WSM

WORKSHOP MANUAL
TRACTOR

L3130 • L3430 • L3830
L4330 • L4630 • L5030

Kubota

KiSC issued 03, 2006 A

TO THE READER

This Workshop Manual has been prepared to provide servicing personnel with information on the mechanism, service and maintenance of KUBOTA Tractor L3130, L3430, L3830, L4330, L4630 and L5030. It is divided into two parts, “Mechanism” and “Servicing” for each section.

Mechanism

Information on the construction and function are included. This part should be understood before proceeding with troubleshooting, disassembling and servicing.

Refer to Diesel engine / Tractor Mechanism Workshop Manual (Code No. 97897-01872 / 97897-18200) for the one which has not been described to this workshop manual.

Servicing

The heading “General” includes general precautions, check and maintenance and special tools. Other section, there are troubleshooting, servicing specification lists, checking and adjusting, disassembling and assembling, and servicing which cover procedures, precautions, factory specifications and allowable limits.

All information illustrations and specifications contained in this manual are based on the latest product information available at the time of publication.

The right is reserved to make changes in all information at any time without notice.

October 2002

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SAFETY FIRST

This symbol, the industry's "Safety Alert Symbol", is used throughout this manual and on labels on the machine itself to warn of the possibility of personal injury. Read these instructions carefully.

It is essential that you read the instructions and safety regulations before you attempt to repair or use this unit.

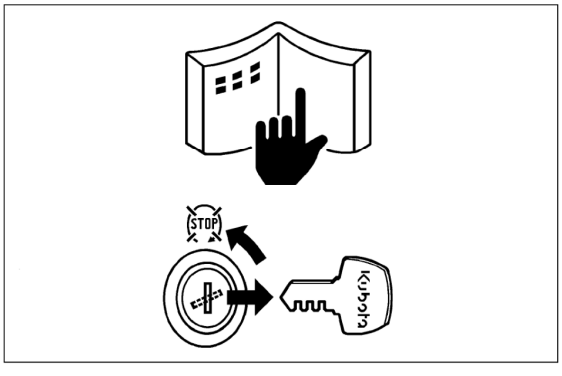
DANGER : **Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.**

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

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

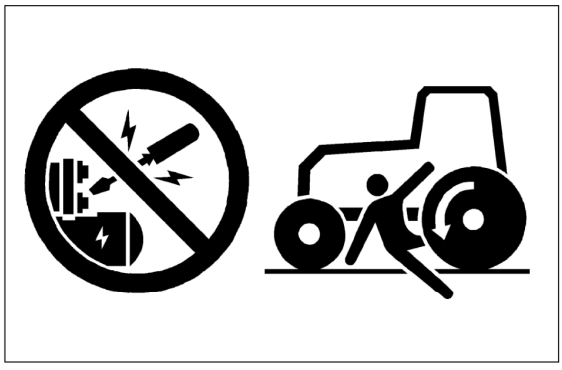
IMPORTANT : **Indicates that equipment or property damage could result if instructions are not followed.**

NOTE : **Gives helpful information.**



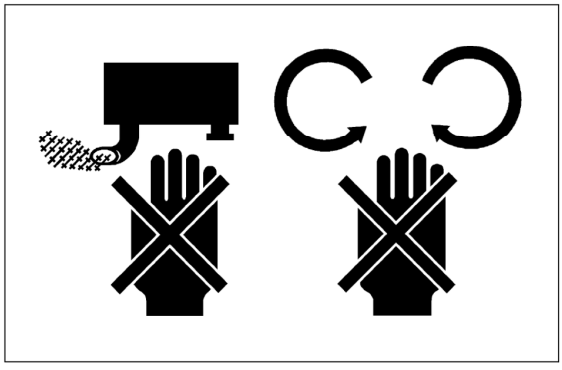
BEFORE SERVICING AND REPAIRING

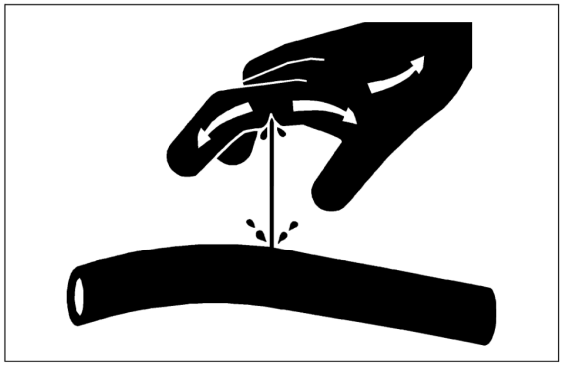
- Read all instructions and safety instructions in this manual and on your machine safety decals.
- Clean the work area and machine.
- Park the machine on a firm and level ground, and set the parking brake.
- Lower the implement to the ground.
- Stop the engine, and remove the key.
- Disconnect the battery negative cable.
- Hang a "**DO NOT OPERATE**" tag in operator station.



SAFETY STARTING

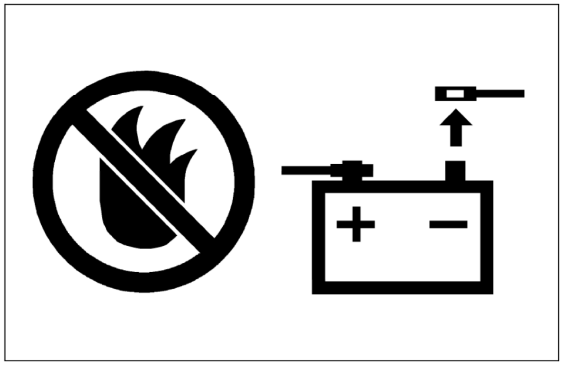
- Do not start the engine by shorting across starter terminals or bypassing the safety start switch.
- Do not alter or remove any part of machine safety system.
- Before starting the engine, make sure that all shift levers are in neutral positions or in disengaged positions.
- Never start the engine while standing on ground. Start the engine only from operator's seat.





SAFETY WORKING

- Do not work on the machine while under the influence of alcohol, medication, or other substances or while fatigued.
- Wear close fitting clothing and safety equipment appropriate to the job.
- Use tools appropriate to the work. Makeshift tools, parts, and procedures are not recommended.
- When servicing is performed together by two or more persons, take care to perform all work safely.
- Do not work under the machine that is supported solely by a jack. Always support the machine by safety stands.
- Do not touch the rotating or hot parts while the engine is running.
- Never remove the radiator cap while the engine is running, or immediately after stopping. Otherwise, hot water will spout out from radiator. Only remove radiator cap when cool enough to touch with bare hands. Slowly loosen the cap to first stop to relieve pressure before removing completely.
- Escaping fluid (fuel or hydraulic oil) under pressure can penetrate the skin causing serious injury. Relieve pressure before disconnecting hydraulic or fuel lines. Tighten all connections before applying pressure.

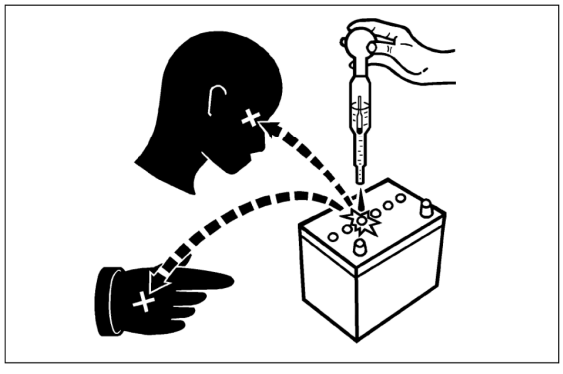


AVOID FIRES

- Fuel is extremely flammable and explosive under certain conditions. Do not smoke or allow flames or sparks in your working area.
- To avoid sparks from an accidental short circuit, always disconnect the battery negative cable first and connect it last.
- Battery gas can explode. Keep sparks and open flame away from the top of battery, especially when charging the battery.
- Make sure that no fuel has been spilled on the engine.

VENTILATE WORK AREA

- If the engine must be running to do some work, make sure the area is well ventilated. Never run the engine in a closed area. The exhaust gas contains poisonous carbon monoxide.

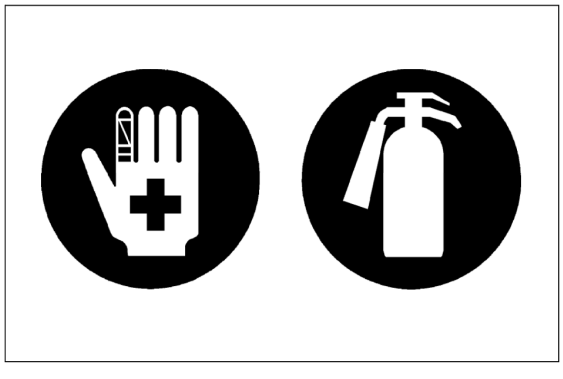


PREVENT ACID BURNS

- Sulfuric acid in battery electrolyte is poisonous. It is strong enough to burn skin, clothing and cause blindness if splashed into eyes. Keep electrolyte away from eyes, hands and clothing. If you spill electrolyte on yourself, flush with water, and get medical attention immediately.

DISPOSE OF FLUIDS PROPERLY

- Do not pour fluids into the ground, down a drain, or into a stream, pond, or lake. Observe relevant environmental protection regulations when disposing of oil, fuel, coolant, electrolyte and other harmful waste.



PREPARE FOR EMERGENCIES

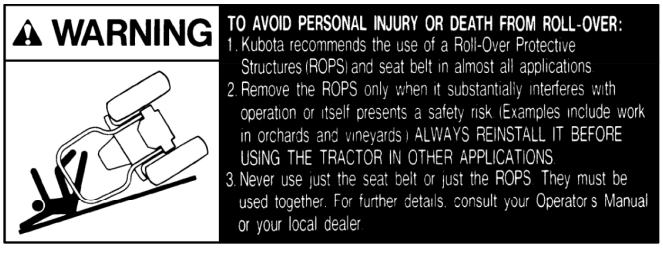
- Keep a first aid kit and fire extinguisher handy at all times.
- Keep emergency numbers for doctors, ambulance service, hospital and fire department near your telephone.

SAFETY DECALS

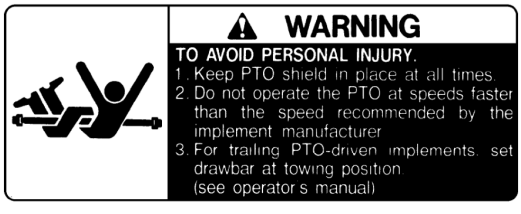
The following safety decals are installed on the machine.
If a decal becomes damaged, illegible or is not on the machine, replace it. The decal part number is listed in the parts list.

(1) Part No. TA040-4965-2

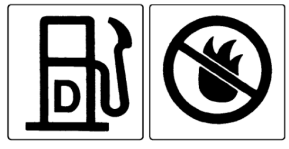
(2) Part No. TA040-4932-2 [Rigid ROPS Type]



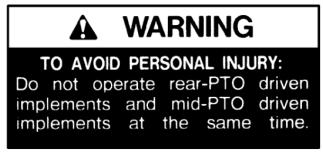
(3) Part No. TA040-4959-3



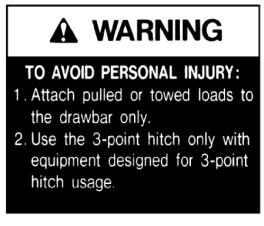
(4) Part No. TA040-4956-2
Diesel fuel only. No fire



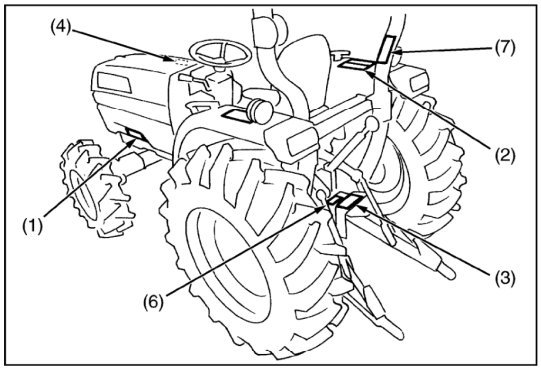
(5) Part No. TA040-4934-1

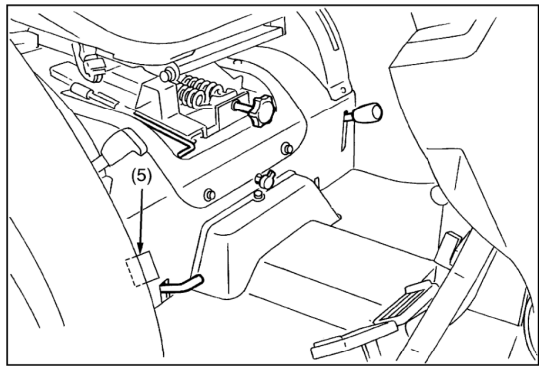


(6) Part No. TA040-4935-1



(7) Part No. 6C140-4746-1





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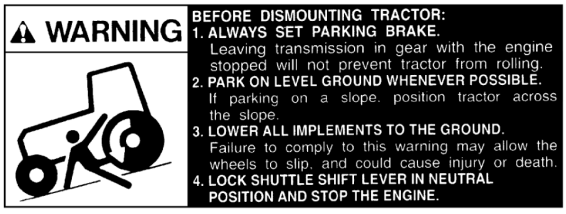
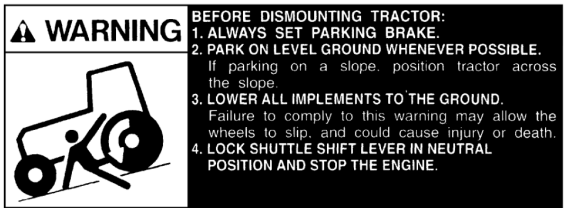
(1) Part No. TA140-4992-1 [GST Type]

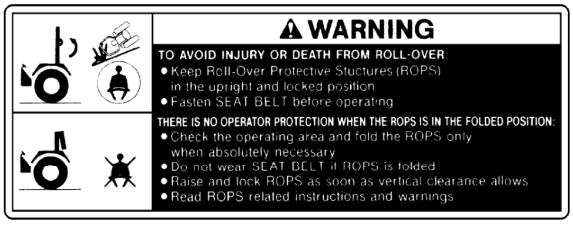


(1) Part No. TA140-4933-1 [Manual Transmission Type]

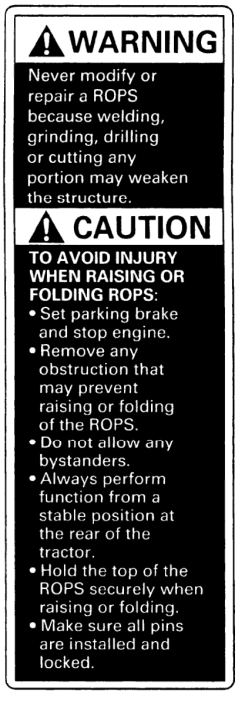


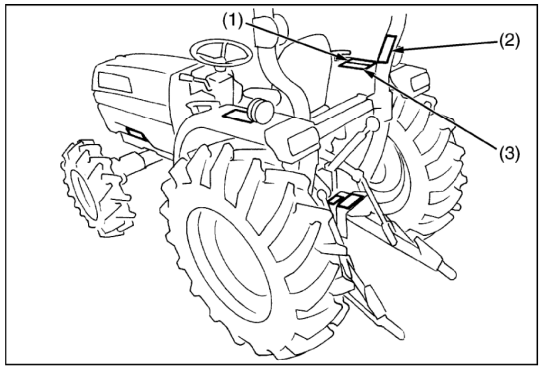
(1) Part No. TA240-4933-1 [HST Type]

(3) Part No. TA240-9848-1 [Foldable ROPS Type]



(2) Part No. 3A111-9554-1 [Foldable ROPS Type]





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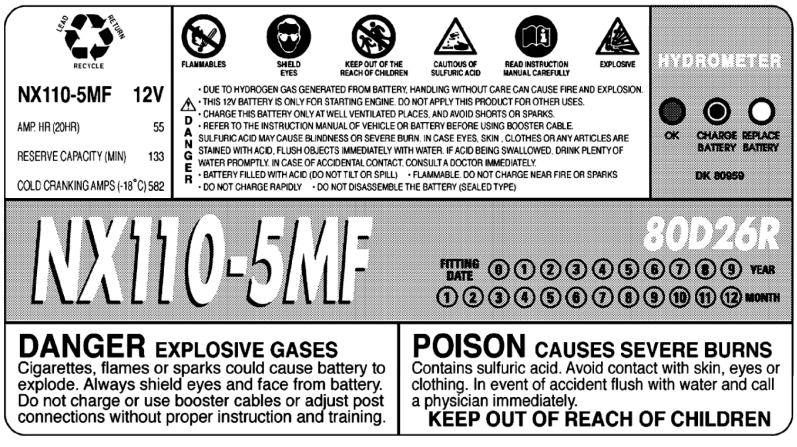
(1) Part No. 35260-3491-4

⚠CAUTION

TO AVOID PERSONAL INJURY:

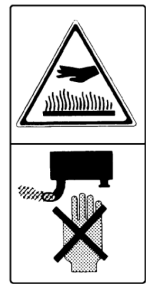
1. Read and understand the operator's manual before operation.
2. Before starting the engine, make sure that everyone is at a safe distance from the tractor and that the PTO is OFF.
3. Do not allow passengers on the tractor at any time.
4. Before allowing other people to use the tractor, have them read 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.

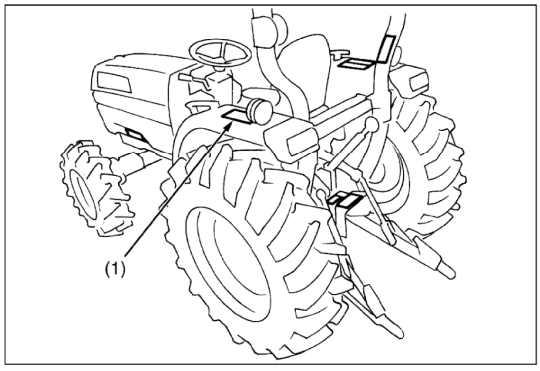
(2) Part No. TD060-3012-1

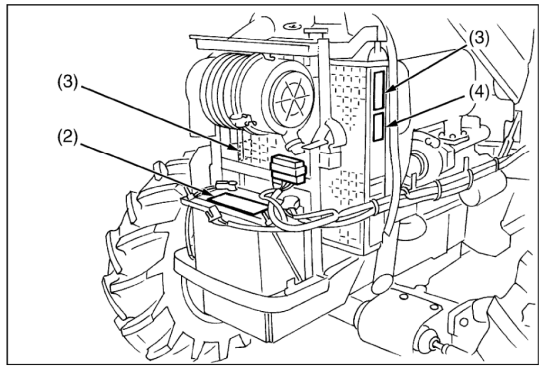


(3) Part No. 32751-4958-1
Stay clear of engine fan and fan belt.

(4) Part No. TC030-4958-1
Do not touch hot surface like muffler etc.







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(1) Part No. 35260-3491-4

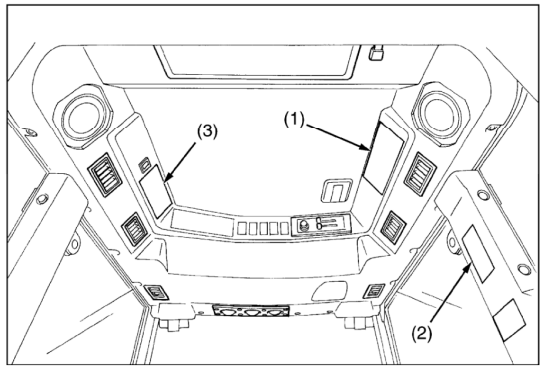
⚠ CAUTION

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.

(2) Part No. TA040-4902-1

(3) Part No. TA240-4933-2



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.
4. If a component with danger, warning or 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.

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SPECIFICATIONS

Model			L3130			
			Manual		GST	HST
			2WD (ROPS)	4WD (ROPS)	4WD (ROPS)	4WD (ROPS)
Engine	Model		D1503-MA-E-GST / D1503-MA-E2-GST			D1503-MA-E-HST / D1503-MA-E2-HST
	Type		Indirect injection vertical, water-cooled, 4-cycle diesel			
	Number of cylinders		3			
	Total displacement		1.499 L (91.5 cu.in.)			
	Bore and stroke		83 × 92.4 mm (3.3 × 3.6 in.)			
	Net power		23.1 kW (31.0 HP)*			
	PTO power (factory observe)		19.0 kW (25.5 HP)* / 2700 min^{-1} (rpm)			17.9 kW (24.0 HP)* / 2700 min^{-1} (rpm)
	Maximum torque		102.9 N·m (10.5 kgf·m, 75.9 ft-lbs)			
	Battery capacity		12 V, RC : 123 min, CCA : 490 A			
	Fuel		Diesel fuel No. 1 [below –10 °C (14 °F], Diesel fuel No. 2-D [above –10 °C (14 °F)]			
Capacities	Fuel tank		40 L (10.6 U.S.gals., 8.8 Imp.gals.)			
	Engine crankcase (with filter)		5.7 L (6.0 U.S.qts., 5.0 Imp.qts.)			
	Engine coolant		6.0 L (6.3 U.S.qts., 5.3 Imp.qts.)			
	Transmission case		42 L (11.1 U.S.gals., 9.2 Imp.gals.)			
Dimensions	Overall length (without 3P)		2915 mm (114.8 in.)			
	Overall width (min. tread)		1520 mm (59.8 in.)			
	Overall height (with ROPS foldable / rigid)		2305 mm (90.7 in.) / 2140 mm (84.3 in.)			
	Wheel base		1810 mm (71.3 in.)	1805 mm (71.1 in.)		
	Min. ground clearance		360 mm (14.2 in.)			
	Tread	Front	1310 mm (51.6 in.) 1410 mm (55.5 in.) 1510 mm (59.4 in.) 1610 mm (63.4 in.)	1155 mm (45.5 in.)		
		Rear	1200 mm (47.2 in.), 1300 mm (51.2 in.), 1385 mm (54.5 in.), 1480 mm (58.3 in.)			
Weight (with ROPS)			1415 kg (3120 lbs)	1460 kg (3220 lbs)	1480 kg (3265 lbs)	1500 kg (3305 lbs)
Travelling system	Standard tire size	Front	6-16	7.2-16		
		Rear	12.4-24			
	Clutch		Dry type single stage			
	Steering		Hydrostatic power steering			
	Transmission		F8, R8 fully synchronized main and shuttle transmission		F12, R8 Glide shift transmission	Hydrotstatic transmission (3 speeds)
	Braking system		Wet disk type			
	Min. turning radius (with brake)		2.6 m (8.5 feet)	2.7 m (8.9 feet)		
Hydraulic system	Hydraulic control system		Position control			
	Pump capacity		31.5 L (8.3 U.S.gals., 6.9 Imp.gals.) / min.			
	Three point hitch		SAE Category I			
	Max. lift force	At lift points	1700 kg (3750 lbs)			
		24 in. behind lift points	1200 kg (2650 lbs)			
	System pressure		17.1 to 18.1 MPa (175 to 185 kgf/cm^2, 2491 to 2633 psi)			
PTO	Rear PTO		SAE 1-3/8, 6 splines			
	PTO / Engine speed		540 min^{-1} (rpm) / 2550 min^{-1} (rpm)			540 min^{-1} (rpm) / 2640 min^{-1} (rpm)
	Mid-PTO (if equipped)		USA No. 5 (KUBOTA 10-tooth) involute spline			
	PTO / Engine speed		2000 min^{-1} (rpm) / 2580 min^{-1} (rpm)			2000 min^{-1} (rpm) / 2670 min^{-1} (rpm)

Note : * Manufacture's estimate

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

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Model			L3430			
			Manual	GST	HST	
			4WD (ROPS)	4WD (ROPS)	4WD (ROPS)	4WD (CABIN)
Engine	Model		D1703-MA-E-GST / D1703-MA-E2-GST		D1703-MA-E-HST / D1703-MA-E2-HST	
	Type		Indirect injection vertical, water-cooled, 4-cycle diesel			
	Number of cylinders		3			
	Total displacement		1.647 L (100.5 cu.in.)			
	Bore and stroke		87 × 92.4 mm (3.4 × 3.6 in.)			
	Net power		25.1 kW (33.6 HP)*			
	PTO power (factory observe)		21.3 kW (28.5 HP)* / 2700 min^{-1} (rpm)		20.1 kW (27.0 HP)* / 2700 min^{-1} (rpm)	
	Maximum torque		108.3 N·m (11.05 kgf·m, 79.9 ft-lbs)			
	Battery capacity		12 V, RC : 123 min, CCA : 490 A			
	Fuel		Diesel fuel No. 1 [below –10 °C (14 °F], Diesel fuel No. 2-D [above –10 °C (14 °F)]			
Capacities	Fuel tank		40 L (10.6 U.S.gals., 8.8 Imp.gals.)			
	Engine crankcase (with filter)		5.7 L (6.0 U.S.qts., 5.0 Imp.qts.)			
	Engine coolant		6.0 L (6.3 U.S.qts., 5.3 Imp.qts.)			
	Transmission case		42 L (11.1 U.S.gals., 9.2 Imp.gals.)			
Dimensions	Overall length (without 3P)		2915 mm (114.8 in.)			
	Overall width (min. tread)		1520 mm (59.8 in.)			
	Overall height (with CABIN or ROPS foldable / rigid)		2305 mm (90.7 in.) / 2140 mm (84.3 in.)			2195 mm (86.4 in.)
	Wheel base		1805 mm (71.1 in.)			
	Min. ground clearance		360 mm (14.2 in.)			
	Tread	Front	1155 mm (45.5 in.)			
		Rear	1200 mm (47.2 in.), 1300 mm (51.2 in.), 1385 mm (54.5 in.), 1480 mm (58.3 in.)			
Weight (with ROPS or CABIN)			1460 kg (3220 lbs)	1480 kg (3265 lbs)	1500 kg (3305 lbs)	1650 kg (3638 lbs)
Travelling system	Standard tire size	Front	7.2-16			
		Rear	12.4-24			
	Clutch		Dry type single stage			
	Steering		Hydrostatic power steering			
	Transmission		F8, R8 fully synchronized main and shuttle transmission	F12, R8 Glide shift transmission	Hydrotstatic transmission (3 speeds)	
	Braking system		Wet disk type			
	Min. turning radius (with brake)		2.7 m (8.9 feet)			
Hydraulic system	Hydraulic control system		Position control			
	Pump capacity		31.5 L (8.3 U.S.gals., 6.9 Imp.gals.) / min.			
	Three point hitch		SAE Category I			
	Max. lift force	At lift points	1700 kg (3750 lbs)			
		24 in. behind lift points	1200 kg (2650 lbs)			
	System pressure		17.1 to 18.1 MPa (175 to 185 kgf/cm^2, 2491 to 2633 psi)			
PTO	Rear PTO		SAE 1-3/8, 6 splines			
	PTO / Engine speed		540 min^{-1} (rpm) / 2550 min^{-1} (rpm)		540 min^{-1} (rpm) / 2640 min^{-1} (rpm)	
	Mid-PTO (if equipped)		USA No. 5 (KUBOTA 10-tooth) involute spline			
	PTO / Engine speed		2000 min^{-1} (rpm) / 2580 min^{-1} (rpm)		2000 min^{-1} (rpm) / 2670 min^{-1} (rpm)	

Note : * Manufacture's estimate

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

W10357910

Model			L3830			
			Manual		GST	HST
			2WD (ROPS)	4WD (ROPS)	4WD (ROPS)	4WD (ROPS)
Engine	Model		D1803-M-E-GST / D1803-M-E2-GST			D1803-M-E-HST / D1803-M-E2-HST
	Type		Indirect injection vertical, water-cooled, 4-cycle diesel			
	Number of cylinders		3			
	Total displacement		1.826 L (111.4 cu.in.)			
	Bore and stroke		87 × 102.4 mm (3.4 × 4.0 in.)			
	Net power		27.9 kW (37.4 HP)*			
	PTO power (factory observe)		23.9.0 kW (32.0 HP)* / 2700 min^{-1} (rpm)			22.8 kW (30.5 HP)* / 2700 min^{-1} (rpm)
	Maximum torque		120.7 N·m (12.3 kgf·m, 89.0 ft-lbs)			
	Battery capacity		12 V, RC : 133 min, CCA : 582 A			
	Fuel		Diesel fuel No. 1 [below –10 °C (14 °F], Diesel fuel No. 2-D [above –10 °C (14 °F)]			
Capacities	Fuel tank		40 L (10.6 U.S.gals., 8.8 Imp.gals.)			
	Engine crankcase (with filter)		6.7 L (7.1 U.S.qts., 5.9 Imp.qts.)			
	Engine coolant		7.5 L (7.9 U.S.qts., 6.6 Imp.qts.)			
	Transmission case		43 L (11.4 U.S.gals., 9.5 Imp.gals.)			
Dimensions	Overall length (without 3P)		2985 mm (117.5 in.)			
	Overall width (min. tread)		1690 mm (66.5 in.)			
	Overall height (with ROPS foldable / rigid)		2315 mm (91.1 in.) / 2155 mm (84.8 in.)			
	Wheel base		1845 mm (72.6 in.)	1840 mm (72.4 in.)		
	Min. ground clearance		375 mm (14.8 in.)			
	Tread	Front	1310 mm (51.6 in.) 1410 mm (55.5 in.) 1510 mm (59.4 in.) 1610 mm (63.4 in.)	1155 mm (45.5 in.)		
		Rear	1285 mm (50.6 in.), 1435 mm (56.5 in.), 1530 mm (60.2 in.)			
Weight (with ROPS)			1430 kg (3155 lbs)	1480 kg (3265 lbs)	1495 kg (3295 lbs)	1515 kg (3340 lbs)
Travelling system	Standard tire size	Front	6-16	8.3-16		
		Rear	14.9-24			
	Clutch		Dry type single stage			
	Steering		Hydrostatic power steering			
	Transmission		F8, R8 fully synchronized main and shuttle transmission		F12, R8 Glide shift transmission	Hydrotstatic transmission (3 speeds)
	Braking system		Wet disk type			
	Min. turning radius (with brake)		2.6 m (8.5 feet)	2.7 m (8.9 feet)		
Hydraulic system	Hydraulic control system		Position control			
	Pump capacity		31.5 L (8.3 U.S.gals., 6.9 Imp.gals.) / min.			
	Three point hitch		SAE Category I			
	Max. lift force	At lift points	1750 kg (3860 lbs)			
		24 in. behind lift points	1250 kg (2760 lbs)			
	System pressure		17.1 to 18.1 MPa (175 to 185 kgf/cm^2, 2491 to 2633 psi)			
PTO	Rear PTO		SAE 1-3/8, 6 splines			
	PTO / Engine speed		540 min^{-1} (rpm) / 2550 min^{-1} (rpm)			540 min^{-1} (rpm) / 2640 min^{-1} (rpm)
	Mid-PTO (if equipped)		USA No. 5 (KUBOTA 10-tooth) involute spline			
	PTO / Engine speed		2000 min^{-1} (rpm) / 2580 min^{-1} (rpm)			2000 min^{-1} (rpm) / 2670 min^{-1} (rpm)

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

W10375160

Model			L4330			
			Manual	GST	HST	
			4WD (ROPS)	4WD (ROPS)	4WD (ROPS)	4WD (CABIN)
Engine	Model		V2203-MA-E-GST / V2203-MA-E2-GST		V2203-MA-E-HST / V2203-MA-E2-HST	
	Type		Indirect injection vertical, water-cooled, 4-cycle diesel			
	Number of cylinders		4			
	Total displacement		2.197 L (134.1 cu.in.)			
	Bore and stroke		87 × 92.4 mm (3.4 × 3.6 in.)			
	Net power		30.6 kW (41.0 HP)*			
	PTO power (factory observe)		26.9 kW (36.0 HP)* / 2600 min^{-1} (rpm)		25.7 kW (34.5 HP)* / 2600 min^{-1} (rpm)	
	Maximum torque		146.2 N·m (14.9 kgf·m, 107.8 ft-lbs)			
	Battery capacity		12 V, RC : 133 min, CCA : 582 A			
	Fuel		Diesel fuel No. 1 [below –10 °C (14 °F], Diesel fuel No. 2-D [above –10 °C (14 °F)]			
Capacities	Fuel tank		40 L (10.6 U.S.gals., 8.8 Imp.gals.)			
	Engine crankcase (with filter)		8.2 L (8.7 U.S.qts., 7.2 Imp.qts.)			
	Engine coolant		7.5 L (7.9 U.S.qts., 6.6 Imp.qts.)			
	Transmission case		43 L (11.4 U.S.gals., 9.5 Imp.gals.)			
Dimensions	Overall length (without 3P)		3080 mm (121.3 in.)			
	Overall width (min. tread)		1690 mm (66.5 in.)			
	Overall height (with CABIN or ROPS foldable / rigid)		2315 mm (91.1 in.) / 2155 mm (84.8 in.)			2210 mm (87.0 in.)
	Wheel base		1895 mm (74.6 in.)			
	Min. ground clearance		375 mm (14.8 in.)			
	Tread	Front	1300 mm (51.2 in.)			
		Rear	1285 mm (50.6 in.), 1435 mm (56.5 in.), 1530 mm (60.2 in.)			
Weight (with ROPS or CABIN)			1560 kg (3440 lbs)	1575 kg (3470 lbs)	1600 kg (3525 lbs)	1750 kg (3858 lbs)
Travelling system	Standard tire size	Front	8.3-16			
		Rear	14.9-24			
	Clutch		Dry type single stage			
	Steering		Hydrostatic power steering			
	Transmission		F8, R8 fully synchronized main and shuttle transmission	F12, R8 Glide shift transmission	Hydrotstatic transmission (3 speeds)	
	Braking system		Wet disk type			
	Min. turning radius (with brake)		2.7 m (8.9 feet)			
Hydraulic system	Hydraulic control system		Position control			
	Pump capacity		35.6 L (9.4 U.S.gals., 7.8 Imp.gals.) / min.			
	Three point hitch		SAE Category I			
	Max. lift force	At lift points	1750 kg (3860 lbs)			
		24 in. behind lift points	1250 kg (2760 lbs)			
	System pressure		18.1 to 19.1 MPa (185 to 195 kgf/cm^2, 2633 to 2775 psi)			
PTO	Rear PTO		SAE 1-3/8, 6 splines			
	PTO / Engine speed		540 min^{-1} (rpm) / 2550 min^{-1} (rpm)		540 min^{-1} (rpm) / 2440 min^{-1} (rpm)	
	Mid-PTO (if equipped)		USA No. 5 (KUBOTA 10-tooth) involute spline			
	PTO / Engine speed		2000 min^{-1} (rpm) / 2580 min^{-1} (rpm)		2000 min^{-1} (rpm) / 2470 min^{-1} (rpm)	

Note : * Manufacture's estimate
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W10388600

Model			L4630			
			Manual	GST		HST
			4WD (ROPS)	4WD (ROPS)	4WD (CABIN)	4WD (ROPS)
Engine	Model		V2203-MB-E-GST / V2203-MB-E2-GST			V2203-MB-E-HST / V2203-MB-E2-HST
	Type		Indirect injection vertical, water-cooled, 4-cycle diesel			
	Number of cylinders		4			
	Total displacement		2.197 L (134.1 cu.in.)			
	Bore and stroke		87 × 92.4 mm (3.4 × 3.6 in.)			
	Net power		33.3 kW (44.7 HP)*			
	PTO power (factory observe)		29.5 kW (39.5 HP)* / 2700 min^{-1} (rpm)			28.3 kW (38.0 HP)* / 2700 min^{-1} (rpm)
	Maximum torque		146.2 N·m (14.9 kgf·m, 107.8 ft-lbs)			
	Battery capacity		12 V, RC : 133 min, CCA : 582 A			
	Fuel		Diesel fuel No. 1 [below –10 °C (14 °F], Diesel fuel No. 2-D [above –10 °C (14 °F)]			
Capacities	Fuel tank		40 L (10.6 U.S.gals., 8.8 Imp.gals.)			
	Engine crankcase (with filter)		8.2 L (8.7 U.S.qts., 7.2 Imp.qts.)			
	Engine coolant		7.5 L (7.9 U.S.qts., 6.6 Imp.qts.)			
	Transmission case		43 L (11.4 U.S.gals., 9.5 Imp.gals.)			
Dimensions	Overall length (without 3P)		3080 mm (121.3 in.)			
	Overall width (min. tread)		1690 mm (66.5 in.)			
	Overall height (with CABIN or ROPS foldable / rigid)		2315 mm (91.1 in.) / 2155 mm (84.8 in.)		2210 mm (87.0 in.)	2315 mm (91.1 in.) / 2155 mm (84.8 in.)
	Wheel base		1895 mm (74.6 in.)			
	Min. ground clearance		375 mm (14.8 in.)			
	Tread	Front	1300 mm (51.2 in.)			
		Rear	1285 mm (50.6 in.), 1435 mm (56.5 in.), 1530 mm (60.2 in.)			
Weight (with ROPS or CABIN)			1560 kg (3440 lbs)	1575 kg (3470 lbs)	1730 kg (3815 lbs)	1600 kg (3525 lbs)
Travelling system	Standard tire size	Front	8.3-16			
		Rear	14.9-24			
	Clutch		Dry type single stage			
	Steering		Hydrostatic power steering			
	Transmission		F8, R8 fully synchronized main and shuttle transmission	F12, R8 Glide shift transmission		Hydrotstatic transmission (3 speeds)
	Braking system		Wet disk type			
	Min. turning radius (with brake)		2.7 m (8.9 feet)			
Hydraulic system	Hydraulic control system		Position control			
	Pump capacity		37.0 L (9.8 U.S.gals., 8.1 Imp.gals.) / min.			
	Three point hitch		SAE Category I			
	Max. lift force	At lift points	1750 kg (3860 lbs)			
		24 in. behind lift points	1250 kg (2760 lbs)			
	System pressure		18.1 to 19.1 MPa (185 to 195 kgf/cm^2, 2633 to 2775 psi)			
PTO	Rear PTO		SAE 1-3/8, 6 splines			
	PTO / Engine speed		540 min^{-1} (rpm) / 2550 min^{-1} (rpm)			540 min^{-1} (rpm) / 2640 min^{-1} (rpm)
	Mid-PTO (if equipped)		USA No. 5 (KUBOTA 10-tooth) involute spline			
	PTO / Engine speed		2000 min^{-1} (rpm) / 2580 min^{-1} (rpm)			2000 min^{-1} (rpm) / 2670 min^{-1} (rpm)

Note : * Manufacture's estimate
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W10400750

Model			L5030		
			GST	HST	
			4WD (ROPS)	4WD (ROPS)	4WD (CABIN)
Engine	Model		V2403-MA-E-GST / V2403-MA-E2-GST	V2403-MA-E-HST / V2403-MA-E2-HST	
	Type		Indirect injection vertical, water-cooled, 4-cycle diesel		
	Number of cylinders		4		
	Total displacement		2.434 L (148.5 cu.in.)		
	Bore and stroke		87 × 102.4 mm (3.4 × 4.0 in.)		
	Net power		37.3 kW (50.0 HP)*		
	PTO power (factory observe)		32.8 kW (44.0 HP)* / 2700 min^{-1} (rpm)	31.7 kW (42.5 HP)* / 2700 min^{-1} (rpm)	
	Maximum torque		162.4 N·m (16.6 kgf·m, 119.8 ft-lbs)		
	Battery capacity		12 V, RC : 133 min, CCA : 582 A		
	Fuel		Diesel fuel No. 1 [below −10 °C (14 °F], Diesel fuel No. 2-D [above −10 °C (14 °F)]		
Capacities	Fuel tank		43 L (11.4 U.S.gals., 9.5 Imp.gals.)		
	Engine crankcase (with filter)		8.2 L (8.7 U.S.qts., 7.2 Imp.qts.)		
	Engine coolant		8.0 L (8.5 U.S.qts., 7.0 Imp.qts.)		
	Transmission case		45 L (11.9 U.S.gals., 9.9 Imp.gals.)		
Dimensions	Overall length (without 3P)		3205 mm (126.2 in.)		
	Overall width (min. tread)		1710 mm (67.3 in.)		
	Overall height (with CABIN or ROPS foldable / rigid)		2355 mm (92.7 in.) / 2190 mm (86.2 in.)		2270 mm (89.4 in.)
	Wheel base		1915 mm (75.4 in.)		
	Min. ground clearance		405 mm (15.9 in.)		
	Tread	Front	1340 mm (52.8 in.)		
		Rear	1325 mm (52.2 in.), 1430 mm (56.3 in.)		
Weight (with ROPS or CABIN)			1680 kg (3705 lbs)	1700 kg (3750 lbs)	1855 kg (4090 lbs)
Travelling system	Standard tire size	Front	9.5-16		
		Rear	14.9-26		
	Clutch		Dry type single stage		
	Steering		Hydrostatic power steering		
	Transmission		F12, R8 Glide shift transmission	Hydrotstatic transmission (3 speeds)	
	Braking system		Wet disk type		
	Min. turning radius (with brake)		2.8 m (9.2 feet)		
Hydraulic system	Hydraulic control system		Position control		
	Pump capacity		37.0 L (9.8 U.S.gals., 8.1 Imp.gals.) / min.		
	Three point hitch		SAE Category I		
	Max. lift force	At lift points	1750 kg (3860 lbs)		
		24 in. behind lift points	1350 kg (2980 lbs)		
	System pressure		18.1 to 19.1 MPa (185 to 195 kgf/cm^2, 2633 to 2775 psi)		
PTO	Rear PTO		SAE 1-3/8, 6 splines		
	PTO / Engine speed		540 min^{-1} (rpm) / 2550 min^{-1} (rpm)	540 min^{-1} (rpm) / 2660 min^{-1} (rpm)	
	Mid-PTO (if equipped)		USA No. 5 (KUBOTA 10-tooth) involute spline		
	PTO / Engine speed		2000 min^{-1} (rpm) / 2580 min^{-1} (rpm)	2000 min^{-1} (rpm) / 2690 min^{-1} (rpm)	

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

W10417330

TRAVELLING SPEEDS

[Manual Transmission Type]

Model			L3130 L3430	L3830	L4330	L4630	L5030
Tire size (Rear)			12.4-24	14.9-24	14.9-24	14.9-24	14.9-26
Shuttle shift lever	Range gear shift lever	Main gear shift lever	km/h (mph)	km/h (mph)	km/h (mph)	km/h (mph)	km/h (mph)
Forward (At rated engine rpm)	Low	1	1.6 (1.0)	1.5 (0.9)	1.6 (1.0)	1.5 (0.9)	1.5 (0.9)
		2	2.3 (1.4)	2.1 (1.3)	2.2 (1.4)	2.1 (1.3)	2.2 (1.4)
		3	3.7 (2.3)	3.5 (2.2)	3.6 (2.2)	3.5 (2.2)	3.5 (2.2)
		4	5.4 (3.4)	5.1 (3.2)	5.3 (3.3)	5.1 (3.2)	5.2 (3.2)
	High	1	7.8 (4.8)	7.6 (4.7)	7.7 (4.8)	7.6 (4.7)	7.8 (4.8)
		2	11.1 (6.9)	10.7 (6.6)	10.9 (6.8)	10.7 (6.6)	11.0 (6.8)
		3	18.0 (11.2)	17.4 (10.8)	17.6 (10.8)	17.4 (10.8)	17.9 (10.9)
		4	26.6 (16.5)	25.7 (16.0)	26.0 (16.2)	25.7 (16.0)	26.4 (16.4)
Reverse (At rated engine rpm)	Low	1	1.5 (0.9)	1.4 (0.9)	1.5 (0.9)	1.4 (0.9)	1.5 (0.9)
		2	2.2 (1.4)	2.0 (1.2)	2.1 (1.3)	2.0 (1.2)	2.1 (1.3)
		3	3.5 (2.2)	3.3 (2.1)	3.4 (2.1)	3.3 (2.1)	3.4 (2.1)
		4	5.2 (3.2)	4.9 (3.0)	5.1 (3.2)	4.9 (3.0)	5.0 (3.1)
	High	1	7.5 (4.7)	7.2 (4.5)	7.3 (4.5)	7.2 (4.5)	7.4 (4.6)
		2	10.6 (6.6)	10.2 (6.3)	10.4 (6.5)	10.2 (6.3)	10.4 (6.5)
		3	17.2 (10.7)	16.6 (10.3)	16.8 (10.4)	16.6 (10.3)	17.1 (10.6)
		4	25.4 (15.8)	24.5 (15.2)	24.8 (15.4)	24.5 (15.2)	25.2 (15.7)

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

W1035065

[GST Type]

Model		L3130 L3430	L3830	L4330	L4630	L5030
Tire size (Rear)		12.4-24	14.9-24	14.9-24	14.9-24	14.9-26
Shuttle shift lever	Main gear shift lever	km/h (mph)	km/h (mph)	km/h (mph)	km/h (mph)	km/h (mph)
Forward (At rated engine rpm)	1	1.6 (1.0)	1.5 (0.9)	1.6 (1.0)	1.5 (0.9)	1.5 (0.9)
	2	2.3 (1.4)	2.1 (1.3)	2.2 (1.4)	2.1 (1.3)	2.2 (1.4)
	3	3.1 (1.9)	2.9 (1.8)	3.0 (1.9)	2.9 (1.8)	2.9 (1.8)
	4	3.7 (2.3)	3.5 (2.2)	3.6 (2.2)	3.5 (2.2)	3.5 (2.2)
	5	4.5 (2.8)	4.2 (2.6)	4.4 (2.7)	4.2 (2.6)	4.3 (2.7)
	6	5.4 (3.4)	5.1 (3.2)	5.3 (3.3)	5.1 (3.2)	5.2 (3.2)
	7	6.5 (4.0)	6.3 (3.9)	6.4 (4.0)	6.3 (3.9)	6.5 (4.0)
	8	7.8 (4.8)	7.6 (4.7)	7.7 (4.8)	7.6 (4.7)	7.8 (4.8)
	9	9.2 (5.7)	8.9 (5.5)	9.0 (5.6)	8.9 (5.5)	9.1 (5.7)
	10	11.1 (6.9)	10.7 (6.6)	10.9 (6.8)	10.7 (6.6)	11.0 (6.8)
	11	18.0 (11.2)	17.4 (10.8)	17.6 (10.8)	17.4 (10.8)	17.9 (10.9)
	12	26.6 (16.5)	25.7 (16.0)	26.0 (16.2)	25.7 (16.0)	26.4 (16.4)
Reverse (At rated engine rpm)	1	1.5 (0.9)	1.4 (0.9)	1.5 (0.9)	1.4 (0.9)	1.5 (0.9)
	2	2.2 (1.4)	2.0 (1.2)	2.1 (1.3)	2.0 (1.2)	2.1 (1.3)
	3	3.5 (2.2)	3.3 (2.1)	3.4 (2.1)	3.3 (2.1)	3.4 (2.1)
	4	5.2 (3.2)	4.9 (3.0)	5.1 (3.2)	4.9 (3.0)	5.0 (3.1)
	5	7.5 (4.7)	7.2 (4.5)	7.3 (4.5)	7.2 (4.5)	7.4 (4.6)
	6	10.6 (6.6)	10.2 (6.3)	10.4 (6.5)	10.2 (6.3)	10.4 (6.5)
	7	17.2 (10.7)	16.6 (10.3)	16.8 (10.4)	16.6 (10.3)	17.1 (10.6)
	8	25.4 (15.8)	24.5 (15.2)	24.8 (15.4)	24.5 (15.2)	25.2 (15.7)

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

W1032246

[With Creep Speed Model]

Model		L4630 CABIN	
Creep gear shift lever		High	Low
Tire size (Rear)		14.9-24	
Shuttle shift lever	Main gear shift lever	km/h (mph)	km/h (mph)
Forward (At rated engine rpm)	1	1.5 (0.9)	0.17 (0.11)
	2	2.1 (1.3)	0.24 (0.15)
	3	2.9 (1.8)	0.32 (0.20)
	4	3.5 (2.2)	0.39 (0.24)
	5	4.2 (2.6)	0.47 (0.29)
	6	5.1 (3.2)	0.57 (0.35)
	7	6.3 (3.9)	0.71 (0.44)
	8	7.6 (4.8)	0.85 (0.53)
	9	8.9 (5.5)	1.00 (0.62)
	10	10.7 (6.6)	1.20 (0.75)
	11	17.4 (10.8)	1.95 (1.21)
	12	25.7 (16.0)	2.88 (1.79)
Reverse (At rated engine rpm)	1	1.4 (0.9)	0.16 (0.10)
	2	2.0 (1.2)	0.23 (0.14)
	3	3.3 (2.1)	0.37 (0.23)
	4	4.9 (3.0)	0.55 (0.34)
	5	7.2 (4.5)	0.81 (0.50)
	6	10.2 (6.2)	1.15 (0.71)
	7	16.6 (10.3)	1.86 (1.16)
	8	24.5 (15.2)	2.75 (1.71)

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

W1033852

[HST Type]

Model		L3130 L3430	L3830	L4330	L4630	L5030
Tire size (Rear)		12.4-24	14.9-24	14.9-24	14.9-24	14.9-26
Shuttle shift lever	Range gear shift lever	km/h (mph)	km/h (mph)	km/h (mph)	km/h (mph)	km/h (mph)
Forward (At rated engine rpm)	L	0 to 6.3 (0 to 3.9)	0 to 5.9 (0 to 3.7)	0 to 6.2 (0 to 3.9)	0 to 5.9 (0 to 3.7)	0 to 6.1 (0 to 3.8)
	M	0 to 12.1 (0 to 7.5)	0 to 11.4 (0 to 7.1)	0 to 11.9 (0 to 7.4)	0 to 11.4 (0 to 7.1)	0 to 11.8 (0 to 7.3)
	H	0 to 27.0 (0 to 16.8)	0 to 25.3 (0 to 15.7)	0 to 26.4 (0 to 16.4)	0 to 25.3 (0 to 15.7)	0 to 26.1 (0 to 16.2)
Reverse (At rated engine rpm)	L	0 to 5.7 (0 to 3.5)	0 to 5.3 (0 to 3.3)	0 to 5.5 (0 to 3.4)	0 to 5.3 (0 to 3.3)	0 to 5.5 (0 to 3.4)
	M	0 to 10.9 (0 to 6.8)	0 to 10.3 (0 to 6.4)	0 to 10.7 (0 to 6.6)	0 to 10.3 (0 to 6.4)	0 to 10.6 (0 to 6.6)
	H	0 to 24.3 (0 to 15.1)	0 to 22.8 (0 to 14.2)	0 to 23.8 (0 to 14.8)	0 to 22.8 (0 to 14.2)	0 to 23.5 (0 to 14.6)

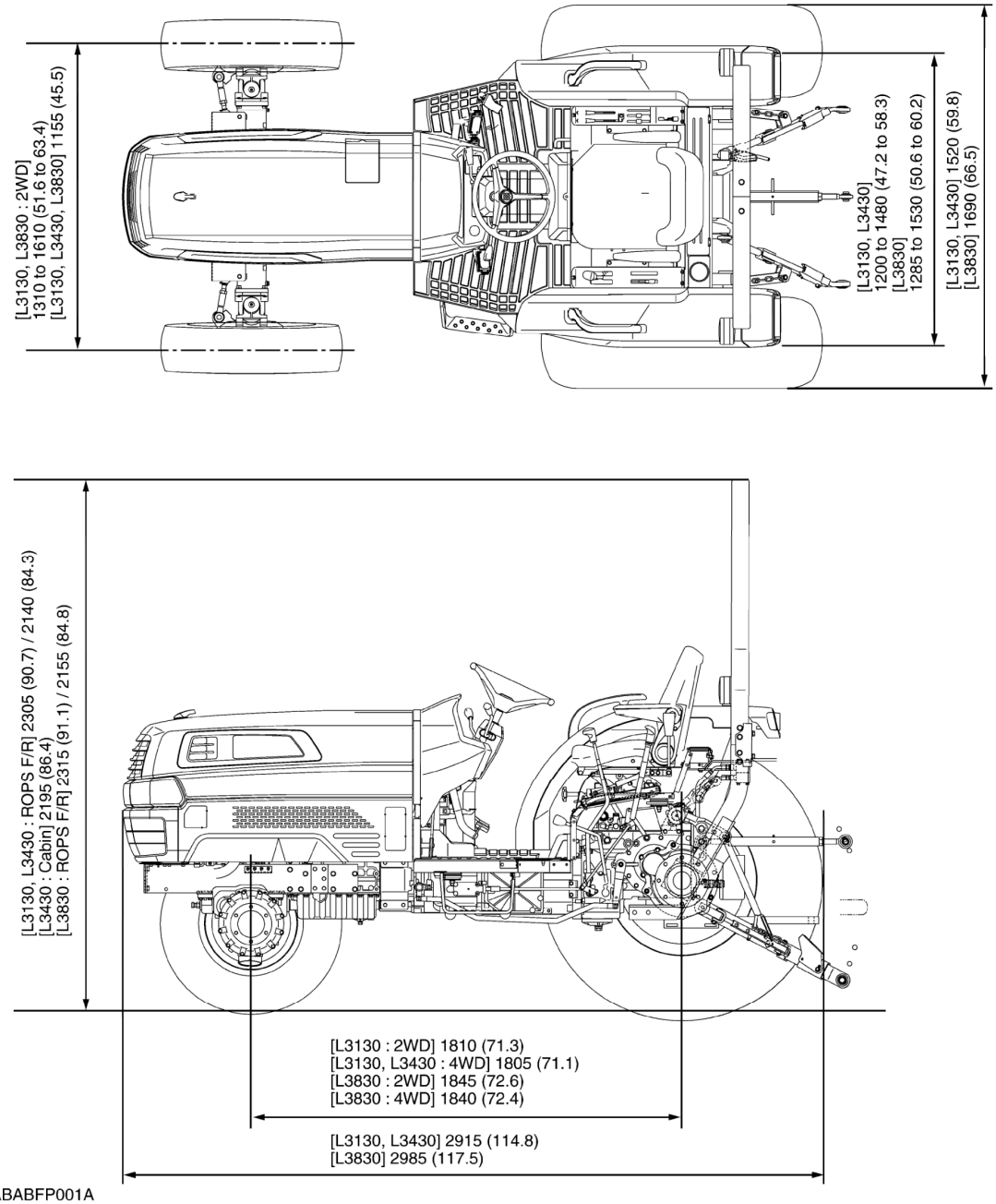
The company reserves the right to change the specifications without notice.

W1034865

DIMENSIONS

[L3130, L3430, L3830]

Unit : mm (in.)



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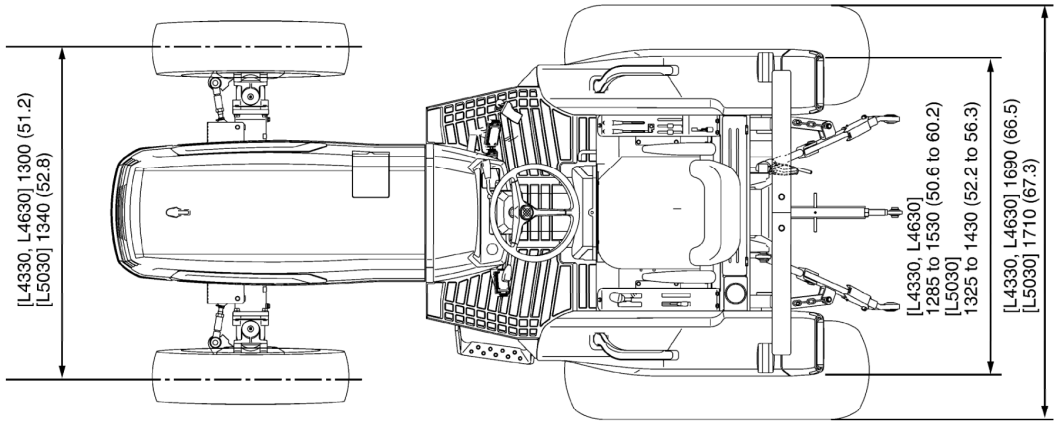
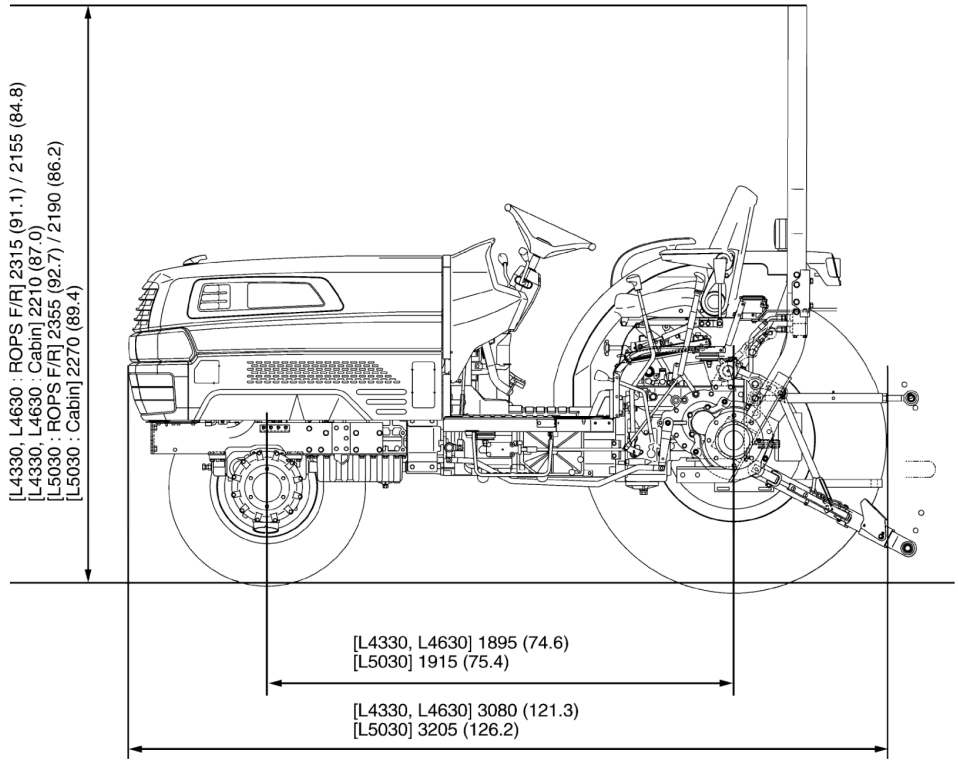
[L4330, L4630, L5030]

Unit : mm (in.)





3TLABABFP001B

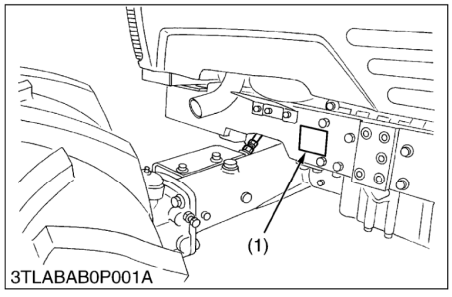
G GENERAL

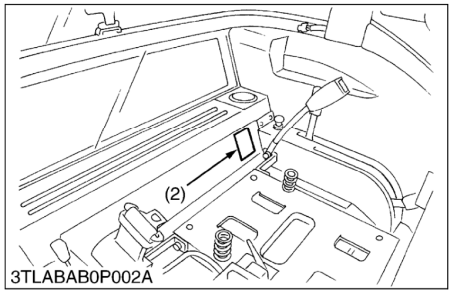
GENERAL

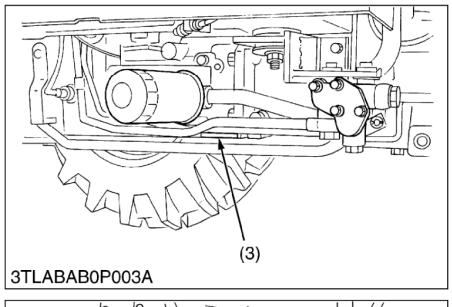
CONTENTS

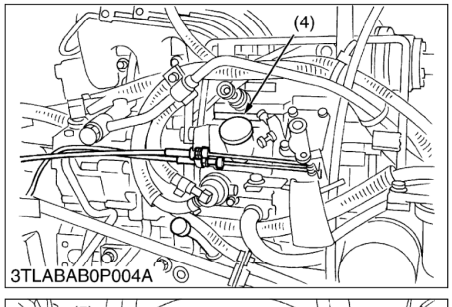
1. TRACTOR IDENTIFICATION

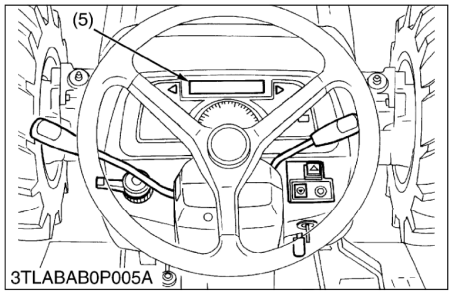
[1] MODEL NAME AND SERIAL NUMBERS







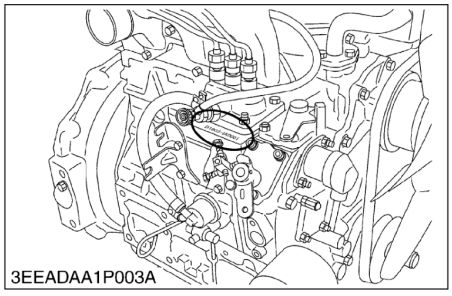




When contacting your local KUBOTA distributor, always specify engine serial number, tractor serial number and hour meter reading.

(1) Tractor Identification Plate
(2) CABIN Identification Plate (CABIN Serial Number)
(3) Tractor Serial Number
(4) Engine Serial Number
(5) Hour Meter (IntelliPanel Display)

W10106000


3EEADAA1P003A

Engine Serial Number

When contacting the manufacture, always specify your engine model name and serial number.

The engine model and its serial number need to be identified before the engine can be serviced or parts replaced.

Engine Serial Number

The engine serial number is an identified number for the engine. It is marked after the engine model number.

It indicates month and year of manufacture as follows.

- **Year of manufacture**

Alphabet or Number	Year	Alphabet or Number	Year
1	2001	F	2015
2	2002	G	2016
3	2003	H	2017
4	2004	J	2018
5	2005	K	2019
6	2006	L	2020
7	2007	M	2021
8	2008	N	2022
9	2009	P	2023
A	2010	R	2024
B	2011	S	2025
C	2012	T	2026
D	2013	V	2027
E	2014		

- **Month of manufacture**

Month	Engine Serial Number	
	0001 ~ 9999	10000 ~
January	A0001 ~ A9999	B0001 ~
February	C0001 ~ C9999	D0001 ~
March	E0001 ~ E9999	F0001 ~
April	G0001 ~ G9999	H0001 ~
May	J0001 ~ J9999	K0001 ~
June	L0001 ~ L9999	M0001 ~
July	N0001 ~ N9999	P0001 ~
August	Q0001 ~ Q9999	R0001 ~
September	S0001 ~ S9999	T0001 ~
October	U0001 ~ U9999	V0001 ~
November	W0001 ~ W9999	X0001 ~
December	Y0001 ~ Y9999	Z0001 ~

e.g. D1803-3A0001

“3” indicates 2003 and “A” indicates January.

So, 3A indicates that the engine was manufactured on January, 2003.

(1) Engine Model and Serial Number

W1010477

[2] E2 ENGINE

[ex.: Model Name D1803-M-E2-XXXX]

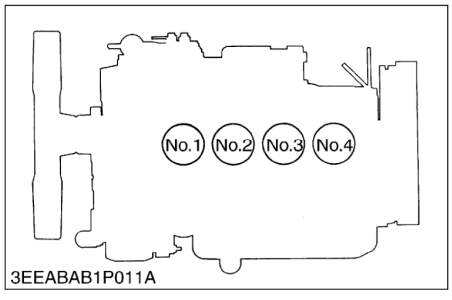
The emission controls that have been put into effect in various countries to prevent air pollution will be stepped up. The time to enforce the regulations differs depending on the engine output classifications.

Kubota has been supplying the diesel engines conforming to the emission regulations in respective countries. Exhaust emissions regulations shift to the second stage. Kubota executed the improvement of the engine according to this regulation.

In order to discriminate the engines conforming to Tier 1 / Phase 1 requirements and those conforming to Tier 2 / Phase 2 requirements, we have adopted E2 as a new model name for the engines conforming Tier 2 / Phase 2 regulations with emission label (1) or (2).

In the after-sale services for 03-M-E2 series engines, only use the dedicated parts for E2 models and carry out the maintenance services accordingly.

[3] CYLINDER NUMBER

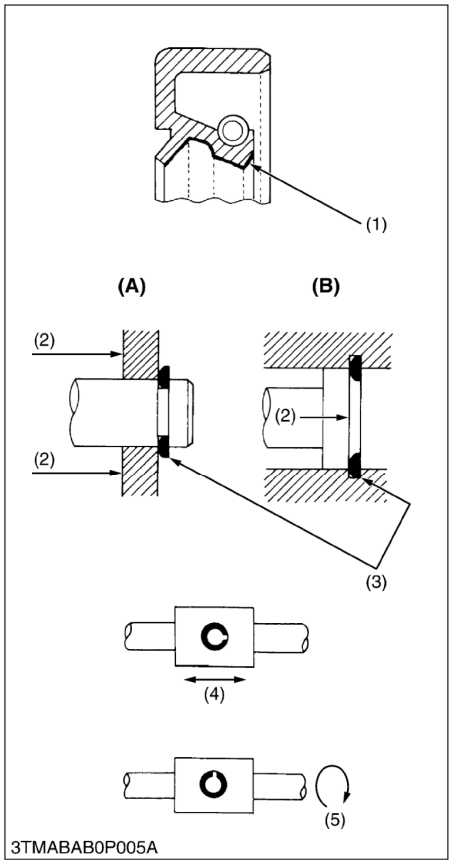


The cylinder numbers of KUBOTA diesel engine are designated as shown in the figure.

The sequence of cylinder numbers is given as No.1, No.2, No.3 and No.4 starting from the gear case side.

W1011077

2. GENERAL PRECAUTIONS



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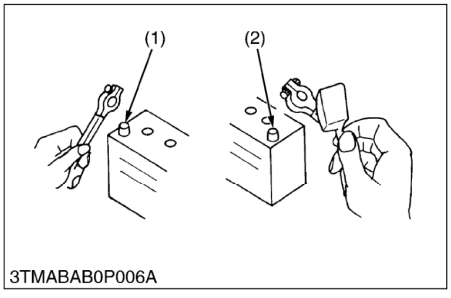
- During disassembly, carefully arrange removed parts in a clean area to prevent confusion later. Screws, bolts and nuts should be installed in their original position to prevent reassembly errors.
- When special tools are required, use KUBOTA genuine special tools. Special tools which are not frequently used should be made according to the drawings provided.
- Before disassembling or servicing electrical wires, always disconnect the ground cable from the battery first.
- Remove oil and dirt from parts before measuring.
- Use only KUBOTA genuine parts for parts replacement to maintain machine performance and to assure safety.
- Gaskets and O-rings must be replaced during reassembly. Apply grease to new O-rings or oil seals before assembling. See the figure left side.
- When reassembling external snap rings or internal snap rings, they must be positioned so that sharp edge faces against the direction from which a force is applied. See the figure left side.
- When inserting spring pins, their splits must face the direction from which a force is applied. See the figure left side.
- To prevent damage to the hydraulic system, use only specified fluid or equivalent.

(1) Grease
(2) Force
(3) Sharp Edge
(4) Axial Force
(5) Rotating Movement

(A) External Snap Ring
(B) Internal Snap Ring

W10109040

3. HANDLING PRECAUTIONS FOR ELECTRICAL PARTS AND WIRING



3TMABAB0P006A

To ensure safety and prevent damage to the machine and surrounding equipment, heed the following precautions in handling electrical parts and wiring.

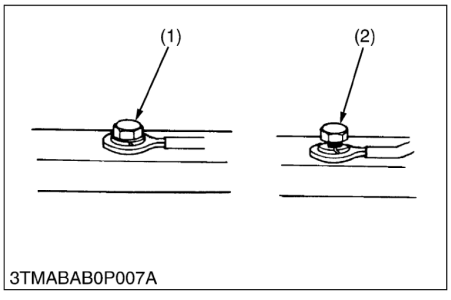
IMPORTANT

- **Check electrical wiring for damage and loosened connection every year. To this end, educate the customer to do his or her own check and at the same time recommend the dealer to perform periodic check for a fee.**
- **Do not attempt to modify or remodel any electrical parts and wiring.**
- **When removing the battery cables, disconnect the negative cable first. When installing the battery cables, connect the positive cable first.**

(1) Negative Terminal (2) Positive Terminal

W10111140

[1] WIRING

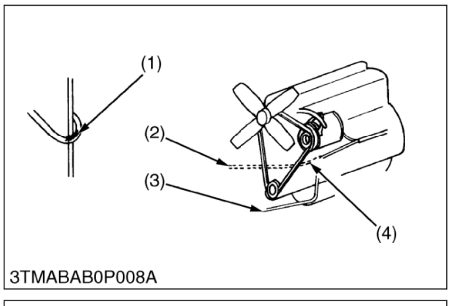


3TMABAB0P007A

- Securely tighten wiring terminals.

(1) Correct (Securely Tighten) (2) Incorrect (Loosening Leads to Faulty Contact)

W10112160

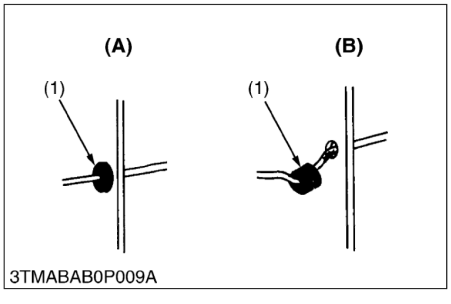


3TMABAB0P008A

- Do not let wiring contact dangerous part.

(1) Wiring (Correct) (3) Dangerous Part
(2) Wiring (Incorrect) (4) Dangerous Part

W10113130

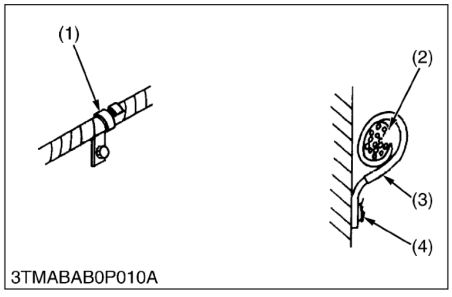


3TMABAB0P009A

- Securely insert grommet.

(1) Grommet **(A) Correct** **(B) Incorrect**

W10113880

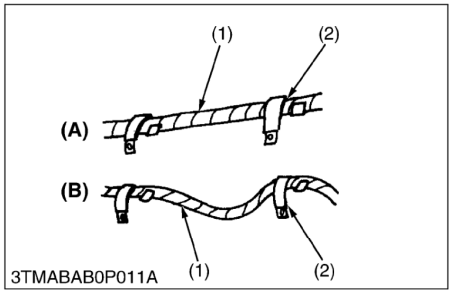


3TMABAB0P010A

- Securely clamp, being careful not to damage wiring.

(1) Clamp
  • Wind Clamp Spirally
(2) Wire Harness
(3) Clamp
(4) Welding Dent

W10114580

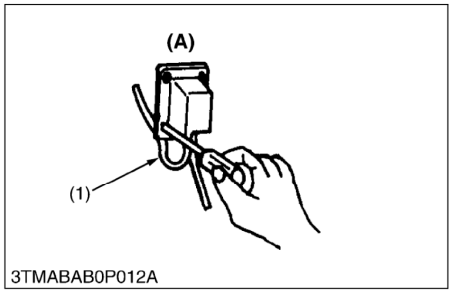


3TMABAB0P011A

- Clamp wiring so that there is no twist, unnecessary sag, or excessive tension, except for movable part, where sag be required.

(1) Wiring
(2) Clamp
(A) Correct
(B) Incorrect

W10115870

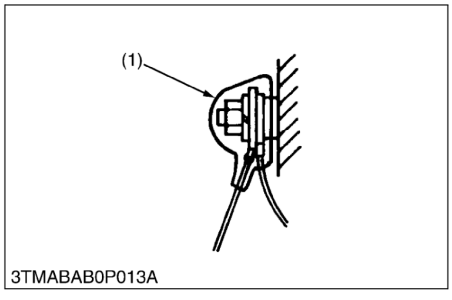


3TMABAB0P012A

- In installing a part, take care not to get wiring caught by it.

(1) Wiring
(A) Incorrect

W10116700



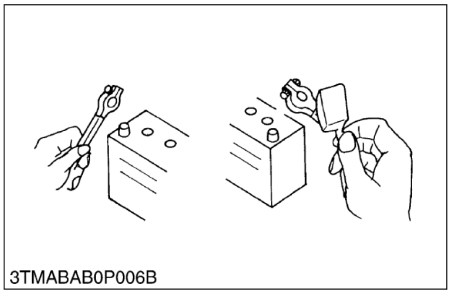
3TMABAB0P013A

- After installing wiring, check protection of terminals and clamped condition of wiring, only connect battery.

(1) Cover
  • Securely Install Cover

W10117350

[2] BATTERY


3TMABAB0P006B

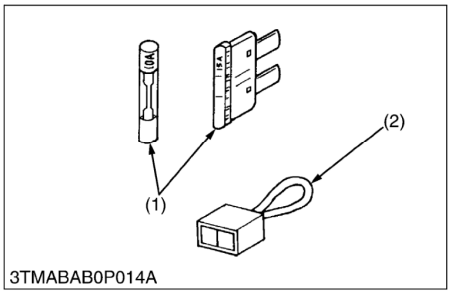
- Take care not to confuse positive and negative terminal posts.
- When removing battery cables, disconnect negative cable first. When installing battery cables, check for polarity and connect positive cable first.
- Do not install any battery with capacity other than is specified (Ah).
- After connecting cables to battery terminal posts, apply high temperature grease to them and securely install terminal covers on them.
- Do not allow dirt and dust to collect on battery.

CAUTION

- **Take care not to let battery liquid spill on your skin and clothes. If contaminated, wash it off with water immediately.**
- **Before recharging the battery, remove it from the machine.**
- **Before recharging, remove cell caps.**
- **Do recharging in a well-ventilated place where there is no open flame nearby, as hydrogen gas and oxygen are formed.**

W10118160

[3] FUSE



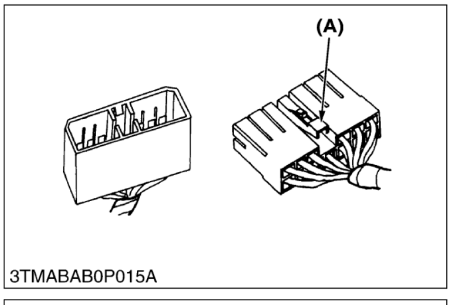
3TMABAB0P014A

- Use fuses with specified capacity.
  Neither too large or small capacity fuse is acceptable.
- Never use steel or copper wire in place of fuse.
- Do not install working light, radio set, etc. on machine which is not provided with reserve power supply.
- Do not install accessories if fuse capacity of reserve power supply is exceeded.

(1) Fuse (2) Slow Blow Fuse

W10120920

[4] CONNECTOR

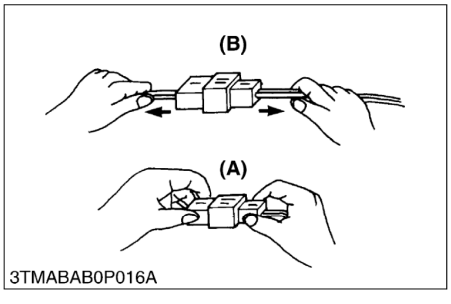


3TMABAB0P015A

- For connector with lock, push lock to separate.

(A) Push

W10122110



3TMABAB0P016A

- In separating connectors, do not pull wire harnesses.
- Hold connector bodies to separate.

(A) Correct **(B) Incorrect**

W10122720

KiSC issued 03, 2006 A