

# Operation & Maintenance Manual



# PC290LC-7K

# PC290NLC-7K

## HYDRAULIC EXCAVATOR

SERIAL NUMBER

PC290LC-7K - K40001 and up

PC290NLC-7K - K40001 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 while operating or performing 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 in the storage location for the Operation and Maintenance Manual given below, and have all personnel read it periodically.**

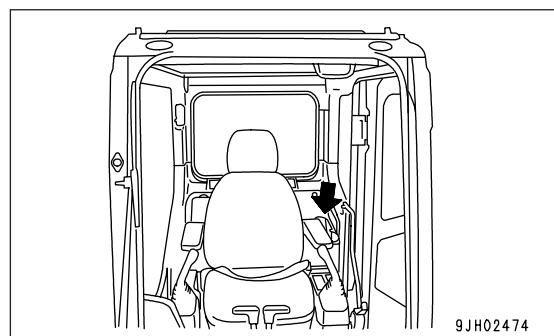
**If this manual has been lost or has become dirty and cannot be read, request a replacement manual immediately from Komatsu or your Komatsu distributor.**

**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:

Storage 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 potentially 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

### WARNING

To avoid hitting unlocked operation levers, lower equipment to ground and move **SAFETY LOCK LEVER** (located near seat) to **LOCK** position before getting up from the operator's seat.  
Sudden and unwanted machine movement can cause 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 pictograms" to indicate safety procedures.

**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.



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.

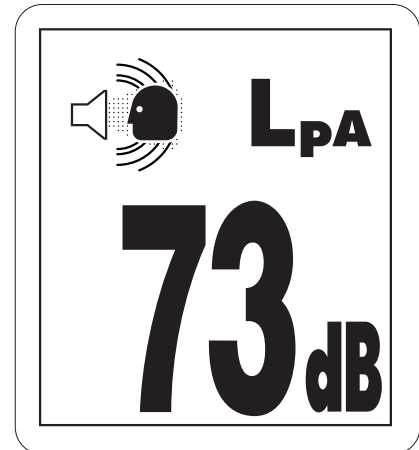
In no event should you engage in prohibited uses or actions described in this manual.

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.

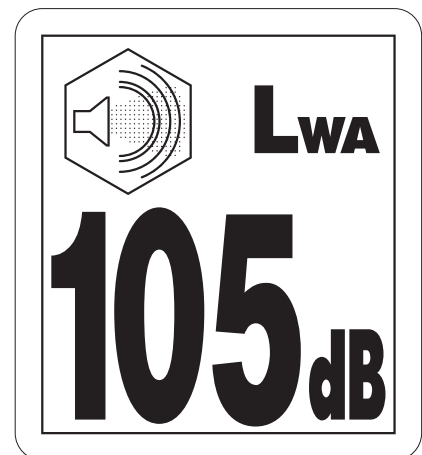
The numbers in circles in the illustrations correspond to the numbers in ( ) in the text. (For example: ① → (1))

## NOISE

- Sound pressure level at the operator's station, measured according to ISO6396 (Dynamic test method, simulated working cycle).



- Sound power level emitted. This is the guaranteed value as specified in the European directive 2000/14/EC



## VIBRATION

The weighted root mean square acceleration value to which the operator's arms are subjected does not exceed  $2.5 \text{ m/s}^2$

The weighted root mean square acceleration value to which the operator's body is subjected does not exceed  $0.5 \text{ m/s}^2$

These results were obtained by accelerometers during trench digging.

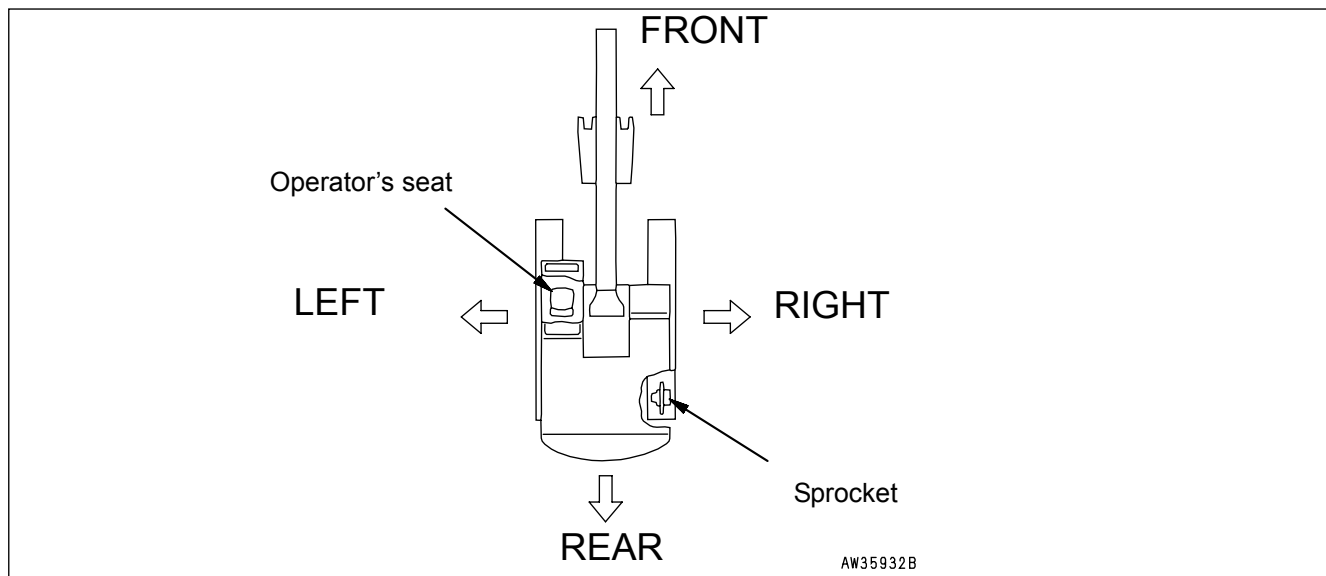
# INTRODUCTION

This Komatsu HYDRAULIC EXCAVATOR is designed to be used mainly for the following works:

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

See the section "RECOMMENDED APPLICATIONS (PAGE 164)" 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 cab when the operator's cab is facing the front and the sprocket is at the rear of the machine.

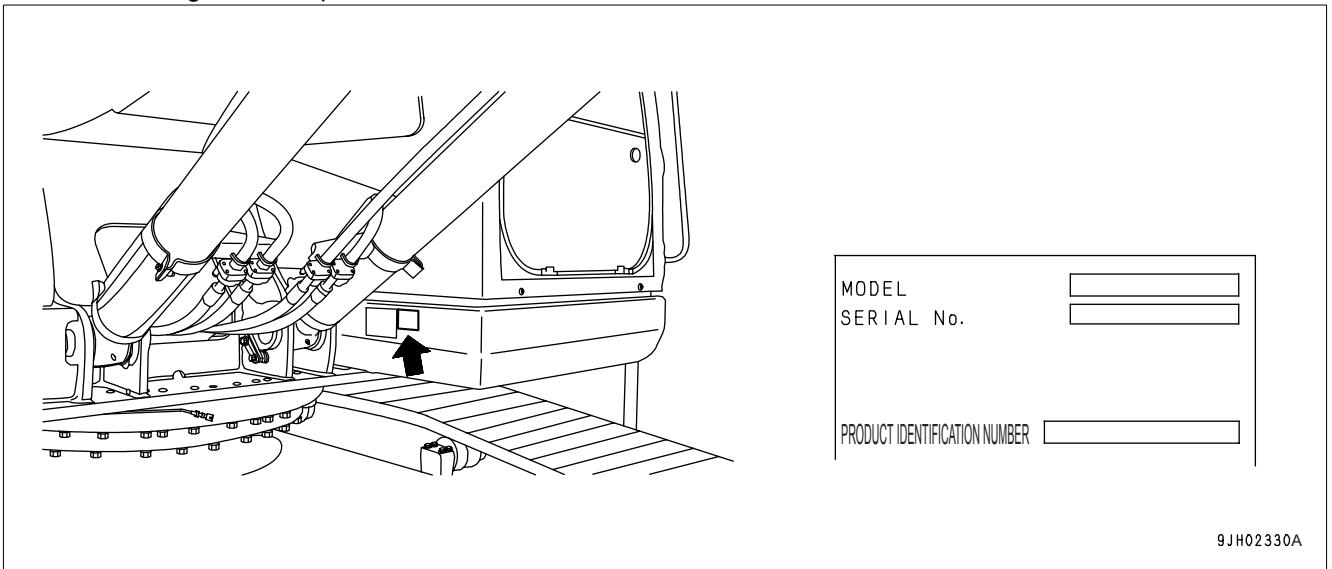


# PRODUCT INFORMATION

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

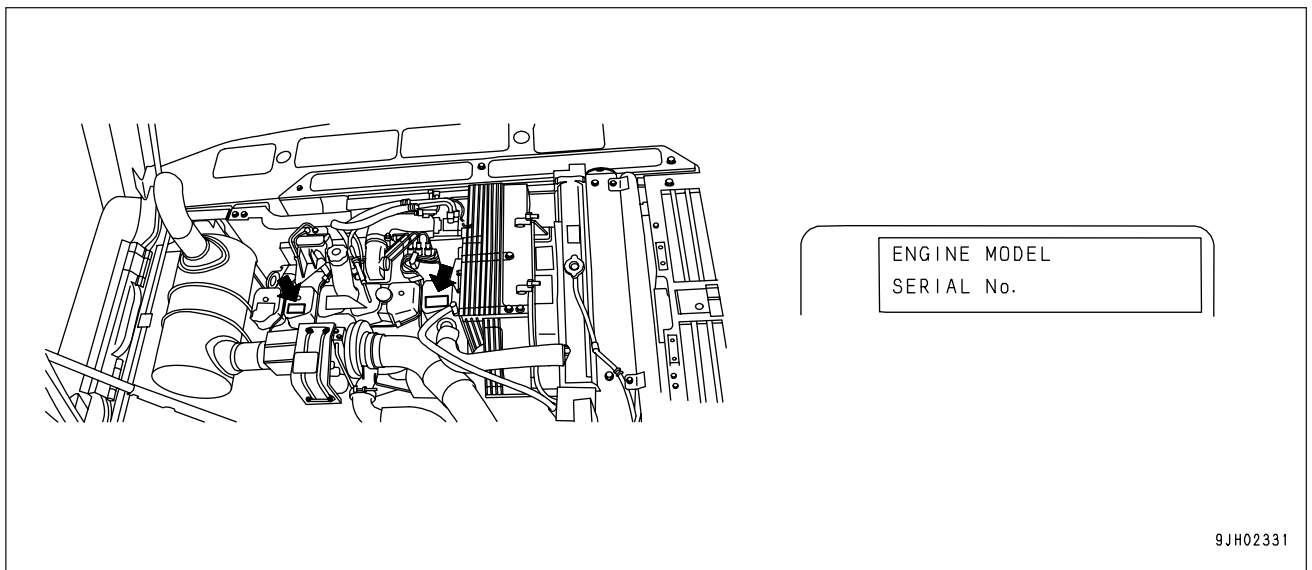
## MACHINE SERIAL NUMBER PLATE AND ITS LOCATION

On the bottom right of the operator's cab



## ENGINE SERIAL NUMBER PLATE AND ITS LOCATION

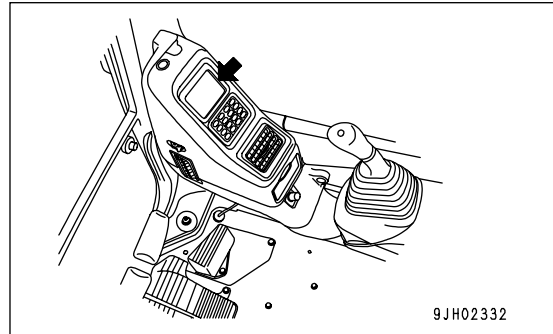
On the top of the No.1 cylinder head cover (The EPA auxiliary nameplate is on the top of the No. 5 cylinder head cover.)



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

## SERVICE METER LOCATION

On top of the machine monitor



## TABLE TO ENTER SERIAL NO. AND DISTRIBUTOR

---

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

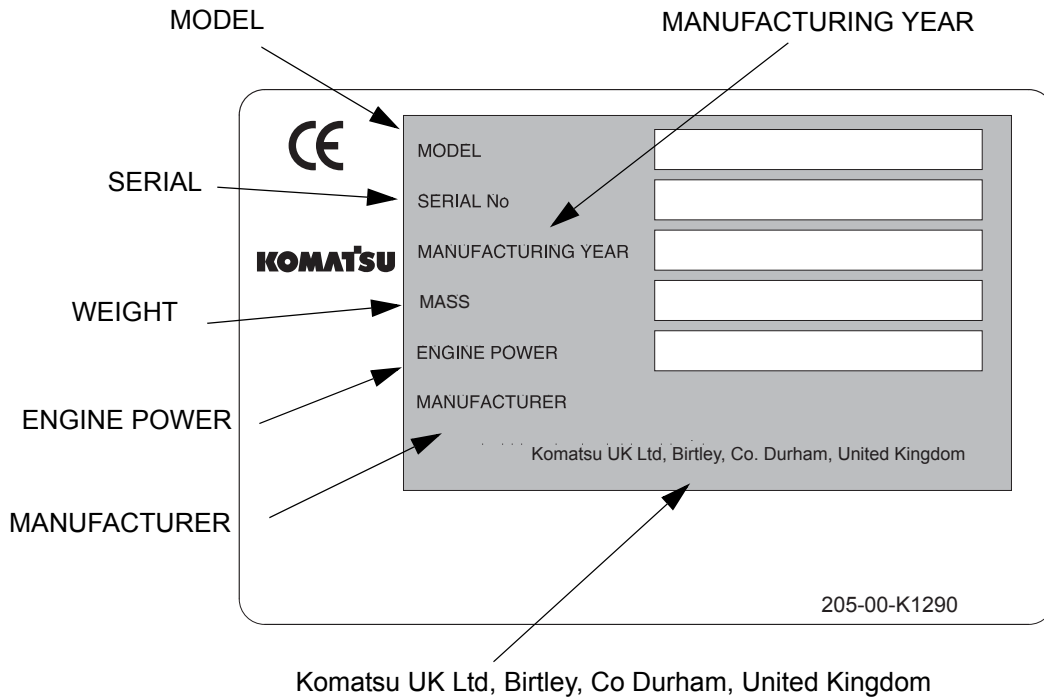
Distributor  
Address

Phone

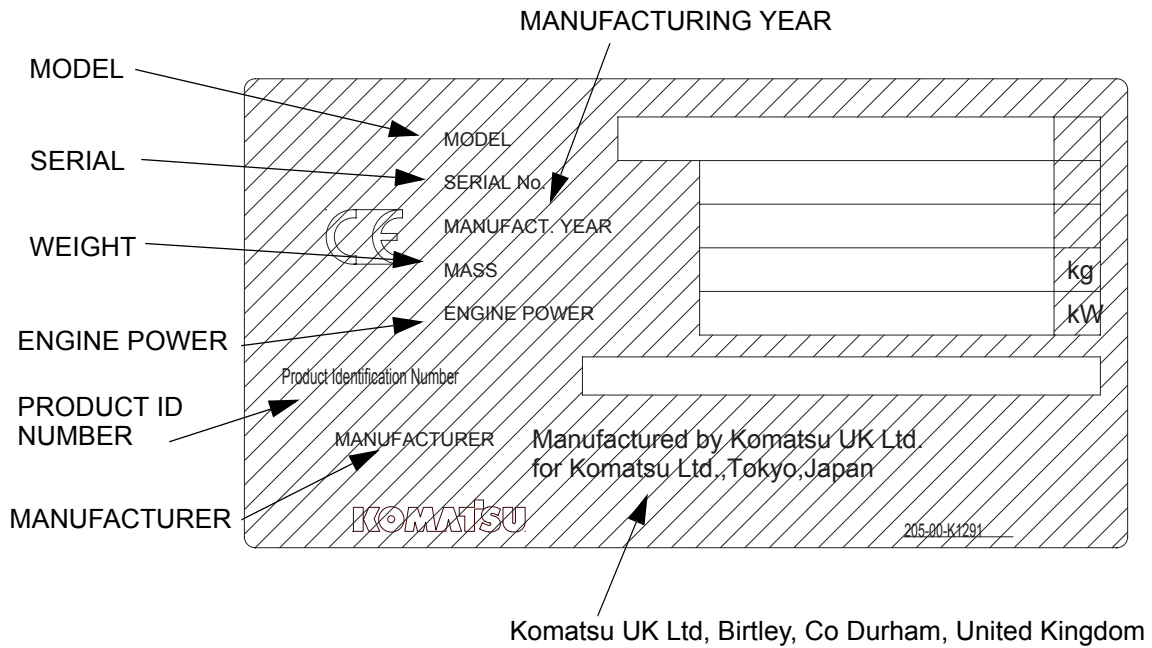
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# MACHINE SERIAL PLATE

Valid until 31 December 2003



Valid as of 1 January 2004



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# SAFETY

## WARNING

Please read and make sure that you fully understand precautions described 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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# POSITION FOR ATTACHING 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, there 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.

## POSITION FOR ATTACHING SAFETY LABELS

