

WSM

WORKSHOP MANUAL

**Z231BR-AU,
Z231KH-AU,
Z251BR-AU, Z251KH-AU**

Kubota

TO THE READER

This workshop manual provides safety information for service activity, general information such as specifications and dimensions of the machine, mechanisms and structure descriptions of the machine, and service procedures.

Safety

This section contains safety service descriptions and safety label information.

General

This section contains general instructions, tightening torques, general machine information and special tools.

Maintenance

This section contains information for the recommended oil and general maintenance procedures.

Each section basically consists of mechanism and servicing.

Mechanism

Mechanism part contains information and explanations for the structure, functions, and specifications of the machine or component parts. This part should be comprehended before proceeding with troubleshooting, disassembling, assembling, and servicing works.

Servicing

Servicing part contains information and procedures for maintenance, troubleshooting and repair works. The reader should follow these instructions in order to satisfy any servicing work safely, correctly and quickly.

In this WSM, service specifications and service limits are defined as followings.

Service specifications:

Specification which corresponds to new machine's ex-factory. It is based on quality standard, drawings, or actual measurements conducted by Kubota. This value is used to determine whether there is a problem with the machine in the event of a troubleshooting. However, it is necessary to consider degradation due to wear, based on the operating time of the machine, application or maintenance condition.

Service limits:

Service limit is a value corresponding to the recommended performance limit by taking long term-use wear into account. When the service limit is reached, the machine is required to have proper repair, overhaul or replacement in order to keep safe and adequate performance.

All of the illustrations, photographs, specifications, and other information in this manual were created based on the latest model at the time of publication.

The parts names used in this manual are unified into names representing the functions of the parts. Therefore, it does not necessarily correspond to the names used in other materials (parts list, operators manual etc.) and the name on the label / identification plates on the product.

Kubota reserves the right to change all information at any time without notice.

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SUPPLEMENTARY INFORMATION

Model name and related manuals

This manual applies to the following model.

Model name
Z231BR-AU, Z231KH-AU, Z251BR-AU, Z251KH-AU

RECORD OF REVISIONS

For pdf, use search function [Search word] to find all the revised locations.

Last digit of the code No.	Month of revision	Main revised point and corrective measure [Search word]	Reference page
1	2021 June	Revised reassembly procedure for HST tension spring	4-13 5-13
		Revised checking procedure for link stopper	7-5
		Added adjusting procedure for link stopper	7-5
		Revised adjusting maximum speed specifications	5-12

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1. SAFETY

SAFETY FIRST

This symbol, the industry's "Safety Alert Symbol", is used throughout this manual and on labels on the machine itself to warn of the possibility of personal injury. Read these instructions carefully. It is essential that you read the instructions and safety regulations before you attempt to assemble or use this unit.

DANGER

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

WARNING

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

CAUTION

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

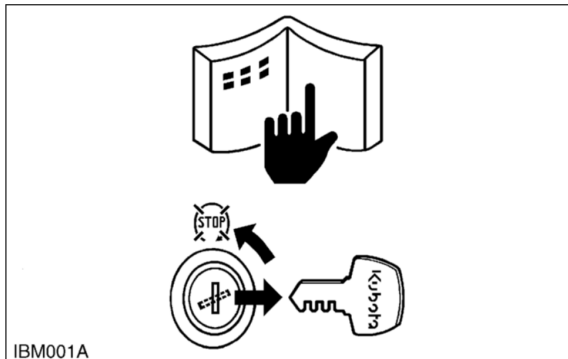
■ IMPORTANT

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

■ NOTE

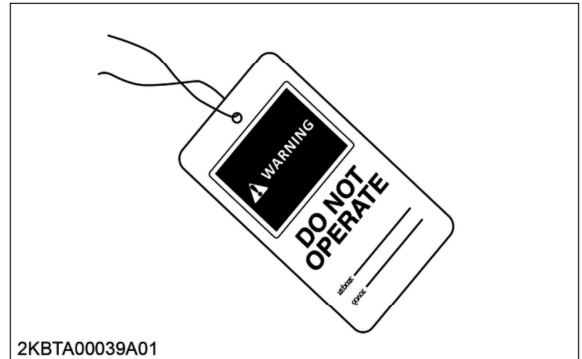
- Gives helpful information.

1. Working precautions



- Understand all safety instructions and safety labels in this manual.
- Park the machine on a stable and level ground then lower the attachment to check the machine safely.

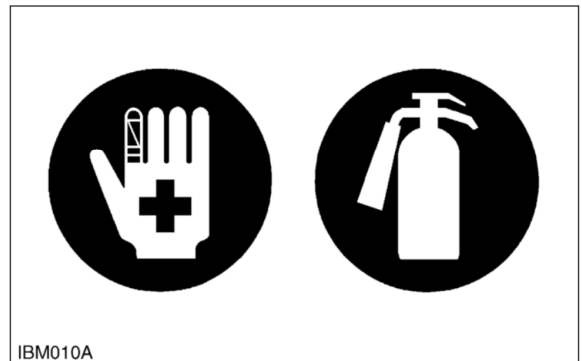
- Stop the engine and remove the key when leaving the operator's seat for cleaning, maintenance, and servicing.



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- Hang a DO NOT OPERATE tag near the operator's seat.
- Do not use worn or cracked tools. Use tools in a proper way with enough strength.
- In regards to the facility which is used in the workshop, follow each safety instruction.

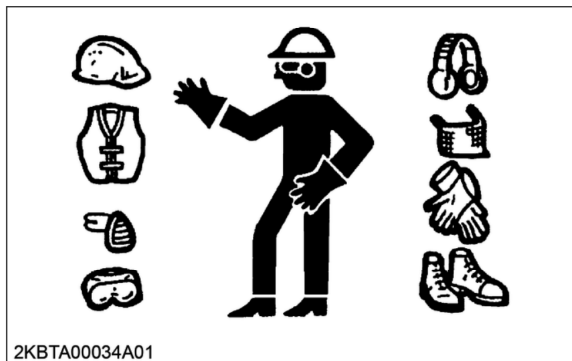
2. Preparing for emergencies



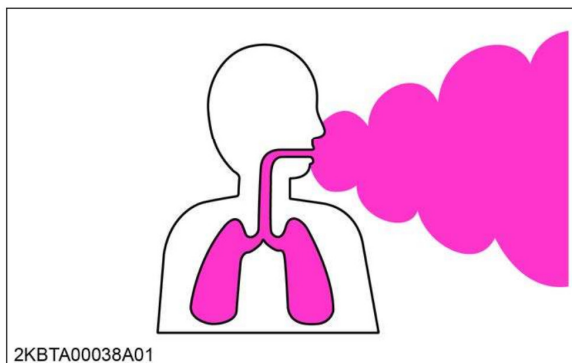
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- Keep a first aid kit and fire extinguisher ready at all times.
- Keep emergency numbers near your telephone at all times.

3. Working cautions



- Wear proper service attire when performing work. Do not wear loose clothing as they could get caught on machine components.
- Wear the proper protective equipment when working around the machine. For example helmet, eye protector and protective shoes.
- Do not work around the machine if you are tired or have consumed alcohol or drugs.



- Keep the machine away from obstacles and hazardous materials.
- Ensure the working environment is properly ventilated.
- Do not allow third parties to come near the machine.

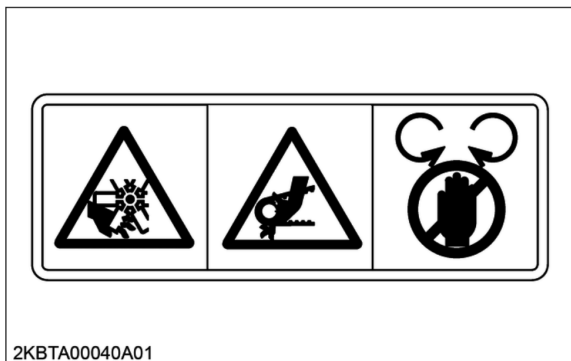


- Make sure you have the support of the 3 points with both hands holding the handle and one foot at the step when getting on and off the machine.
- When working under the machine, make sure the machine does not move back and forth or side-to-side.
- When working under the machine, provide secure support for the machine.
- When using a hydraulic jack, always use with a rigid rack to prevent the machine from falling.

4. Starting machine safely

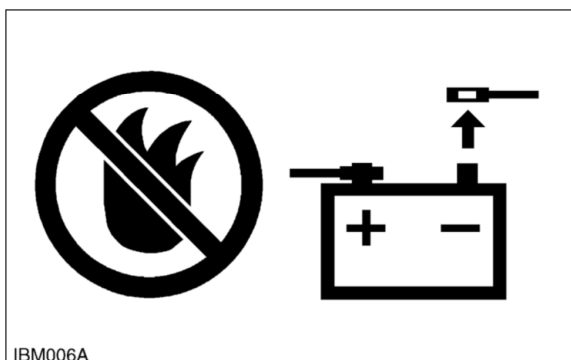


- Do not do the following work when starting the engine.
 - Short across starter terminals.
 - Bypass the safety start switch.
- Make sure there are no bystanders or obstacles present around the machine before starting the engine.
- Do not start the engine unless the operator is seated in the operator's seat.
- Make sure that the pilot levers are in neutral before starting the engine.



- Lock the covers before starting the machine.
- Keep away from rotating and moving objects.
- Keep tools and waste cloth away from rotating and moving objects.

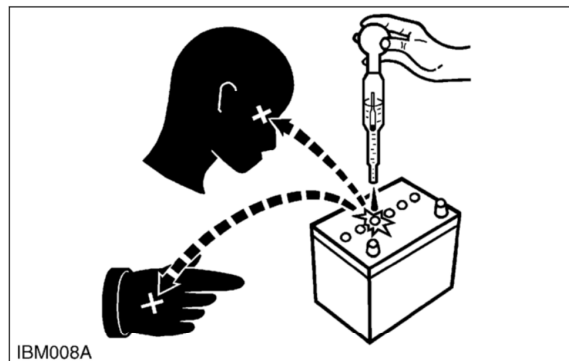
5. Preventing fires



- Keep fire (welding sparks, grinding sparks, cigarettes) away from the fuel.
- Wipe the fuel off when spilled.
- Keep fire (welding sparks, grinding sparks, cigarettes) away from the battery. The battery produces oxygen and hydrogen gas that are flammable.
- Disconnect the negative (-) terminal first when disconnecting the battery cable.

- Connect the positive (+) terminal first when connecting the battery cable.
- Do not short circuit the machine.
- Do not splash the hydraulic oil on the exhaust components.

6. Preventing acid burns



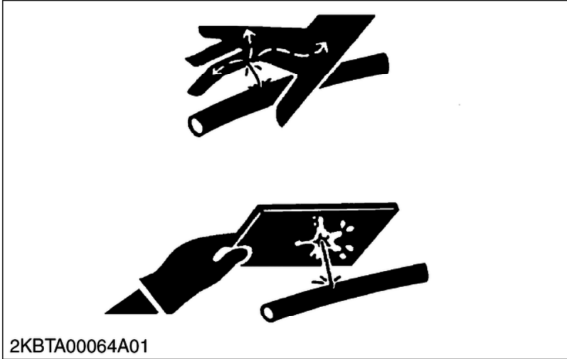
- Keep the electrolyte away from your eyes, hands, and clothes. Sulfuric acid in the battery electrolyte is poisonous: it can cause blindness and is strong enough to burn your skin and clothing. If you spill electrolyte on yourself, clean yourself with water and get a medical aid immediately.

7. Avoiding high pressure fluid



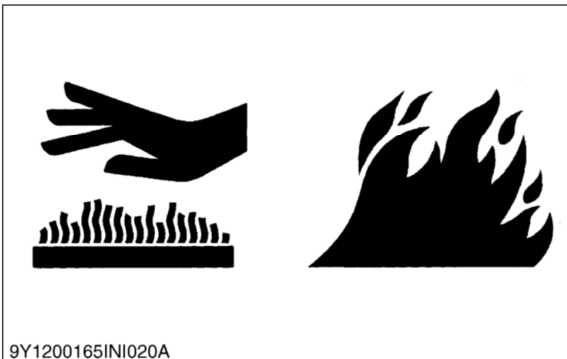
- Keep away from high pressure fluids bursting from a hose or pipe. The fluid can penetrate your skin and cause serious injuries.
- Get a medical aid immediately if an accident occurs.

1. SAFETY

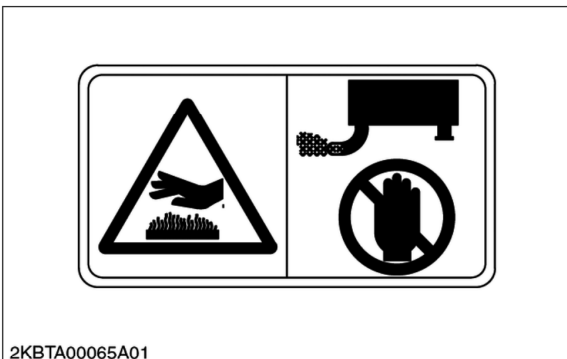


- Release residual pressure in the hydraulic circuit before removing the hydraulic components.
- Pay attention when releasing pressure in hydraulic circuit, because the machine or attachment might move unexpectedly.
- Check the coolant temperature and release the pressure before opening the radiator cap.

8. Avoiding hot exhaust



- Avoid skin exposure and contact with hot exhaust gas or components.
- Exhaust gas and components are extremely hot during operation.



- Do not work immediately after stopping the engine. The engine, muffler, radiator, and hydraulic components are extremely hot.
- Do not remove caps and plugs soon after stopping the engine. The temperature and pressure of the coolant, hydraulic oil, and fuel are still high.