Operation & Maintenance Manual

SEAM02070501

PC300-5
PC300LC-5

HYDRAULIC EXCAVATOR

SERIAL NUMBERS PC300-5 :20001 and up
PC300LC-5 :20001

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 PC300-5, PC300LC-5 Hydraulic Excavator Operation & Maintenan... Order the manual at mid-west-tech.com >

CONTENTS

OPERATION

GENERAL LOCATIONS AND SPECIFICATIONS 4
INSTRUMENTS AND CONTROLS 6
METHOD OF USING MODE SELECTOR SWITCHES 46
CHECK BEFORE STARTING 50
OPERATING YOUR MACHINE 56
INVERSION AND REPLACEMENT OF BUCKET 78
HANDLING THE TRAPEZOIDAL BUCKET 80
HANDLING THE CLAMSHELL BUCKET 80
SELECTION OF TRACK SHOES 82
SELECTION OF BUCKET TEETH 84
TRANSPORTATION 85
INSTALLATION OF OPTIONAL ELECTRICAL EQUIPMENT 90
COLD WEATHER OPERATION 92

MAINTENANCE

PERIODIC MAINTENANCE 101
PRECAUTIONS WHEN DISASSEMBLING MACHINE 102
BLEEDING AIR FROM CIRCUIT 104
PERIODICAL REPLACEMENT OF SAFETY PARTS 108
MAINTENANCE TABLE 112
OIL FILLER AND LEVEL GAUGE POSITIONS 116
EVERY 100 HOURS SERVICE 118
INITIAL 250 HOURS SERVICE 122
EVERY 250 HOURS SERVICE 124
EVERY 500 HOURS SERVICE 132
EVERY 1000 HOURS SERVICE 136
EVERY 2000 HOURS SERVICE 140
EVERY 4000 HOURS SERVICE 145
WHEN REQUIRED 146
ADJUSTMENT 164
TROUBLE SHOOTING GUIDE 166
SERVICE METER 176
MACHINE AND ENGINE SERIAL NUMBERS 178
FUEL, COOLANT AND LUBRICANTS 180

MidWestTech | Komatsu PC300-5, PC300LC-5 Hydraulic Excavator Operation & Maintenanc... Order the manual at mid-west-tech.com >

GENERAL LOCATIONS AND SPECIFICATIONS

1. Bucket
2. Bucket cylinder
3. Arm
4. Arm cylinder
5. Boom
6. Boom cylinder
7. Sprocket
8. Track frame
9. Idler
10. Track shoe

MACHINE MODEL			PC300	PC300LC
PERFORMANCE	Bucket capacity (m^3)	[SAE]	1.32	1.32
		[CECE]	1.2	1.2
	Travel speed (km/h)	Hi	5.5	5.5
		Lo	3.4	3.4
	Swing speed (rpm)		10	10
OPERATING WEIGHT (kg)			29800	31000
ENGINE	Model		Komatsu SA6D108 Diesel Engine	
	Flywheel horsepower (HP) [Rated rpm]		213 [1950]	213 [1950]

NOTE: Specifications are subject to change without notice.

MidWestTech | Komatsu PC300-5, PC300LC-5 Hydraulic Excavator Operation & Maintenanc... Order the manual at mid-west-tech.com >

4. RIGHT WORK EQUIPMENT LEVER (boom/bucket control lever) (with auto-deceleration device)

(N)Neutral:

When the lever in this position, the boom and the bucket will be retained in the position in which they stop.

Boom operation

(1)Boom raises.

(2)Boom lowers.

Bucket operation

(3)Bucket dumps.

(4)Bucket curls.

★ For levers 2, 3, and 4, the engine speed changes as follows because of the auto-deceleration mechanism.

- When the travel lever and work equipment control levers are at neutral, even if the fuel control dial is above the mid-range position, the engine speed will drop to a mid-range speed.
  If any of the levers are operated, the engine speed will rise to the speed set by the fuel control dial.
- If all control levers are set to neutral, the engine speed will drop by approx. 100 rpm, and after approx. 4 seconds, the engine speed will drop to the deceleration speed (approx. 1400 rpm).

⚠ **If any lever is operated when in the deceleration range, the engine speed will suddenly increase, so be careful when operating the levers.**

5. FORWARD ADJUSTMENT BUTTON FOR WORK EQUIPMENT CONTROL LEVER

If the button at the side of the left and right console boxes is pressed, it is possible to move the console box forward in two stages.

N: Neutral positin

F1: Middle position

F2: Deep excavation position

★ The left console box only can also be adjusted back from the N position. Use this position when getting on or off the machine.

MidWestTech | Komatsu PC300-5, PC300LC-5 Hydraulic Excavator Operation & Maintenance... Order the manual at mid-west-tech.com >

EVERY 500 HOURS SERVICE

* **Maintenance for every 100 and 250 hours should be carried out at the same time.**

a. SWING CIRCLE PINION

1. Remove bolts (1) (2 bolts) on the top of the revolving frame and remove cover (2).
2. Check with scale that grease depth is about 47 mm. If there is insufficient grease, replenish it.

* If the grease is particularly milky due to ingress of water, etc., then remove cover (3) from the bottom of the track frame and remove the grease. Replace all of the grease with new grease.
* The total amount of grease is 33 ℓ (29.7 kg).
* When changing the grease, contact your Komatsu distributor.

b. RADIATOR FINS AND OIL COOLER FINS

Clean the radiator fins and oil cooler fins clogged with mud, dust and leaves with compressed air. Steam or water may be used instead of compressed air.

* The rubber hose should be checked at the same time. If the hose is found to have cracks or to be hardened by ageing, such hose should be replaced by new one. Further, loosened hose clamp should also be checked.
* When cleaning, clean the net at the front of the oil cooler also.
* On dusty jobsites, carry out this inspection every day regardless of the maintenance interval.

MidWestTech | Komatsu PC300-5, PC300LC-5 Hydraulic Excavator Operation & Maintenanc... Order the manual at mid-west-tech.com >