

# Operation & Maintenance Manual

UEAM003604

# PC130-7

## HYDRAULIC EXCAVATOR

SERIAL NUMBER PC130-7 - 72642 and up



### WARNING

Unsafe use of this machine may cause serious injury or death. Operators and maintenance personnel must read this manual before operating or maintaining this machine. This manual should be kept inside the cab for reference and periodically reviewed by all personnel who will come into contact with the machine.

# KOMATSU



# **FOREWORD**

## FOREWORD

This manual provides rules and guidelines which will help you use this machine safely and effectively. The precautions in this manual must be followed at all times when performing operation and maintenance. Most accidents are caused by the failure to follow fundamental safety rules for the operation and maintenance of machines. Accidents can be prevented by knowing beforehand conditions that may cause a hazard when performing operation and maintenance.

### **WARNING**

**Operators and maintenance personnel must always do as follows before beginning operation or maintenance.**

**Always be sure to read and understand this manual thoroughly before performing operation and maintenance.**

**Read the safety messages given in this manual and the safety labels affixed to the machine thoroughly and be sure that you understand them fully.**

**Keep this manual at the storage location for the Operation and Maintenance Manual given below, and have all personnel read it periodically.**

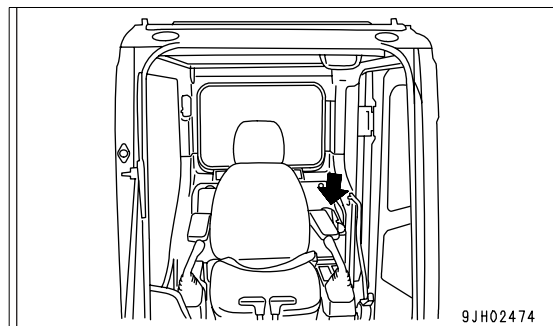
**If this manual has been lost or has become dirty and cannot be read, request a replacement manual immediately from Komatsu or your Komatsu distributor.**

**If you sell the machine, be sure to give this manual to the new owners together with the machine.**

**Komatsu delivers machines that comply with all applicable regulations and standards of the country to which it has been shipped. If this machine has been purchased in another country or purchased from someone in another country, it may lack certain safety devices and specifications that are necessary for use in your country. If there is any question about whether your product complies with the applicable standards and regulations of your country, consult Komatsu or your Komatsu distributor before operating the machine.**

Storage location for the Operation and Maintenance Manual:

magazine box on the left side of the operator's seat.



## SAFETY INFORMATION

To enable you to use this machine safely, safety precautions and labels are given in this manual and affixed to the machine to give explanations of situations involving potential hazards and of the methods of avoiding such situations.

### Signal words

The following signal words are used to inform you that there is a potential hazardous situation that may lead to personal injury or damage.

In this manual and on machine labels, the following signal words are used to express the potential level of hazard.



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



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



Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. This word is used also to alert against unsafe practices that may cause property damage.

### Example of safety message using signal word



**When standing up from the operator's seat, always place the safety lock lever in the LOCK position.**

**If you accidentally touch the control levers when they are not locked, this may cause a serious injury or death.**

### Other signal words

In addition to the above, the following signal words are used to indicate precautions that should be followed to protect the machine or to give information that is useful to know.

**NOTICE** This word is used for precautions that must be taken to avoid actions which could shorten the life of the machine.

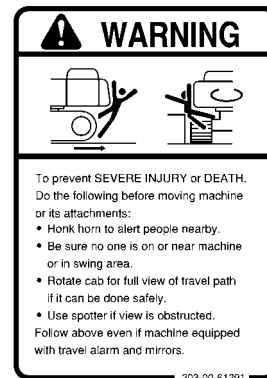
**REMARKS** This word is used for information that is useful to know.

## ● Safety labels

Safety labels are affixed to the machine to inform the operator or maintenance worker on the spot when carrying out operation or maintenance of the machine that may involve hazard.

This machine uses “Safety labels using words” and “Safety labels using pictograms” to indicate safety procedures.

### Example of safety label using words



Part No.

### Safety labels using pictogram

Safety pictograms use a picture to express a level of hazardous condition equivalent to the signal word. These safety pictograms use pictures in order to let the operator or maintenance worker understand the level and type of hazardous condition at all times.

Safety pictograms show the type of hazardous condition at the top or left side, and the method of avoiding the hazardous condition at the bottom or right side. In addition, the type of hazardous condition is displayed inside a triangle and the method of avoiding the hazardous condition is shown inside a circle.



Part No.

Komatsu cannot predict every circumstance that might involve a potential hazard in operation and maintenance. Therefore, the safety messages in this manual and on the machine may not include all possible safety precautions.

If any procedures or actions not specifically recommended or allowed in this manual are used, it is your responsibility to take the necessary steps to ensure safety.

In no event should you engage in prohibited uses or actions described in this manual.

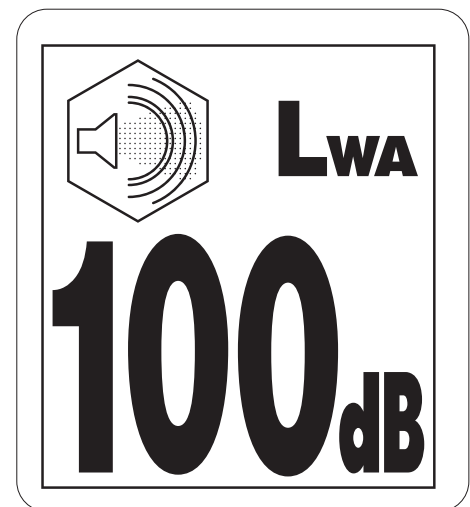
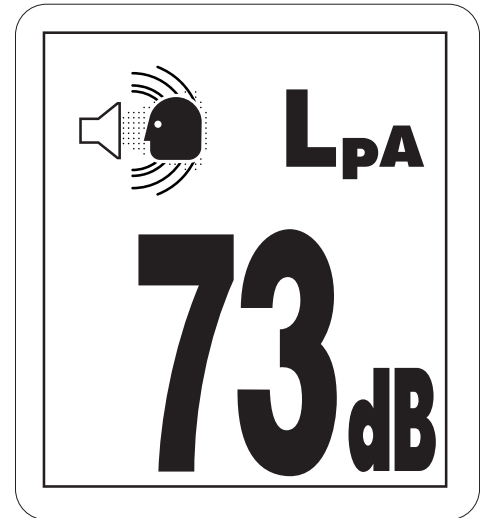
The explanations, values, and illustrations in this manual were prepared based on the latest information available at that time. Continuing improvements in the design of this machine can lead to changes in detail which may not be reflected in this manual. Consult Komatsu or your Komatsu distributor for the latest available information of your machine or for questions regarding information in this manual.

The numbers in circles in the illustrations correspond to the numbers in ( ) in the text. (For example: ① -> (1))

## Noise emission levels

Two labels indicating the machine noise level are affixed on the machine

- Sound pressure level at the operator's station, measured according to ISO6396 (Dynamic test method, simulated working cycle).
- Sound power level emitted by the machine, measured according to ISO 6395 (Dynamic test method, simulated working cycle). This is the guaranteed value as specified in European directive 2000/14/EC.



## Vibration levels

When used for its intended purpose, levels of vibration for the earth-moving machine transmitted from the operator's seat are lower than or equal to the tested vibrations for the relative machinery class in compliance with ISO 7096.

The actual acceleration value for the hands and arms is less than or equal to 2.5 m/s<sup>2</sup>. The actual acceleration value for the body is less than or equal to 0.5 m/s<sup>2</sup>.

These values were determined using a representative machine and measured during the typical operating condition indicated below according to the measurement procedures that are defined in the standards ISO 2631/1 and ISO 5349.

### Operating condition:

(HYDRAULIC EXCAVATORS:) Excavating (Digging-loading-rotating-unloading-rotating)

## Guide to Reduce Vibration Levels on Machine

The following guides can help an operator of this machine to reduce the whole body vibration levels:

1. Use the correct equipment and attachments.
2. Maintain the machine according to this manual
  - Tire pressures (for wheeled machines), tension of crawler (for crawler machines)
  - Brake and steering systems
  - Controls, hydraulic system and linkages
3. Keep the terrain where the machine is working and traveling in good condition
  - Remove any large rocks or obstacles
  - Fill any ditches and holes
  - Site manager should provide machine operators with machine and schedule time to maintain terrain conditions
4. Use a seat that meets ISO 7096 and keep the seat maintained and adjusted
  - Adjust the seat and suspension for the weight and size of the operator
  - Wear seat belt
  - Inspect and maintain the seat suspension and adjustment mechanisms
5. Steer, brake, accelerate, shift gears (for wheeled machines), and move the attachment levers and pedals slowly so that the machine moves smoothly
6. Adjust the machine speed and travel path to minimize the vibration level
  - When pushing with bucket or blade, avoid sudden loading; load gradually
  - Drive around obstacles and rough terrain conditions
  - Slow down when it is necessary to go over rough terrain
  - Make the curve radius of traveling path as large as possible
  - Travel at low speed when traveling around sharp curves
7. Minimize vibrations for long work cycle or long distance traveling
  - Reduce speed to prevent bounce
  - Transport machines long distances between worksites
8. The following guidelines can be effective to minimize risks of low back pain
  - Operate the machine only when you are in good health.
  - Provide breaks to reduce long periods of sitting in the same posture
  - Do not jump down from the cab or machine
  - Do not repeatedly handle and lift loads



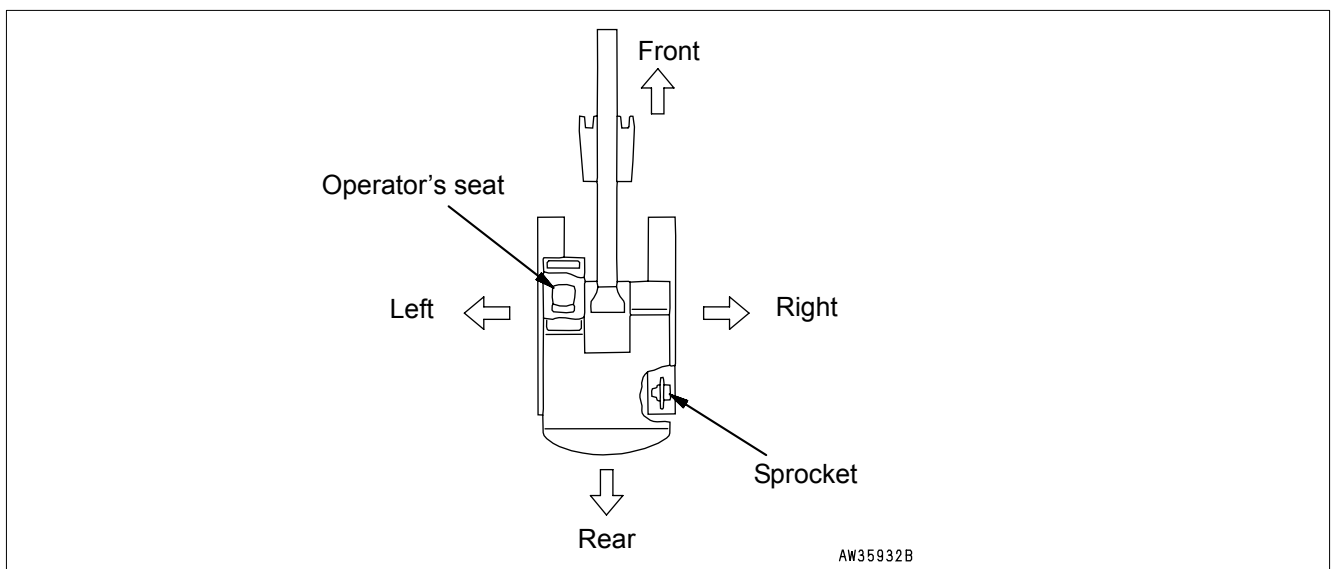
## INTRODUCTION

This Komatsu machine is designed to be used mainly for the following work:

- Digging work
- Leveling work
- Ditching work
- Loading work
- Demolition work

See the section “RECOMMENDED APPLICATIONS (3-100)” for further details.

## DIRECTIONS OF MACHINE



In this manual, the terms front, rear, left, and right refer to the travel direction as seen from the operator's seat when the operator's seat is facing the front and the sprocket is at the rear of the machine.

## BREAKING-IN THE NEW MACHINE

### NOTICE

**Your Komatsu machine has been thoroughly adjusted and tested before shipment from the factory. However, operating the machine under full load before breaking the machine in can adversely affect the performance and shorten the machine life.**

**Be sure to break in the machine for the initial 100 hours (as indicated on the service meter).**

Make sure that you fully understand the content of this manual, and pay careful attention to the following points when breaking in the machine.

- Run the engine at idling for 15 seconds after starting it. During this time, do not operate the control levers or fuel control dial.
- Idle the engine for 5 minutes after starting it up.
- Avoid operation with heavy loads or at high speeds.
- Immediately after starting the engine, avoid sudden starts, sudden acceleration, unnecessary sudden stops, and sudden changes in direction.

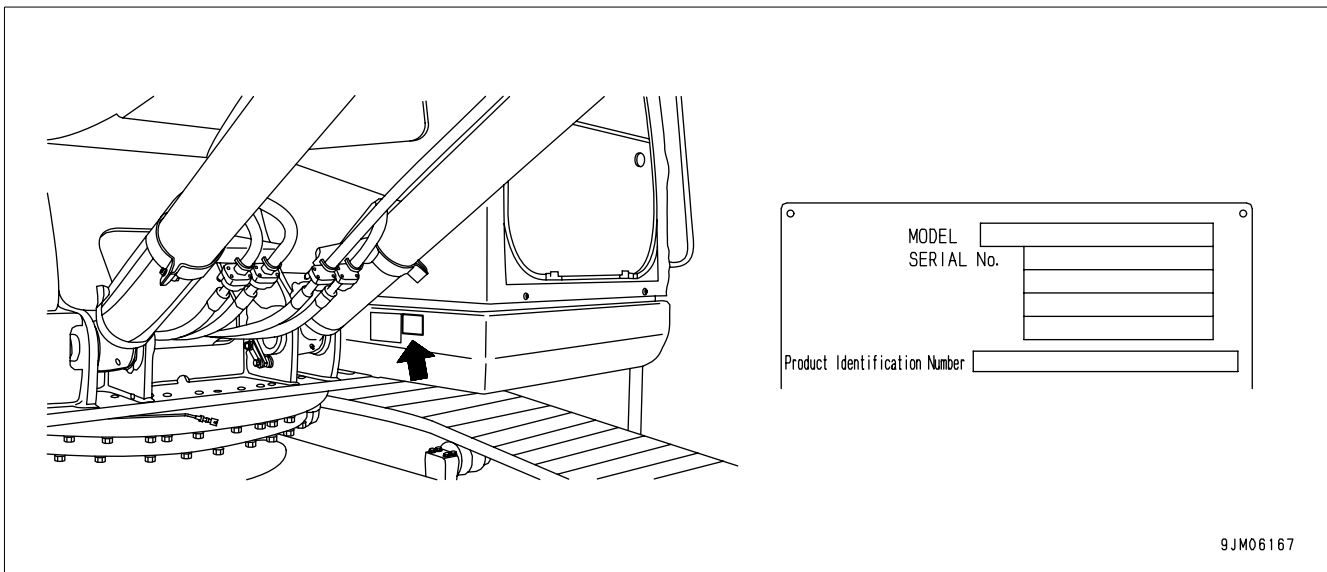
# PRODUCT INFORMATION

When requesting service or ordering replacement parts, please inform your Komatsu distributor of the following items.

## PRODUCT IDENTIFICATION NUMBER (PIN)/MACHINE SERIAL NO. PLATE

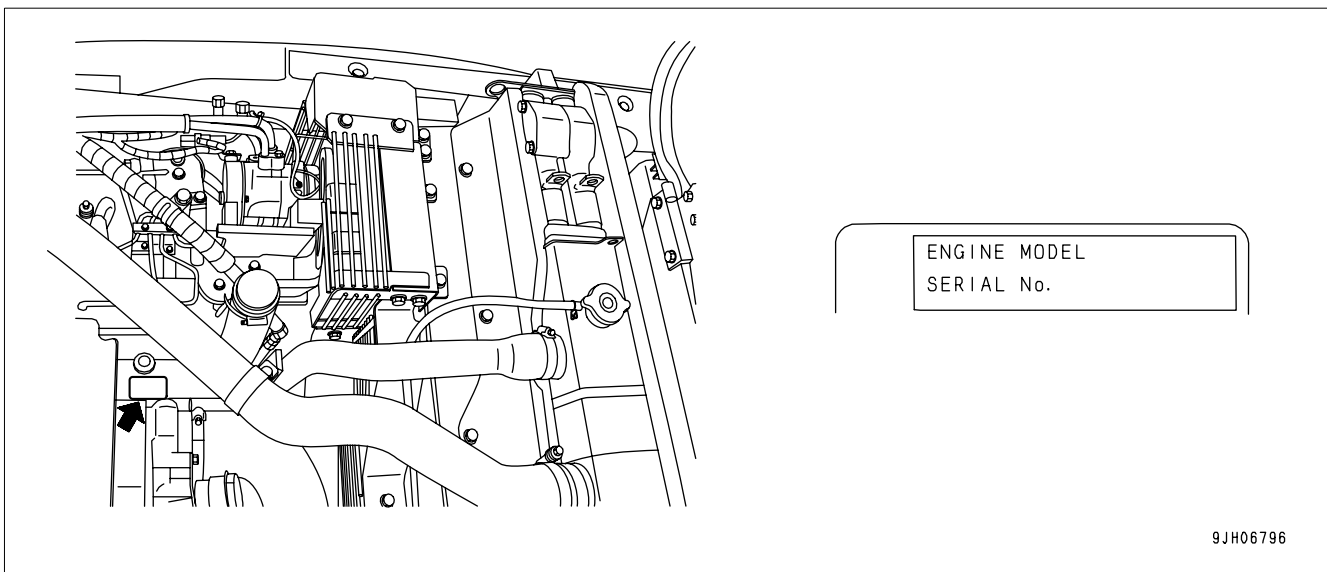
On the bottom right of the operator's cab

The design of the nameplate differs according to the territory.



## ENGINE SERIAL NUMBER PLATE AND ITS LOCATION

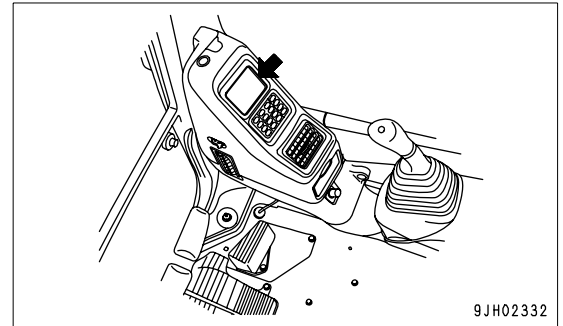
On the upper side of the engine cylinder head cover.



EPA: Environmental Protection Agency, U.S.A.

## SERVICE METER LOCATION

On top of the machine monitor



## YOUR MACHINE SERIAL NUMBERS AND DISTRIBUTOR

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Machine serial No.

---

Engine serial No.

---

Product Identification Number

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Manufacturers name:	KOMATSU UK Ltd.
Address:	Durham Road Birtley Chester-Le street County Durham DH32QX United Kingdom

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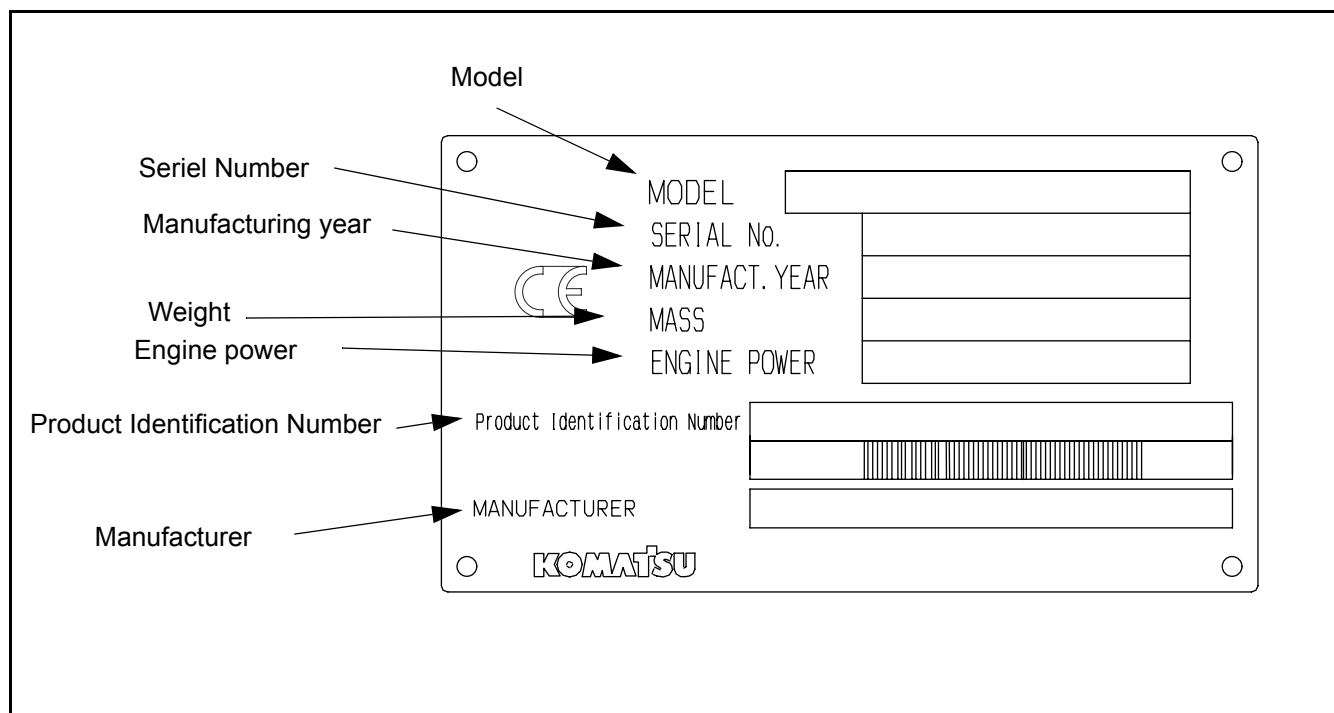
Distributor  
Address

Phone

Service personnel for your  
machine:

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# MACHINE SERIAL NUMBER PLATE





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## **INDEX**

## **COLOPHON**



# SAFETY



## WARNING

**Please be sure that you fully understand this manual and the precautions discribed in this manual and the safety labels on the machine. When operating or servicing the machine, always follow these precautions strictly.**

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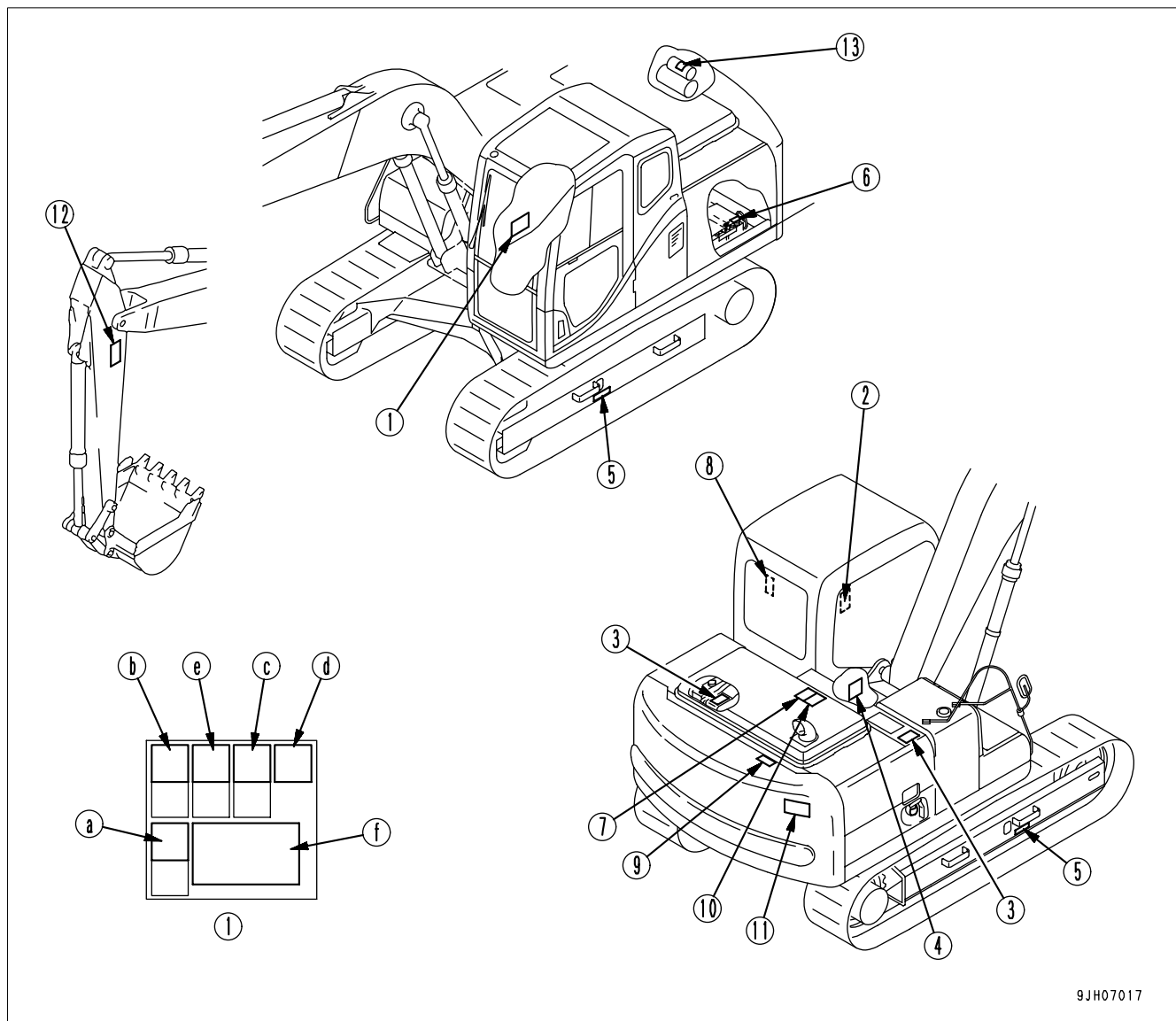
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## SAFETY LABELS

The following warning signs and safety labels are used on this machine.

- Be sure that you fully understand the correct position and content of labels.
- To ensure that the content of labels can be read properly, be sure that they are in the correct place and always keep them clean. When cleaning them, do not use organic solvents or gasoline. These may cause the labels to peel off.
- There are also other labels in addition to the warning signs and safety labels. Handle those labels in the same way.
- If the labels are damaged, lost, or cannot be read properly, replace them with new ones. For details of the part numbers for the labels, see this manual or the actual label, and place an order with Komatsu distributor.

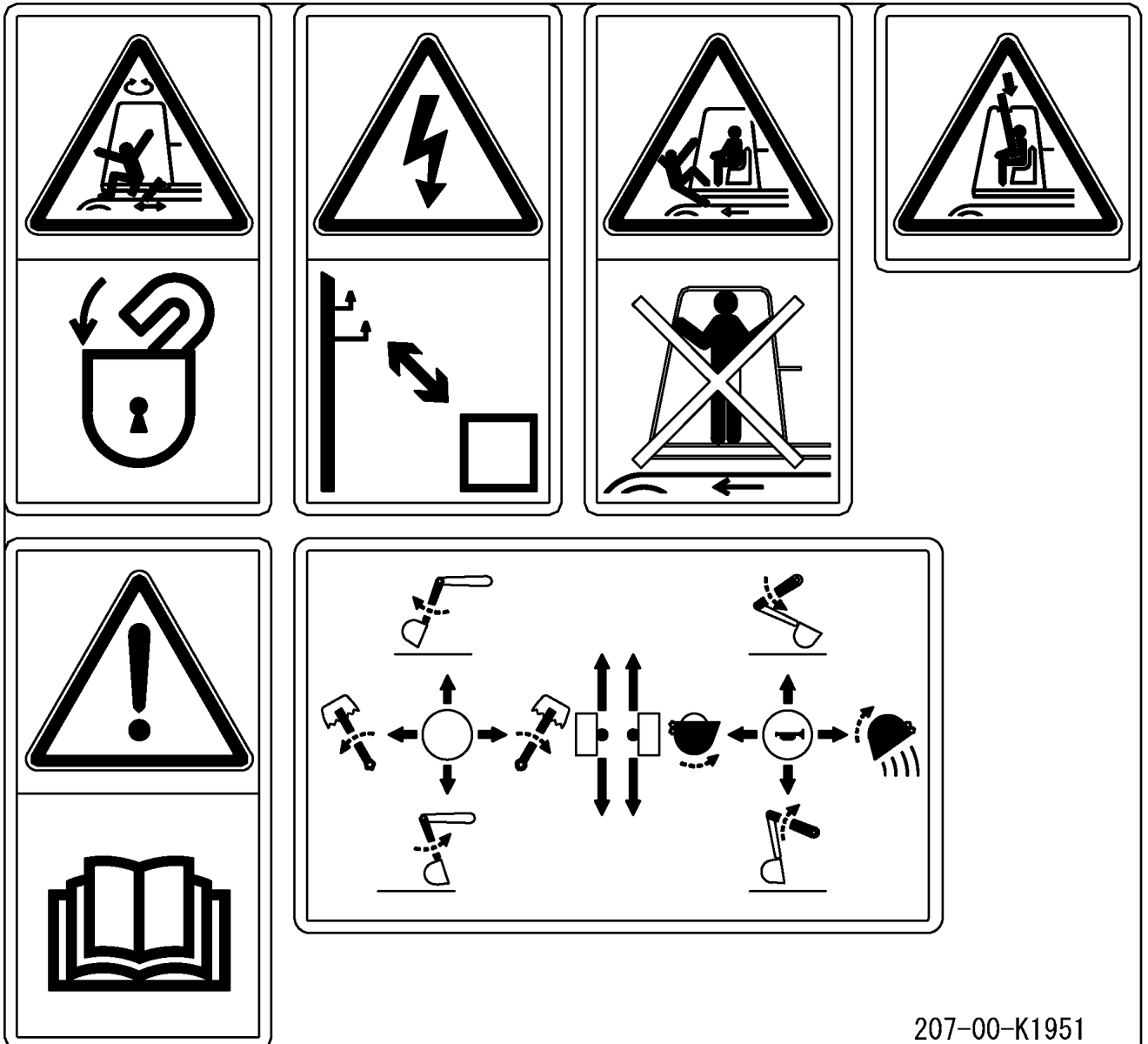
## LOCATION OF SAFETY LABELS



**SAFETY LABELS**

(1) (207-00-K1951)

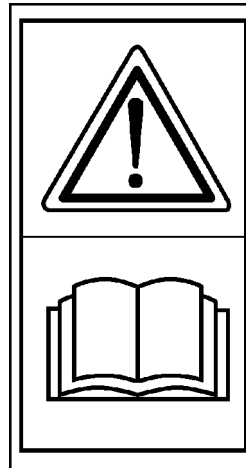
- Warnings for operation, inspection and maintenance.
- Improper operation and maintenance can cause serious injury or death.
- Read the manual and labels before operation and maintenance.  
Follow instructions and warnings in manual and in labels on machine.



207-00-K1951

(a) Keep the manual in machine cab near operator.

If this manual is lost, please contact your Komatsu distributor for a replacement.



(b) Always apply lock when leaving operator's seat.



(c) WARNING - No passengers

No passengers allowed to ride on machine while it is moving.



(d) WARNING - DANGER OF FALLING OBJECTS

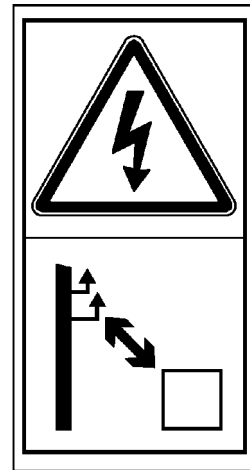
Do not operate where a danger of falling objects exists.

Consult your dealer for fitting of FOPS protections.

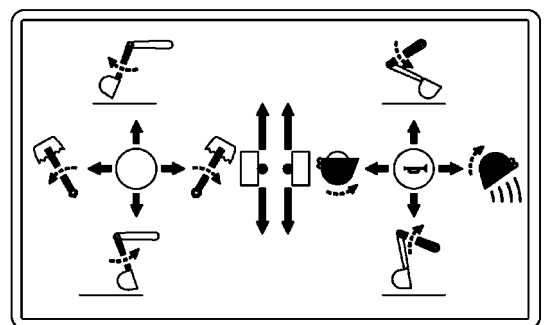


(e) HAZARDOUS - Voltage hazard

Serious injury or death can occur if machine or attachments are not kept safe distance away from electric lines.



(f) Control levers operational function diagram.



## (2) Precautions when stowing front window (09803-A0481)

- When the front window is stowed, there is the hazard that it will fall.
- Always lock the front window securely at the stowed position.



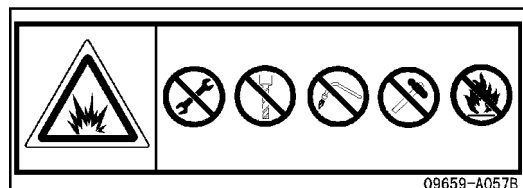
## (3) Precautions for high-temperature coolant, hydraulic oil (09653-A0481)

- Never remove the cap when the engine is at operating (high) temperature. Steam or high temperature oil blowing up from the radiator or hydraulic tank, will cause personal injury and/or burns.
- Never remove the radiator cap or hydraulic tank oil filler when cooling water or hydraulic oil is at high temperature.



## (4) Precautions when handling accumulator (09659-A057B)

- There is the hazard of explosion causing injury.
- Do not disassemble the accumulator, make holes in it, weld it cut it, hit it, roll it or bring it near flame



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