# **Operation & Maintenance** Manual

# PC400,400LC-6 PC450,450LC<sub>-6</sub>

**HYDRAULIC EXCAVATOR** 

SERIAL NUMBERS PC400,400LC-32250 PC450,450LC-12144



#### **▲** 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 near the machine for reference and periodically reviewed by all personnel who will come into contact with it.

#### NOTICE

Komatsu has Operation & Maintenance Manuals written in some other languages. If a foreign language manual is necessary, contact your local distributor for availability.



# 1. 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 of your machine or for questions regarding information in this manual.

This manual may contain attachments and optional equipment that are not available in your area. Consult Komatsu or your Komatsu distributor for those items you may require.

## · 🛕 WARNING -

- 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.
  - Keep this manual in the luggage box to the rear of the operator seat, and have all personnel involved in working on the machine read the manual periodically.
- 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 SAFETY INFORMATION on page 0-2 and in SAFETY from page 1-1.

#### **CALIFORNIA**

# **Proposition 65 Warning**

Diesel engine exhaust and some of its constituents are known to the State of California to cause cancer, birth defects, and other reproductive harm.

# 2. SAFETY INFORMATION

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 safety messages in this manual and on machine labels, the following signal words are used.



**DANGER** 

This word is used on safety messages and 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.



WARNING -

This word is used on safety messages and 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 to the machine.



 This word is used on safety messages and safety labels for hazards which could result in minor or moderate injury if the hazard is not avoided. This word might also be word for hazards 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 1-1.

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, 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 distributor.

# 3. INTRODUCTION

#### 3.1 INTENDED USE

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

- Digging work
- Smoothing work
- Ditching work
- Loading work

See the section "12.14 WORK POSSIBLE USING HYDRAULIC EXCAVATOR" for further details.

#### 3.2 FEATURES

- This Komatsu HYDRAULIC EXCAVATOR is equipped with various controls based on an advanced electronics system.
  - o 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.
- Air-conditioned operator's cab assures comfortable operation.
- Low noise level and smart urban-style design and coloring.
- Superb operating performance provided by powerful engine and high-performance hydraulic pumps.
- Low fuel consumption controlled by an electronic control system provides an environment-friendly machine.

### 3.3 BREAKING IN THE 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 service meter.) During breaking in:

- Idle the engine for 5 minutes after starting it up.
- Avoid operation with heavy loads or at high speeds.
- Avoid sudden starts, sudden acceleration, sudden steering and sudden stops except in cases of emergency.

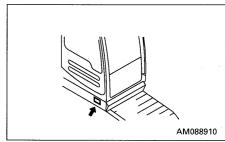
The precautions given in this manual for operating, maintenance, and safety procedures are only those that apply when this product is used for the specified purpose. If the machine is used for a purpose that is not listed in this manual, Komatsu cannot bear any responsibility for safety. All consideration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

# 4. LOCATION OF PLATES, TABLE TO ENTER SERIAL NO. AND DISTRIBUTOR

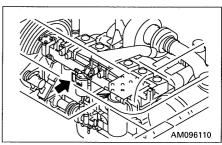
## 4.1 MACHINE SERIAL NO. PLATE POSITION

On the bottom right of the operator's cab



# 4.2 ENGINE SERIAL NO. PLATE POSITION

On the upper side of the engine cylinder head cover



# 4.3 TABLE TO ENTER SERIAL NO. AND DISTRIBUTOR

Machine serial No.:		
Engine serial No.:		
Distributor name:		
Address:	Phone:	
Service personnel for your machine:		

#### **REMARKS**



Thank you very much for your reading.

Please click here to get more information.