Operation & Maintenance Manual

EEAM024400

D65EX-15E0
D65PX-15E0

BULLDOZER

SERIAL NUMBER
D65EX-15E0 - 69001 and up
D65PX-15E0 - 69001 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

BEFORE READING THIS MANUAL

This manual gives details of the operation and methods of inspection and maintenance for this machine that must be obeyed in order to use the machine safely. Most accidents are caused by the failure to follow fundamental safety rules for the operation and maintenance of machines.

Read, understand and follow all precautions and warnings in this manual and on the machine before performing operation and maintenance. Failure to do so may result in serious injury or death.

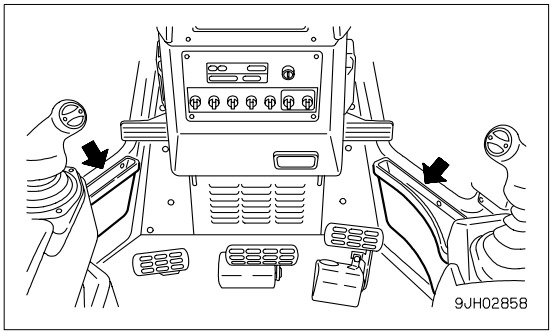
Komatsu cannot predict every circumstance that might involve a potential hazard when the machine is used. Therefore, the safety messages in this manual and on the machine may not include all possible safety precautions. If you carry out any operation, inspection, or maintenance under conditions that are not described in this manual, understand that it is your responsibility to take the necessary precautions to ensure safety. In no event should you or others engage in the prohibited uses or actions described in this manual. Improper operation and maintenance of the machine can be hazardous and could result in serious injury or death.

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

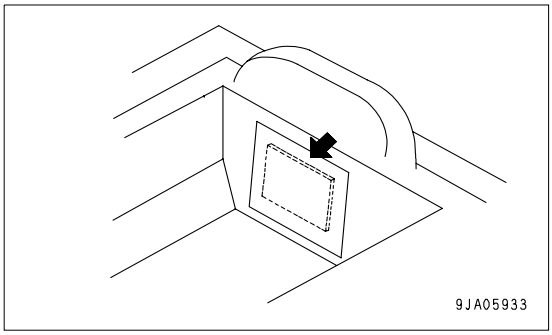
Always keep this Operation and Maintenance Manual in the location shown on the right so that all relevant personnel can read it at any time.

Operation and Maintenance Manual Storing Place

For a machine with a cab, a pocket is provided on the inside of both right and left doors.



For a machine with a ROPS canopy, a pocket is provided at the end of the floor.



If this manual is lost or damaged, contact your distributor immediately to arrange for its replacement. For details regarding the machine serial No. you will need to provide your Komatsu distributor, see “TABLE TO ENTER SERIAL NO. AND DISTRIBUTOR (1-13)“.

This manual uses the international units (SI) for units of measurement. For reference, units that have been used in the past are given in ( ).

The explanations, values, and illustrations in this manual have been prepared based on the latest information available as of the date of its publication. Continuing improvements in the design of this machine may lead to additional changes that are not reflected in this manual. Consult Komatsu or your Komatsu distributor for the latest available information concerning your machine or with questions regarding information contained in this manual.

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

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, 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.

IMPORTANT SAFETY INFORMATION

To enable you to use the machine safely, and to prevent injury to operators, service personnel or bystanders, the precautions and warnings included in this manual and the safety signs attached to the machine must always be followed.

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

The “Safety Alert Symbol“ identifies important safety messages on machines, in manuals, and elsewhere. When you see this symbol, be alert to the risk of personal injury or death. Follow the instructions in the safety message.

DANGER	This signal word indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury
WARNING	This signal word indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
CAUTION	This signal word indicates a potentially hazardous situation exists which, if not avoided, may result in minor or moderate injury.

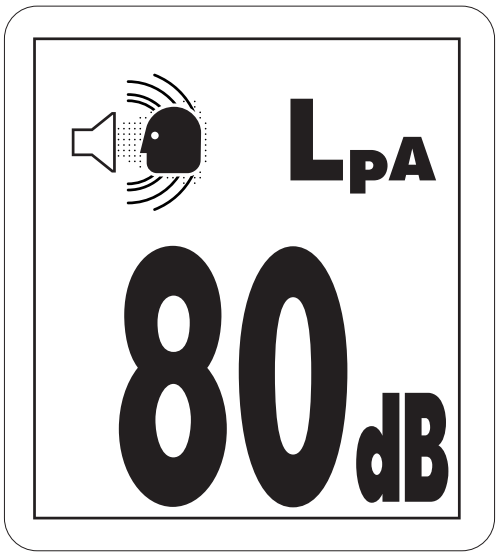
The following signal words are used to alert you to information that must be followed to avoid damage to the machine.

NOTICE	This precaution is given where the machine may be damaged or the service life reduced if the precaution is not followed.
REMARKS	This word is used for information that is useful to know.

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.

- If equipped with air suspension seat

The actual acceleration value for the hands and arms is less than or equal to 2.5 m/s². The actual acceleration value for the body is less than or equal to 0.5 m/s².

- If equipped with mechanical suspension seat

The actual acceleration value for the hands and arms is less than or equal to 2.5 m/s².
D65EX-15 : the actual acceleration value for the body is 0.63 m/s².
D65EXL-15, D65PX-15 : the actual acceleration value for the body is 0.68 m/s².

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:

(WHEEL LOADER:) V-shape loading

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

(TRACTOR DOZER:) Dozing and spreading material through forward/reversing motion

(Rigid/Articulate dumper:) Work cycle (including waiting, travelling, loading, travelling with load, unloading, and travelling without load)

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.

INTENDED USE

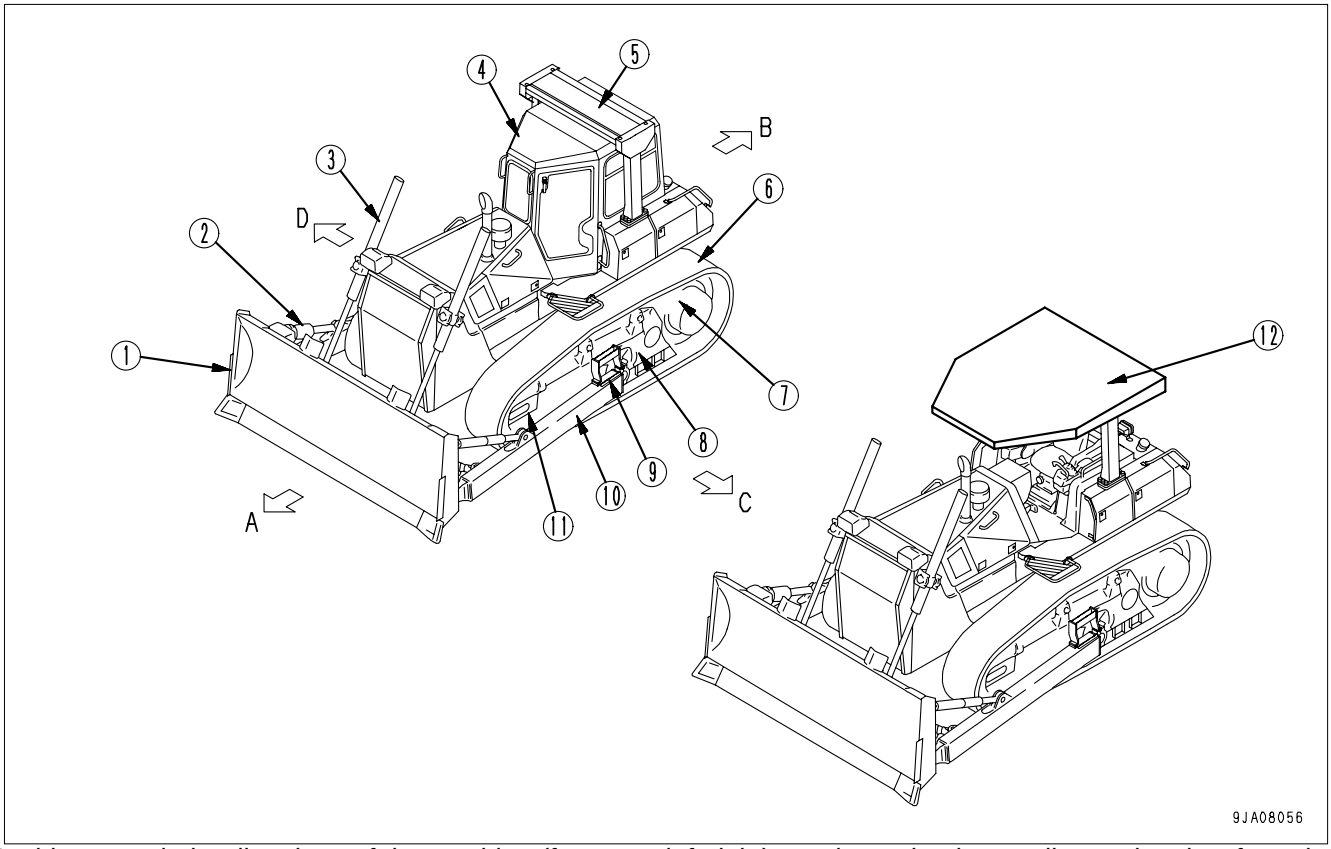
USE OF MACHINE

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

- Dozing
- Smoothing
- Cutting into hard or frozen ground or ditching
- Felling trees, removing stumps

See the section “WORK POSSIBLE USING BULLDOZER (3-88)“ for further details.

GENERAL VIEW AND DIRECTIONS OF MACHINE



In this manual, the directions of the machine (front,rear,left,right) are determined according to the view from the operator's seat in the direction of travel (front) of the machine.

(1) Blade
(2) Tilt cylinder
(3) Lift cylinder
(4) Cab
(5) ROPS guard
(6) Track shoe
(7) Sprocket
(8) Track frame
(9) Step
(10) Frame
(11) Idler
(12) ROPS canopy

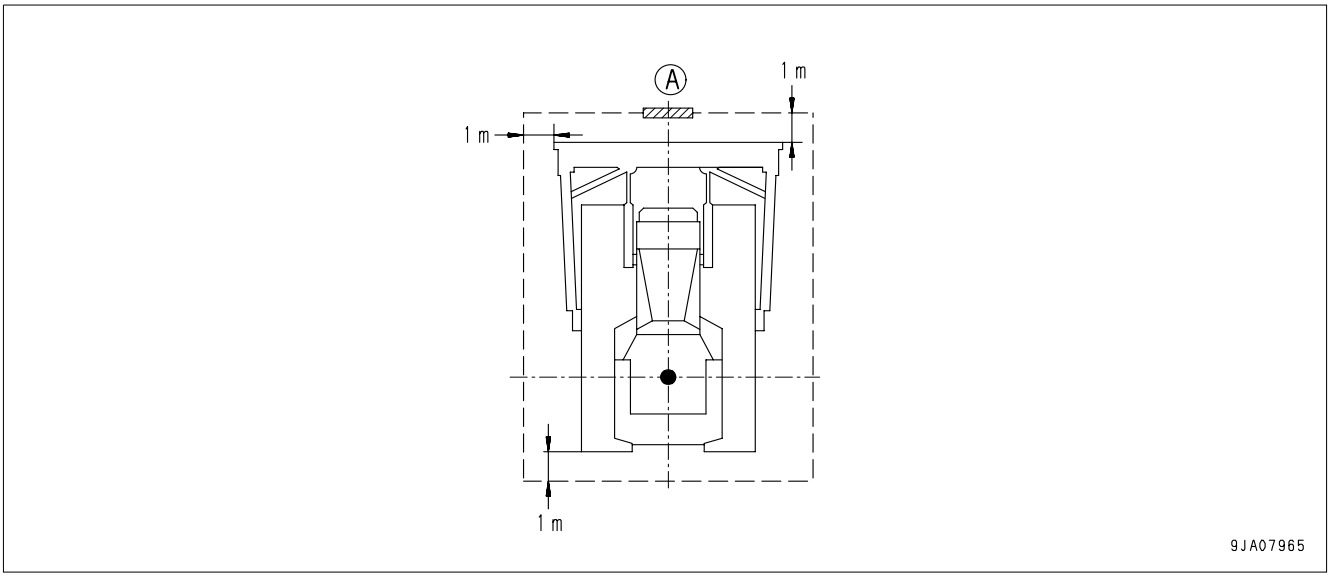
(A) Front
(B) Rear
(C) Left
(D) Right

VISIBILITY FROM OPERATOR'S SEAT

The visibility standards (ISO 5006) for this machine require a view shown in the diagram below.

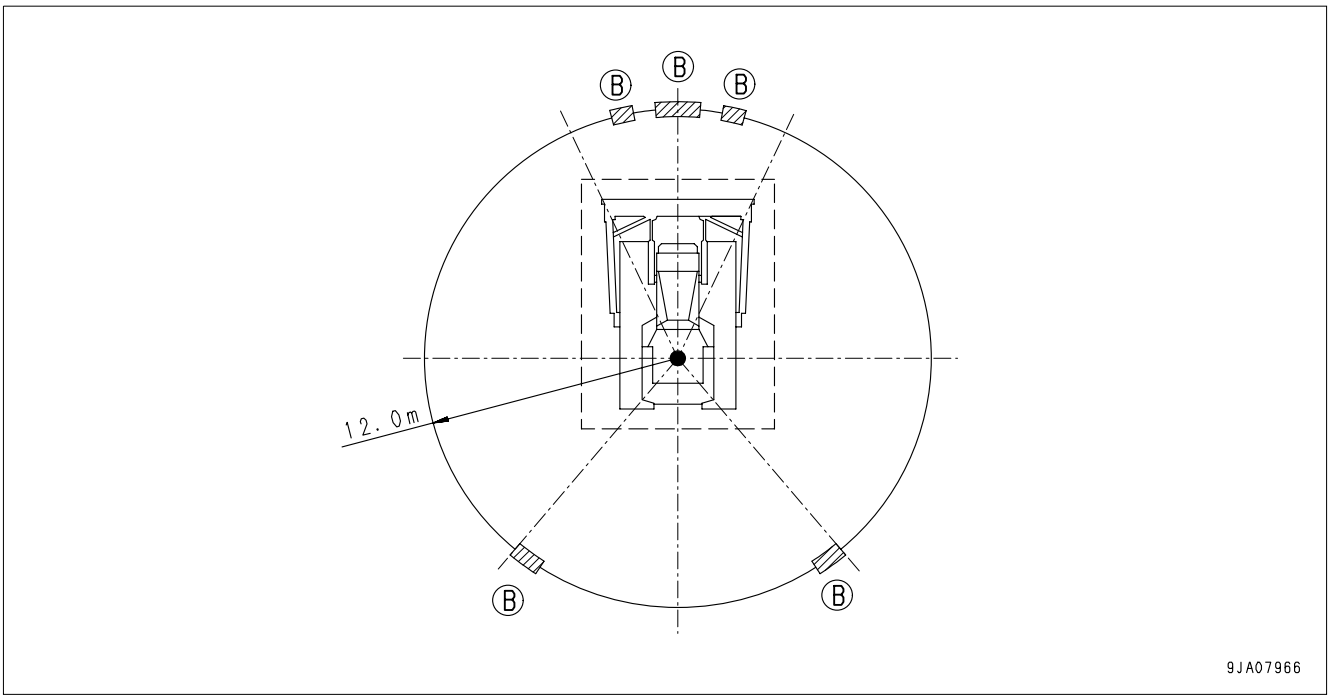
PROXIMITY VISIBILITY

The figure bellows shows a front visibility from the machine at a spot 1.0 m away from the side and 1.5 m above the ground. Shaded area (A) in the figure shows an area whose view is blocked by part of the machine. Operate the machine, fully aware that the machine has a portion that an operator cannot see.



12M CIRCUMFERENCE VISIBILITY

The figure below shows a visibility from the machine within a circle of 12 m in radius. Shaded area (B) in the figure shows an area whose view is blocked by part of the machine. Operate the machine, fully aware that the machine has a portion that an operator cannot see.



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 idle 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.

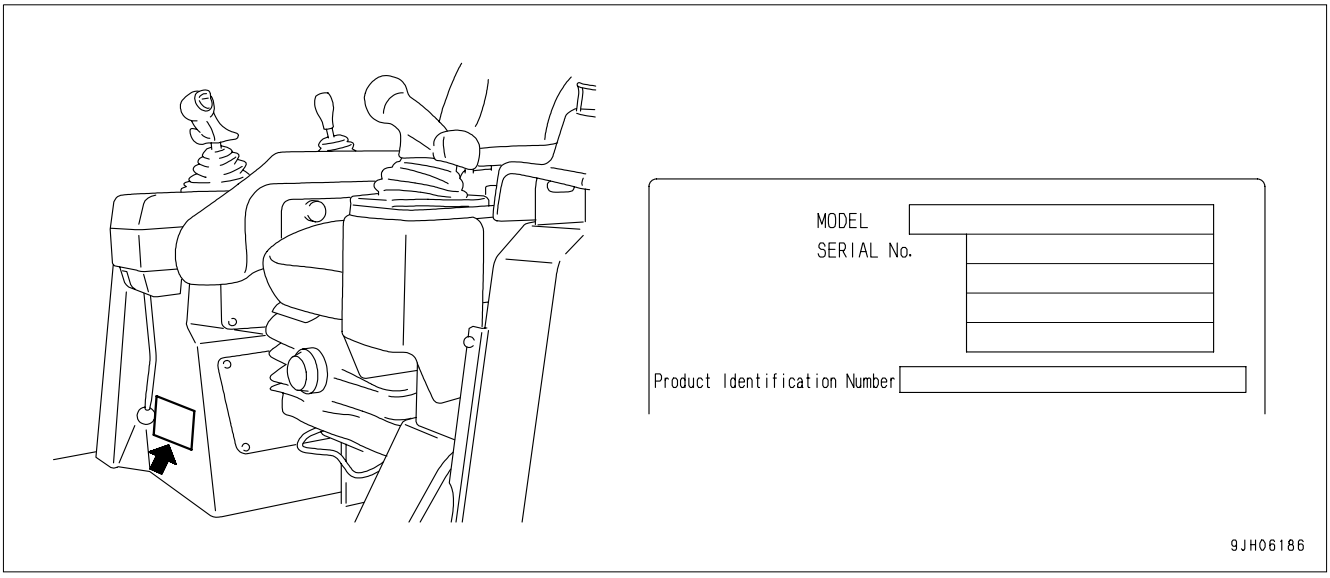
LOCATION OF PLATES, TABLE TO ENTER SERIAL NO. AND DISTRIBUTOR

When ordering replacement parts, please inform your Komatsu distributor of the following.

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

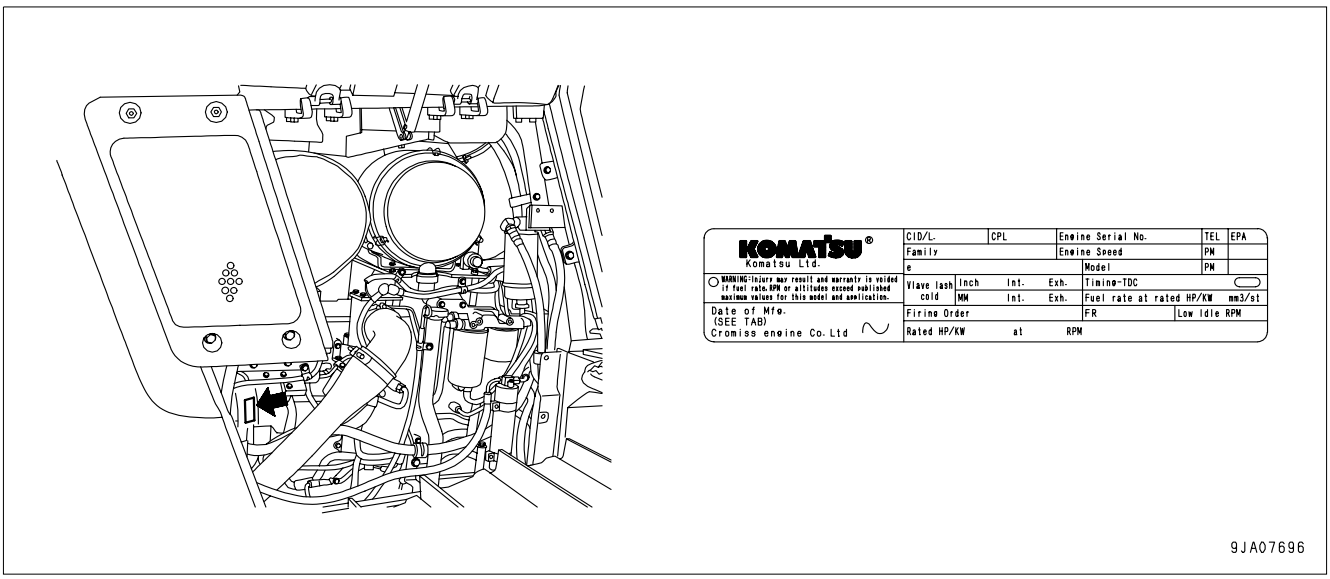
This is at the front bottom right of the operator's seat.

The design of the nameplate differs according to the territory.



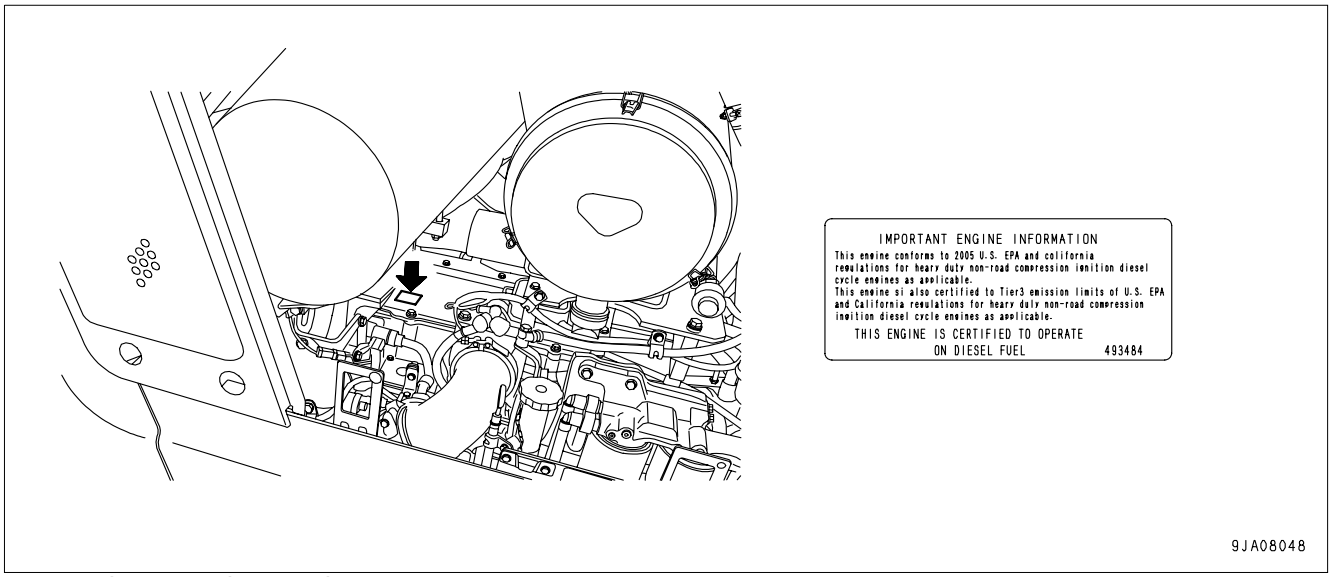
ENGINE SERIAL NO. PLATE POSITION

The engine serial No. plate is located on the side of the engine front cover on the left side of the machine.



ADDITIONAL EPA NAMEPLATE

The additional EPA nameplate is located on top of the engine head cover on the left side of the machine.



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

SERVICE METER POSITION

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

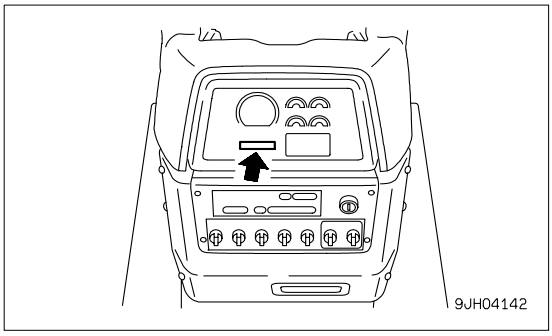
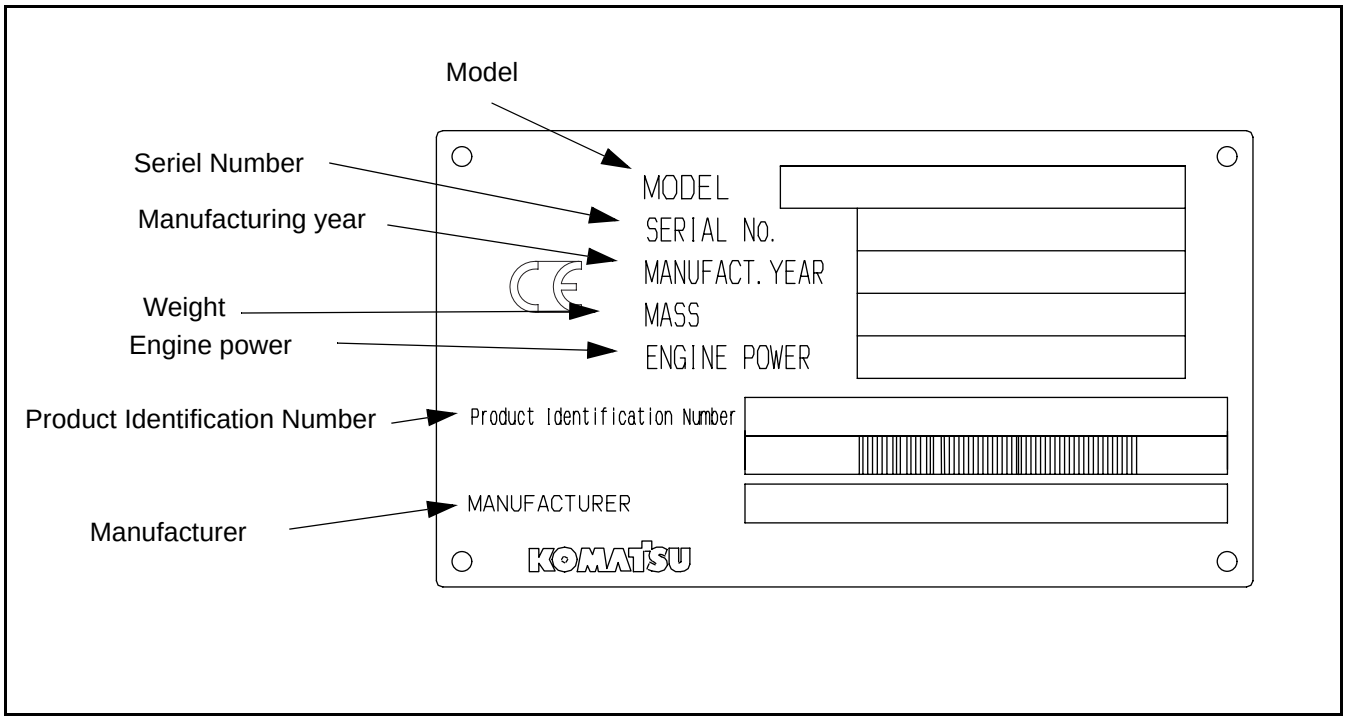


TABLE TO ENTER SERIAL NO. AND DISTRIBUTOR

Machine serial No.	
Engine serial No.	
Product Identification Number (PIN)	
Manufacturers name: Address:	KOMATSU LTD. 3-6 Akasaka Minato-ku, 101 Tokyo Japan
Distributor Address	
Phone	
Service personnel for your machine:	

MACHINE SERIAL NUMBER PLATE



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