

Operation & Maintenance Manual

PC210, PC210LC-6K PC240LC, PC240NLC-6K

HYDRAULIC EXCAVATOR

SERIAL NUMBER

PC210-6K	- K34552 and up
PC210LC-6K	- K34552 and up
PC240LC-6K	- K34227 and up
PC240NLC-6K	- K34227 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

This manual provides rules and guidelines which will help you use this machine safely and effectively. Keep this manual handy and have all personnel read it periodically. If this manual has been lost or has become dirty and can not be read, request a replacement manual from Komatsu or your Komatsu distributor.

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

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 for your machine or for questions regarding information in this manual.

WARNING

- **This operation & maintenance manual may contain attachments and optional equipment that are not available in your area. Please consult your local Komatsu distributor for those items you require.**
 - **This machine complies with EC directive (89/392/EEC). Machines complying with this directive display the CE mark**
 - **Improper operation and maintenance of this machine can be hazardous and could result in serious injury or death.**
 - **Operators and maintenance personnel should read this manual thoroughly before beginning operation or maintenance.**
 - **Some actions involved in operation and maintenance of the machine can cause a serious accident, if they are not done in a manner described in this manual.**
 - **The procedures and precautions given in this manual apply only to intended uses of the machine. If you use your machine for any unintended uses that are not specifically prohibited, you must be sure that it is safe for you and others. In no event should you or others engage in prohibited uses or actions as described in this manual.**
 - **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.**
 - **The description of safety is given in see "SAFETY INFORMATION" on page 2. and in "SAFETY" from page 17.**
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SAFETY INFORMATION

SAFETY MESSAGES

Most accidents are caused by the failure to follow fundamental safety rules for the operation and maintenance of machines.

To avoid accidents, read, understand and follow all precautions and warnings in this manual and on the machine before performing operation and maintenance.

To identify hazards on the machine pictorial decals are used (see "POSITION FOR ATTACHING SAFETY LABELS" on page 49).



RED WARNING TRIANGLE - This is used on safety labels where there is a high probability of serious injury or death if the hazard is not avoided. These safety messages or labels usually describe precautions that must be taken to avoid the hazard. Failure to avoid this hazard may also result in serious damage to the machine.



ORANGE WARNING TRIANGLE - This is used on safety labels where there is a potentially dangerous situation which could result in serious injury or death if the hazard is not avoided. These safety messages or labels usually describe precautions that must be taken to avoid the hazard. Failure to avoid this hazard may also result in serious damage of the machine.



YELLOW SAFETY TRIANGLE - This is used on safety labels for hazards which could result in minor or moderate injury if the hazard is not avoided. This word might also be used for a hazard where the only result could be damage to the machine.

NOTICE

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

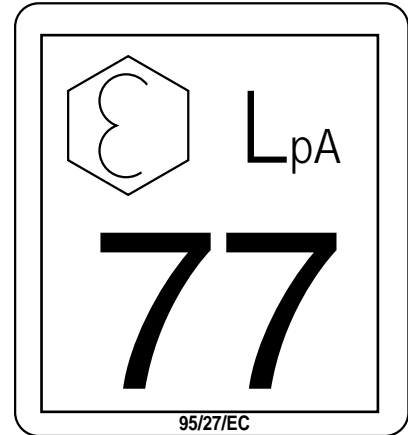
Safety precautions are described in "SAFETY" from page 17.

Komatsu cannot predict every circumstance that might involve a potential hazard in operation and maintenance. Therefore the safety message 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, you must be sure that you and others can do such procedures and actions safely and without damaging the machine. If you are unsure about the safety of some procedures, contact Komatsu or your Komatsu distributor.

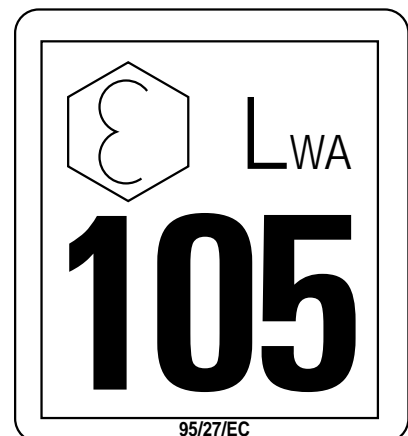
NOISE PC210, PC210LC-6K

Valid until 31 December 2001

- Operator ears noise value (Sound pressure level)



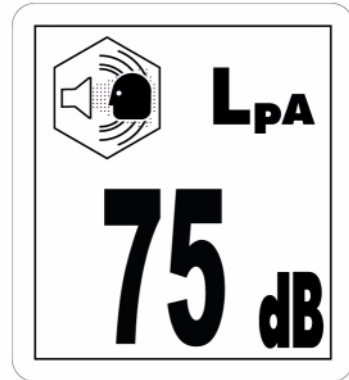
- Ambient noise value (Sound power level)



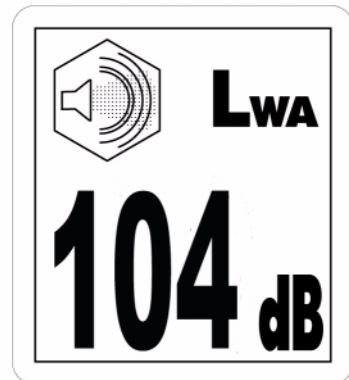
Noise level indicated is the guaranteed value as specified in the directive 86/662/EEC as amended by 95/27/EC

Valid as of 1 January 2002

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



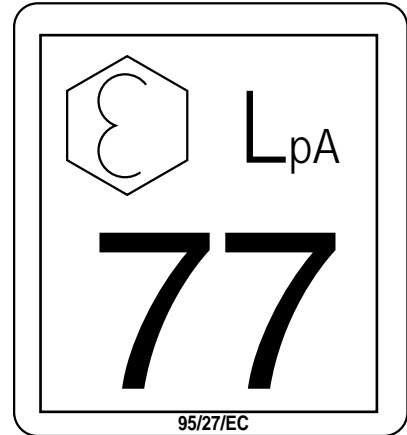
- Sound power level emitted. This is the guaranteed value as specified in European directive 2000/14/EC.



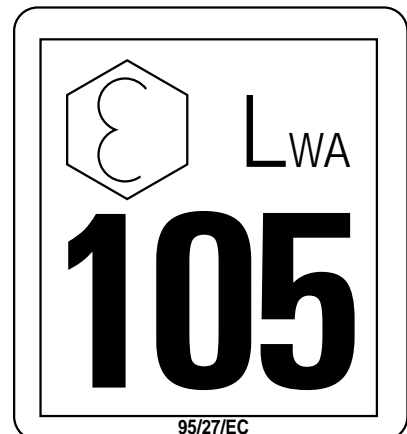
NOISE PC240LC, PC240NLC-6K

Valid until 31 December 2001

- Operator ears noise value (Sound pressure level)



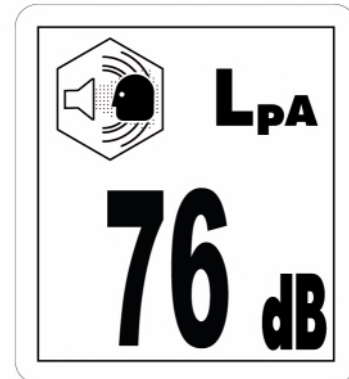
- Ambient noise value (Sound power level)



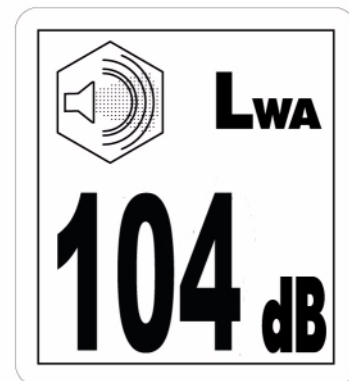
Noise level indicated is the guaranteed value as specified in the directive 86/662/EEC as amended by 95/27/EC

Valid as of 1 January 2002

- 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

The weighted root mean square acceleration value to which the operator's arms are subjected does not exceed 2.5 m/s²

The weighted root mean square acceleration value to which the operator's body is subjected does not exceed 0.5 m/s²

These results were obtained by accelerometers during trench digging.

INTRODUCTION

INTENDED USE

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

- Digging
- Smoothing work
- Ditching work
- Loading work

See the section “WORK POSSIBLE USING HYDRAULIC EXCAVATOR” on page 129 for further details

FEATURES

- This Komatsu HYDRAULIC EXCAVATOR is equipped with various controls based on an advanced electronics system.
- The monitor panel greatly facilitates daily maintenance and self-diagnosis.
- Working mode, travel speed and swing priority are selectable.
- Digging and lifting force can be increased by light-touch control. (For details, see operation section.)
- Adjustable wrist control levers make operations smooth and easy.
- Fresh filtered air conditioner assures comfortable operation.
- Low noise level and smart urban style design and colouring.
- Superb operation performance provided by powerful engine and high-performance hydraulic pumps.
- Low fuel consumption controlled by an electronic control system provides an environment-friendly machine.

BREAKING IN YOUR NEW MACHINE

Your Komatsu machine has been thoroughly adjusted and tested before shipment.

However, operating the machine under severe conditions at the beginning can adversely affect the performance and shorten the machine life.

Be sure to break in the machine for the initial 100 hours (as indicated by the hour meter.)

During breaking in:

- Idle the engine for 5 minutes after starting it up.
- Avoid operation with heavy loads or at high speeds.
- Sudden starting or acceleration, unnecessarily abrupt braking and sharp turning should be avoided except in cases of emergency.

Additionally for the first 20 hours

- Avoid operating engine for prolonged periods at constant speed (including idle.)
- Avoid high speed travelling for periods of more than 5 minutes.

Pay particular attention to oil pressure and temperature indicators & check coolant and oil levels frequently during breaking in.

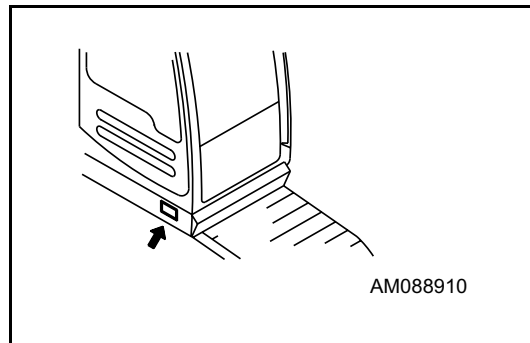
The precautions given in this manual for operating, maintenance, and safety procedures are only those that apply when this product is used for the specified purpose. If the machine is used for a purpose that is not listed in this manual, Komatsu cannot bear any responsibility for safety. All consideration of safety in such operations is the responsibility of the user.

Operations that are prohibited in this manual must never be carried out under any circumstances.

LOCATION OF PLATES, TABLES TO ENTER SERIAL NO. AND DISTRIBUTOR

MACHINE SERIAL NO. PLATE POSITION

On the front bottom right of the operator's cab



ENGINE SERIAL NO. PLATE POSITION

On the upper side of the engine cylinder head cover.

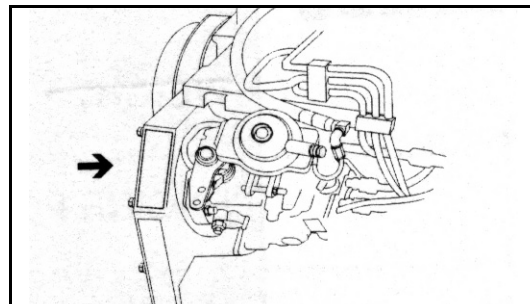


TABLE TO ENTER SERIAL NO. AND DISTRIBUTOR

Machine serial No.



Engine serial No.

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

Distributor
Address

Phone

MACHINE SERIAL PLATE.

 	MODEL	<input type="text"/>
	SERIAL No	<input type="text"/>
	MANUFACTURING YEAR	<input type="text"/>
	MASS	<input type="text"/>
	ENGINE POWER	<input type="text"/>
	MANUFACTURER	
Komatsu UK Ltd, Birtley, Co. Durham, United Kingdom		

205-00-K1290

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SAFETY

 **WARNING**

Read and follow all safety precautions. Failure to do so may result in serious injury or death.

This safety section also contains precautions for optional equipment and attachments.

⚠ WARNING: For reasons of safety, always follow these safety precautions.

GENERAL PRECAUTIONS

SAFETY RULES

- ONLY trained and authorised personnel can operate and maintain the machine.
- Follow all safety rules, precautions and instructions when operating or performing maintenance on the machine.
- When working with another operator or a person on worksite traffic duty, be sure all personnel understand all hand signals that are to be used.
- A seat belt must be worn at all times when operating machinery.

SAFETY LABELS

- Please read and understand the safety labels stuck to the machine.
- Always keep the safety labels clean.
- If the safety label comes off or is lost or damaged, stick it on again or contact your Komatsu distributor and replace it with a new part.

SAFETY FEATURES

- Be sure all guards and covers are in their proper position. Have guards and covers repaired if damaged.
- Use safety features such as safety lock lever properly.
- NEVER remove any safety features. ALWAYS keep them in good operating condition.

Safety lever, see “PARKING THE MACHINE” on page 133.

Seat belt → see “USING THE SEAT BELT” on page 103.

- Improper use of safety features could result in serious bodily injury or death.

