SEAM022100

Operation & Maintenance Manual

avance

PC600-6
PC600LC-6

HYDRAULIC EXCAVATOR

SERIAL NUMBERS PC600 -10001 and up
PC600LC -10001

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.

KOMATSU®

MidWestTech | Komatsu PC600-6, PC600LC-6 Hydraulic Excavator Operation & Maintenan... Order the manual at mid-west-tech.com >

5. CONTENTS

1. **Foreword** 0- 1

2. **Safety information** 0- 2

3. **Introduction** 0- 3

4. **Location of plates, table to enter serial No. and distributor** 0- 4

SAFETY

6. **General precautions** 1- 2

7. **Precautions during operation** 1- 9
   - 7.1 Before starting engine 1- 9
   - 7.2 After starting engine 1-11
   - 7.3 Transportation 1-18
   - 7.4 Battery 1-19
   - 7.5 Towing 1-21
   - 7.6 Lifting operations 1-21
   - 7.7 Bucket with hook 1-22

8. **Precautions for maintenance** 1-23
   - 8.1 Before carrying out maintenance 1-23
   - 8.2 During maintenance 1-27

9. **Position for attaching safety labels** 1-33

OPERATION

10. **General view** 2- 2
    - 10.1 General view of machine 2- 2
    - 10.2 General view of controls and gauges 2- 3

11. **Explanation of components** 2- 4
    - 11.1 Machine monitor 2- 4
    - 11.2 Switches 2-15
    - 11.3 Control levers, pedals 2-20
    - 11.4 Ceiling window (civil engineering specification machine) 2-23
    - 11.5 Front window (civil engineering specification machine) 2-24
    - 11.6 Door lock 2-26
    - 11.7 Cap, cover with lock 2-27
    - 11.8 Hot and cool box 2-28
    - 11.9 Luggage box 2-28
    - 11.10 Ashtray 2-28
    - 11.11 Handling air conditioner 2-29
    - 11.12 Car radio 2-32
    - 11.13 Power supply socket 2-36
    - 11.14 Fuse 2-37
    - 11.15 Fusible link 2-38
    - 11.16 Controllers 2-38
    - 11.17 Tool holder (cloth bag) 2-38
    - 11.18 Handling grease pump 2-38
    - 11.19 Handling accumulator 2-41

MidWestTech | Komatsu PC600-6, PC600LC-6 Hydraulic Excavator Operation & Mainte... Order the manual at mid-west-tech.com >

12. Operation 2-42
12.1 Check before starting engine 2-42
12.2 Starting engine 2-51
12.3 Operations and checks after starting engine 2-53
12.4 Moving machine off 2-58
12.5 Steering machine 2-61
12.6 Stopping machine 2-63
12.7 Swinging 2-64
12.8 Operation of work equipment 2-65
12.9 Handling working mode 2-66
12.10 Prohibitions for operation 2-67
12.11 Precautions for operation 2-69
12.12 Precautions when traveling up or down hills 2-70
12.13 How to escape from mud 2-72
12.14 Work possible using hydraulic excavator 2-73
12.15 Replacement of bucket 2-74
12.16 Parking machine 2-75
12.17 Check after finishing work 2-76
12.18 Stopping engine 2-77
12.19 Check after stopping engine 2-78
12.20 Locking 2-78

13. Transportation 2-79
13.1 Loading, unloading work 2-79
13.2 Precautions for loading 2-81
13.3 Precautions for transportation 2-81
13.4 Method of lifting machine 2-82
13.5 Transportation posture 2-83
13.6 Procedure for increasing or reducing track frame gauge 2-87

14. Cold weather operation 2-89
14.1 Precautions for low temperature 2-89
14.2 Precautions after completion of work 2-91
14.3 After cold weather 2-91

15. Long-term storage 2-92
15.1 Before storage 2-92
15.2 During storage 2-93
15.3 After storage 2-93
15.4 Starting machine after long-term storage 2-93

16. Troubleshooting 2-94
16.1 When machine runs out of fuel 2-94
16.2 Phenomena that are not failures 2-94
16.3 Method of towing machine 2-94
16.4 Precautions on particular jobsites 2-95
16.5 If battery is discharged 2-95
16.6 Other trouble 2-99

MidWestTech | Komatsu PC600-6, PC600LC-6 Hydraulic Excavator Operation & Mainte... Order the manual at mid-west-tech.com >

MAINTENANCE

17. Guides to maintenance 3- 2

18. Outlines of service 3- 4
18.1 Outline of oil, fuel, coolant 3- 4
18.2 Outline of electric system 3- 7
18.3 Outline of hydraulic system 3- 7
18.4 Releasing pressure 3- 8
18.5 Bleeding air from circuit 3- 9

19. Wear parts list 3-12

20. Use of fuel, coolant and lubricants according to ambient temperature 3-13

21. Standard tightening torques for bolts and nuts 3-17
21.1 Introduction of necessary tools 3-17
21.2 Torque list 3-18

22. Periodic replacement of safety critical parts 3-19

23. Maintenance schedule chart 3-20
23.1 Maintenance schedule chart 3-20

24. Service Procedure 3-24
24.1 Initial 250 hours service 3-24
24.2 When required 3-25
24.3 Check before starting 3-39
24.4 Every 10 hours service 3-40
24.5 Every 100 hours service 3-42
24.6 Every 250 hours service 3-43
24.7 Every 500 hours service 3-53
24.8 Every 1000 hours service 3-59
24.9 Every 1500 hours service 3-63
24.10 Every 2000 hours service 3-70
24.11 Every 5000 hours service 3-71
24.12 Every 6000 hours service 3-73

SPECIFICATIONS

25. Specifications 4- 2

OPTIONS, ATTACHMENTS

26. Using seat belt 5- 2
26.1 Seat belt 5- 2

27. Introduction of optional parts, attachments 5- 4
27.1 Combinations of work equipment 5- 4
27.2 Selection of track shoes 5- 5

MidWestTech | Komatsu PC600-6, PC600LC-6 Hydraulic Excavator Operation & Mainte... Order the manual at mid-west-tech.com >

8.1 BEFORE CARRYING OUT MAINTENANCE

NOTIFICATION OF FAILURE

Carrying out maintenance not described in the Komatsu operation and maintenance manual may lead to unexpected failures.
Please contact your Komatsu distributor for repairs.

WARNING TAG

- ALWAYS attach the "DO NOT OPERATE" warning tag to the blade control lever in the operator's cab to alert others that you are working on the machine. Attach additional warning tags around the machine if necessary.
- If others start the engine, or touch or operate the blade control lever while you are performing service or maintenance, you could suffer serious injury or death.

Warning tag Part No. 09963-03000

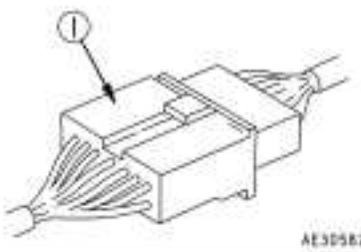




CLEAN BEFORE INSPECTION AND MAINTENANCE

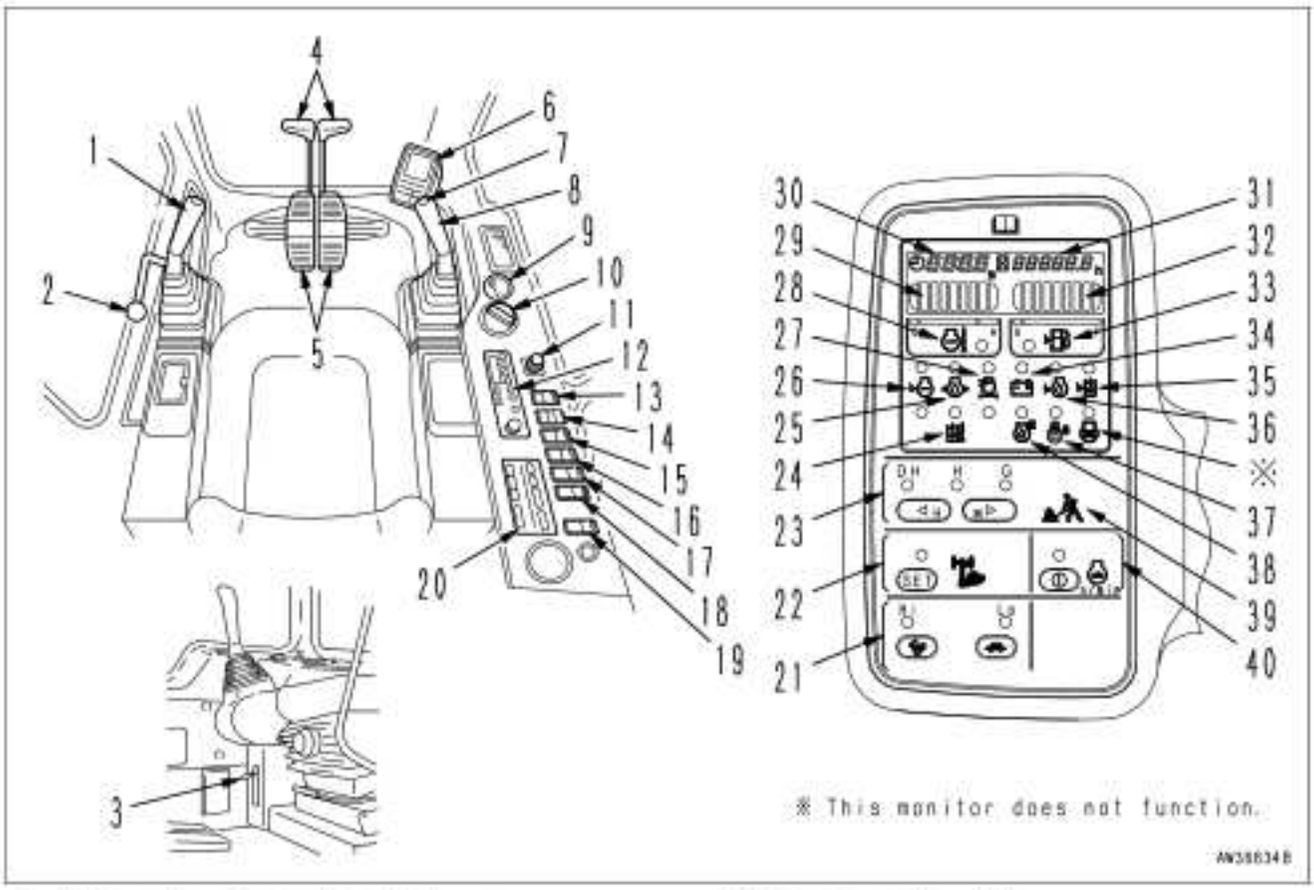
- Clean the machine before carrying out inspection and maintenance. This will ensure that dirt does not get into the machine and will also ensure that maintenance can be carried out safely.
- If inspection and maintenance are carried out with the machine still dirty, it will be difficult to find the location of problems, and there is also the danger that you will get dirty or mud in your eyes, and that you will slip and injure yourself.
- When washing the machine, always do as follows.
  - Wear non-slip shoes to prevent yourself from slipping on the wet surface.
  - When using high-pressure steam to wash the machine, always wear protective clothing. This will protect you from being hit by high-pressure water, and cutting your skin or getting mud or dust into your eyes.
  - Do not spray water directly on to the electrical system (sensors, connectors) ①. If water gets into the electrical system, there is danger that it will cause defective operation and malfunction.





MidWestTech | Komatsu PC600-6, PC600LC-6 Hydraulic Excavator Operation & Mainte... Order the manual at mid-west-tech.com >

10.2 GENERAL VIEW OF CONTROLS AND GAUGES



1. Left work equipment control lever
2. Safety lock lever
3. Ether switch
4. Travel lever
5. Travel pedal
6. Machine monitor
7. Horn switch
8. Right work equipment control lever
9. Starting switch
10. Fuel control dial
11. Cigarette lighter
12. Car radio
13. Swing lock switch
14. Wiper switch
15. Lamp switch (additional lamp switch)
16. Buzzer stop switch
17. Car heater fan switch (option)
18. Machine push up switch
19. Switch (option)
20. Air conditioner control switch
21. Travel speed switch
22. Heavy lift switch
23. Working mode selector switch
24. Hydraulic oil level monitor
25. Engine oil pressure monitor
26. Radiator water level monitor
27. Air cleaner clogging monitor
28. Engine water temperature monitor
29. Engine water temperature gauge
30. Display (for clock and fault indication)
31. Service meter
32. Fuel gauge
33. Fuel level monitor
34. Charge level monitor
35. Hydraulic oil temperature monitor
36. Engine oil level monitor
37. Swing lock monitor
38. Engine oil change monitor
39. Working mode
40. Auto-deceleration switch

MidWestTech | Komatsu PC600-6, PC600LC-6 Hydraulic Excavator Operation & Mainte... Order the manual at mid-west-tech.com >

11.12.3 PRECAUTIONS WHEN USING

- To ensure safety, always keep the sound to a level where it is possible to hear outside sounds during operation.
- If water gets into the speaker case or car radio (auto tuning), it may lead to an unexpected failure, so be careful not to get water on the equipment.
- Do not wipe the scales or buttons with benzene, thinner, or any other solvent. Wipe with a soft dry cloth. Use a cloth soaked in alcohol if the equipment is extremely dirty.
- When the battery is replaced, the settings for the preset buttons are all cleared, so set again.

11.12.4 SPECIFICATIONS

Tuning method:	PLL synthesizer method
Reception frequency:	AM 522 kHz – 1629 kHz (in 9 kHz steps) FM 76.0 MHz – 90.0 MHz (in 0.1 MHz steps)
Actual max. sensitivity:	AM 30 dB FM 15 dB
Actual max. output:	10 W x 2
Current consumption:	Max. 2 A
External dimensions:	Width 184 mm (7.24 in), Height 56 mm (2.20 in), Depth 116 mm (4.57 in)
Weight:	0.65 kg (1.43 lb)

11.13 POWER SUPPLY SOCKET

It is possible to remove the cigarette lighter and use the socket as a power supply.

Capacity of cigarette lighter: 85W (24V x 3.5A)

NOTICE

Do not use as a power supply for 12V equipment.
This will cause failure of the equipment.

MidWestTech | Komatsu PC600-6, PC600LC-6 Hydraulic Excavator Operation & Mainte... Order the manual at mid-west-tech.com >