounted implement from side to side by turning the adjusting handle to shorten or lengthen the adjustable lifting rod with the implement on the ground. After adjustment, tighten the lock nut securely.



1AGAPAAAP058A

- (1) Adjusting handle
(2) Lock nut

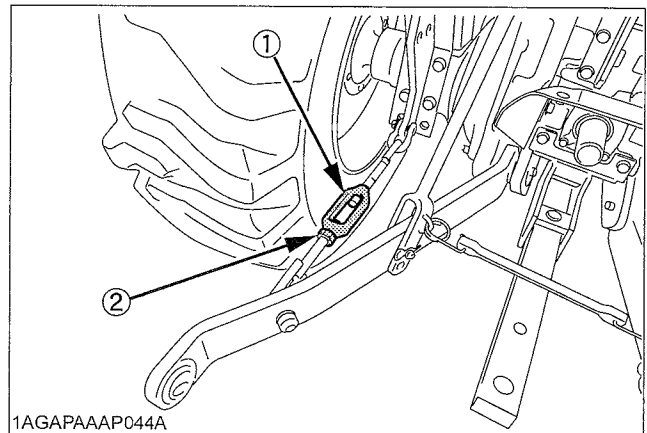
■ Top Link

1. Adjust the angle of the implement to the desired position by shortening or lengthening the top link.
2. The proper length of the top link varies according to the type of implement being used.

■ Check chains

Adjust the turnbuckle to control horizontal sway of the implement.

After adjustment, retighten the lock nut.



1AGAPAAAP044A

- (1) Turnbuckle
(2) Lock nut

■ Lower link holder

When operating the tractor without a 3-point hitch implement, it is necessary to lock the lower links to prevent them from hitting the tractor rear wheels.

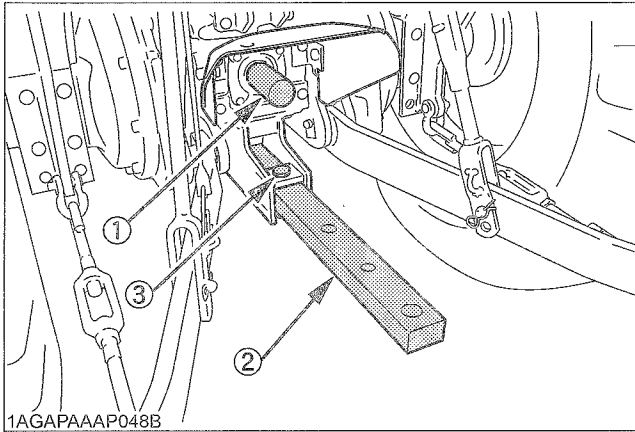
DRAWBAR



WARNING

To avoid personal injury:

- ⊗ 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 causing personal injury or death.



- (1) PTO shaft
- (2) Drawbar
- (3) Drawbar pin

NOTE :

- ⊗ The drawbar load is referred to "IMPLEMENT LIMITATIONS" section.

HYDRAULIC UNIT

IMPORTANT :

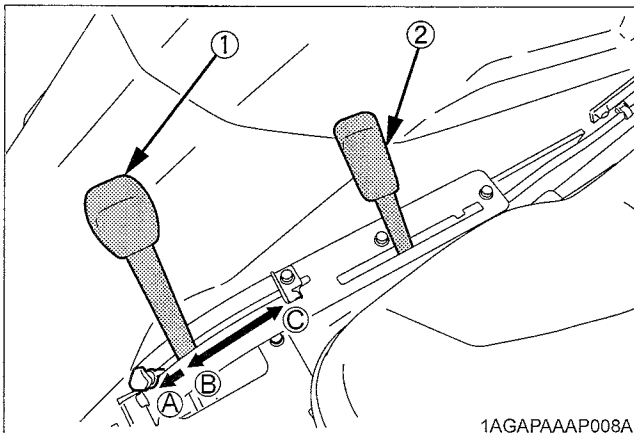
- Do not operate until the engine is warmed up. If operation is attempted when the engine is still cold, the hydraulic system may be damaged.
- If noises are heard when implement is lifting after the hydraulic control lever has been activated, the hydraulic mechanism is not adjusted properly. Unless corrected, the unit will be damaged. Contact your KUBOTA Dealer for adjustment.

3-POINT HITCH CONTROL SYSTEM

■ Position Control

This will control the working depth of three-point hitch mounted implement regardless of the amount of pull required.

Place the draft control lever to the rear-most position and set the implement working depth with the position control lever.

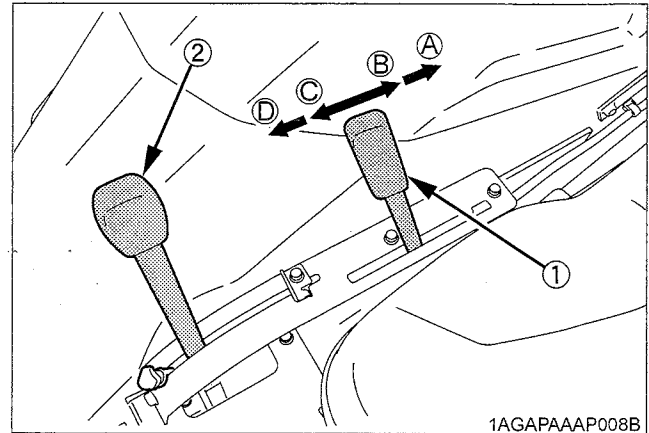


- (1) Position control lever
(2) Draft control lever (if equipped)
- (A) "UP"
(B) "DOWN"
(C) "UP"

■ Draft Control (if equipped)

This will control the pull of the 3-point hitch mounted implement. As the load on the 3-point hitch changes due to various soil conditions, the draft control system automatically responds to these changes by either raising or lowering the implement slightly to maintain a constant pull.

Place the position control lever to the rear-most position and set the implement pull with the draft control lever.



- (1) Draft control lever
(2) Position control lever
- (A) "UP"
(B) "SHALLOW"
(C) "DEEP"
(D) "FLOAT"

■ Float Control

[with Draft control]

Place both the draft control lever and the position control lever in the float position to make the lower links move freely along with the ground conditions.

[with Position control]

Place the position control lever in the float position to make the lower links move freely along with the ground conditions.

■ 3-point Hitch Lowering Speed

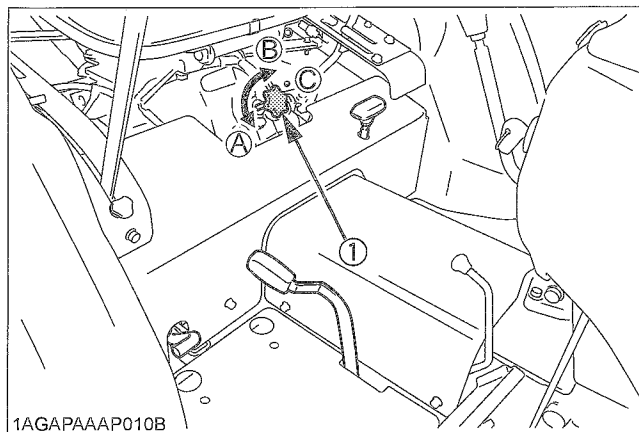


CAUTION

To avoid personal injury:

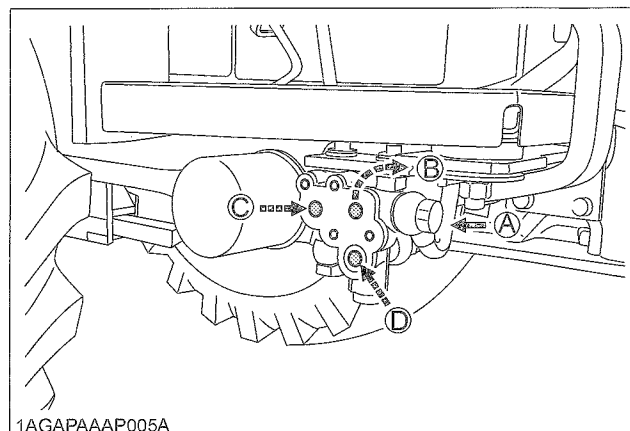
- Fast lowering speed may cause damage or injury. Lowering speed of implement should be adjusted to two or more seconds.

The lowering speed of the 3-point hitch can be controlled by adjusting the 3-point lowering speed knob.



(1) 3-Point lowering speed knob

- (A) "FAST"
(B) "SLOW"
(C) "LOCK"



(1) Block cover

- (A) Front gear pump
(B) To implement
Max flow
26.6 L/min (7.0 gals./min)
[L2800]
25.7 L/min (6.8 gals./min)
[L3400]
Max pressure
16.2 Mpa (165 kgf/cm², 2347 psi)
[L2800, L3400]
(C) From implement(Outlet)
(D) From implement(Tank port)

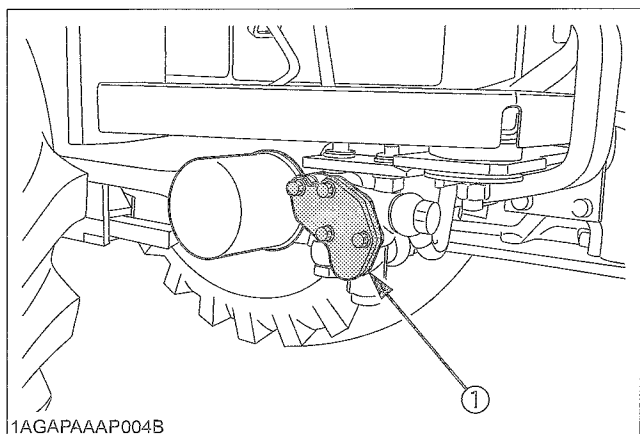
AUXILIARY HYDRAULICS

■Hydraulic Block Type Outlet

Hydraulic block type outlet is useful when adding hydraulically operated equipment such as: front end loader, front blade, etc.

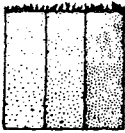
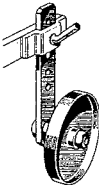
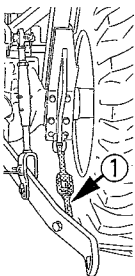
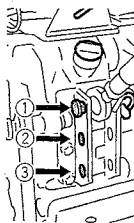
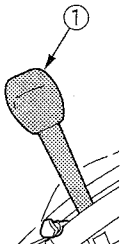
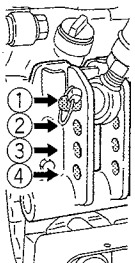
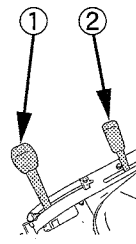
When implement is attached

1. Remove the block cover.
2. Route the implement inlet, outlet, and return hoses as shown in the illustration.



■ Hydraulic Control Unit Use Reference Chart

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

Implement	 1AGAMAAAP314A	with Position control		with Draft control		 1AGAMAAAP316A	 1AGAPAAAP041D	Remarks		
		 1AGAPAAAP043D	 1AGAPAAAP008D	 1AGAMAAAP315A	 1AGAPAAAP008E					
	Soil condition	Top link mounting holes	① Position control lever	Top link mounting holes	① Position control lever ② Draft control lever	Gauge wheel	① Check chains			
Moldboard plow	Light soil Medium soil Heavy soil	1 or 2 2 or 3 3	Position control	1 or 2 2 or 3 3	Draft control	YES/NO	Loose	Adjust the check chains so that the implement can move 5 to 6 cm (2.0 to 2.4 in) laterally.		
Disc plow	---	2 or 3		2 or 3	Hold the position control lever at the rear most position during operation.			YES/NO	Loose	Check chains should be tight enough to prevent excessive implement movement when implement is in raised position.
Harrow (spike, springtooth, disc type)	---	2 or 3								
Sub-soiler ...										
Weeder, ridger...	---	3		4	Position control	YES	Tighten			
Earthmover, digger, scraper, manure fork, rear carrier.....					Hold the draft control lever at the rear most position during operation.	YES/NO				
Mower (mid-and rear-mount type)						NO				

TIRES, WHEELS AND BALLAST

TIRES



WARNING

To avoid personal injury:

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

IMPORTANT :

- Do not use tires other than those approved by KUBOTA.
- When you intend to mount different size of tires from equipped ones, consult your dealer about front drive gear ratio for details.
Excessive wear of tires may occur due to improper gear ratio.

■ Inflation Pressure

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

	Tire sizes	Inflation Pressure
Rear	11.2-24, 4PR	100 kPa (1.0 kgf/cm ² , 14 psi)
	13.6-16, 4PR	100 kPa (1.0 kgf/cm ² , 14 psi)
	15-19.5, 6PR	210 kPa (2.1 kgf/cm ² , 30 psi)
Front	5.00-15, 4PR	220 kPa (2.2 kgf/cm ² , 32 psi)
	7-16, 6PR	250 kPa (2.5 kgf/cm ² , 36 psi)
	23 x 8.50-12, 4PR	160 kPa (1.6 kgf/cm ² , 23 psi)
	25 x 8.50-14, 6PR	160 kPa (1.6 kgf/cm ² , 23 psi)
	27 x 8.50-15, 6PR	210 kPa (2.1 kgf/cm ² , 30 psi)

NOTE :

- Maintain the maximum pressure in front tires, if using a front loader or when equipped with a full load of front weights.

■ Dual Tires

Dual tires are not approved.

WHEEL ADJUSTMENT



CAUTION

To avoid personal injury:

- When working on slopes or when working with trailer, set the wheel tread as wide as practical for maximum stability.
- Support tractor securely on stands before removing a wheel.
- Do not work under any hydraulically supported devices. They can settle, suddenly leak down, or be accidentally lowered. If necessary to work under tractor or any machine elements for servicing or adjustment, securely support them with stands or suitable blocking beforehand.
- Never operate tractor with a loose rim, wheel, or axle.

■ Front Wheels (with two wheel drive)

Front tread can not be adjusted.

5-15 Farm	23 x 8.5-12 Turf
1050mm (41.3in.) 1AGAPAAAP053A	1175mm (46.3in.) 1AGAPAAAP054A

■ Front Wheels (with four wheel drive)

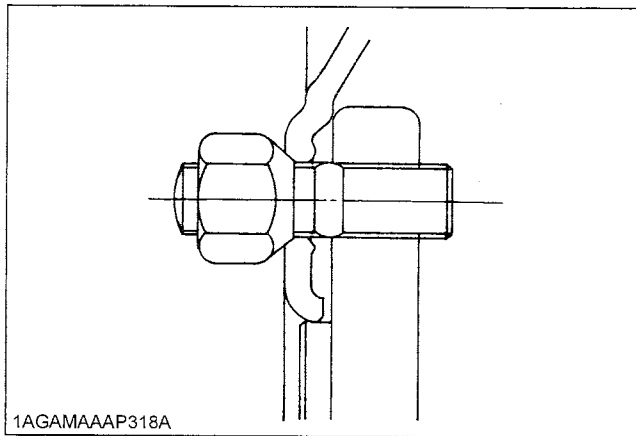
Front tread can not be adjusted.

IMPORTANT :

- Do not turn front discs to obtain wider tread.

NOTE :

- Wheels with beveled or tapered holes: Use the tapered side of lug nut.



	Tire	7-16 Farm	25 x 8.5-14 Turf	27 x 8.5-15 IND
	Tread	1095mm (43.1in.)	1105mm (43.5in.)	1115mm (43.9in.)

NOTE :

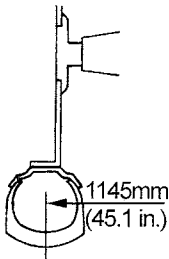
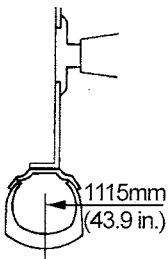
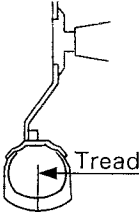
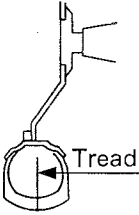
- IND...for Industrial

■ Rear Wheels

Rear tread width can be adjusted as shown with the standard equipped tires.

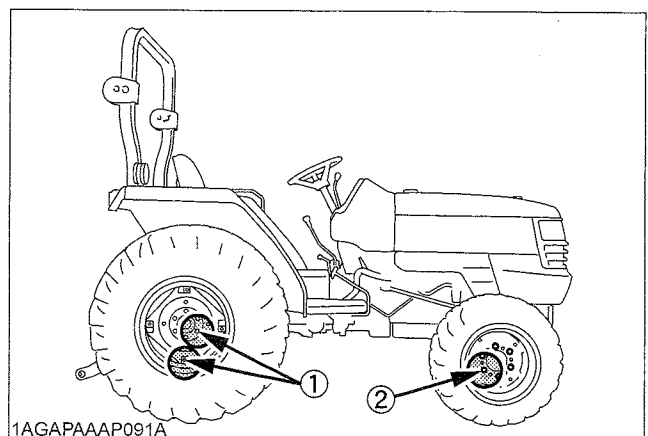
To change the tread width

1. Remove the wheel rim and / or disk mounting bolts.
2. Change the position of the rim and / or disk (right and left) to the desired position, and tighten the bolts.

15-19.5 Industry		13.6-16 Turf	
		11.2-24 Farm	
			
1020mm (40.2in.)	1115mm (43.8in.)	1195mm (47.1in.)	1290mm (50.8in.)

IMPORTANT :

- Always attach tires as shown in the drawings.
- 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 200m (200yards) and thereafter according to service interval.
(See "MAINTENANCE" section)



- (1) 137 N-m (14kgf-m, 100ft-lbs)
(2) 215 N-m (22kgf-m, 160ft-lbs)

BALLAST



CAUTION

To avoid personal injury:

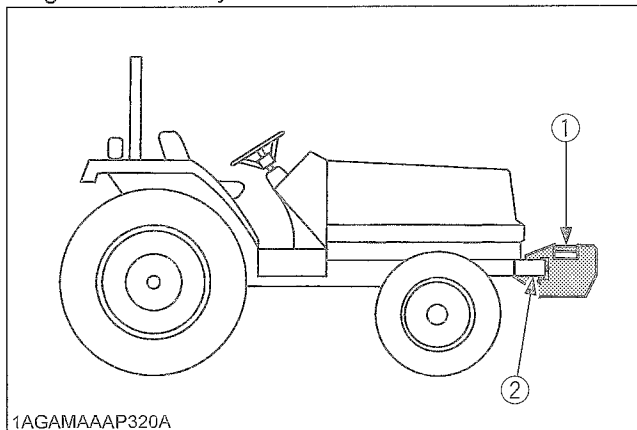
- ⊗ Additional ballast will be needed for transporting heavy implements. When the implement is raised, drive slowly over rough ground, regardless of how much ballast is used.
- ⊗ Do not fill the front wheels with liquid to maintain steering control.

■ Front Ballast

Add weights if needed for stability (2WD/4WD models) and improve traction (4WD model). 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.



(1) Front end weights
(2) Bumper

IMPORTANT :

- ⊗ Do not overload tires.
- ⊗ Add no more weight than indicated in chart.

Maximum weight	25 kg x 5 Pieces (275 lbs.)
----------------	--------------------------------

NOTE :

- ⊗ The front end weights can be attached to the bumper (option on 4WD models - North America only).

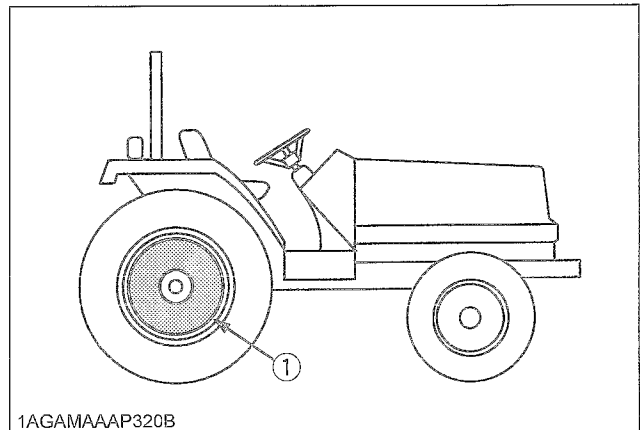
■ Rear Ballast

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.

◆ Rear Wheel Weights (option)

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



(1) Rear wheel weights

IMPORTANT :

- ⊗ Do not overload tires.
- ⊗ Add no more weight than indicated in chart.

Maximum weight per wheel	28 kg x 3 Pieces (185 lbs.)
--------------------------	--------------------------------

■ Liquid Ballast in Rear Tires

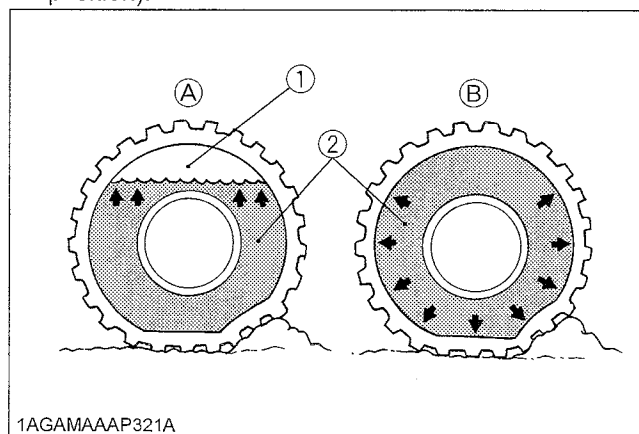
Water and calcium chloride solution provides safe economical ballast. Used properly, it will not damage tires, tubes or rims. The addition of calcium chloride is recommended to prevent the water from freezing. Use of this method of weighting the wheels has the full approval of the tire companies. See your tire dealer for this service.

Liquid weight per tire (75 Percent filled)

Tire sizes	11.2 - 24	15 - 19.5
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]	105 kg (230 lbs.)	140 kg (309 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]	110 kg (240 lbs.)	150 kg (331 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]	115 kg (253 lbs.)	160 kg (353 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 (A) Correct-75% Air compresses like a cushion
(2) Water (B) Incorrect-100% Full Water can not be compressed

MAINTENANCE

SERVICE INTERVALS

No.	Items		Indication on hour meter														Since then	Ref. page	
			50	100	150	200	250	300	350	400	450	500	550	600	650	700			
1	Engine oil	Change	⊙	○		○		○		○		○		○		○	every 100 Hr	52	
2	Engine oil filter	Replace	⊙			○				○				○			every 200 Hr	57	
3	Hydraulic oil filter	Replace	⊙			○				○				○			every 200 Hr	57	
4	HST oil filter	Replace	⊙			○				○				○			every 200 Hr	57	
5	Transmission fluid	Change	⊙							○							every 400 Hr	61	
6	Front axle case oil (4WD)	Change	⊙							○							every 400 Hr	62	
7	Front axle pivot	Adjust												○			every 600 Hr	63	
8	Greasing	-	○	○	○	○	○	○	○	○	○	○	○	○	○	○	every 50 Hr	49	
9	Engine start system	Check	○	○	○	○	○	○	○	○	○	○	○	○	○	○	every 50 Hr	50	
10	Wheel bolt torque	Check	○	○	○	○	○	○	○	○	○	○	○	○	○	○	every 50 Hr	51	
11	Battery condition	Check		○		○		○		○		○		○		○	every 100 Hr	55	*5
12	Air cleaner element	Clean		○		○		○		○		○		○		○	every 100 Hr	52	*1
		Replace															every 1 year	63	*2
13	Fuel filter element	Clean		○		○		○		○		○		○		○	every 100 Hr	53	@
		Replace								○							every 400 Hr	62	
14	Fan belt	Adjust		○		○		○		○		○		○		○	every 100 Hr	53	
15	Clutch	Adjust	⊙	○		○		○		○		○		○		○	every 100 Hr	54	
16	Brake	Adjust		○		○		○		○		○		○		○	every 100 Hr	55	
17	Radiator hose and clamp	Check				○				○				○			every 200 Hr	59	
		Replace															every 2 year	65	
18	Power steering oil line	Check				○				○				○			every 200 Hr	59	
		Replace															every 2 year	65	
19	Fuel line	Check		○		○		○		○		○		○		○	every 100 Hr	54	@
		Replace															every 2 year	65	
20	HST oil Line	Check				○				○				○			every 200 Hr	59	
		Replace															every 2 year	65	
21	Toe-in	Adjust				○				○				○			every 200 Hr	60	
22	Intake air line	Check				○				○				○			every 200 Hr	60	@
		Replace															every 2 year	65	
23	Greasing (2WD front wheel hub)	-								○							every 400 Hr	62	
24	Engine valve clearance	Adjust															every 800 Hr	63	*4
25	Fuel injection nozzle	Check															every 1500 Hr	63	*4
26	Injection pump	Check															every 3000 Hr	63	*4
27	Cooling system	Flush															every 2 year	63	@
28	Coolant	Change															every 2 year	63	
29	Fuel system	Bleed																65	
30	Clutch housing water	Drain															Service as required	66	
31	Fuse	Replace																66	
32	Light bulb	Replace																67	

IMPORTANT :

● The jobs indicated by ⊙ must be done after the first 50 hours of operation.

*1 Air cleaner should be cleaned more often in dusty conditions than in normal conditions.

*2 Every year or every 6 times of cleaning.

*3 Replace only if necessary.

*4 Consult your local KUBOTA Dealer for this service.

*5 When the battery is used for less than 100 hours per year, check the battery condition by reading the indicator annually.

- The items listed above (@ marked) 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 above instruction.

Please see Warranty Statement in detail.

LUBRICANTS

No.	Locations	Capacities		Lubricants	
		L2800	L3400		
1	Fuel	34 L (9.0 U.S.gals.)		No. 2-D diesel fuel No. 1-D diesel fuel if temperature is below -10 °C(14°F)	
2	Coolant	6.0 L (6.3 U.S.qts.)		Fresh clean water with anti-freeze	
3	Engine crankcase (with filter)	5.7 L (6.0 U.S.qts.)		● Engine oil : API Service Classification CD, CE or CF	
				Above 25°C (77°F)	SAE30, SAE10W-30 or 10W-40
				0 to 25°C (32 to 77°F)	SAE20, SAE10W-30 or 10W-40
				Below 0°C (32°F)	SAE10W, SAE10W-30 or 10W-40
4	Transmission case	Manual Transmission, 2WD	27.0 L (7.1 U.S. gals.)	● KUBOTA UDT or SUPER UDT fluid*	
		Manual Transmission, 4WD	27.5 L (7.3 U.S. gals.)		
		HST, 4WD	23.5 L (6.2 U.S. gals.)		
5	Front axle case [4WD]	4.5 L (4.8 U.S.qts.)		● KUBOTA UDT or SUPER UDT fluid or SAE 80 - SAE 90 gear oil	
6	Greasing	No. of greasing points		Capacity	Type of grease
	● Front wheel hub	2[2WD only]		A small amount	Bearing grease
	● Knuckle shaft	2[2WD only]		Until grease overflows.	Multipurpose Grease NLGI-2 OR NLGI-1 (GC-LB)
	● Front axle support	2			
	● Clutch pedal	1			
	● Brake pedal	1			
	● Pedal shaft	1			
	● Top link bracket	2[with Draft Control (if equipped)]			
	● Battery terminals	2			
	● Lift rod	1			

NOTE : *KUBOTA SUPER UDT --- KUBOTA original transmission hydraulic fluid

NOTE :

- Engine Oil:
Oil used in the engine should have an American Petroleum Institute (API) service classification and Proper SAE Engine Oil according to the ambient temperatures as shown above:
- With the emission control now in effect, the CF-4 and CG-4 lubricating oils have been developed for use of a low-sulfur fuel on on-road vehicle engines. When an off-road vehicle engine runs on a high-sulfur fuel, it is advisable to employ the CF, CD or CE lubricating oil with a high total base number. **If the CF-4 or CG-4 lubricating oil is used with a high-sulfur fuel, change the lubricating oil at shorter intervals.**
- Lubricating oil recommended when a low-sulfur or high-sulfur fuel employed.

○: Recommendable X: Not Recommendable

Lubricating oil class	Fuel		Remark
	Low-sulfur	High-sulfur	
CF	○	○	TBN $\geq$ 10
CF-4	○	X	
CG-4	○	X	

④ Transmission oil

The oil used to lubricate the transmission is also used as hydraulic fluid. To insure proper operation of the hydraulic system and complete lubrication of the transmission, it is important that a multi-grade transmission fluid be used in this system. We recommend the use of **KUBOTA SUPER UDT** fluid for optimum protection and performance. (Consult your local KUBOTA Dealer for further detail.)

Do not mix different brands or grades.

⑤ Indicated capacity of water and oil are manufacturer's estimate.

PERIODIC SERVICE



CAUTION

To avoid personal injury:

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

HOW TO OPEN THE HOOD



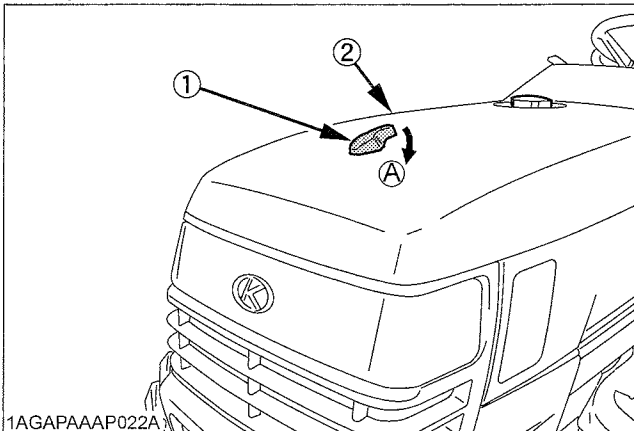
CAUTION

To avoid personal injury from contact with moving parts;

- Never open the hood while the engine is running.
- Do not touch muffler or exhaust pipes while they are hot; Severe burns could result.
- Support hood with other hand while unlocking support link.

■ Hood

To open the hood, twist the mascot to release the latch and open the hood.

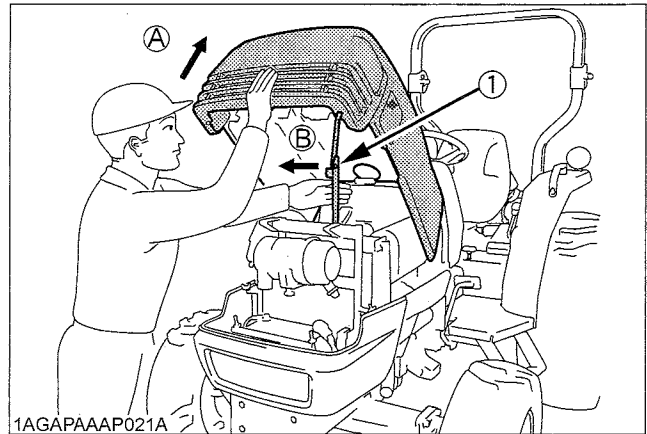


- (1) Mascot
(2) Hood

(A) "OPEN"

NOTE :

- To close the hood, hold the hood and release the support link.



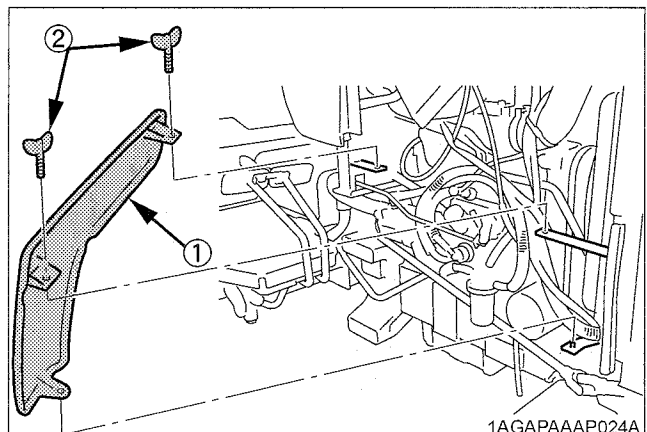
(1) Support link

(A) "HOLD"

(B) "PULL"

■ Side Cover

1. Remove the bolts at the both sides and detach the side cover.
2. To attach the side cover, insert the bottom pin of side cover first, and then tighten the bolts.



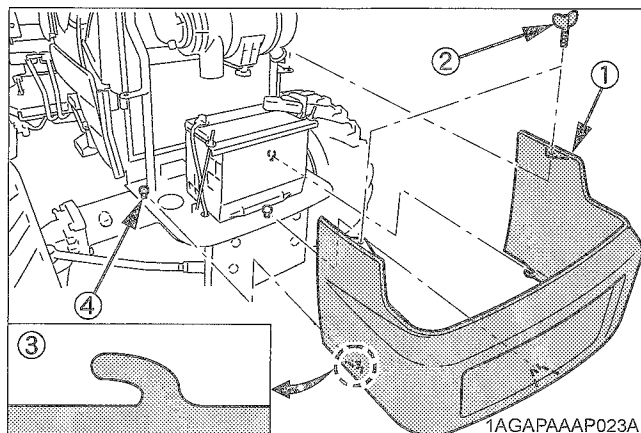
(1) Side cover

(2) Wing bolt

1AGAPAAAP024A

Front Cover

1. Remove the bolts at the both sides and detach the front cover.
2. To attach the front cover, fit 3 grooves on the front cover and then tighten the bolts.



- (1) Front cover
(2) Wing bolt
(3) Groove
(4) Pin

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.

**CAUTION**

To avoid personal injury:

- Be sure to check and service the tractor on a flat place with the engine shut off and the parking brake "ON".

Walk Around Inspection

Look around and under the tractor for such items as loose bolts, trash build-up, oil or coolant leaks, broken or worn parts.

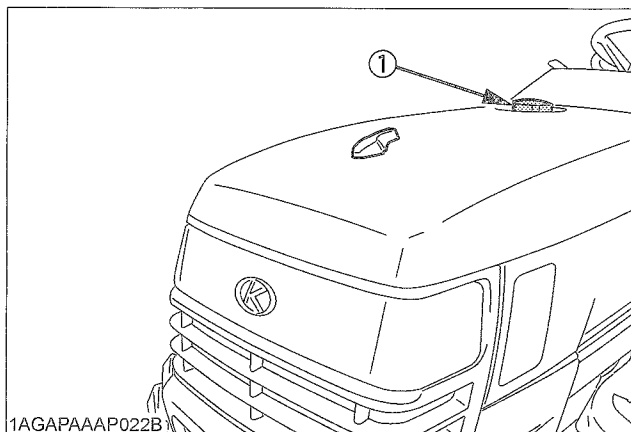
Checking and Refueling**CAUTION**

To avoid personal injury:

- Do not smoke while refueling.
- Be sure to stop the engine before refueling.

1. Turn the key switch to "ON", check the amount of fuel by fuel gauge.
2. Fill fuel tank when fuel gauge shows 1/4 or less fuel in tank.

3. Use grade No.2-Diesel fuel at temperatures above -10 °C (14 °F).
Use grade No.1-Diesel fuel at temperatures below -10 °C (14 °F).



(1) Fuel tank cap

Model	Fuel tank capacity
L2800	34L (9.0 U.S.gals.)
L3400	

IMPORTANT :

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

NOTE :

- No.2-D is a distillate fuel of lower volatility for engines in industrial and heavy mobile service.
(SAE J313 JUN87)
- Grade of Diesel Fuel Oil According to ASTM D975

Flash Point, °C (°F)	Water and Sediment, volume %	Carbon Residue on, 10 percent Residuum, %	Ash, weight %
Min	Max	Max	Max
52 (125)	0.05	0.35	0.01

Distillation Tempera- tures, °C (°F) 90% Point		Viscosity Kinematic cSt or mm ² /s at 40 °C		Viscosity Saybolt, SUS at 100 °F		Sulfur weight %	Cop- per Strip Corro- sion	Ce- tane Num- ber
Min	Max	Min	Max	Min	Max	Max	Max	Min
282 (540)	338 (640)	1.9	4.1	32.6	40.1	0.50	No.3	40

■ Checking Engine Oil Level



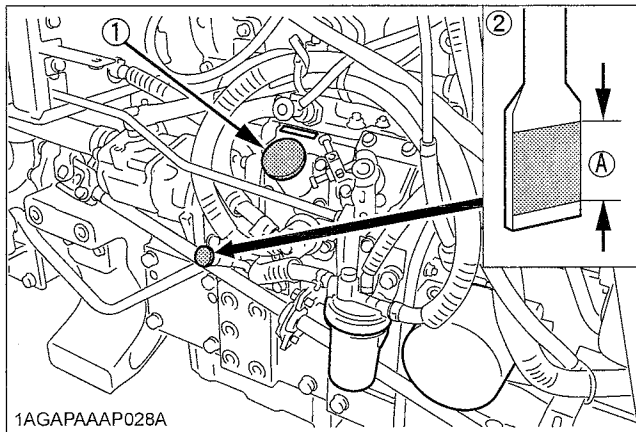
CAUTION

To avoid personal injury:

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

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

(See "LUBRICANTS" in Maintenance section)



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

IMPORTANT :

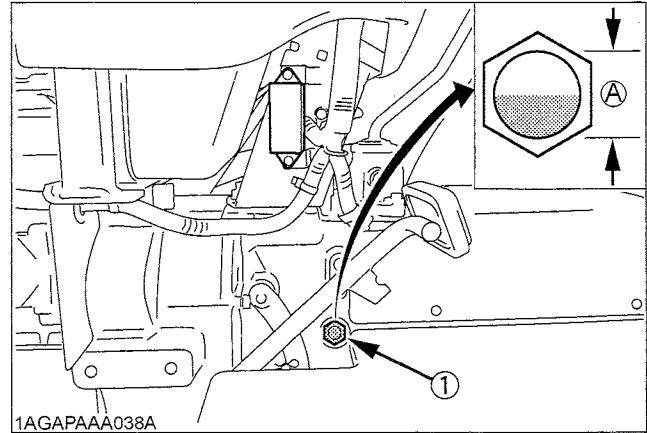
- When using an oil of different maker or viscosity from the previous one, remove all of the old oil. Never mix two different types of oil.
- If oil level is low, do not run engine.

■ Checking Transmission Fluid Level

1. Park the machine on a flat surface, lower the implement and shut off engine.
2. View the fluid level through the fluid level gauge. If the level is too low, add new oil to the prescribed level at the oil inlet.

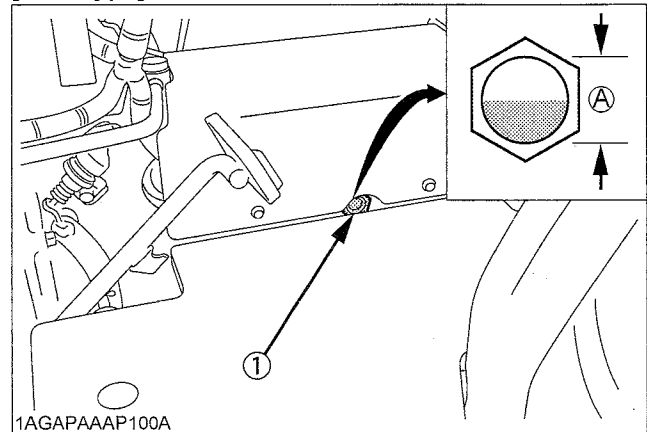
(See "LUBRICANTS" in Maintenance Section)

[Manual Transmission Type]



1AGAPAAA038A

[HST Type]



1AGAPAAAP100A

(1) Gauge (A) Oil level is acceptable within this range.

IMPORTANT :

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

■ Checking Coolant Level



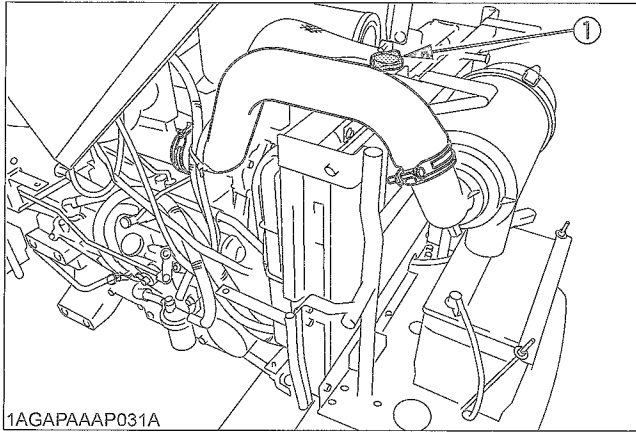
CAUTION

To avoid personal injury:

- 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.

[Manual Transmission Type]

1. Remove the radiator cap and check to see that the coolant level is just below the port.
2. When the coolant level drops due to evaporation, add water only. In case of leakage, add antifreeze and water in the specified mixing ratio.
(See "Flush Cooling System and Changing Coolant" in every 2 years maintenance.)



1AGAPAAAP031A

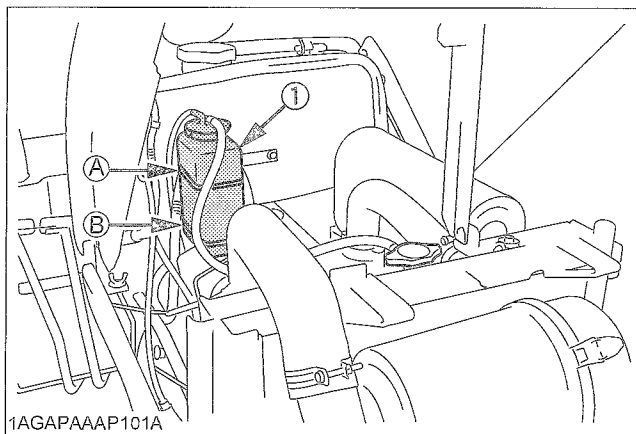
(1) Radiator cap

IMPORTANT :

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

[HST Type]

1. Check to see that the coolant level is between the "FULL" and "LOW" marks of recovery tank.
2. When the coolant level drops due to evaporation, add water only up to the full level.
In case of leakage, add anti-freeze and water in the specified mixing ratio up to the full level.
(See "Flush Cooling System and Changing Coolant" in every 2 years maintenance)



1AGAPAAAP101A

(1) Recovery tank

(A) "FULL"
(B) "LOW"

IMPORTANT :

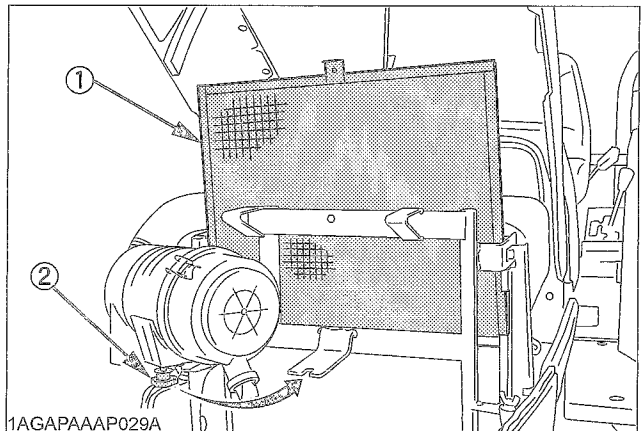
- If the radiator cap has to be removed, follow the caution above and securely retighten the cap.
- Use clean, fresh water and anti-freeze to fill the recovery tank.
- If coolant should leak, consult your local KUBOTA Dealer.

■ Cleaning Grill, Radiator Screen and Oil Cooler**CAUTION**

To avoid personal injury:

- Be sure to stop the engine before removing the screen.

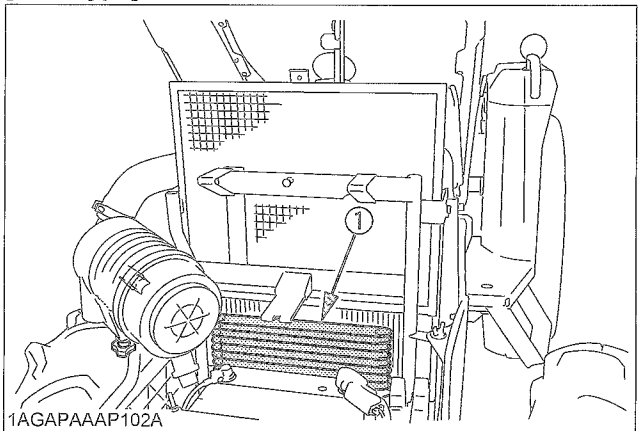
1. Loosen the knob bolt and move the air cleaner to the left.
2. Check front grill to be sure it is clean from debris.
3. Detach the screen and remove all the foreign material.



1AGAPAAAP029A

(1) Radiator screen

(2) Knob bolt

[HST Type]

1AGAPAAAP102A

(1) Oil cooler

IMPORTANT :

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

■ Checking Brake Pedals and Clutch Pedal



WARNING

To avoid personal injury:

- Be sure brake pedals have equal adjustment when using locked together. Incorrect or unequal brake pedal adjustment can cause the tractor to swerve or roll-over.

1. Inspect the brake and clutch pedals for free travel, and smooth operation.
2. Adjust if incorrect measurement is found:
(See "Adjusting Clutch and Brake Pedal" in every 100 hours maintenance)

■ Checking Gauges, Meter and Easy Checker(TM)

1. Inspect the instrument panel for broken gauge(s), meter(s) and Easy Checker(TM) lamps.
2. Replace if broken.

■ Checking Head Light, Hazard Light etc.

1. Inspect the lights for broken bulbs and lenses,
2. Replace if broken.

■ Checking Seat Belt and ROPS

1. Always check condition of seat belt and ROPS attaching hardware before operating tractor.
2. Replace if damaged.

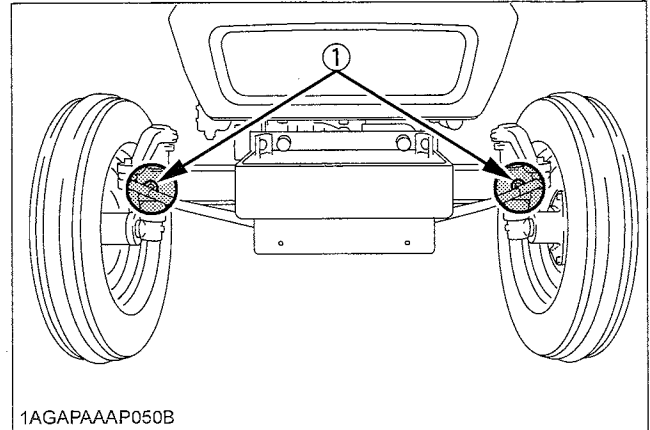
EVERY 50 HOURS

■ Lubricating Grease Fittings

Apply a small amount of multipurpose grease to the following points every 50 hours:

If you operated the machine in extremely wet and muddy conditions, lubricate grease fittings more often.

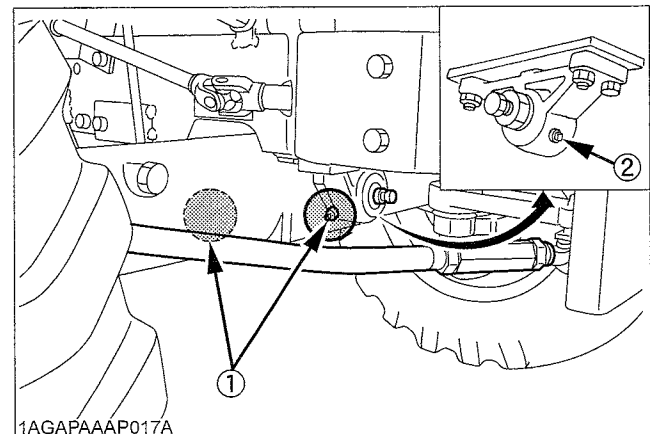
[2WD]



(1) Grease fitting (Knuckle shaft)[RH, LH]

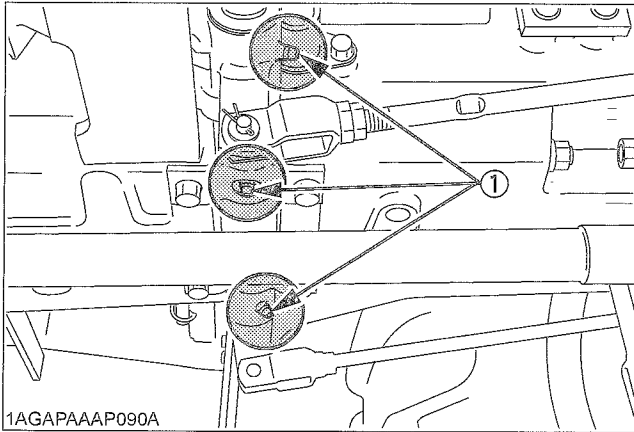
When apply a grease to forward front axle support, remove the breather plug and apply a grease until grease overflows from breather plug port.

After greasing reinstall the breather plug.

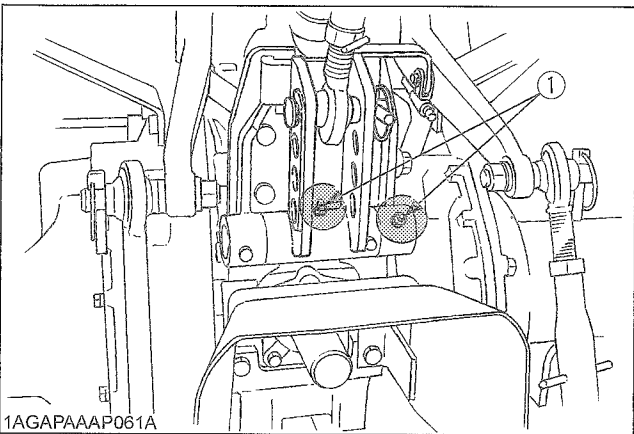


(1) Grease fitting (Front axle support)

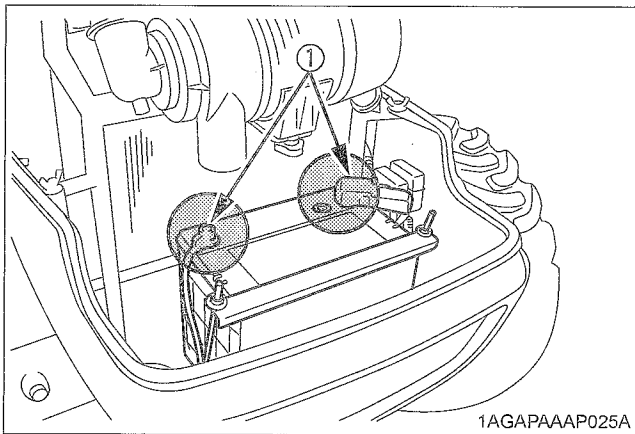
(2) Breather plug



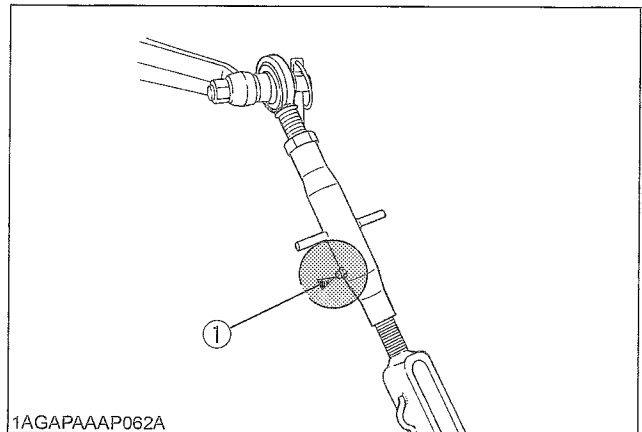
(1) Grease fitting (Pedal shaft)



(1) Grease fitting (Top link bracket) (with draft control)



(1) Battery terminals



(1) Grease fitting (Lifting rod) [RH]

■ Checking Engine Start System



CAUTION

To avoid personal injury:

- ⊗ Do not allow anyone near the tractor while testing.
- ⊗ If the tractor does not pass the test do not operate the tractor.

◆ Preparation before testing.

1. Place all control levers in the "NEUTRAL" position.
2. Set the parking brake and stop the engine.

[Manual Transmission Type]

◆ Test : Switch for the range gear shift lever.

1. Sit on the operator's seat.
2. Shift the range gear shift lever to "L", "H" or "R" position.
3. Depress the clutch pedal fully.
4. Disengage the PTO gear shift lever.
5. Turn the key to "START" position.
6. The engine must not crank.
7. If it cranks, consult your local KUBOTA Dealer for this service.

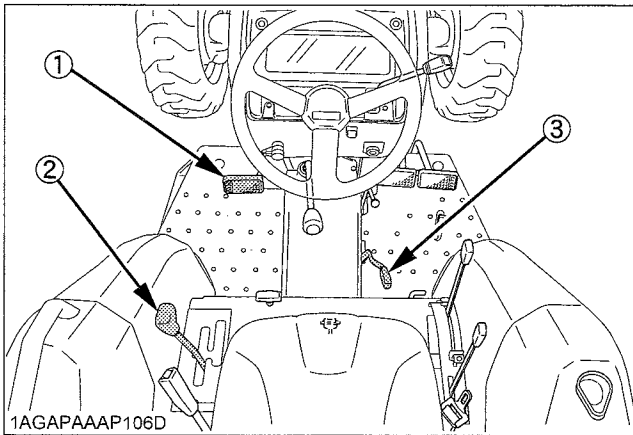
◆ Test : Switch for the PTO gear shift lever.

1. Sit on the operator's seat.
2. Engage the PTO gear shift lever.
3. Depress the clutch pedal fully.
4. Shift the range gear shift lever to the neutral position.
5. Turn the key to "START" position.
6. The engine must not crank.
7. If it cranks, consult your local KUBOTA Dealer for this service.

◆ Test : Switch for the operator's seat

1. Sit on the operator's seat.
2. Start the engine.
3. Engage the PTO gear shift lever.
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, consult your local KUBOTA Dealer for this service.



- (1) Clutch pedal
(2) Range gear shift lever (Shuttle shift lever)
(3) PTO gear shift lever

[HST Type]

◆ Test : Switch for the speed control pedal.

1. Sit on the operator's seat.
2. Depress the speed control pedal to the desired direction.
3. Depress the clutch pedal fully.
4. Disengage the PTO clutch control lever.
5. Turn the key to "START" position.
6. The engine must not crank.
7. If it cranks, consult your local KUBOTA Dealer for this service.

◆ Test : Switch for the PTO gear shift lever.

1. Sit on the operator's seat.
2. Engage the PTO gear shift lever.
3. Depress the clutch pedal fully.
4. Place the speed control pedal in neutral position.
5. Turn the key to "START" position.
6. The engine must not crank.
7. If it cranks, consult your local KUBOTA Dealer for this service.

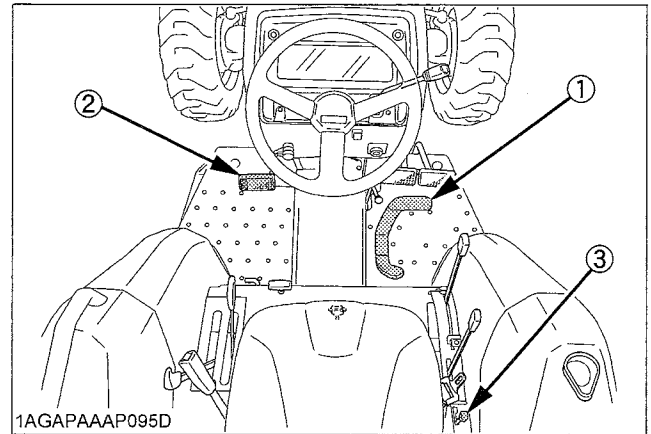
◆ Test : Switch for the clutch pedal.

1. Sit on the operator's seat.
2. Disengage the PTO gear shift lever.
3. Place the speed control pedal in neutral position.
4. Release the clutch pedal.
5. Turn the key to "START" position.
6. The engine must not crank.
7. If it cranks, consult your local KUBOTA Dealer for this service.

◆ Test : Switch for the operator's seat

1. Sit on the operator's seat.
2. Start the engine.
3. Engage the PTO gear shift lever.

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, consult your local KUBOTA Dealer for this service.



- (1) Speed control pedal
(2) Clutch pedal
(3) PTO gear shift lever

■ Checking Wheel Bolt Torque

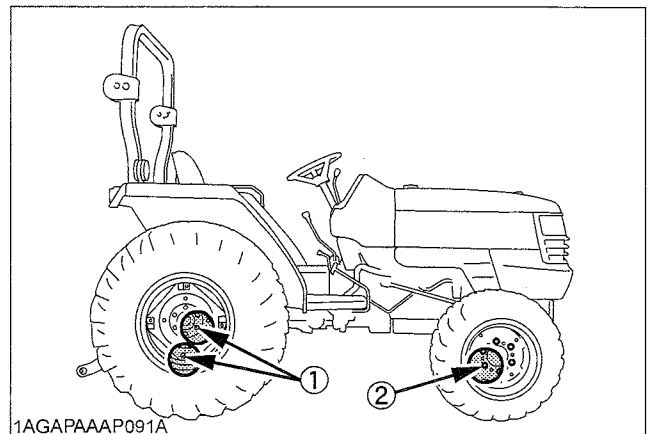


CAUTION

To avoid personal injury:

- Never operate tractor with a loose rim, wheel, or axle.
- Any time bolts and nuts are loosened, retighten to 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) 137 N-m (14kgf-m, 100ft-lbs)
(2) 215 N-m (22kgf-m, 160ft-lbs)

EVERY 100 HOURS

Changing Engine Oil



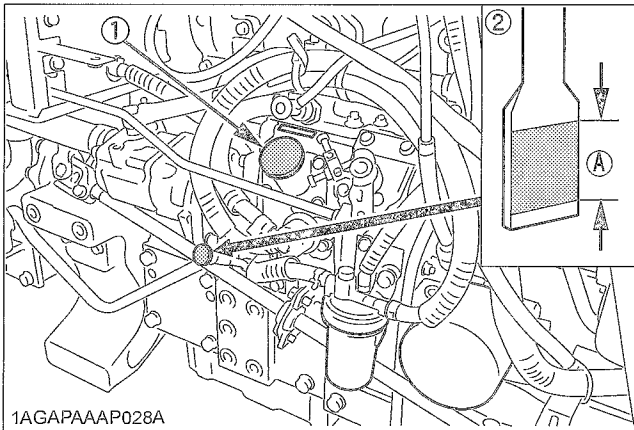
CAUTION

To avoid personal injury:

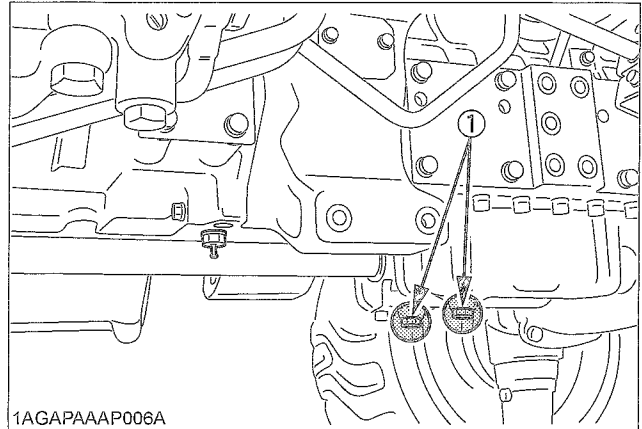
- Be sure to stop the engine before changing the oil.
- Allow engine to cool down sufficiently, oil can be hot and can burn.

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.
All the used oil can be drained out easily when the engine is still warm.
2. After draining reinstall the drain plug.
3. Fill with the new oil up to the upper notch on the dipstick.
(See "LUBRICANTS" in Maintenance section)

Model	Oil capacity with filter
L2800	5.7L (6.0 U.S.qts.)
L3400	



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



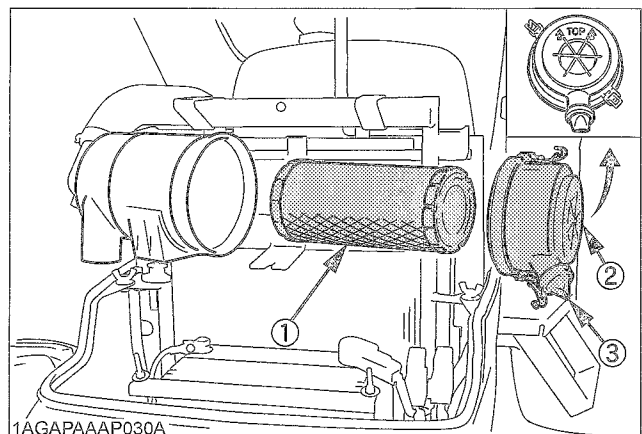
(1) Drain plug

Cleaning Air Cleaner Element [Single Element Type]

1. Remove the air cleaner cover and the element.
2. Clean the element:
 - (1) When dry dust adheres to the element, blow compressed air from the inside turning the element. Pressure of compressed air must be under 205 kPa (2.1 kgf/cm², 30 psi).
 - (2) 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 element is fully dried, inspect inside of the element with a light and check if it is damaged or not.
3. Replace air cleaner element:
Once yearly or after every sixth cleaning, whichever comes first.

NOTE:

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



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

IMPORTANT :

- The air cleaner uses a dry element, never apply oil.
- Do not run the engine with filter element removed.
- Be sure to refit the cover with the arrow ↑ (on the rear) upright. If the cover is improperly fitted, dust passes by the baffle and directly adheres to the element.

◆ 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.

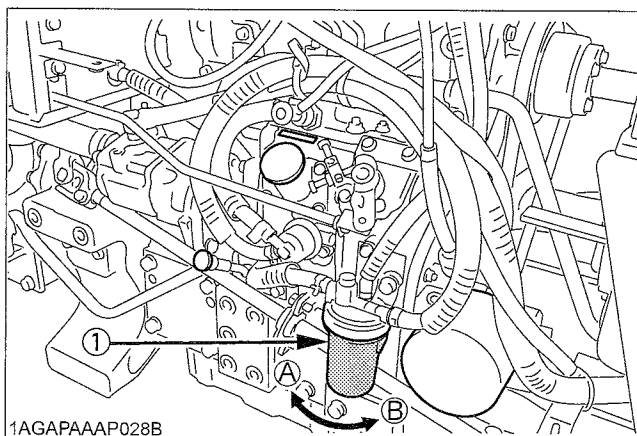
■ Cleaning Fuel Filter

This job should not be done in the field, but in a clean place.

1. Loosen and remove the filter bowl, and rinse the inside with kerosene.
2. Take out the element and dip it in the kerosene to rinse.
3. After cleaning, reassemble the fuel filter, keeping out dust and dirt.
4. Bleed the fuel system.
(See "SERVICE AS REQUIRED" in Periodic service section.)

IMPORTANT :

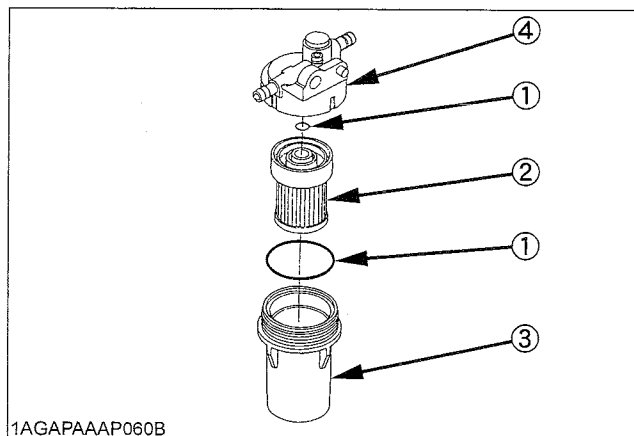
- When the fuel filter bowl has been removed, fuel stops flowing from the fuel tank. If the fuel tank is almost full, however, the fuel will flow back from the fuel return pipe to the fuel filter. Before checking, make sure the fuel tank is less than half-full.



(1) Fuel filter bowl

(A) "LOOSEN"

(B) "TIGHTEN"



1AGAPAAAP060B

- (1) O ring
(2) Filter element
(3) Filter bowl
(4) Body (built-in fuel check valve)

IMPORTANT :

- If dust, dirt or water enters the fuel system, the fuel pump and injection nozzles are subject to premature wear. To prevent this, be sure to clean the fuel filter bowl and element periodically.

■ Adjusting Fan Belt Tension**CAUTION**

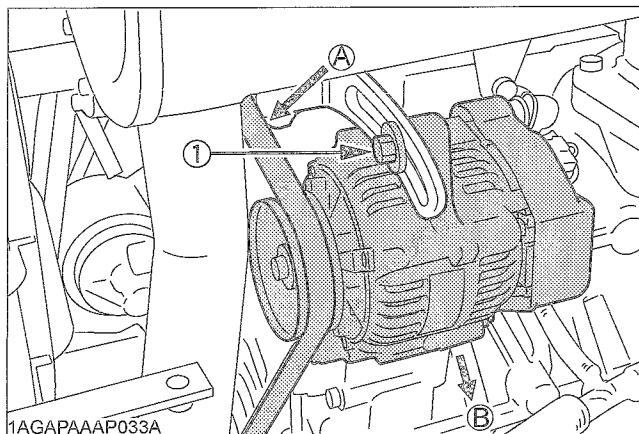
To avoid personal injury:

- Be sure to stop the engine before checking 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 belt between pulleys.
3. If tension is incorrect, loosen the alternator mounting bolts and, using a lever placed between the alternator and the engine block, pull the alternator out until the deflection of the belt falls within acceptable limits.
4. Replace fan belt if it is damaged.

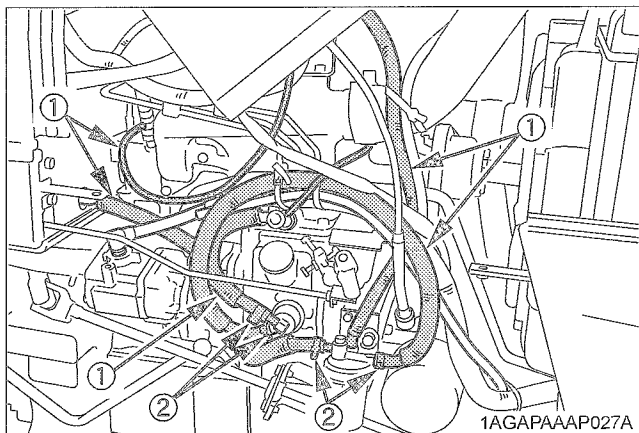


(1) Bolt

(A) Check the belt tension
(B) To tighten

Checking Fuel Line

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



(1) Fuel lines
(2) Clamp bands

NOTE :

- If the fuel line is removed, be sure to properly bleed the fuel system.
(See "Bleeding Fuel System" in as required maintenance.)

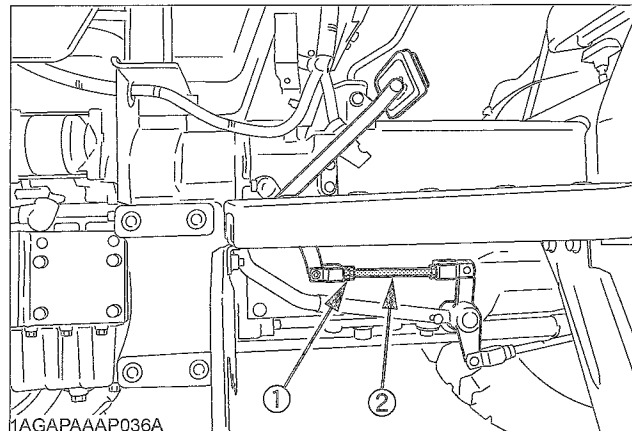
Adjusting Clutch Pedal

Proper clutch pedal free travel	20 to 30 mm(0.8 to 1.2 in.) on the pedal
---------------------------------	--

Adjusting procedure [with single clutch] [L2800 Manual Transmission Type], [HST Type]

1. Stop the engine and remove the key.

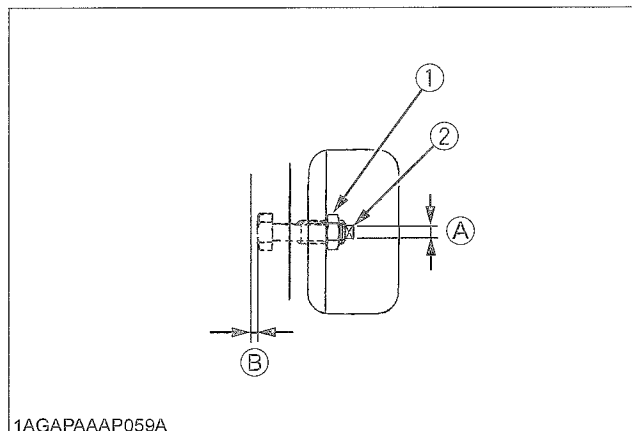
2. Slightly depress the clutch pedal and measure free travel at the top of pedal stroke.
3. If adjustment is needed, loosen the lock nut and turn the clutch rod to adjust the rod length within acceptable limits.
4. Retighten the lock nut.



(1) Lock nut
(2) Clutch rod

Adjusting procedure [with Dual Clutch] [L3400 Manual Transmission Type]

1. At first adjust clutch play, same as with single disc clutch.
2. Remove the cover located on the right side of flywheel housing case.
3. Loosen the lock nut, tighten the adjust bolt by using 6 mm (0.24 in.) spanner until head of the bolt contacts pressure plate slightly.
Make 7/6 turn counterclockwise to give 1.4 to 1.5 mm (0.055 to 0.059 in.) clearance.



(1) Lock nut (A) 6 mm (0.24 in.)
(2) Adjusting bolt (B) 1.4 to 1.5 mm (0.055 to 0.059 in.)

4. Tighten the lock nut, holding the adjusting bolt.
5. Turn the flywheel to adjust the clearance of other adjusting bolts. (three bolts)
6. Repeat step (3) and readjust free travel of clutch pedal if necessary.

■ Adjusting Brake Pedal



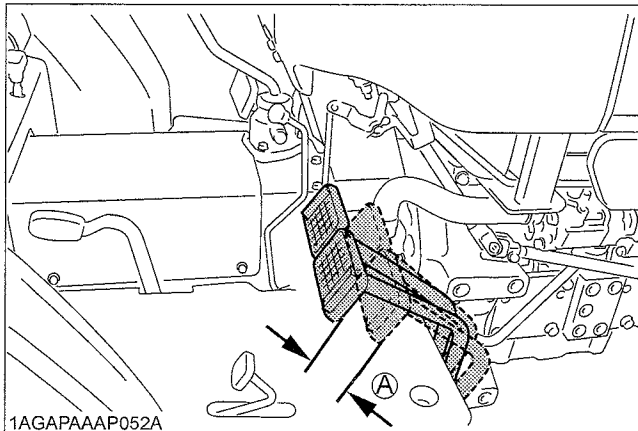
CAUTION

To avoid personal injury:

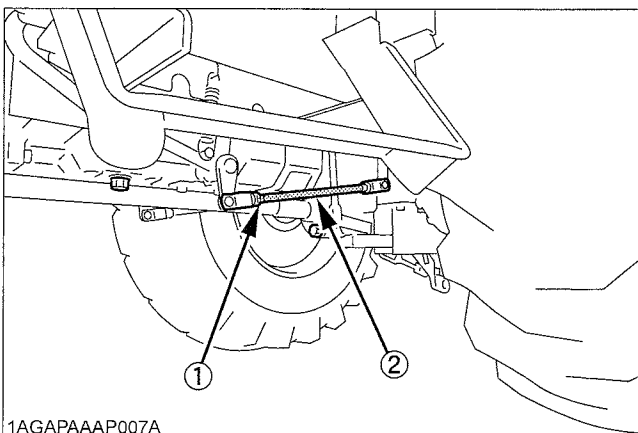
- Stop the engine and chock the wheels before checking brake pedal.

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.

1. Release the parking brake.
2. Slightly depress the brake pedals and measure free travel at top of pedal stroke.
3. If adjustment is needed, loosen the lock nut and turn the brake rod to adjust the rod length within acceptable limits.
4. Retighten the lock nut.



(A) Free travel



- (1) Lock nut
(2) Brake rod

■ Checking Battery Condition



DANGER

To avoid the possibility of battery explosion:

For the refillable type battery, follow the instructions below.

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



CAUTION

To avoid personal injury:

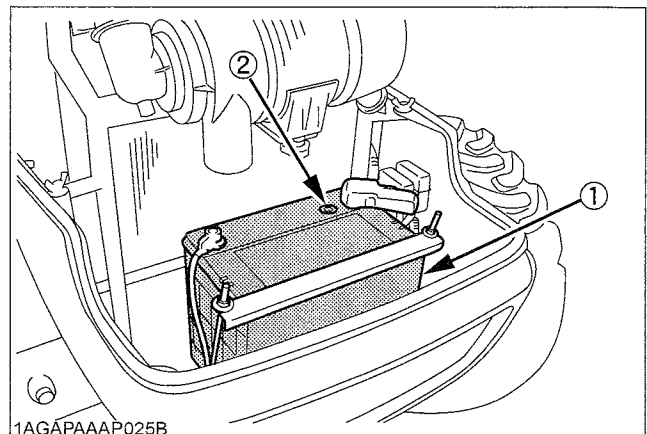
- Never remove the vent caps while the engine is running.
- Keep electrolyte away from eyes, hands and clothes. If you are splattered with it, wash it away completely with water immediately and get medical attention.
- Wear eye protection and rubber gloves when working around the battery.

The factory-installed battery is of non-refillable type. If the indicator turns white, do not charge the battery but replace it with 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.



- (1) Battery
(2) Indicator

◆ How to read the indicator

Check the battery condition by reading the indicator.

State of indicator display	
Green	Specific gravity of electrolyte and quality of electrolyte are both in good condition.
Black	Needs charging battery.
White	Needs changing battery.

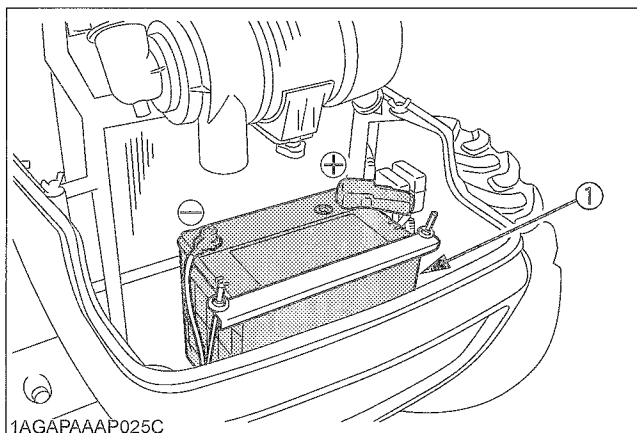
◆ Battery Charging



CAUTION

To avoid personal injury:

- ⊗ 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.



(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. It will partially charge the battery at a high rate and in a short time.
When using a boost-charged battery, it is necessary to recharge the battery as early as possible.
Failure to do this will shorten the battery's service life.
3. The battery is charged if the indicator display turns green from black.

4. When exchanging an old battery for a new one, use battery of equal specification shown in table 1.

Table 1

Tractor model	Battery TYPE	volts (V)	Reserve capacity (min)	CCA (SAE) (A)	Normal Charging Rate (A)
L2800	75D26R	12	123	490	6.5
L3400					

CCA : Cold Cranking Ampere

◆ Direction for Storage

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

EVERY 200 HOURS

■ Replacing Engine Oil Filter

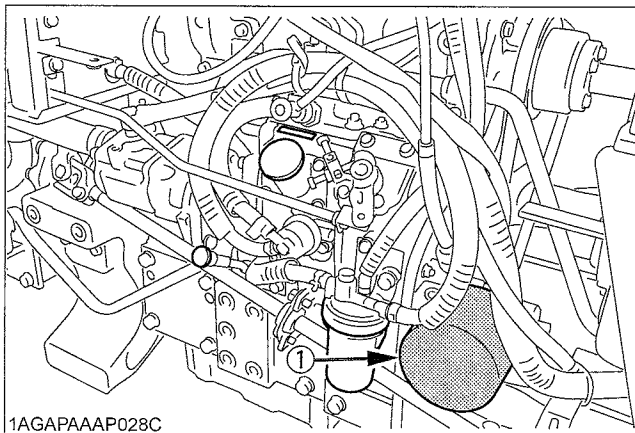


CAUTION

To avoid personal injury:

- Be sure to stop the engine before changing the oil filter cartridge.
- Allow 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 filter by hand an additional 1/2 turn only.
4. After the new filter has been replaced, the engine oil normally decreases a little. Make sure that the engine oil does not leak through the seal and be sure to check the oil level on the dipstick. Then, replenish the engine oil up to the prescribed level.



(1) Engine oil filter

IMPORTANT :

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

■ Replacing Hydraulic Oil Filter / Replacing Transmission Oil Filter [HST Type]

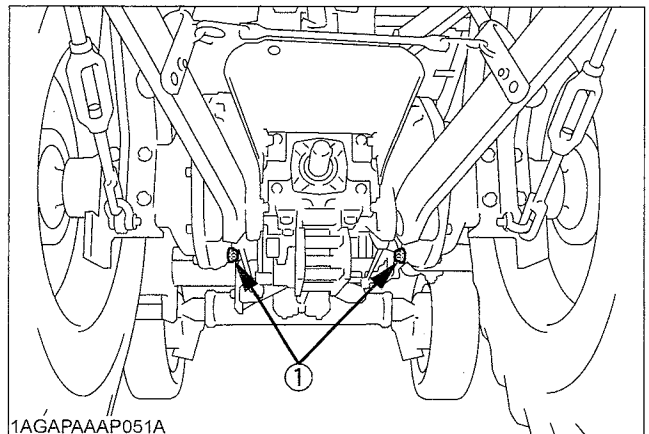


CAUTION

To avoid personal injury:

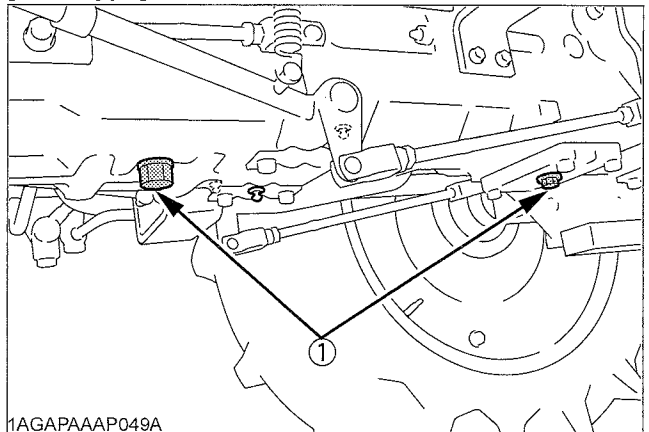
- Be sure to stop the engine before changing the oil filter cartridge.
- Allow engine to cool down sufficiently, oil can be hot and can burn.

1. Remove the drain plugs at the bottom of the transmission case and drain the oil completely into the oil pan.
2. After draining reinstall the drain plugs.

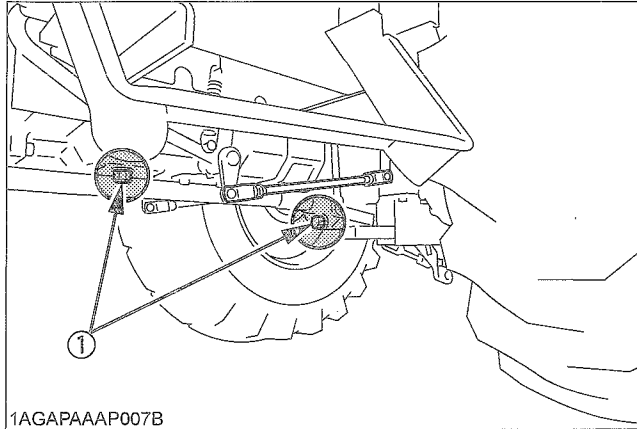


(1) Drain plugs

[2WD Type]

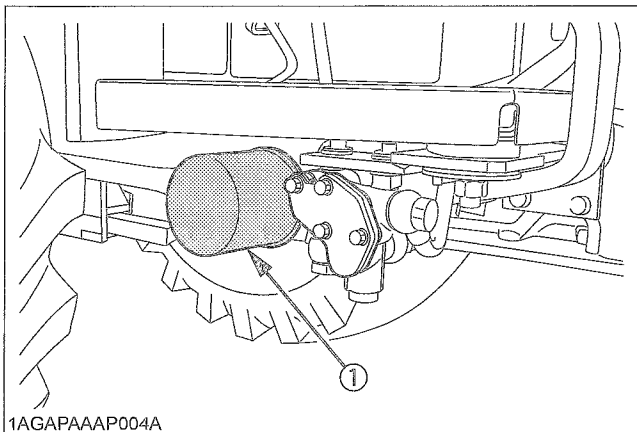


(1) Drain plugs

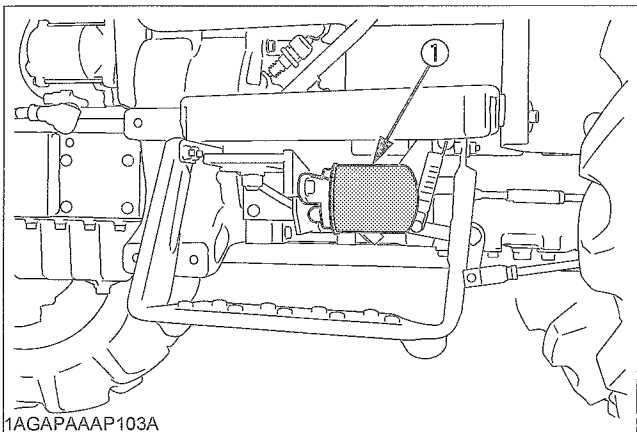
[4WD Type]

(1) Drain plugs

3. Remove the oil filter.



(1) Hydraulic oil filter



(1) Transmission oil filter [HST Type]

4. Put a film of clean transmission oil on the rubber seal of the new filter.

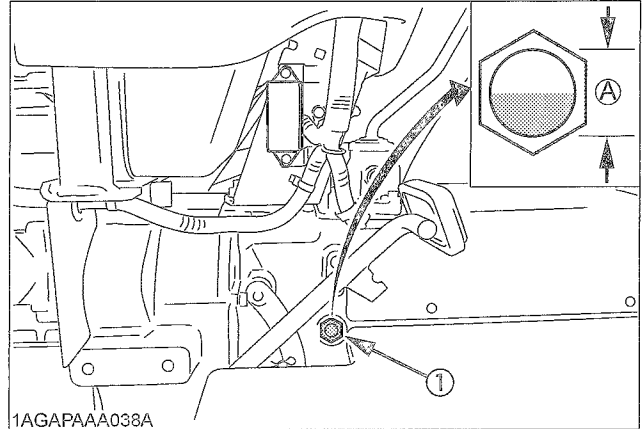
5. [Hydraulic oil filter]

Quickly tighten the filter until it contacts the mounting surface, then tighten it by hand an additional 1/2 turn only.

[Transmission oil filter]

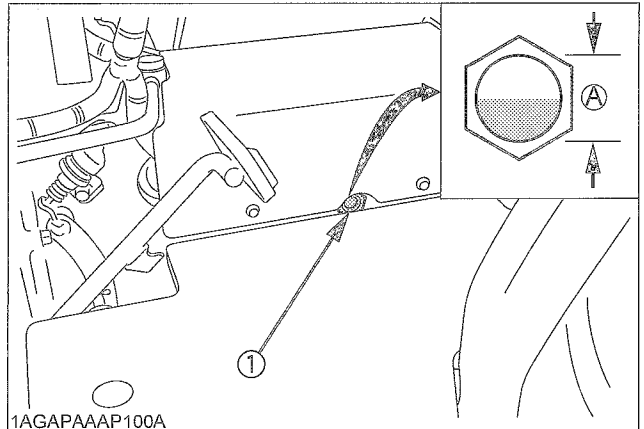
Quickly tighten the filter until it contacts the mounting surface, then, with a filter wrench, tighten it an additional 1 turn only.

6. After the new filters have been replaced, fill the transmission oil up to the upper notch on the dipstick.

[Manual Transmission Type]

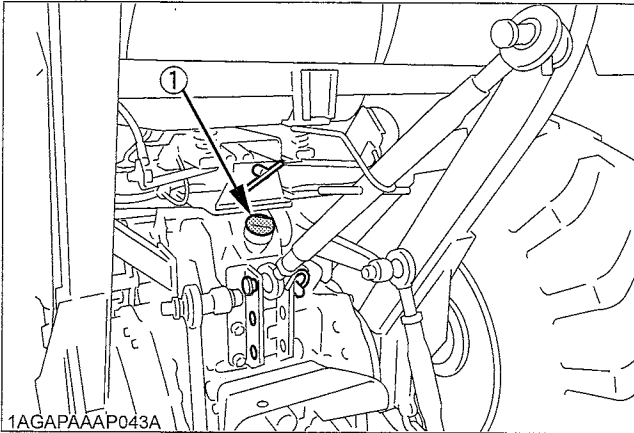
(1) Gauge

(A) Oil level is acceptable within this range.

[HST Type]

(1) Gauge

(A) Oil level is acceptable within this range.



(1) Oil inlet

7. After running the engine for a few minutes, stop the engine and check the oil level again, add oil to the prescribed level.
8. Make sure that the transmission fluid doesn't leak past the seal on the filter.

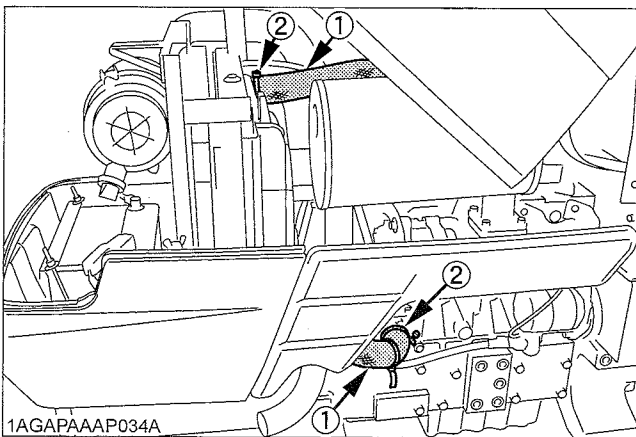
IMPORTANT :

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

■ Checking Radiator Hose and Clamp

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

1. If hose clamps are loose or water leaks, tighten bands securely.
 2. Replace hoses and tighten hose clamps securely, if radiator hoses are swollen, hardened or cracked.
- Replace hoses and hose clamps every 2 years or earlier if checked and found that hoses are swollen, hardened or cracked.



(1) Radiator hoses
(2) Clamp bands

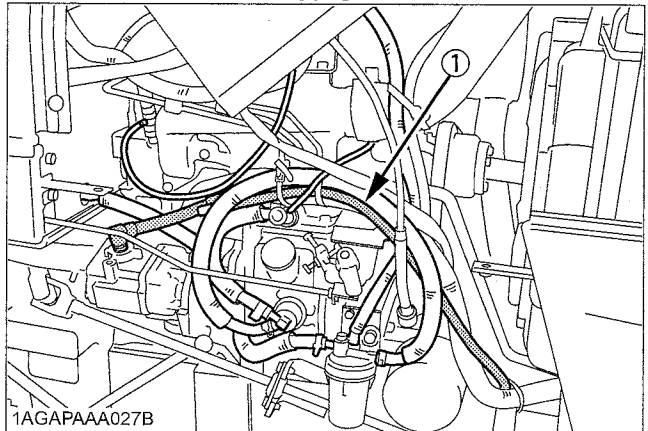
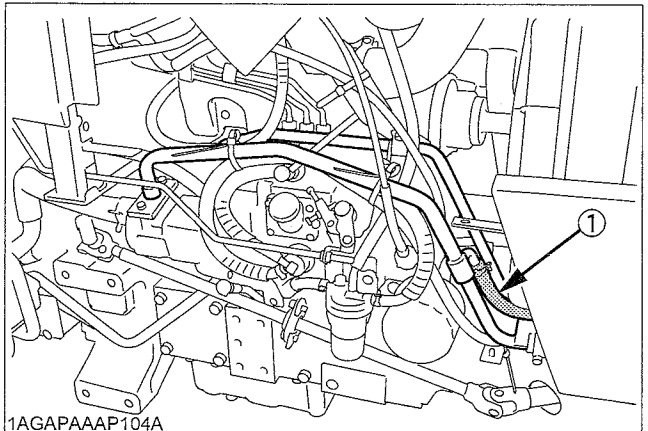
◆ Precaution at Overheating

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

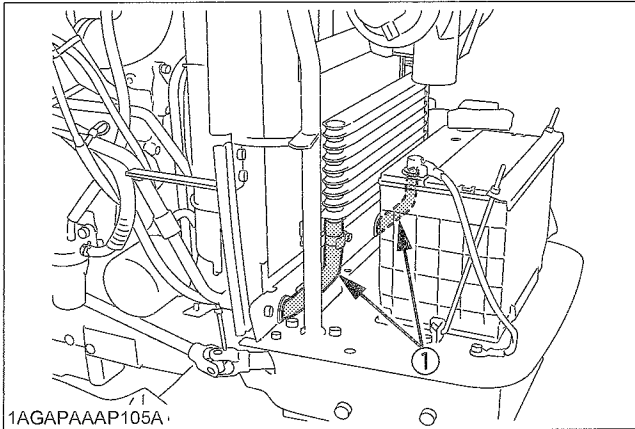
1. Park the tractor in a safe place and keep the engine unloaded idling.
2. Don't stop the engine suddenly, but stop it after about 5 minutes of unloaded idling.
3. Keep yourself well away from the machine for further 10 minutes or while the steam blows out.
4. Check that there are no dangers such as burns. Get rid of the causes of overheating according to the manual, see "Troubleshooting" section, and then, start again the engine.

■ Checking HST Oil Line [HST Type] / Checking Power Steering Line

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

[Manual Transmission Type]**[HST Type]**

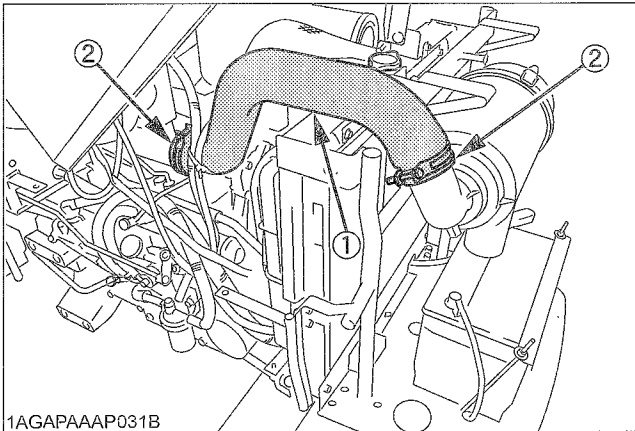
(1) Power steering pressure hose



(1) HST oil line

■ Checking Intake Air Line

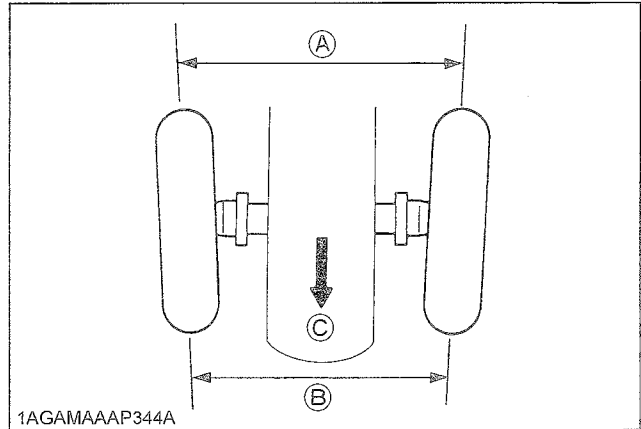
1. Check to see that hoses and hose clamps are tight and not damaged.
2. If hoses and clamps are found worn or damaged, replace or repair them at once.



(1) Hose
(2) Hose clamps

■ Adjusting Toe-in

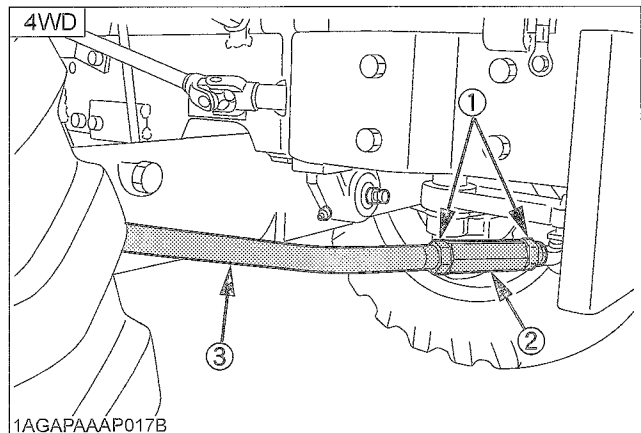
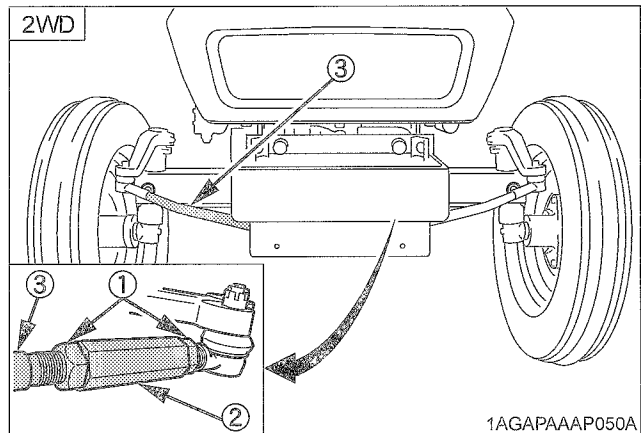
1. Park tractor on a flat place.
2. Turn steering wheel so front wheels are in the straight ahead position.
3. Lower the implement, lock the park brake and stop the engine.
4. Measure distance between tire beads at front of tire, hub height.
5. Measure distance between tire beads at rear of tire, hub height.
6. Front distance should be 2 to 8mm (1/16 to 5/16 in.) less than rear distance. If not, adjust tie rod length.



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

◆ Adjusting procedure [4WD]

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



(1) Lock nuts (2) Turnbuckle (3) Tie rod

EVERY 400 HOURS

■ Changing Transmission Fluid



CAUTION

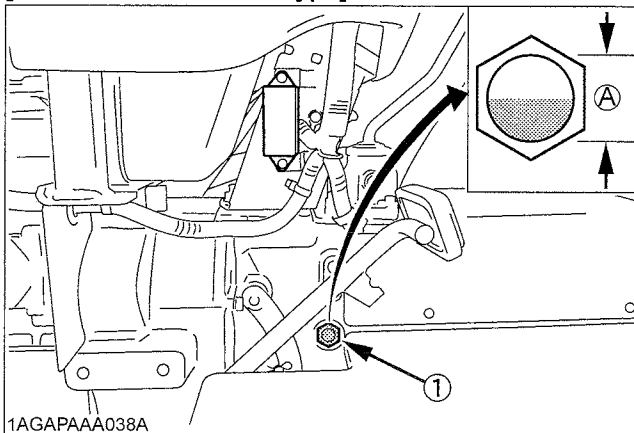
To avoid personal injury:

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

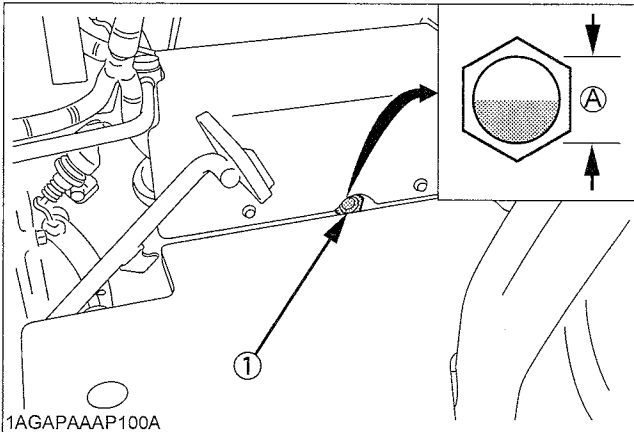
1. To drain the used oil, remove the drain plug at the bottom of the transmission case and drain the oil completely into the oil pan.
2. After draining reinstall the drain plug.
3. Fill with the new KUBOTA SUPER UDT fluid up to the upper line of the gauge.
(See "LUBRICANTS" in Maintenance Section)...
4. After running the engine for a few minutes, stop it and check the oil level again; add oil to prescribed level.

Oil capacity	Manual Transmission	2WD	27.0 L (7.1 U.S.gals.)
		4WD	27.5 L (7.3 U.S.gals.)
	HST	4WD	23.5 L (6.2 U.S.gals.)

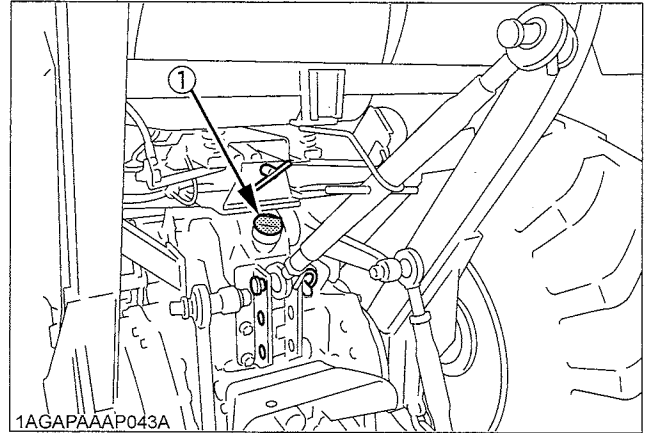
[Manual Transmission Type]



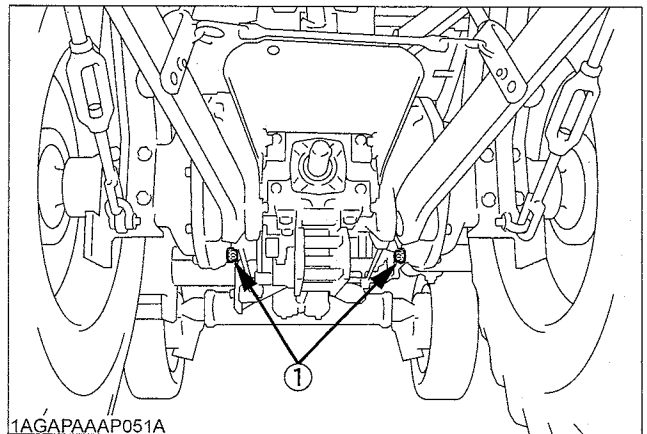
[HST Type]



(1) Gauge (A) Oil level is acceptable within this range

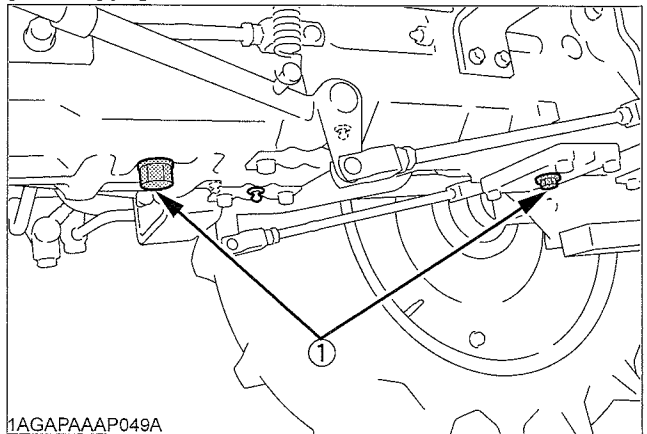


(1) Oil inlet

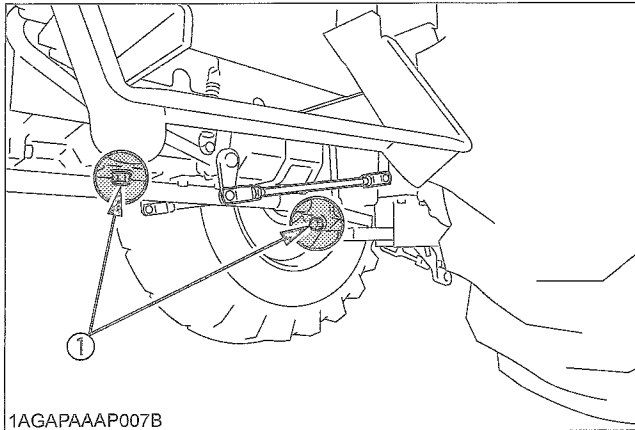


(1) Drain plugs

[2WD Type]



(1) Drain plugs

[4WD Type]

(1) Drain plugs

IMPORTANT :

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

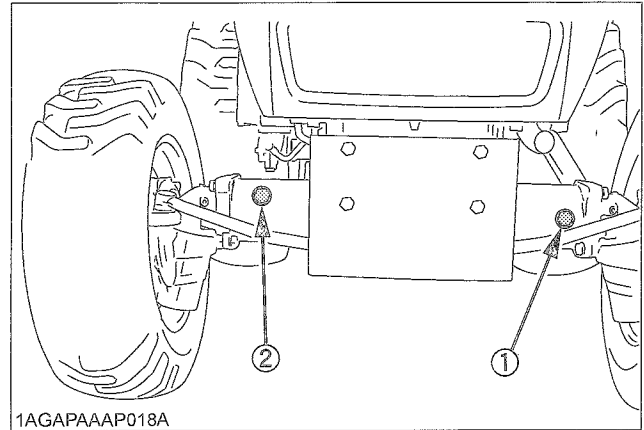
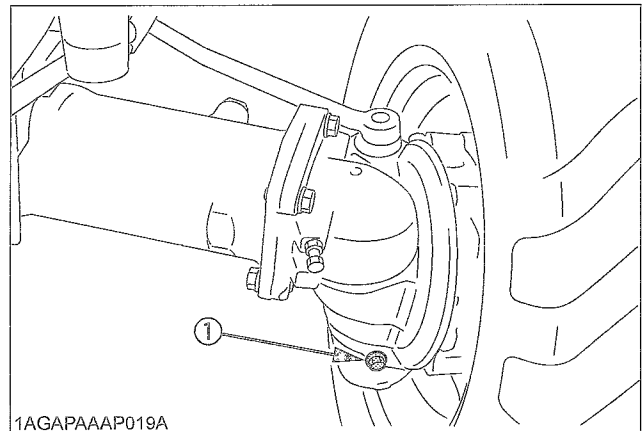
■ Replacing Fuel Filter Element

(See "Cleaning fuel filter" in every 100 hours maintenance)

■ Changing 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 drain the oil completely into the oil pan.
2. After draining reinstall the drain plugs.
3. Remove the oil level check plug.
4. Fill with the new oil up to the check plug port.
(See "LUBRICANTS" in Maintenance section)
5. After filling reinstall the filling plug and check plug.

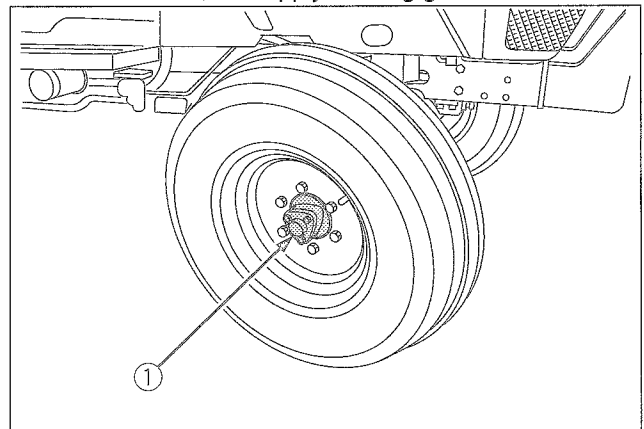
Model	Oil capacity
L2800	4.5L (4.8 U.S.qts.)
L3400	

(1) Check plug
(2) Filling plug

(1) Drain plug

■ Lubricating Grease Fitting [2WD]

Detach the cover, and apply bearing grease.



(1) Front wheel hub cover

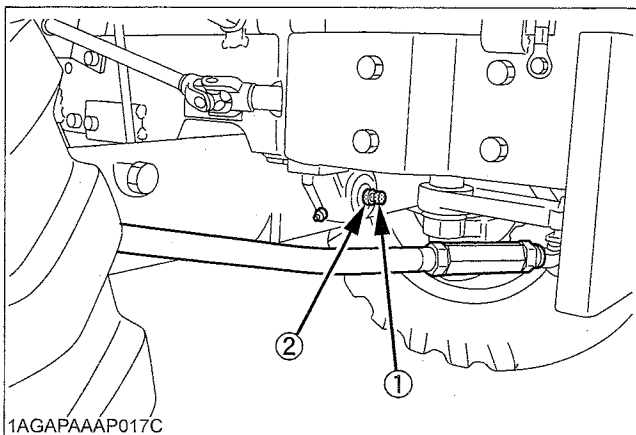
EVERY 600 HOURS

■ Adjusting Front Axle Pivot

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

◆ Adjusting procedure

Loosen the lock nut, tighten the adjusting screw all the way, and then loosen the screw by 1/6 turn. Retighten the lock nut.



(1) Adjusting screw

(2) Lock nut

EVERY 800 HOURS

■ Adjusting Engine Valve Clearance

Consult your local KUBOTA Dealer for this service.

EVERY 1500 HOURS

■ Checking Fuel Injection Nozzle Injection Pressure

Consult your local KUBOTA Dealer for this service.

EVERY 3000 HOURS

■ Checking Injection Pump

Consult your local KUBOTA Dealer for this service.

EVERY 1 YEAR

■ Replacing Air Cleaner Element

(See "Cleaning Air Cleaner Element" in every 100 hours maintenance)

EVERY 2 YEARS

■ Flush Cooling System and Changing Coolant



CAUTION

To avoid personal injury:

- 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.

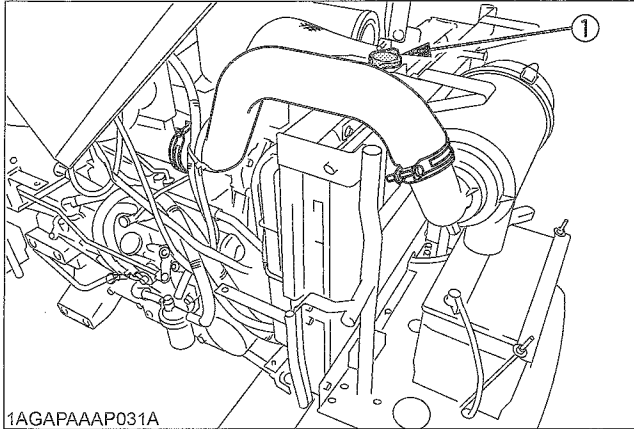
[Manual Transmission Type]

1. Stop the engine and let cool down.
2. To drain the coolant, open the radiator drain plug and remove 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 with clean water and cooling system cleaner.
5. Follow directions of the cleaner instruction.
6. After flushing, fill with clean water and anti-freeze until the coolant level is just below the radiator cap.
7. Start and operate the engine for few minutes.
8. Stop the engine. Check coolant level and add coolant if necessary.
9. Install the radiator cap securely.

[HST Type]

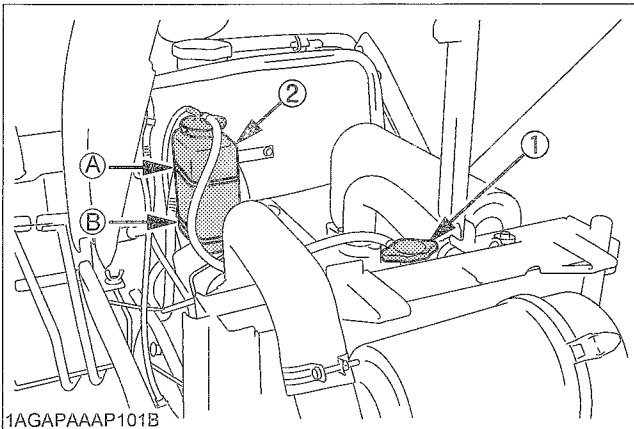
1. Stop the engine and let cool down.
2. To drain the coolant, open the radiator drain plug and remove radiator cap. The radiator cap must be removed to completely drain the coolant.
3. After all coolant is drained, close the drain plug.
4. Fill with clean water and cooling system cleaner.
5. Follow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

	Coolant capacity
Radiator	6.0 L (6.3 U.S.qts.)
Recovery tank	0.6 L (0.6 U.S.qts.)

[Manual Transmission Type]

1AGAPAAAP031A

(1) Radiator cap

[HST Type]

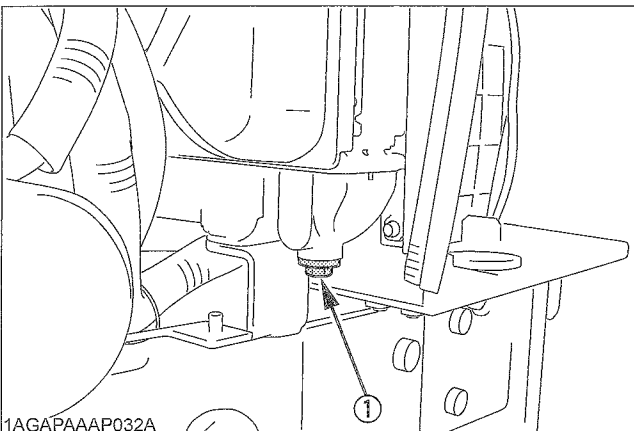
1AGAPAAAP101B

(1) Radiator cap

(A) "FULL"

(2) Recovery tank

(B) "LOW"



1AGAPAAAP032A

(1) Drain plug

IMPORTANT :

- ⊛ Do not start engine without coolant.
- ⊛ Use clean, fresh water and anti-freeze to fill the radiator and recovery tank.
- ⊛ When the anti-freeze is mixed with water, the anti-freeze mixing ratio must be less than 50 %.

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

■Anti-Freeze**CAUTION**

To avoid personal injury:

- ⊛ When using antifreeze, put on some protection such as rubber gloves (Antifreeze contains poison.).
- ⊛ If should drink antifreeze, throw up at once and take medical attention.
- ⊛ 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 reaction causing 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 some container underneath the engine body.
- ⊛ Do not pour waste onto the grounds, down a drain, or into any water source.
- ⊛ Also, observe the relevant environmental protection regulations when disposing of antifreeze.

If it freezes, coolant can damage the cylinders and radiator. If the ambient temperature falls below 0 °C (32 °F) or before a long-term storage, let out cooling water completely, or mix fresh water with long-life coolant and fill the radiator and reserve tank with the mixture.

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

IMPORTANT :

- ⊛ When the antifreeze is mixed with water, the antifreeze mixing ratio must be less than 50%.

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

- * At $1.013 \times 10^5 \text{ Pa}$ (760mmHg) pressure (atmospheric).
A higher boiling point is obtained by using a radiator pressure cap which permits the development of pressure within the cooling system.
- 5. Adding the LLC
 - (1) Add only water if the mixture reduces in amount by evaporation.
 - (2) If there is a mixture leak, add the LLC of the same manufacturer and type in the same mixture percentage.
 - * Never add any long-life coolant of different manufacturer. (Different brands may have different additive components, and the engine may fail to perform as specified.)
- 6. When the LLC is mixed, do not employ any radiator cleaning agent. The LLC contains anticorrosive agent. If mixed with the cleaning agent, sludge may build up, adversely affecting the engine parts.
- 7. Kubota's genuine long-life coolant has a service life of 2 years. Be sure to change the coolant every 2 years.

NOTE :

- The above data represent industry standards that necessitate a minimum glycol content in the concentrated antifreeze.
- When the coolant level drops due to evaporation, add water only to keep the antifreeze mixing ratio less than 50%. In case of leakage, add antifreeze and water in the specified mixing ratio before filling in to the radiator.

■ Replacing Radiator Hose (Water pipes)

Replace the hoses and clamps.

(See "Checking Radiator Hose and Clamp" in every 200 hours maintenance)

■ Replacing Power Steering Hose

Replace the hoses and clamps.

(See "Checking Power Steering line" in every 200 hours maintenance)

■ Replacing HST Oil Line [HST Type]

Replace the hoses and clamps.

(See "Checking HST Oil Line" in every 200 hours maintenance)

■ Replacing Fuel Hose

Replace the hoses and clamps.

See "Checking Fuel line" in every 100 hours maintenance)

■ Replacing Intake Air Line

Consult your local KUBOTA Dealer for this service.

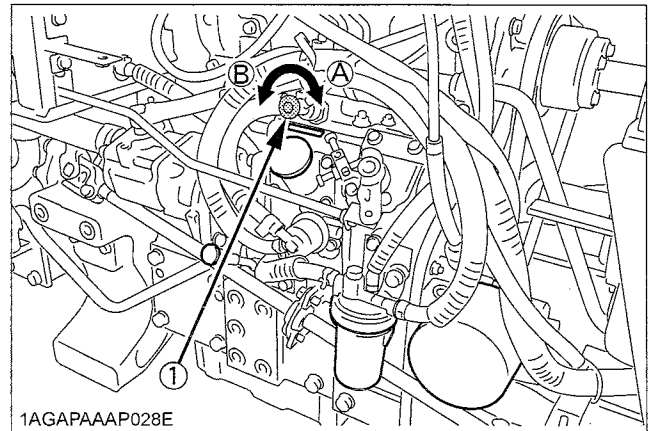
SERVICE AS REQUIRED**■ Bleeding Fuel System**

Air must be removed:

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

◆ Bleeding procedure is as follows:

1. Fill the fuel tank with fuel.
2. Open the air vent cock on the fuel injection pump.



(1) Air vent cock

(A) CLOSE

(B) OPEN

3. Start the engine and run for about 30 seconds, and then stop the engine.
4. Close the air vent cock.

IMPORTANT :

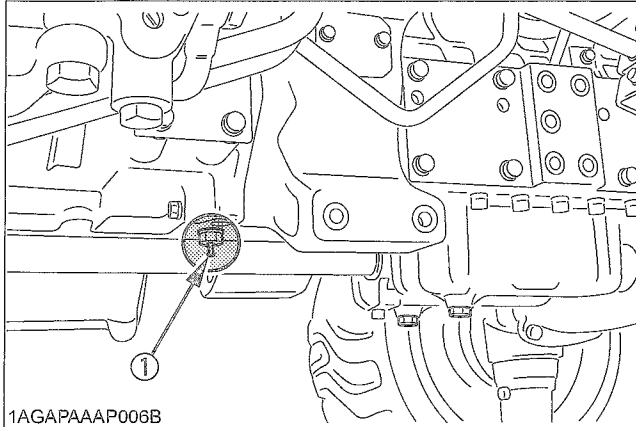
- Always close the air vent cock except for bleeding fuel lines.
Otherwise, engine runs irregularly or stalls frequently.

Draining Clutch Housing Water

The tractor is equipped with split pin plug under the clutch housing.

After operating in rain, snow or tractor has been washed, water may get into the clutch housing. Check it by pushing in the split pin.

If water enters into the clutch housing, remove the plug and drain the water, then install the plug again.



(1) Split pin plug

Replacing Fuse

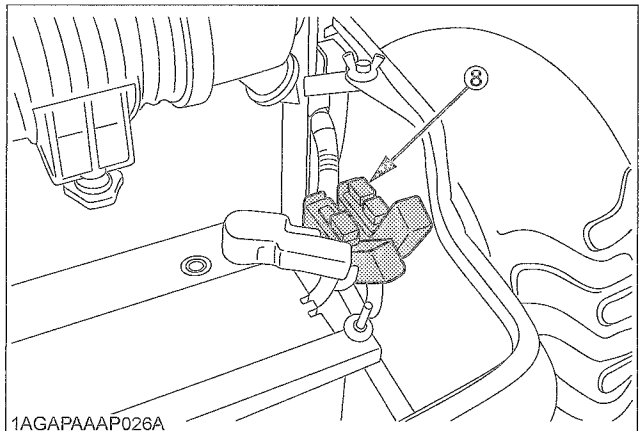
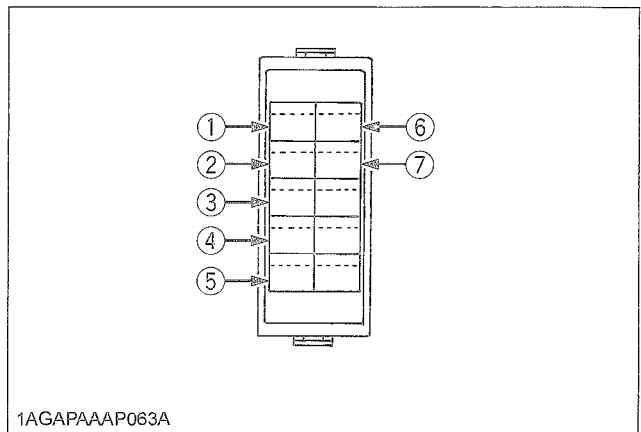
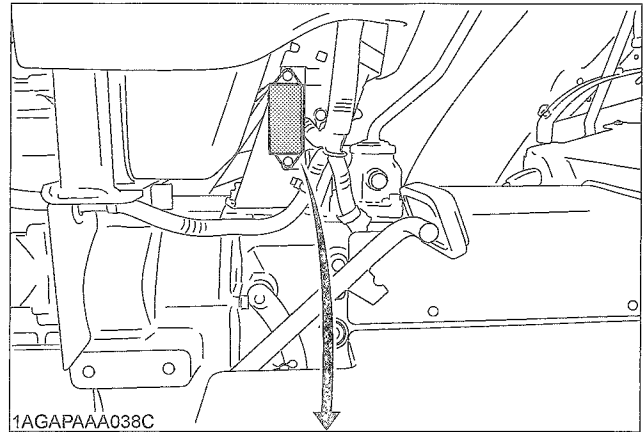
The tractor electrical system is protected from potential damage by fuses.

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. Refer to the troubleshooting section of this manual or your local KUBOTA Dealer for specific information dealing with electrical problems.



FUSE No.	CAPACITY(A)	Protected circuit
(1)	15	Hazard
(2)	10	Work light
(3)	10	Panel
(4)	15	Head light
(5)	5	Key stop
(6)	5	Glow lamp
(7)	5	Starter relay
(8)	Slow blow fuse	Check circuit against wrong battery connection.

■ Replacing Light Bulb

1. Head lights and rear combination lights :
Take the bulb out of the light body and replace with a new one.
2. Other lights :
Detach the lens and replace the bulb.

Light	Capacity
Head lights	25W / 25W
Tail light	8W
Turn signal / Hazard light (rear)	23W
Turn signal / Hazard light (front)	27W
Instrument panel light	1.7W

STORAGE



CAUTION

To avoid personal injury:

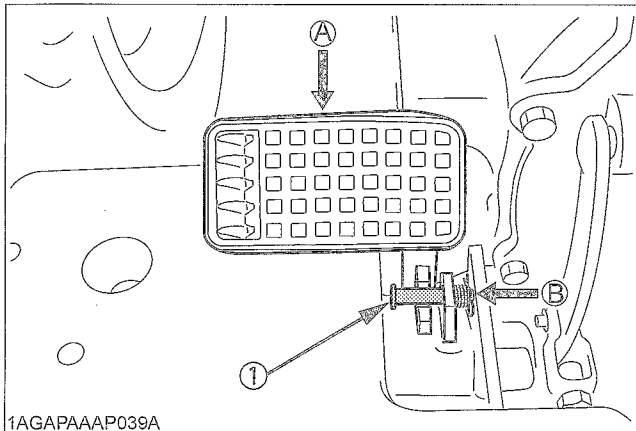
- Do not clean the machine while the engine is running.
- To avoid the danger of exhaust fume poisoning, do not operate the engine in a closed building without proper ventilation.
- When storing, remove the key from the key switch to avoid unauthorized persons from operating the tractor and getting injured.

TRACTOR STORAGE

If you intend to store your tractor for an extended period of time, follow the procedures outlined below.

These procedures will insure 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 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 five minutes.
6. Keep the clutch disengaged. If the clutch is left engaged for a long period of time, the clutch plate may rust, making clutch disengagement impossible at the next operation.



1AGAPAAAP039A

(1) Lock pin

(A) "DEPRESS"

(B) "HOOK TO LOCK"

7. With all implements lowered to the ground, coat any exposed hydraulic cylinder piston rods with grease.

8. Remove the battery from the tractor. Store the battery following the battery storage procedures.
(See "Battery condition" in every 100 hours in periodic service section)
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 four tires are off the ground. Keep the tires out of direct sunlight and extreme heat.

IMPORTANT :

- When washing the tractor, be sure to stop the engine. Allow sufficient time for the engine to cool 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 they are low.
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 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 gauges are functioning properly and reading normal, move the tractor outside. Once outside, park the tractor and let the engine idle for at least five minutes. Shut the engine off and walk around 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 table below for the cause and its corrective measure.

Trouble		Cause	Countermeasure
Engine is difficult to start or won't 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 Fuel System" in as required maintenance)
		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 & terminals. - Charge the battery. - In cold weather, always remove the battery from the engine, charge and store it indoors. Install it 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 exhaust muffler is dumped 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 defective 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.

OPTIONS

Consult your local KUBOTA Dealer for further detail.

- ⊗ Work Light
High visibility for night work
- ⊗ Single Acting Remote Hydraulic Control Valve
- ⊗ Draft Control
- ⊗ Swinging Drawbar
- ⊗ Engine Block heater
For facilitating starting and reducing warm up period in cold weather.
- ⊗ Front bumper
- ⊗ Front end weights
For front ballast
- ⊗ Rear Wheel Weights
For rear ballast
- ⊗ Sunshade
- ⊗ Secondary element
For double air cleaner
- ⊗ Front grill guard
- ⊗ Stabilizer kit (for lower link)
- ⊗ Drawbar Clevis



KUBOTA DIESEL TRACTOR

L

L2800/L3400/L4400

With a new L4400 HST model, and a power increase for the L2800/L3400, the enhanced Kubota L-Series standard tractor lineup will meet your demands head-on.



**NEW
L4400HST**

*To do the job right, you need the right tractor
Kubota's standard L-Series lineup lets you*

HST MODEL

NEW

L4400 4WD

- PTO 36.0 HP
- HST with I-type range shift
- Live continuous PTO with overrunning clutch

L3400 4WD

Xtra Power

- PTO 28.5 HP
- HST with I-type range shift
- Live continuous PTO with overrunning clutch

L2800 4WD

Xtra Power

- PTO 23.5 HP
- HST with I-type range shift
- Live continuous PTO with overrunning clutch



*tor. The variety and versatility of
select what's perfect for you.*

GEAR MODEL

L3400 XtraPower 4WD

- PTO 30.0 HP
- 8F/4R gear-drive transmission
- Live continuous PTO

L4400 4WD

- PTO 37.5 HP
- 8F/4R gear-drive transmission
- Full-flat deck
- Hydraulic independent PTO
- Hydrostatic power steering



The time-tested popularity of our simple-to-operate standard L-Series tractors proves one thing: that they're some of the most dependable and versatile tractors in their class. To meet a wide range of demands, our full lineup of standard L-Series diesel tractors includes the L2800, L3400, and the L4400. With several high-performance models to choose from, we're sure there's one that's just right for you.

L-SERIES STANDARD TRACTOR

With Kubota's L4400 tractor, you'll be a smooth operator on the field.

NEW

HYDROSTATIC TRANSMISSION



Feather-Step HST* (Hydraulic servo mechanism)

Kubota's 44.5cc Feather-Step HST features a hydraulic servo system that increases pedal responsiveness, providing easy pedal-shifting operation for smoother performance and improved control, regardless of load size. Now, forward and reverse directional changes are simple. The HST also reduces shock, vibration, noise and fatigue to improve tractor performance and operator comfort. Plus, it features a hand-operated, step-less cruise control, which keeps your working speed constant.

* L4400HST model only



Cruise Control Lever

The cruise control lever is conveniently located on the left side of the operator's seat for easier setting. Simpler than button and pedal combination systems, our lever lets you select and maintain the perfect travel speed for reduced operator fatigue.



GEAR-DRIVE TRANSMISSION

Shuttle Transmission For Higher Productivity

For easier front-loader operation, get a grip on the L4400's range shift—it has a forward/reverse mechanical shuttle shift in the low and reverse ranges. Plus, the transmission offers 8 forward and 4 reverse speeds (8F/4R), enabling you to select the perfect speed for higher productivity.



Long Wheelbase

The L4400 maximizes both power and stability, thanks to its long, 72.6-inch wheelbase.

L4400

Powerful and Clean-running 45.3HP Kubota Engine

World renowned for its reliability and power, the Kubota E-TVCS diesel engine generates 36.0 PTO horsepower to let you tackle any job. The rugged power plant delivers dynamic output and high torque, reduced noise and low vibration. It also produces clean emissions to meet the EPA's Interim Tier 4 '08 regulations. Plus, it includes the advanced Operator Presence Control (OPC), engine key-stop, and much more.

Large Fuel Tank

You'll spend more time working and less time refueling with our large-capacity 42 litre fuel tank.

Hydrostatic Power Steering

Not only responsive, but our fatigue-reducing hydrostatic power steering remains light and smooth even when working with heavy loads.

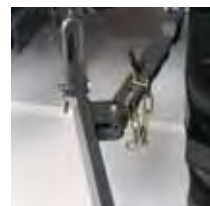


Spacious Operator's Platform

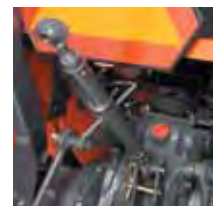
The L4400 features widely spaced rear fenders and a full-flat deck design, providing ample space for the driver and maximizing comfort. Its hanging-type pedals also increase space while offering effortless operation. And the convenient cup holder always keeps a refreshing drink within easy reach to help keep your thirst quenched.

User-friendly Hydraulic Independent PTO & 3-point Hitch

This convenient feature lets you operate the hydraulic independent PTO without using a clutch. Engaging and disengaging the PTO is incredibly simple. Other features include a flip-type PTO shield, top link holder, and telescopic stabilizers.



Telescopic Stabilizer



Top-link Holder



PTO Shield

***With more horsepower than ever before,
the L2800 and L3400 tractors will drive
you to a higher level of performance.***



Live Continuous-running PTO

The L2800/L3400 HST models and the L3400 gear-drive model include a live, continuous-running rear PTO for easier operation. The HST models also feature an over-running clutch on the PTO shaft to protect the transmission. Finally, a stationary PTO has been included to enable the use of various implements, such as pumps.

Spacious Operator's Deck

To provide maximum comfort, the L2800 and L3400 feature a spacious operator platform. Its semi-flat design also makes getting on and off the tractors easier.

Bevel Gear Front Axle

A superior feature that delivers an extremely tight turning radius with full power transfer to the wheels at every steering angle.

Large Fuel Tank

An ample 34-litre fuel tank lets you fill up with more fuel so you can operate longer.



L2800/L3400

Xtra Power

HYDROSTATIC TRANSMISSION



HST Pedal

Range Shift Lever
And Cruise Control

3-range Shift/Cruise Control For Optimal Speed Selection.

An in-line shifting pattern enables easy range shifting from low to medium to high. The shift is also conveniently on the left side of the operator's seat. For an easy way to keep your working speed constant, simply set the infinite, mechanical cruise control lever on either the L2800 or L3400 4WD HST models to your desired speed—and go. Changing your speed is as simple as operating a single lever.



GEAR-DRIVE TRANSMISSION

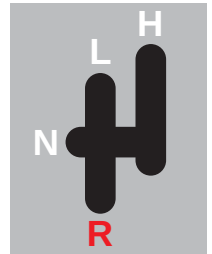


Main Shift Lever

Range Shift Lever

Powerful And Versatile Means Getting The Job Done Faster.

You'll finish the big jobs easily with a mechanical shuttle transmission. For easier front-loader operation, the mechanical shuttle shift has a forward/reverse in the low and reverse ranges. Moreover, the transmission offers 8 forward and 4 reverse speeds (8F/4R), enabling you to select the perfect speed for higher productivity.



More Powerful Engines to Take On the Toughest Projects.

More power means better performance. To make your job easier, we've given both of our world-renowned E-TVCS diesel engines an extra 1HP. The L2800 HST model puts out an impressive 23.5 PTO horsepower, while the L3400 HST provides a vigorous 28.5 PTO horsepower (gear-drive model: 30 PTO horsepower). These clean-running engines are compliant with the EPA's Interim Tier 4 emissions standards.



Smooth Power Steering

To reduce fatigue, both the L2800 and L3400 models come equipped with smooth, easy-turn, integral power steering.

The L-Series gives you more of what the most popular compact tractors on earth should provide.



A Perfect Balance of Form and Function.

When you're more comfortable, you're more productive. With this in mind, we designed the Kubota L2800, L3400 and L4400 standard tractors to be the perfect balance of form and function. The slanted hood and enclosed muffler with low-exit exhaust give them a sleek and modern look, and the design provides improved visibility as well. Other practical features include a 3-point hitch and conveniently located control levers.

Cup/Mug Holder

This convenient holder securely fits a cup or a mug so you can always quench your thirst.



Roll-Over Protective Structure (ROPS)

For maximum protection, all models come with foldable ROPS as standard equipment.

Top Link Holder

A feature that keeps your top link in place when not in use.



3-point Hitch

The large capacity hydraulic pump and cylinder provide powerful lifting capacity, allowing you to use a wider range of implements.



Full-open Hood and Slide-out Grill

Whether simple maintenance or a more involved repair, a one-piece, full-opening hood exposes most engine components, making it easier to do either. Removing the front grill is fast, too. Simply slide it out.



Wet-disc Brakes

Responsive and smooth, our long-life wet-disc brakes are immersed in oil, and require only the slightest foot pressure to activate.

Conveniently Located PTO Lever

To further enhance access and entry/exit, the PTO lever is located on the right side of the operator's seat (all HST models/L4400DT), or to the right side of the deck center cover (L3400 gear-drive model).



(L3400 4WD gear-drive model)

Choice Of Tires

Tires designed especially for specific jobs enable the L2800, L3400 and L4400 to perform even better. Select from AG, Industrial, and Turf.



Maximize the L-Series' versatility with Kubota's performance-matched quick attach/detach implements.

High Performance Front Loaders

To ensure maximum productivity, Kubota has designed two performance-matched loaders. We created one that best matches both the L2800 and L3400 models, and another exclusively for the L4400 model.

Easy Operation

A single-lever joystick provides easier operation. A regenerative dump circuit allows for fast bucket dumping, and the series circuit provides for simultaneous operation of the boom and bucket. The valve stays with the tractor when the loader is detached, so that the valve can be used for other implement operations.

Quick Attaching/Detaching

Thanks to Kubota's innovative attaching/detaching system, you can attach and detach mounting pins and hose couplers from the driver's seat, quickly and easily. As a result, you can move from job to job with greater efficiency. Boom-mounted loader stands make access easy and allow the loader to stand alone when detached.



Rounded Boom

High Quality Cylinder



Optional Skid Steer-type Quick Coupler
(Only available for LA463 and LA703A.)



Protected Cylinder Tubes

Powerful Backhoes

- Quick-attach convenience combined with full-mount subframe ensures sturdiness.
- Transport lock for safe transporting.
- Two-lever control for smooth and fast operation. One lever controls boom extension and retraction as well as swing arc. The second lever operates the dipperstick extension, retraction, and bucket curl.
- Compatible with applicable front loader.
- Hydraulically actuated stabilizers provide good stability.
- Variety of bucket options.
- Console styling.
- Backhoe applications require installation of the appropriate loader for tractor stability.



Ample Departure Angle



Protected Hoses



Quick Attach/Detach

IMPLEMENTS



Loader Specifications

Model		LA463	LA703A
Matching Tractor		L2800 or L3400	L4400
Maximum Lift Height (Pivot pin)	in.(mm)	95.3 (2420)	102.4 (2600)
Clearance w/Attachment Dump	in.(mm)	76.2 (1935)	83.9 (2130)
Reach @ Maximum Height	in.(mm)	22.2 (565)	19 (483)
Maximum Dump Angle	deg.	40	40
Reach w/Attachment on Ground	in.(mm)	64.5 (1640)	64.5 (1640)
Maximum Rollback Angle	deg.	31	23
Digging Depth (When Bucket is Level)	in.(mm)	5.9 (150)	3.5 (90)
Overall Height in Carry Position	in.(mm)	53.1 (1350)	55.5 (1410)
Material Bucket Width/Weight	in.(mm) / lbs.(kg)	60 (1525) / 260 (118)	72 (1830) / 293 (133)
Lift Capacity (500mm forward)	lbs.(kg)	853 (387)	1356 (615)
Lift Capacity (Pivot pin)	lbs.(kg)	1142 (518)	1818 (825)
Lift Capacity (Bucket center)	lbs.(kg)	1014 (460)	1543 (700)
Breakout Force (500mm forward)	lbs.(N)	1858 (8267)	2530 (11255)
Raising Time to Full Height w/out Load	sec.	3.5	3.3
Lowering Time w/out Load (powerdown)	sec.	2.2	2.2
Attachment Rollback Time	sec.	2.1	2.2
Attachment Dumping Time	sec.	1.7	1.3
Rated Flow	gpm (l/min)	6.3 (23.9)	7.8 (29.4)
Relief Valve PSI	psi (kg/cm ²)	2347 (165)	2560 (180)

Backhoe Specifications

Model		BH75A	BH90A*
Matching Tractor		L2800/L3400	L4400
Transport height	in.(mm)	80.4 (2042)	98.9 (2512)
Stabilizer spread transport	in.(mm)	51.8 (1315)	71.0 (1803)
Ground clearance	in.(mm)	12.9 (327)	15.6 (396)
Digging depth, 2ft. flat bottom	in.(mm)	91.0 (2311)	108.9 (2766)
Loading height	in.(mm)	81.8 (2077)	95.3 (2421)
Reach from swing pivot	in.(mm)	120.5 (3060)	146.5 (3721)
Swing pivot to rear axle center line	in.(mm)	38.4 (976)	42.1 (1069)
Bucket rotation	deg.	182	180
Stabilizer spread operating	in.(mm)	67.0 (1717)	92.0 (2336)
Angle of departure per SAE J 1234	deg.	18	22.1
Swing arc	deg.	180	180
Digging Force Using Bucket Cylinder	lbs(kg)	3339 (1514)	3871 (1756)
Digging Force Using Dipperstick Cylinder	lbs(kg)	2097 (951)	2593 (1176)

* Not applicable for older models.



POST HOLE DIGGER



ROTARY TILLERS



REAR BLADES



REAR-MOUNT MOWERS



BOX SCRAPERS

Implements models and availability may differ for Canada.

Specifications

<https://truckmanualshub.com/>

Model			L2800		L3400		L4400	
			HST		Gear-Drive Transmission	HST	Gear-Drive Transmission	HST
			4WD		4WD	4WD	4WD	4WD
Engine			Vertical liquid-cooled 4-cycle diesel, Indirect injection (E-TVCS)					
Type								
Engine gross power		HP (kW)	30.0 (22.4)@2800 rpm		35.7 (26.6)@2700 rpm		45.3 (33.8)@2600 rpm	
Engine net power		HP (kW)	28.6 (21.3)@2800 rpm		34.2 (25.5)@2700 rpm		43.0 (32.1)@2600 rpm	
PTO power		HP (kW)	23.5 (17.5)@2800 rpm		30.0 (22.4)@2700 rpm	28.5 (21.3)@2700 rpm	37.5 (28.0)@2600 rpm	36.0 (26.8)@2600 rpm
No. of cylinders			3				4	
Bore & stroke		in. (mm)	3.3×3.6 (83×92.4)		3.4×4.0 (87×102.4)		3.4×3.6 (87×92.4)	
Total displacement		cu.in. (cm³)	91.5 (1499)		111.4 (1826)		134.1 (2197)	
Battery			12V, RC: 123min, CCA: 490A				12V, RC: 133min, CCA: 582A	
Fuel tank capacity		US gal. (ℓ)	9.0 (34)				11.1 (42)	
PTO			Live-continuous with overrunning clutch		Live-continuous running	Live-continuous with overrunning clutch	Live-independent, hydraulic PTO with PTO brake, wet clutch*	
Rear PTO (540 rpm)								
Hydraulic			6.5 (24.7)		6.3 (23.9)		7.8 (29.4)	
Pump capacity (main)		gpm (ℓ/min.)						
(PS)		gpm (ℓ/min.)	4.0 (15.0)		3.8 (14.5)		4.7 (17.9)	
3-point hitch			Category I					
Lift control type			Position control					
Lift capacity at lift point		lbs. (kg)	1998 (906)				2870 (1300)	
at 24 in behind LP		lbs. (kg)	1435 (651)				2310 (1053)	
Traveling System			Hydrostatic transmission, 3 range speed		Sliding gear and constant mesh, 8 forward and 4 reverse	Hydrostatic transmission, 3 range speed	Sliding gear and constant mesh, 8 forward and 4 reverse	Hydrostatic transmission, 3 range speed
Transmission								
Steering			Integral type power steering				Hydrostatic power steering	
Brakes			Wet disc type					
Clutch			Dry-type single stage		Dry-type dual stage	Dry-type single stage	Dry-type single stage	
Rear differential lock			Standard					
Tire Size		AG Standard	Front/Rear		7–16 / 11.2–24		8–16 / 14.9–24	
		TURF Option	Front/Rear		24×8.50 – 14 / 13.6 – 16		27×8.50–15 /41×14.00–20	
		INDUST. Option	Front/Rear		27×8.50 – 15 / 15 – 19.5 R4		10.0 – 16.5 / 17.5 – 24	
Traveling Speeds w/Standard AG Tires (at Rated Engine Speed)			For 0-14.7 (0-23.6) Rev 0-13.2 (0-21.2)		For 1.1-13.2 (1.7-21.2) Rev 1.5-4.7 (2.4-7.6)	For 0-14.1 (0-22.7) Rev 0-12.7 (0-20.5)	For 12-14.9 (2.0-24.0) Rev 15-51 (2.4-8.2)	For 0-15.8 (0-25.4) Rev 0-14.2 (0-22.9)
Dimensions			106.5 (2705)				118.3 (3005)	
Overall length (w/o 3P)		in. (mm)						
Overall width (min. tread)		in. (mm)	51.4 (1305)				62.4 (1585)	
Overall height (w/ROPS)		in. (mm)	85.0 (2160)				85.4 (2170)	
Wheelbase		in. (mm)	63.3 (1610)				72.6 (1845)	
Min. ground clearance (Front axle)		in. (mm)	13.4 (340)				15.7 (400)	
Tread (STD Tires)			43.1 (1095)				45.5 (1155)	
Front		in. (mm)						
Rear		in. (mm)	40.2 (1020), 43.8 (1115), 47.1 (1195), 50.8 (1290)				46.5 (1180), 47.2 (1200), 51.2 (1300), 57.1 (1450), 60.8 (1545)	
Min. Turning Radius (w/brake)		feet (m)	8.2 (2.5)				8.5 (2.6)	
Weight (with ROPS)		lbs. (kg)	2600 (1180)		2580 (1170)	2600 (1180)	3153 (1430)	3307 (1500)
Optional Equipment			Sunshade, Front Bumper Weights, Rear Wheel Weights, Block Heater, Drawbar Clevis, 3PT Stabilizer Kit*, Aux. Control Valves (L4400), Grill Guard, Double Element Air Cleaner*, Rear Work Light, Draft Control Kit (L4400), Swinging Drawbar (L4400)					

The company reserves the right to change the above specifications without notice. This brochure is for descriptive purposes only. Please contact your local Kubota dealer for warranty information. For your safety, Kubota strongly recommends the use of a Rollover Protective Structure (ROPS) and seat belt in almost all applications. The operator's manual should be consulted for more complete operational information. *Standard on L4400

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