

Product: 2020 Kubota M96S M108S Service Manual

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# WSM

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WORKSHOP MANUAL  
TRACTOR

M96S, M108S

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**Kubota**

KiSC issued 09, 2020 A

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## TO THE READER

This Workshop Manual has been prepared to provide servicing personnel with information on the mechanism, service and maintenance of M96S and M108S. It is divided into three parts, "General", "Mechanism" and "Servicing".

### ■ General

Information on the tractor identification, the general precautions, maintenance check list, check and maintenance and special tools are described.

### ■ 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. 9Y021-01870 / 9Y021-18200) for the one which has not been described to this workshop manual.

### ■ Servicing

Information on the troubleshooting, servicing specification lists, tightening torque, checking and adjusting, disassembling and assembling, and servicing which cover procedures, precautions, factory specifications and allowable limits.

Regarding the failures of Common Rail System (CRS), refer to "DIAGNOSIS MANUAL (CD-ROM)" at the end of this manual.

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.

Due to covering many models of this manual, information or picture being used have not been specified as one model.

February 2007

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**Record of Revisions**

For pdf, use search function {Search word} to find all the revised locations.

<b>Last digit of the Code No.</b>	<b>Month of Revision</b>	<b>Main Revised Point and Corrective Measures {Search word}</b>	<b>Reference Page</b>
4	2014.04	PTO clutch assembly changed	2-S2, 2-S27, 2-S28
5	2017.11	Update of parking break pad service content	5-S19
6	2018.02	Update of brake master cylinder service content	G-43, 5-S7, 5-S10
7	2018.03	• Additional information Additional information regarding the assembly procedure of the new type spiral bevel pinion shaft	3-S44, 3-S50
		• Wrong correction Disassembly procedure in parking brake case was corrected.	5-S3, 5-S19
8	2020.09	Added the return spring to hydraulic shuttle valve.	3-M6



## 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

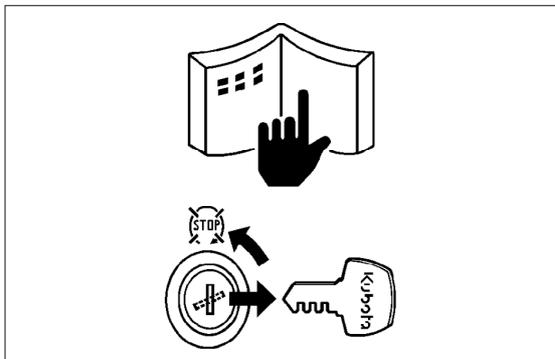
: Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

### ■ IMPORTANT

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

### ■ NOTE

: Gives helpful information.



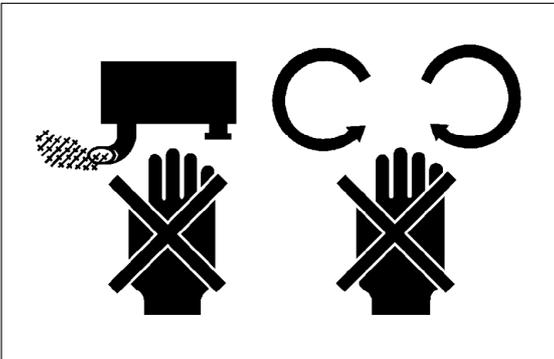
### BEFORE SERVICING AND REPAIRING

- 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.



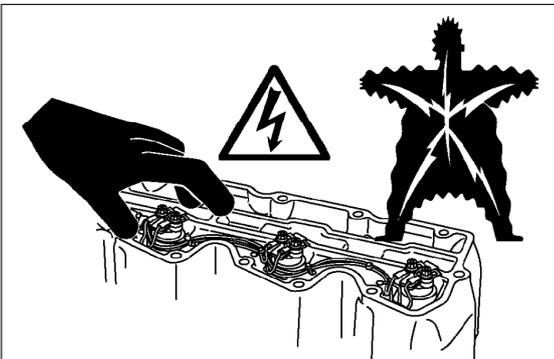
### SAFETY STARTING

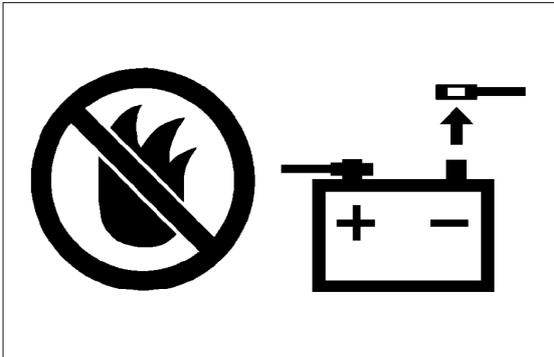
- Do not start the engine by shorting across starter terminals or bypassing the safety start switch.
- Do not alter or remove any part of machine safety system.
- Before starting the engine, make sure that all shift levers are in neutral positions or in disengaged positions.
- Never start the engine 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 2 or more persons do servicing, make sure that you do it 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.
- Do not open high-pressure fuel system. High-pressure fluid remaining in fuel lines can cause serious injury. Do not disconnect or attempt to repair fuel lines, sensors, or any other components between the high-pressure fuel pump and injectors on engines with high pressure common rail fuel system.
- High voltage exceeding 100 V is generated in the ECU and injector. Pay sufficient caution to electric shock when performing work activities.





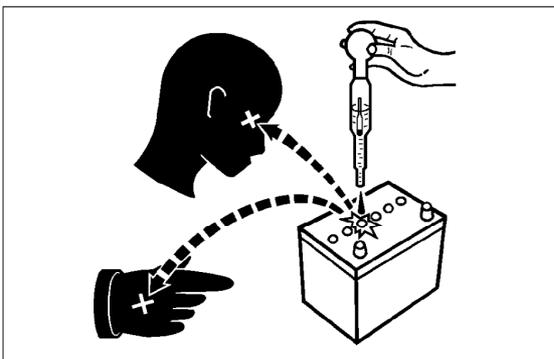
### AVOID FIRES

- 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.



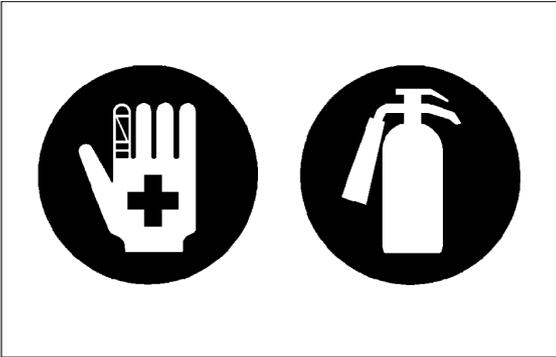
### PREVENT ACID BURNS

- 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.  
**[ROPS Model]**

(1) Part No. 32751-4958-1  
 Do not get your hands close to engine fan and fan belt.



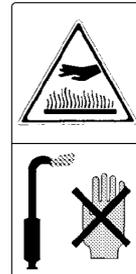
1AGAIAZAP110A

(2) Part No. 3N600-4958-1 [M108S]  
 Do not touch hot surface like supply pump, etc.



1AGAI DXAP073A

(3) Part No. 3N300-4958-1  
 Do not touch hot surface like muffler, etc.

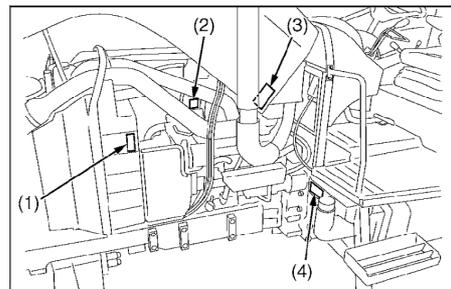


1AGAIAZAP071A

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



1AGAIAZAP118A



3TMACAVCP001A

(1) Part No. 6C150-4743-1

 <b>WARNING</b>	<b>BEFORE DISMOUNTING TRACTOR:</b> <b>1. ALWAYS SET PARKING BRAKE.</b> Leaving transmission in gear with the engine stopped will not prevent tractor from rolling. <b>2. PARK ON LEVEL GROUND WHENEVER POSSIBLE.</b> If parking on a slope, position tractor across the slope. <b>3. LOWER ALL IMPLEMENTS TO THE GROUND.</b> <b>4. STOP THE ENGINE.</b>
	

1AGAIBDAP040E

(2) Part No. TA040-4965-2

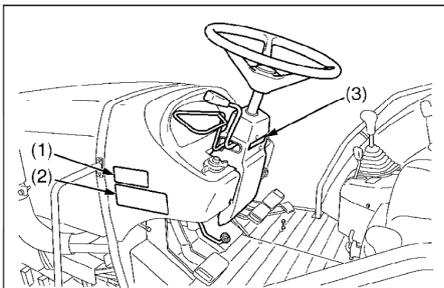
	<b>⚠ DANGER</b>  <b>TO AVOID POSSIBLE INJURY OR DEATH FROM A MACHINE RUNAWAY.</b> 1. Do not start engine by shorting across starter terminals or bypassing the safety start switch. Machine may start in gear and move if normal starting circuitry is bypassed. 2. Start engine only from operator's seat with transmission and PTO OFF. Never start engine while standing on the ground.
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1AGAIAZAP009A

(3) Part No. 3F240-9857-1

 <b>WARNING</b>
To avoid free wheeling when shifting the shuttle lever while on a slope, stop completely by using the brake and by depressing the clutch pedal. Start off after selecting shuttle direction by releasing the clutch pedal.

1AGAIBDAP039A



3TMACAVCP002A

(1) Part No. 3P305-9856-1

**CAUTION**

**TO AVOID INJURY FROM SEPARATION:**

**DO NOT EXTEND LIFT ROD BEYOND THE GROOVE ON THE THREADED ROD.**



1AGAICVAFD46E

(2) Part No. TA040-4935-1

**WARNING**

**TO AVOID PERSONAL INJURY:**

1. Attach pulled or towed loads to the drawbar only.
2. Use the 3-point hitch only with equipment designed for 3-point hitch usage.

1AGAIAZAP056A

(3) Part No. TA040-4959-3

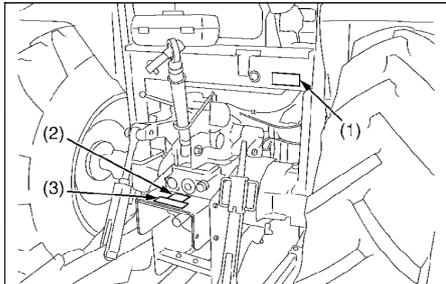


**WARNING**

**TO AVOID PERSONAL INJURY:**

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

1AGAIAZAP116A



3TMACAVCP003A

(1) Part No. 3A111-9554-1

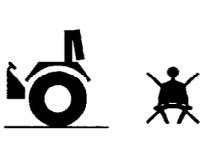
**⚠ WARNING**  
 Never modify or repair a ROPS because welding, grinding, drilling or cutting any portion may weaken the structure.

**⚠ 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.

1AGAIAZAP076A

(2) Part No. 3A111-9848-2

	<p><b>⚠ WARNING</b></p> <p><b>TO AVOID INJURY OR DEATH FROM ROLL-OVER:</b></p> <ul style="list-style-type: none"> <li>• Keep Roll-Over Protective Structures (ROPS) in the upright and locked position.</li> <li>• Fasten SEAT BELT before operating.</li> </ul>
	<p><b>THERE IS NO OPERATOR PROTECTION WHEN THE ROPS IS IN THE FOLDED POSITION.</b></p> <ul style="list-style-type: none"> <li>• Check the operating area and fold the ROPS only when absolutely necessary.</li> <li>• Do not wear SEAT BELT if ROPS is folded.</li> <li>• Raise and lock ROPS as soon as vertical clearance allows.</li> <li>• Read ROPS related instructions and warnings.</li> </ul>

1AGAIDCAP066E

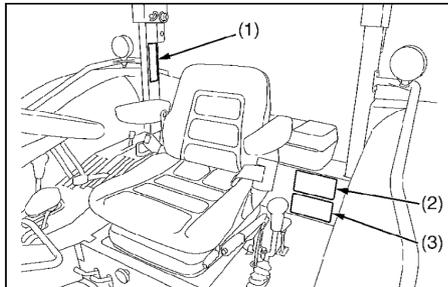
(3) Part No. 6C070-4742-2

**⚠ 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.

1AGAIAZAP109A



3TMACAVCP004A

(1) Part No. 3N600-4958-1  
[M108S]  
Do not touch hot surface  
like supply pump, etc.



1AGAIDXAP073A

(2) Part No. 32751-4958-1  
Do not get your hands  
close to engine fan and  
fan belt.



1AGAIAZAP110A

(3) Part No. 3N300-9892-1

**⚠ DANGER/POISON**

 <b>SHIELD EYES.</b> EXPLOSIVE GASES CAN CAUSE BLINDNESS OR INJURY.	 <b>NO</b> - SPARKS - FLAMES - SMOKING	 <b>SULFURIC ACID</b> CAN CAUSE BLINDNESS OR SEVERE BURNS.
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**KEEP OUT OF REACH OF CHILDREN.  
DO NOT TIP. DO NOT OPEN BATTERY.**

**FLUSH EYES  
IMMEDIATELY  
WITH WATER.**

**GET  
MEDICAL  
HELP FAST.**

**PROPOSITION 65 WARNING**

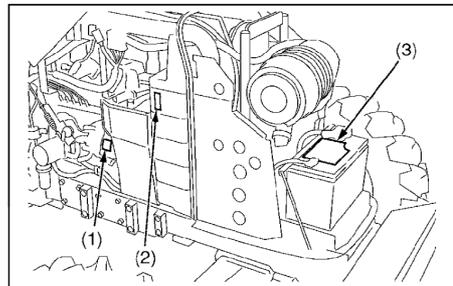
BATTERY POSTS, TERMINALS, AND RELATED ACCESSORIES  
CONTAIN LEAD AND LEAD COMPOUNDS, CHEMICALS KNOWN  
TO THE STATE OF CALIFORNIA TO CAUSE CANCER AND  
REPRODUCTIVE HARM. WASH HANDS AFTER HANDLING.

**105E41R 12V**

**HYDROMETER**

RESERVE CAPACITY (MIN) 160  
COLD CRANKING AMPS(-18°C) 900

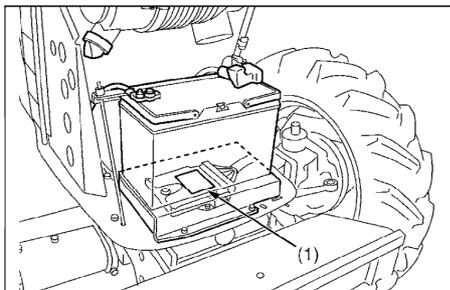
1AGAICHAP100A



(1) Part No. 1J574-8721-1 [M108S]



1AGAIEDAP019A



#### 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.

3TMACAVCP006A

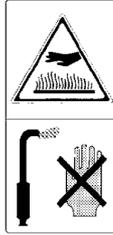
[CABIN Model]

(1) Part No. 32751-4958-1  
Do not get your hands close to engine fan and fan belt.



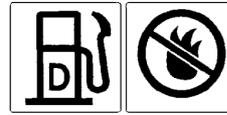
1AGAIAZAP110A

(2) Part No. 3N300-4958-1  
Do not touch hot surface like muffler, etc.



1AGAIAZAP071A

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



1AGAIAZAP118A

(4) Part No. TA040-7295-1

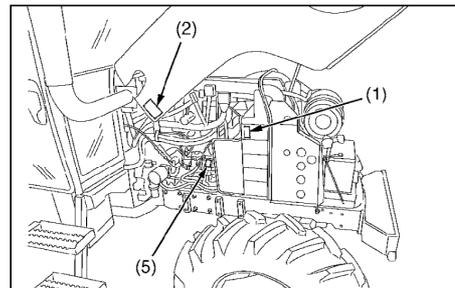
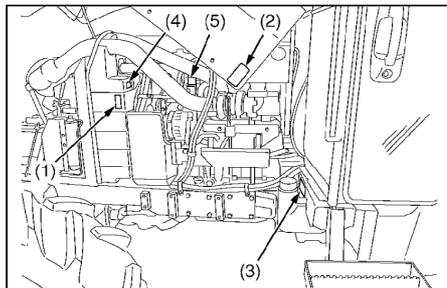
<b>CAUTION</b> REFRIGERANT UNDER HIGH PRESSURE	
Improper service methods may cause personal injury. This air conditioning system should be serviced by your dealer or other qualified service shop. See Repair Manual for details.	
Refrigerant <b>R134a</b> USE ONLY	Oil <b>ND-OIL8</b> USE ONLY
Max. 1.05kg (2.31 lbs) Min. 0.95kg (2.09 lbs)	SAE J19639
MFD. BY	NIPPONDENSO CO.,LTD. JAPAN

1AGAICHAP077A

(5) Part No. 3N600-4958-1 [M108S]  
Do not touch hot surface like supply pump, etc.



1AGAI DXAP073A



3TMACAVCP007A

(1) Part No. 6C150-4743-1

 <b>WARNING</b>	<p><b>BEFORE DISMOUNTING TRACTOR:</b></p> <ol style="list-style-type: none"> <li><b>1. ALWAYS SET PARKING BRAKE.</b> Leaving transmission in gear with the engine stopped will not prevent tractor from rolling.</li> <li><b>2. PARK ON LEVEL GROUND WHENEVER POSSIBLE.</b> If parking on a slope, position tractor across the slope.</li> <li><b>3. LOWER ALL IMPLEMENTS TO THE GROUND.</b></li> <li><b>4. STOP THE ENGINE.</b></li> </ol>
	

1AGAIBDAP040A

(2) Part No. TA040-4965-2

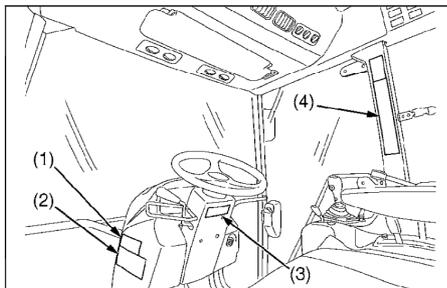
	 <b>DANGER</b>
	<p><b>TO AVOID POSSIBLE INJURY OR DEATH FROM A MACHINE RUNAWAY.</b></p> <ol style="list-style-type: none"> <li>Do not start engine by shorting across starter terminals or bypassing the safety start switch. Machine may start in gear and move if normal starting circuitry is bypassed.</li> <li>Start engine only from operator's seat with transmission and PTO OFF. Never start engine while standing on the ground.</li> </ol>

1AGAIAZAP009A

(3) Part No. 3F240-9857-1

 <b>WARNING</b>
<p>To avoid free wheeling when shifting the shuttle lever while on a slope: Stop completely by using the brake and by depressing the clutch pedal. Start off after selecting shuttle direction by releasing the clutch pedal.</p>

1AGAIBDAP039A



3TMACAVCP008A

(4) Part No. 3F240-9836-2

 <b>CAUTION</b>
<p><b>TO AVOID PERSONAL INJURY:</b></p> <ol style="list-style-type: none"> <li>Read and understand the operator's manual before operation.</li> <li>Before starting the engine, make sure that everyone is at a safe distance from tractor and the PTO is off.</li> <li>Do not allow passengers on the tractor at any time.</li> <li>Before allowing other people to use the tractor, have them read the operator's manual.</li> <li>Check the tightness of nuts and bolts regularly.</li> <li>Keep all shields in place and stay away from all moving parts.</li> <li>Lock the two brake pedals together before driving on the road.</li> <li>Slow down for turns, or rough roads, or when applying individual brakes.</li> <li>On public roads use SMV emblem and hazard lights, if required by local traffic and safety regulations.</li> <li>Pull only from the drawbar.</li> <li>Before dismounting, lower the implement to the ground, set the parking brake, stop the engine and remove the key.</li> <li>Securely support tractor and implements before working underneath.</li> </ol>

1AGAICHAP113A

(1) Part No. 3N300-9892-1

<p><b>⚠ DANGER/POISON</b></p>			<p><b>KEEP OUT OF REACH OF CHILDREN. DO NOT TIP. DO NOT OPEN BATTERY.</b></p>	
<p><b>SHIELD EYES. EXPLOSIVE GASES CAN CAUSE BLINDNESS OR INJURY.</b></p>	<p><b>NO SPARKS • FLAMES • SMOKING</b></p>	<p><b>SULFURIC ACID CAN CAUSE BLINDNESS OR SEVERE BURNS.</b></p>	<p><b>FLUSH EYES IMMEDIATELY WITH WATER.</b></p>	<p><b>GET MEDICAL HELP FAST.</b></p>
<p><b>PROPOSITION 65 WARNING</b>                  BATTERY POSTS, TERMINALS, AND RELATED ACCESSORIES CONTAIN LEAD AND LEAD COMPOUNDS, CHEMICALS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER AND REPRODUCTIVE HARM. WASH HANDS AFTER HANDLING.</p>			<p><b>RECYCLE</b></p> <p>105E41R 12V</p>	<p><b>HYDROMETER</b></p> <p>○ ●</p>
			<p>RESERVE CAPACITY (MIN) 160</p> <p>CC.O CRANKING AMPS (-18°C) 900</p>	

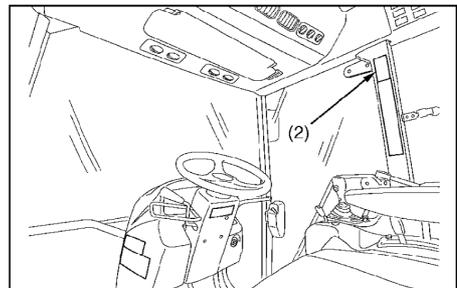
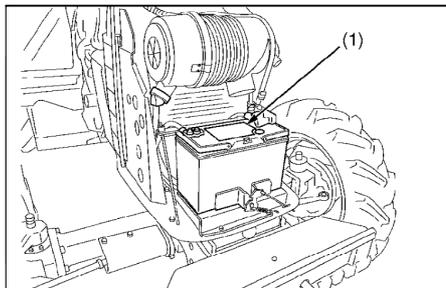
1AGAICHAP100A

(2) Part No. TA040-4902-1

**⚠ WARNING**

**TO AVOID INJURY OR DEATH FROM ROLL-OVER:**  
 Always use seat belt when driving.

1AGAMAQAP078A



3TMACAVCP009A

(1) Part No. 3P305-9856-1

**⚠ CAUTION**

**TO AVOID INJURY FROM SEPARATION:**

GROOVE



LH

**DO NOT EXTEND LIFT ROD  
BEYOND THE GROOVE  
ON THE THREADED ROD.**

GROOVE



RH

1AGAICVAP046E

(2) Part No. TA040-4935-1

**⚠ WARNING**

**TO AVOID PERSONAL INJURY:**

1. Attach pulled or towed loads to the drawbar only.
2. Use the 3-point hitch only with equipment designed for 3-point hitch usage.

1AGAIAZAP056A

(3) Part No. TA040-4959-3

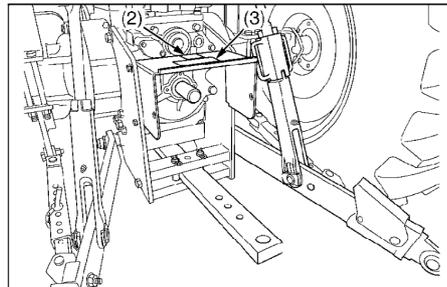
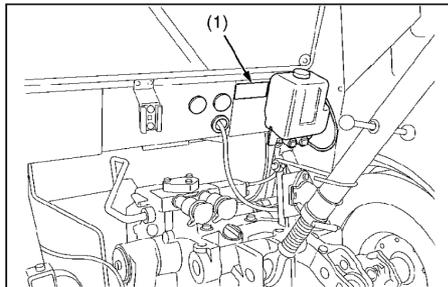


**⚠ WARNING**

**TO AVOID PERSONAL INJURY.**

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

1AGAIAZAP116A

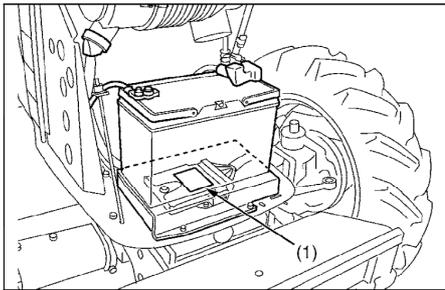


3TMACAVCP010A

(1) Part No. 1J574-8721-1 [M108S]



1AGAIEDAP019A

**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.

3TMACAVCP011A

# SPECIFICATIONS

## [ROPS Model]

Model		M96S		M108S		
		2WD	4WD	2WD	4WD	
Engine	Model	V3800-DI-T		V3800-CR-TI		
	Type	Vertical, water-cooled, 4-cycle diesel engine				
	No. of cylinder	4				
	Total displacement	3769 cm <sup>3</sup> (230.0 cu.in.)				
	Bore and stroke	100 × 120 mm (3.9 x 4.7 in.)				
	Net power	70.9 kW (95 HP)* / 2600 min <sup>-1</sup> (rpm)		80.6 kW (108 HP)* / 2600 min <sup>-1</sup> (rpm)		
	PTO power *1 (factory observed)	62.7 kW (84 HP)*1 / 2600 min <sup>-1</sup> (rpm)		71.6 kW (96 HP)*1 / 2600 min <sup>-1</sup> (rpm)		
	Maximum torque	314.8 N·m (32.1 kgf·m, 232.2 lbf·ft) / 1400 to 1600 min <sup>-1</sup> (rpm)		366.4 N·m (37.3 kgf·m, 270.2 lbf·ft) / 1400 to 1600 min <sup>-1</sup> (rpm)		
	Battery	12 V, RC, 160 min, CCA 900 A				
	Fuel	Diesel fuel No.1 [below -10 °C (14 °F)], Diesel fuel No.2-D [above -10 °C (14 °F)]				
	Fuel tank	175 L (46.2 U.S.gals, 38.5 Imp.gals)				
	Engine crankcase	10.7 L (11.3 U.S.qts, 9.4 Imp.qts)				
	Engine coolant	9.6 L (10.1 U.S.qts, 8.4 Imp.qts)				
Dimensions	Overall length	4120 mm (162.2 in.)				
	Overall width (Minimum tread)	2200 mm (86.4 in.)		2195 mm (86 in.)	2220 mm (87.4 in.)	
	Overall height	2620 mm (103.1 in.)		2670 mm (105.1 in.)		
	Wheel base	2435 mm (95.9 in.)				
	Tread	Front	1540 to 2040 mm (60.6 to 80.3 in.)	1580 to 1680 mm (62.2 to 66.1 in.)	1540 to 2040 mm (60.6 to 80.3 in.)	1580 to 1680 mm (62.2 to 66.1 in.)
		Rear	1700 to 2010 mm (66.9 to 79.1 in.)	1705 to 2060 mm (67.1 to 81.1 in.)	1705 to 2005 mm (67.1 to 78.9 in.)	1730 to 2035 mm (68.1 to 80.1 in.)
Minimum ground clearance	385 mm (15.2 in.)		435 mm (17.1 in.) (drawbar bracket)			
Weight *2		2840 kg (6261 lbs)	3370 kg (7401 lbs)	2880 kg (6349 lbs)	3620 kg (7981 lbs)	
Traveling system	Standard tire size *3	Front	10.00-16	12.4-24	10.00-16	13.6-24
		Rear	18.4-30	18.4-30 cast	18.4-34	18.4-34 cast
	Clutch	Multiple wet disc hydraulic				
	Steering	Full hydraulic power steering				
	Transmission	Hydraulic shuttle shift, fully synchronized main shift, 32F / 32R, If equip creep gear 48F / 48R				
	Brake	Travelling	Wet type multiple discs (hydraulic)			
		Parking	Wet type multiple discs (mechanical)			
Differential	Bevel gears with differential lock (Rear)		Bevel gears with differential lock (Front, Rear)			
Hydraulic system	Hydraulic control system	Position, draft and mix control				
	Pump capacity	65.0 L/min. (17.2 U.S.gals./min., 14.3 Imp.gals./min.)				
	Three point hitch	Category II				
	Max. lifting force	At lifting point *4	2500 kg (5512 lbs) at lower link end with link horizontal 3900 kg (8600 lbs) with 2 assist cylinder (option)			
		24 in. behind lifting point *4	2100 kg (4630 lbs) at 610 mm (24 in.) behind lifting point 3400 kg (7490 lbs) with 2 assist cylinder (option)			
System pressure	19.6 MPa (200 kgf/cm <sup>2</sup> , 2847 psi)					
PTO system	Independent clutch	Wet type, multiple discs				
	Live PTO	Direction of turning	Clockwise, viewed from tractor rear			
		PTO speed	540 min <sup>-1</sup> (rpm) at 2205 engine min <sup>-1</sup> (rpm)			
Traction system	Swing drawbar, adjustable in direction					

NOTE: \* Manufacture's estimate.

\*1 The company reserves the right to change the specifications without notice.

\*2 W/O cast iron discs for rear wheels.

\*3 Cast iron discs available for wheels.

\*4 At lower link end with links horizontal.

W10297880

**[CABIN Model]**

Model		M96S		M108S		
		4WD		2WD	4WD	
Engine	Model	V3800-DI-T		V3800-CR-T1		
	Type	Vertical, water-cooled, 4-cycle diesel engine				
	No. of cylinder	4				
	Total displacement	3769 cm <sup>3</sup> (230.0 cu.in.)				
	Bore and stroke	100 × 120 mm (3.9 x 4.7 in.)				
	Net power	70.9 kW (95 HP)* / 2600 min <sup>-1</sup> (rpm)		80.6 kW (108 HP)* / 2600 min <sup>-1</sup> (rpm)		
	PTO power *1 (factory observed)	62.7 kW (84 HP)*1 / 2600 min <sup>-1</sup> (rpm)		71.6 kW (96 HP)*1 / 2600 min <sup>-1</sup> (rpm)		
	Maximum torque	314.8 N·m (32.1 kgf·m, 232.2 lbf·ft) / 1400 to 1600 min <sup>-1</sup> (rpm)		366.4 N·m (37.3 kgf·m, 270.2 lbf·ft) / 1400 to 1600 min <sup>-1</sup> (rpm)		
	Battery	12 V, RC, 160 min, CCA 900 A				
	Fuel	Diesel fuel No.1 [below -10 °C (14 °F), Diesel fuel No.2-D [above -10 °C (14 °F)]				
	Fuel tank	175 L (46.2 U.S.gals, 38.5 Imp.gals)				
	Engine crankcase	10.7 L (11.3 U.S.qts, 9.4 Imp.qts)				
	Engine coolant	9.6 L (10.1 U.S.qts, 8.4 Imp.qts)				
Dimensions	Overall length	4145 mm (163 in.)				
	Overall width (Minimum tread)	2215 mm (87 in.)		2195 mm (86 in.)		
	Overall height	2630 mm (103.5 in.)		2680 mm (106 in.)		
	Wheel base	2435 mm (95.9 in.)				
	Tread	Front	1580, 1680 mm (62.2, 66.1 in.)		1540 to 2040 mm (60.6 to 80.3 in.)	1580, 1680 mm (62.2, 66.1 in.)
		Rear	1700 to 2010 mm (66.9 to 79.1 in.)		1705 to 2005 mm (67.1 to 79 in.)	
Minimum ground clearance	385 mm (15.2 in.)		435 mm (17.1 in.) (drawbar bracket)			
Weight *2	3640 kg (8025 lbs)		3150 kg (6930 lbs)	3890 kg (8558 lbs)		
Traveling system	Standard tire size *3	Front	12.4-24		10.00-16	13.6-24
		Rear	18.4-30 cast		18.4-34	18.4-34 cast
	Clutch	Multiple wet disc hydraulic				
	Steering	Full hydraulic power steering				
	Transmission	Hydraulic shuttle shift, fully synchronized main shift, 32F / 32R, If equip creep gear 48F / 48R				
	Brake	Travelling	Wet type multiple discs (hydraulic)			
		Parking	Wet type multiple discs (mechanical)			
Differential	Bevel gears with differential lock (Rear)		Bevel gears with differential lock (Front, Rear)			
Hydraulic system	Hydraulic control system	Position, draft and mix control				
	Pump capacity	65.0 L/min. (17.2 U.S.gals./min., 14.3 Imp.gals./min.)				
	Three point hitch	Category II				
	Max. lifting force	At lifting point *4	2500 kg (5512 lbs) at lower link end with link horizontal 3900 kg (8600 lbs) with 2 assist cylinder (option)			
		24 in. behind lifting point *4	2100 kg (4630 lbs) at 610 mm (24 in.) behind lifting point 3400 kg (7490 lbs) with 2 assist cylinder (option)			
System pressure	19.6 MPa (200 kgf/cm <sup>2</sup> , 2847 psi)					
PTO system	Independent clutch	Wet type, multiple discs				
	Live PTO	Direction of turning	Clockwise, viewed from tractor rear			
		PTO speed	540 min <sup>-1</sup> (rpm) at 2205 engine min <sup>-1</sup> (rpm)			
Traction system	Swing drawbar, adjustable in direction					

NOTE: \* Manufacture's estimate.

\*1 The company reserves the right to change the specifications without notice.

\*2 W/O cast iron discs for rear wheels.

\*3 Cast iron discs available for wheels.

\*4 At lower link end with links horizontal.

W10295600

# TRAVELING SPEEDS

(At rated engine rpm)

Model			M96S			
Tire size (Rear)			18.4-30			
Transmission type			without Dual speed	with Dual speed		
Shuttle shift lever	Range gear shift lever	Main gear shift lever	km/h (mph)	Hi	Lo	
				km/h (mph)	km/h (mph)	
Forward 	CREEP (option)		1	0.35 (0.22)	0.35 (0.22)	0.29 (0.18)
			2	0.44 (0.28)	0.44 (0.28)	0.37 (0.23)
			3	0.55 (0.34)	0.55 (0.34)	0.45 (0.28)
			4	0.67 (0.42)	0.67 (0.42)	0.55 (0.34)
			1	0.86 (0.53)	0.86 (0.53)	0.71 (0.44)
			2	1.09 (0.68)	1.09 (0.68)	0.90 (0.56)
			3	1.35 (0.84)	1.35 (0.84)	1.11 (0.69)
			4	1.65 (1.03)	1.65 (1.03)	1.36 (0.85)
	L		1	1.95 (1.21)	1.95 (1.21)	1.61 (1.00)
			2	2.48 (1.54)	2.48 (1.54)	2.05 (1.27)
			3	3.05 (1.90)	3.05 (1.90)	2.52 (1.57)
			4	3.74 (2.33)	3.74 (2.33)	3.09 (1.92)
			1	4.79 (2.98)	4.79 (2.98)	3.96 (2.46)
			2	6.10 (3.79)	6.10 (3.79)	5.04 (3.13)
			3	7.51 (4.67)	7.51 (4.67)	6.21 (3.86)
			4	9.21 (5.72)	9.21 (5.72)	7.61 (4.73)
	H		1	6.80 (4.23)	6.80 (4.23)	5.62 (3.49)
			2	8.66 (5.38)	8.66 (5.38)	7.16 (4.45)
			3	10.67 (6.63)	10.67 (6.63)	8.82 (5.48)
			4	13.07 (8.13)	13.07 (8.13)	10.81 (6.72)
		1	16.73 (10.40)	16.73 (10.40)	13.83 (8.59)	
		2	21.31 (13.24)	21.31 (13.24)	17.61 (10.95)	
		3	26.24 (16.31)	26.24 (16.31)	21.69 (13.48)	
		4	34.64 (21.53)*	34.64 (21.53)*	26.59 (16.53)	

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

\* At maximum engine rpm.

W1035065

(At rated engine rpm)

Model			M96S			
Tire size (Rear)			18.4-30			
Transmission type			without Dual speed	with Dual speed		
Shuttle shift lever	Range gear shift lever	Main gear shift lever	km/h (mph)	Hi	Lo	
				km/h (mph)	km/h (mph)	
Reverse 	CREEP (option)		1	0.35 (0.22)	0.35 (0.22)	0.29 (0.18)
			2	0.45 (0.28)	0.45 (0.28)	0.37 (0.23)
			3	0.55 (0.34)	0.55 (0.34)	0.46 (0.28)
			4	0.68 (0.42)	0.68 (0.42)	0.56 (0.35)
			1	0.87 (0.54)	0.87 (0.54)	0.72 (0.44)
			2	1.10 (0.69)	1.10 (0.69)	0.91 (0.57)
			3	1.36 (0.84)	1.36 (0.84)	1.12 (0.70)
			4	1.66 (1.03)	1.66 (1.03)	1.38 (0.86)
	L		1	1.96 (1.22)	1.96 (1.22)	1.62 (1.01)
			2	2.50 (1.55)	2.50 (1.55)	2.07 (1.28)
			3	3.08 (1.91)	3.08 (1.91)	2.55 (1.58)
			4	3.77 (2.35)	3.77 (2.35)	3.12 (1.94)
			1	4.83 (3.00)	4.83 (3.00)	3.99 (2.48)
			2	6.15 (3.82)	6.15 (3.82)	5.08 (3.16)
			3	7.58 (4.71)	7.58 (4.71)	6.26 (3.89)
			4	9.29 (5.77)	9.29 (5.77)	7.68 (4.77)
	H		1	6.86 (4.26)	6.86 (4.26)	5.67 (3.52)
			2	8.73 (5.43)	8.73 (5.43)	7.22 (4.49)
			3	10.76 (6.69)	10.76 (6.69)	8.89 (5.53)
			4	13.19 (8.20)	13.19 (8.20)	10.90 (6.78)
			1	16.87 (10.49)	16.87 (10.49)	13.95 (8.67)
			2	21.49 (13.36)	21.49 (13.36)	17.77 (11.04)
			3	26.47 (16.45)	26.47 (16.45)	21.88 (13.60)
			4	34.94 (21.71)*	34.94 (21.71)*	26.82 (16.67)

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

\* At maximum engine rpm.

W1033594

(At rated engine rpm)

Model			M108S			
Tire size (Rear)			18.4-34			
Transmission type			without Dual speed	with Dual speed		
Shuttle shift lever	Range gear shift lever	Main gear shift lever	km/h (mph)	Hi	Lo	
				km/h (mph)	km/h (mph)	
Forward 	CREEP (option)		1	0.38 (0.23)	0.38 (0.23)	0.31 (0.19)
			2	0.48 (0.30)	0.48 (0.30)	0.39 (0.25)
			3	0.59 (0.37)	0.59 (0.37)	0.49 (0.30)
			4	0.72 (0.45)	0.72 (0.45)	0.60 (0.37)
			1	0.92 (0.57)	0.92 (0.57)	0.76 (0.47)
			2	1.18 (0.73)	1.18 (0.73)	0.97 (0.60)
			3	1.45 (0.90)	1.45 (0.90)	1.20 (0.74)
			4	1.77 (1.10)	1.77 (1.10)	1.47 (0.91)
	L		1	2.09 (1.30)	2.09 (1.30)	1.73 (1.08)
			2	2.67 (1.66)	2.67 (1.66)	2.20 (1.37)
			3	3.28 (2.04)	3.28 (2.04)	2.71 (1.69)
			4	4.02 (2.50)	4.02 (2.50)	3.33 (2.07)
			1	5.15 (3.20)	5.15 (3.20)	4.26 (2.65)
			2	6.56 (4.08)	6.56 (4.08)	5.42 (3.37)
			3	8.08 (5.02)	8.08 (5.02)	6.68 (4.15)
			4	9.90 (6.15)	9.90 (6.15)	8.19 (5.09)
	H		1	7.31 (4.54)	7.31 (4.54)	6.05 (3.76)
			2	9.31 (5.79)	9.31 (5.79)	7.70 (4.78)
			3	11.47 (7.13)	11.47 (7.13)	9.48 (5.89)
			4	14.06 (8.74)	14.06 (8.74)	11.63 (7.22)
			1	17.99 (11.18)	17.99 (11.18)	14.87 (9.24)
			2	22.92 (14.24)	22.92 (14.24)	18.94 (11.77)
			3	28.22 (17.54)	28.22 (17.54)	23.33 (14.50)
			4	37.26 (23.16)*	37.26 (23.16)*	28.60 (17.77)

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

\* At maximum engine rpm.

W1037333

(At rated engine rpm)

Model				M108S		
Tire size (Rear)				18.4-34		
Transmission type				without Dual speed	with Dual speed	
Shuttle shift lever	Range gear shift lever	Main gear shift lever	km/h (mph)	Hi	Lo	
				km/h (mph)	km/h (mph)	
Reverse 	CREEP (option)		1	0.38 (0.24)	0.38 (0.24)	0.31 (0.19)
			2	0.48 (0.30)	0.48 (0.30)	0.40 (0.25)
			3	0.59 (0.37)	0.59 (0.37)	0.49 (0.30)
			4	0.73 (0.45)	0.73 (0.45)	0.60 (0.37)
			1	0.93 (0.58)	0.93 (0.58)	0.77 (0.48)
			2	1.19 (0.74)	1.19 (0.74)	0.98 (0.61)
			3	1.46 (0.91)	1.46 (0.91)	1.21 (0.75)
			4	1.79 (1.11)	1.79 (1.11)	1.48 (0.92)
	L		1	2.11 (1.31)	2.11 (1.31)	1.75 (1.08)
			2	2.69 (1.67)	2.69 (1.67)	2.22 (1.38)
			3	3.31 (2.06)	3.31 (2.06)	2.74 (1.70)
			4	4.06 (2.52)	4.06 (2.52)	3.36 (2.09)
			1	5.19 (3.23)	5.19 (3.23)	4.29 (2.67)
			2	6.61 (4.11)	6.61 (4.11)	5.47 (3.40)
			3	8.15 (5.06)	8.15 (5.06)	6.74 (4.19)
			4	9.99 (6.21)	9.99 (6.21)	8.26 (5.13)
	H		1	7.38 (4.58)	7.38 (4.58)	6.10 (3.79)
			2	9.39 (5.84)	9.39 (5.84)	7.77 (4.83)
			3	11.57 (7.19)	11.57 (7.19)	9.57 (5.94)
			4	14.18 (8.81)	14.18 (8.81)	11.73 (7.29)
		1	18.15 (11.28)	18.15 (11.28)	15.00 (9.32)	
		2	23.11 (14.36)	23.11 (14.36)	19.11 (11.87)	
		3	28.47 (17.69)	28.47 (17.69)	23.53 (14.62)	
		4	37.58 (23.35)*	37.58 (23.35)*	28.85 (17.93)	

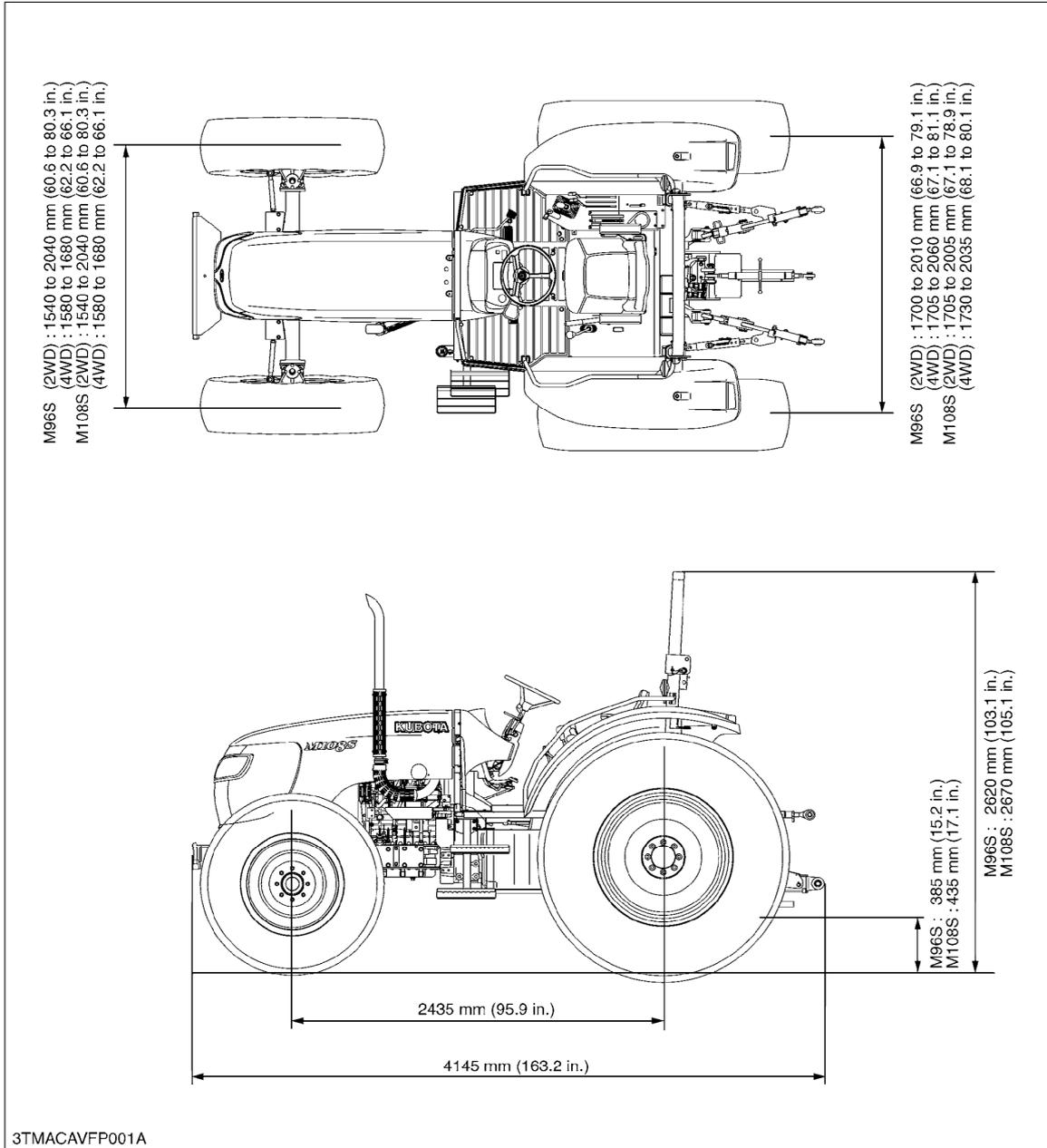
The company reserves the right to change the specifications without notice.

\* At maximum engine rpm.

W1038042

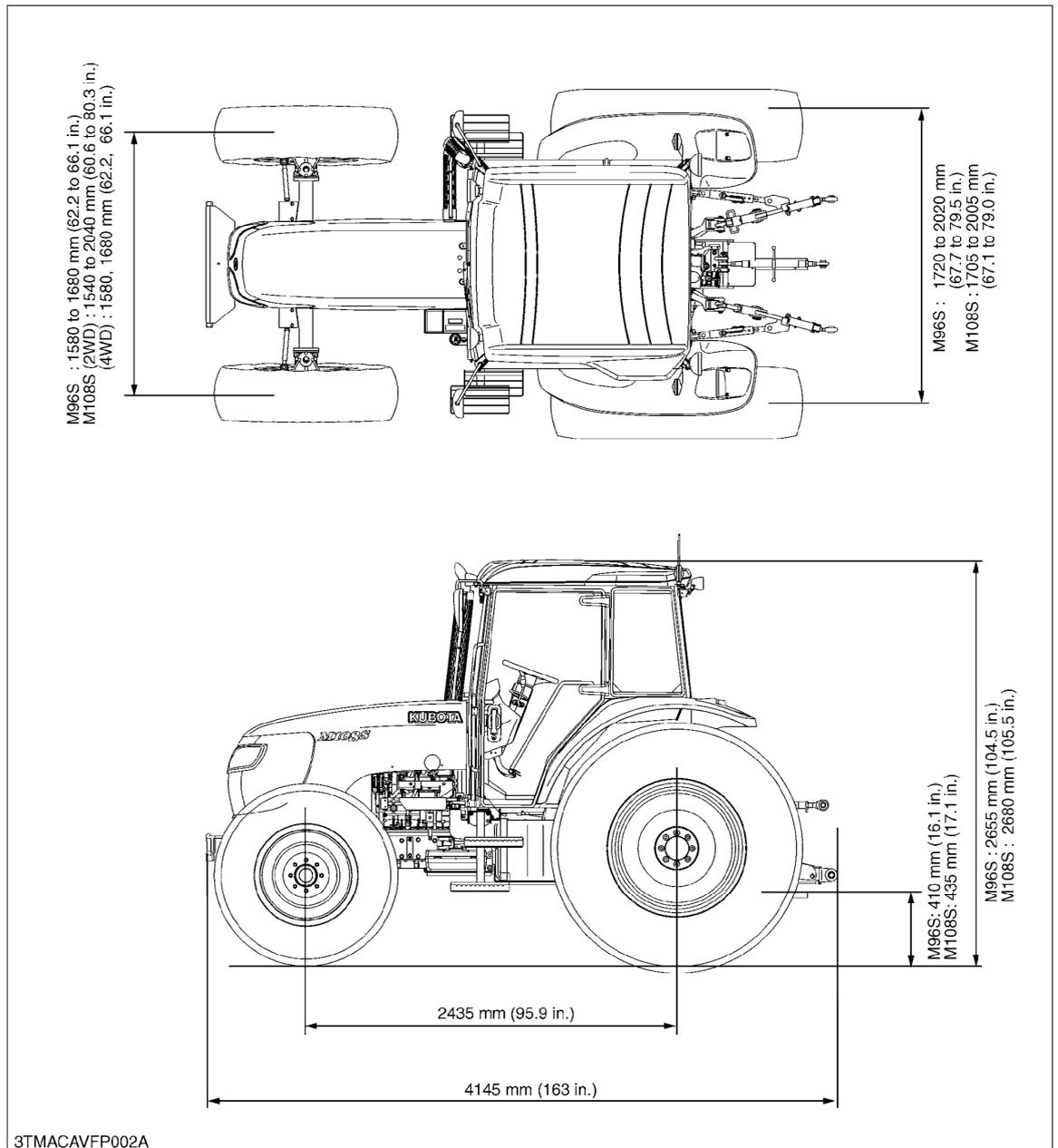
# DIMENSIONS

[ROPS Model]



3TMACAVFP001A

[CABIN Model]



# **G GENERAL**

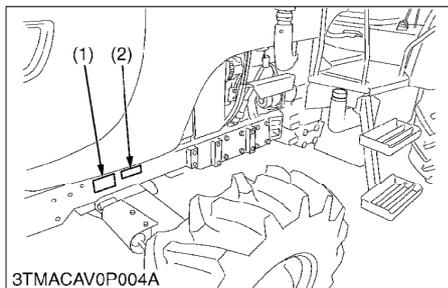
# GENERAL

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# 1. TRACTOR IDENTIFICATION

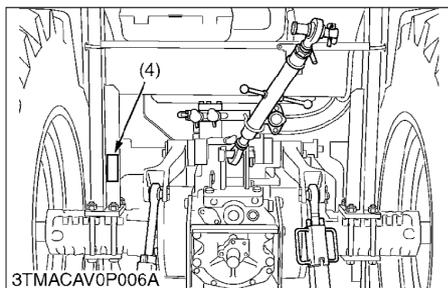
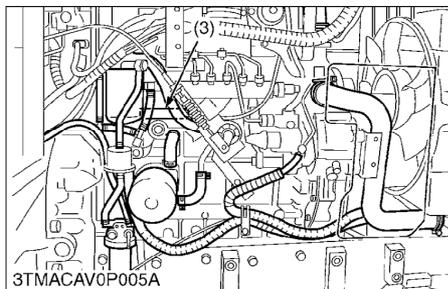
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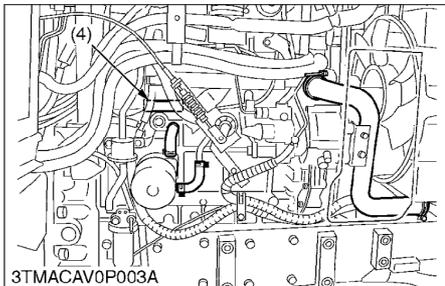
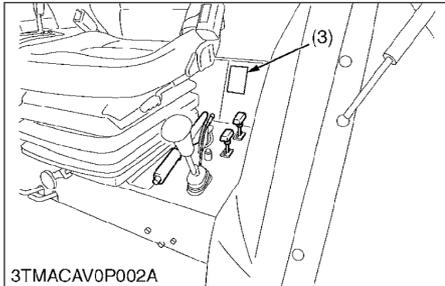
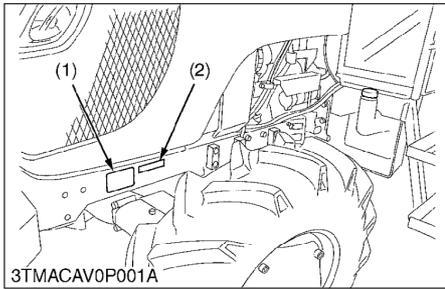
When contacting your local KUBOTA distributor, always specify engine serial number, tractor serial number and hour meter reading.

- (1) Tractor Identification Plate
- (2) Tractor Serial Number
- (3) Engine Serial Number
- (4) ROPS Identification Plate (ROPS Serial Number)

W1010854



## [2] CABIN MODEL



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

- (1) Tractor Identification Plate
- (2) Tractor Serial Number
- (3) CABIN Identification Plate  
(CABIN Serial Number)
- (4) Engine Serial Number

W1010602