

Operation & Maintenance Manual

D31EX, PX-21

D37EX, PX-21

D39EX, PX-21

BULLDOZER

SERIAL NUMBER

D31EX-21 - 50501 and up

D31PX-21 - 50501 and up

D37EX-21 - 5501 and up

D37PX-21 - 5501 and up

D39EX-21 -1501 and up

D39PX-21 -1501 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

Before beginning operation or maintenance, operators and maintenance personnel must always observe the following points.

Read this manual thoroughly and understand its contents fully.

Read the safety messages and safety labels given in this manual carefully so that they should be understood fully.

Keep this manual at the storage location for the Operation and Maintenance Manual given below so that all personnel involved in working on the machine can consult it periodically.

In case this manual should be lost or damaged, immediately contact Komatsu or your Komatsu distributor to obtain a new copy.

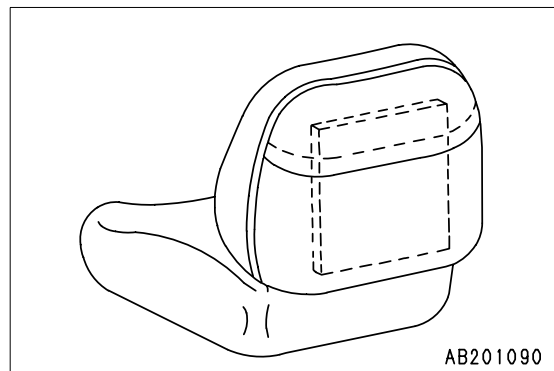
When you sell the machine, make sure that this manual should be provided to the new owner together with the machine.

In this manual, measurements are expressed in international standard units (SI). For the reference purpose, weight units used in the past are also displayed in { }.

Storage location for the Operation and Maintenance Manual:

If machine is equipped without cab.

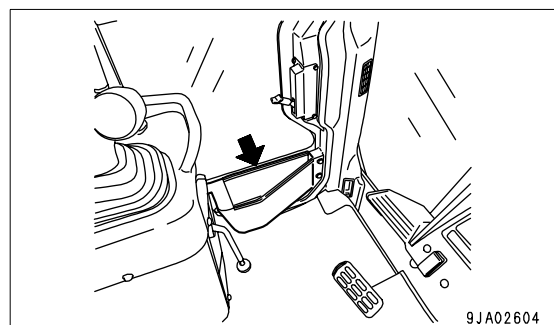
Pocket at rear of operator's seat



If machine is equipped with a cab.

Pocket at rear of operator's seat

Inside of right and left doors



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.

REMARK

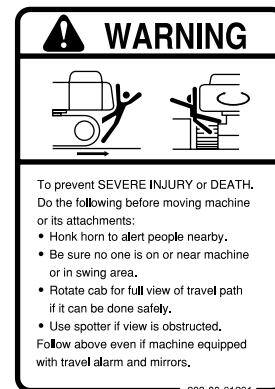
This gives information that is useful to know.

● **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.

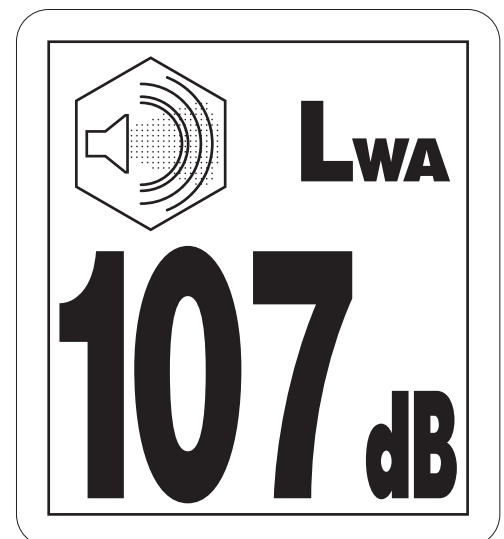
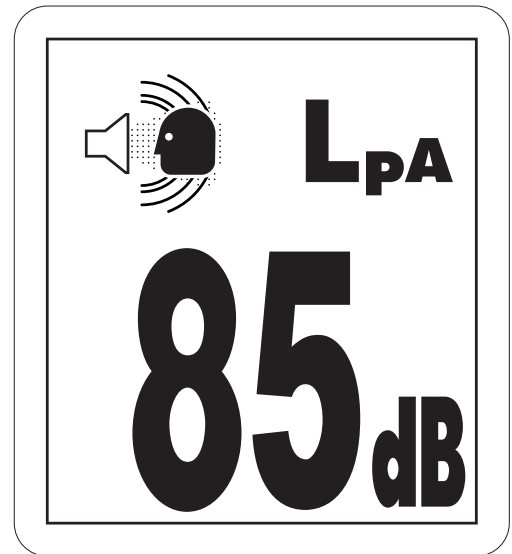
In no event should you engage in prohibited uses or actions described in this manual.

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

- 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 European directive 2000/14/EC.



VIBRATION

When used for its intended purpose, levels of vibration for the earthworking machine transmitted from the operator's seat are lower or equal to the test vibrations for the relative machinery class in compliance with ISO 7096. The actual acceleration value of the upper limbs is less than 2.5 m/s². The actual acceleration value for the body is less than 0.8 m/s². These values were determined using a representative machine and with the help of the measurement procedures that are defined in the directives ISO 2631/1 and ISO 5349.

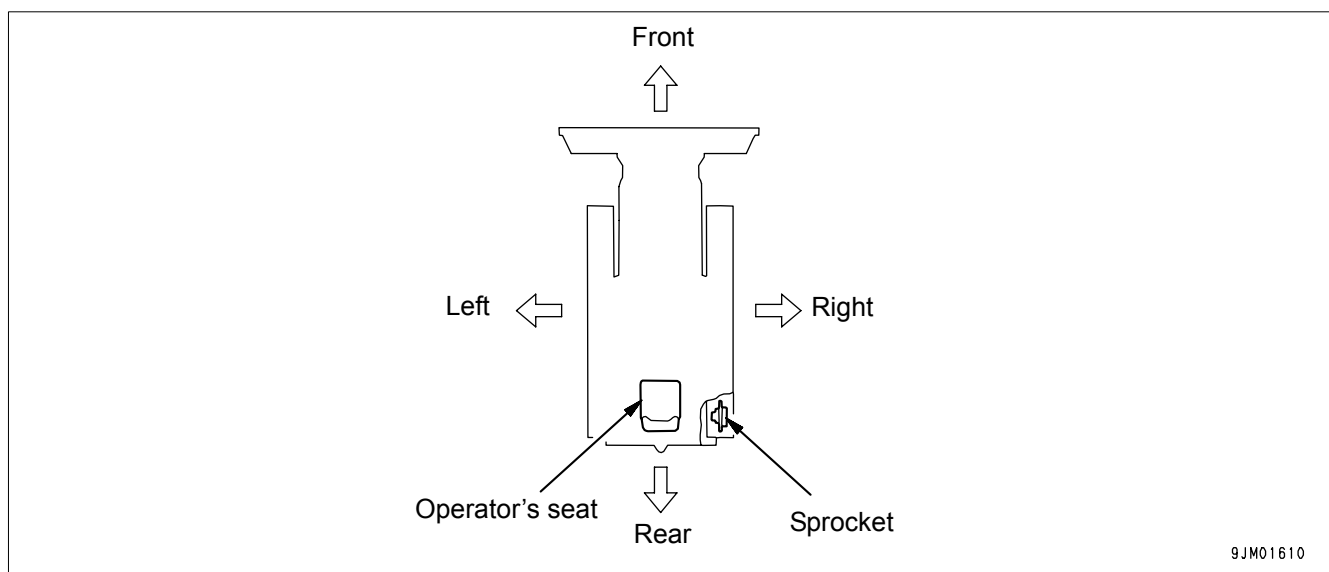
INTRODUCTION

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

- Dozing
- Smoothing
- Cutting into hard or frozen ground or ditching

See the section "WORK POSSIBLE USING BULLDOZER (3-95)" for further details.

FRONT/REAR, LEFT/RIGHT 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.

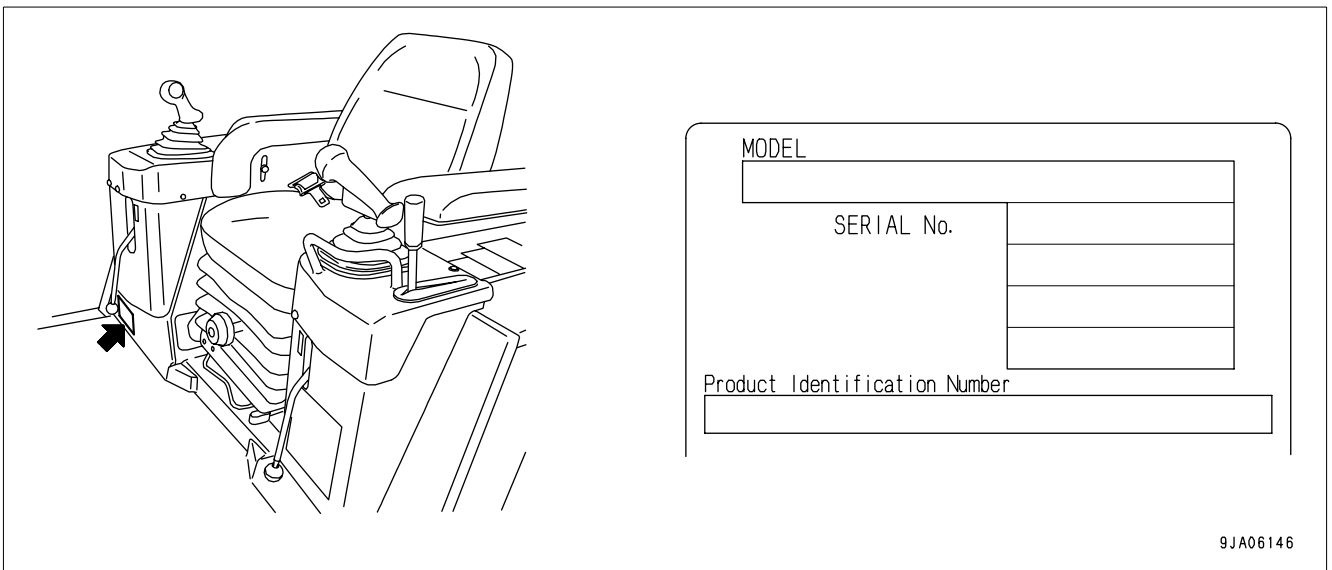
NECESSARY INFORMATION

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

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

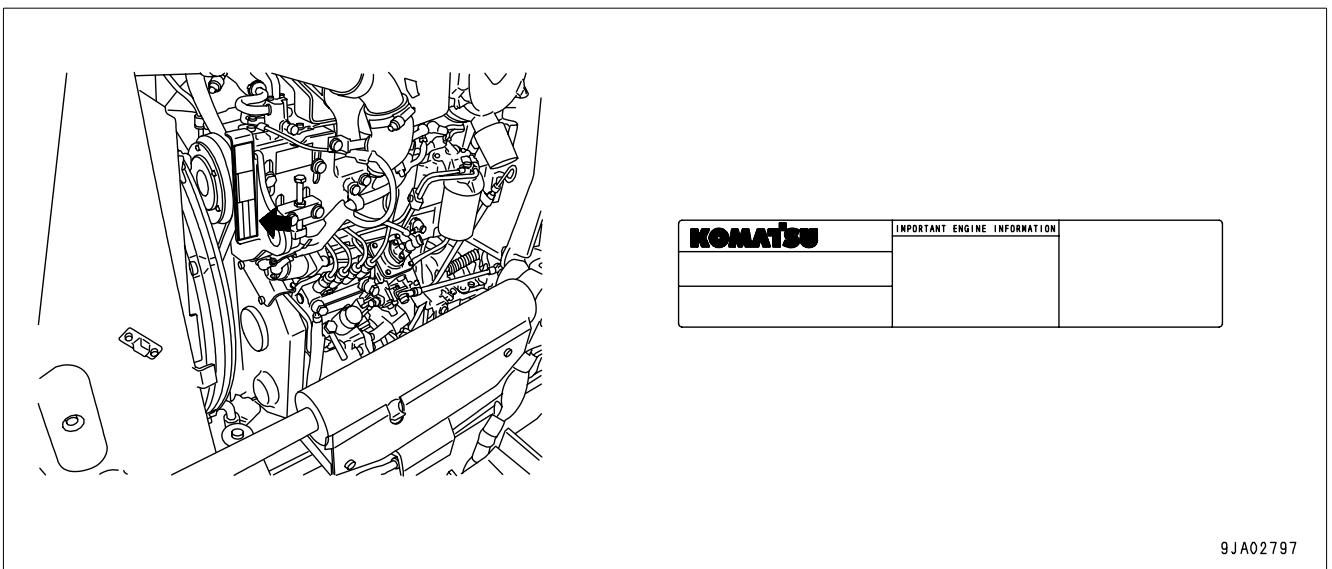
This is at the front bottom right of the operator's seat.

The design of the nameplate differs according to the territory.



ENGINE SERIAL NO. PLATE

This is at the front top of the engine on the left side machine.



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

POSITION OF SERVICE METER

The service meter is provided at the lower part of the monitor panel.

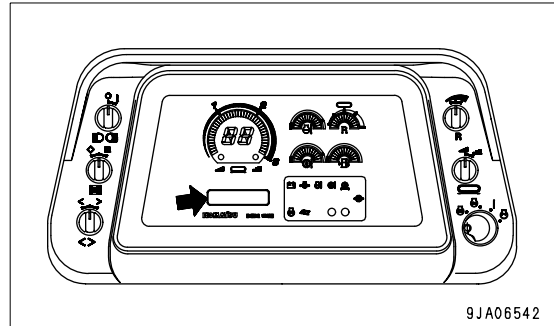


TABLE OF ENTER SERIAL NO. AND DISTRIBUTOR

Machine serial No.

Engine serial No.

Product Identification Number

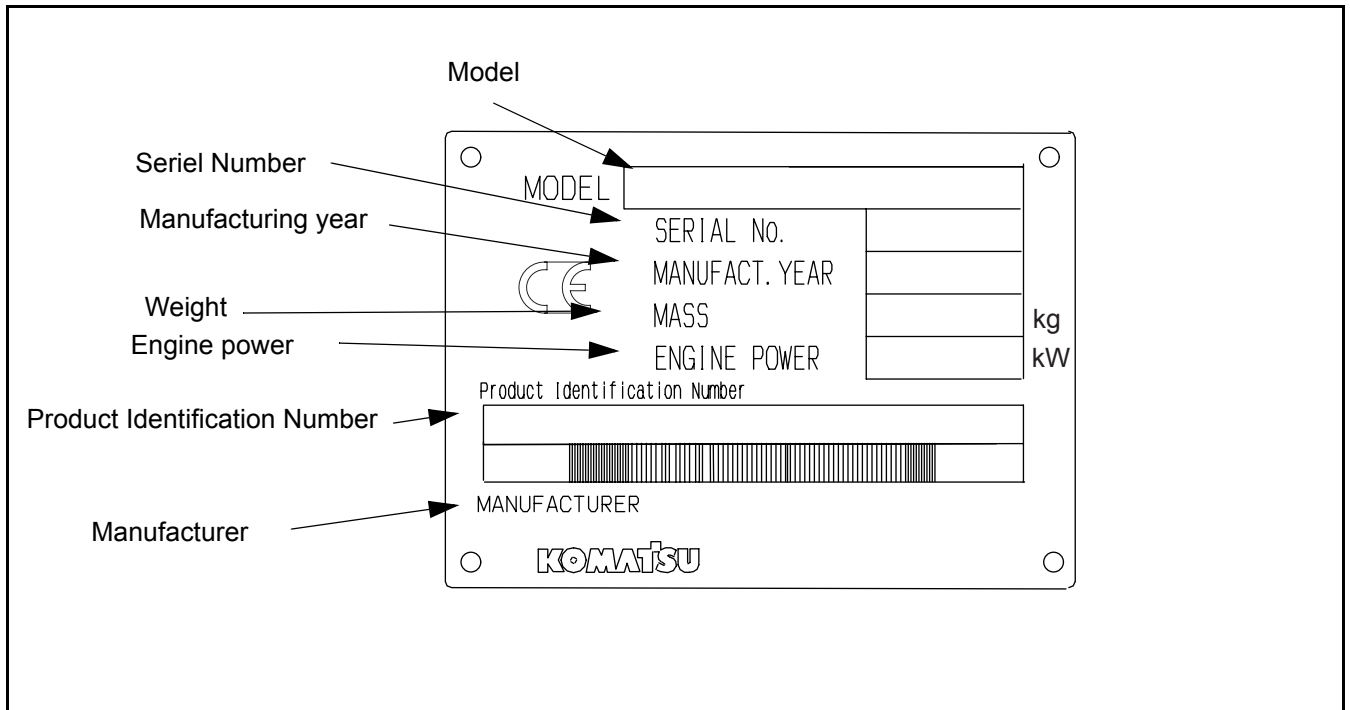
Manufacturers name:	KOMATSU LTD.
Address:	3-6 Akasaka Minato-ku, 101 Tokyo Japan

Distributor
Address

Phone

Service personnel for your
machine:

MACHINE SERIAL PLATE.



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COLOPHON

SAFETY



WARNING

Please be sure that you fully understand this manual and the 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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