

# Shop Manual

HYDRAULIC  
EXCAVATOR

# PC170LC-10

SERIAL NUMBERS PC170LC-10 K60001 and up

**KOMATSU**



# **SHOP MANUAL**

---

# **HYDRAULIC EXCAVATOR PC170LC-10**

<b>Machine model</b>	<b>Serial number</b>
PC170LC-10	K60001 and up

---

## **00 Index and foreword**

---

---

**Table of contents**

## 00 Index and foreword

Table of contents.....	2
Foreword, safety and general information.....	14
Important safety notice.....	14
Fire prevention.....	19
Dispose of waste materials.....	20
How to read the shop manual.....	21
Explanation of terms for maintenance standard.....	23
Handling equipment of fuel system devices.....	25
Handling of intake system parts.....	26
Handling of hydraulic equipment.....	27
Method of disconnecting and connecting of push-pull type coupler.....	29
Handling of electrical equipment.....	32
How to read electric wire code.....	40
Precautions when performing operation.....	43
Practical use of KOMTRAX.....	48
Standard tightening torque table.....	49
List of abbreviation.....	55
Conversion table.....	60

## 01 Specification

Table of contents.....	2
Specifications.....	3
Specification drawing.....	3
Working range drawings.....	4
Specifications.....	5
Weight table.....	8
Table of fuel, coolant, and lubricants.....	9

## 10 Structure and function

Engine and cooling system.....	3
Engine related parts.....	3
Variable flow turbocharger.....	5
EGR system piping drawing.....	9
EGR system circuit diagram.....	11
EGR valve.....	12
EGR cooler.....	14
KCCV layout drawing.....	16
KCCV ventilator.....	19
KDOC muffler.....	21
Cooling system.....	23
Power train.....	25
Power train system.....	25
Swing circle.....	27
Swing machinery.....	28
Final drive.....	30
Undercarriage and frame.....	32
Track frame and idler cushion.....	32
Hydraulic system.....	34
Hydraulic component layout.....	34

Valve control .....	37
Hydraulic tank .....	38
CLSS .....	40
Main pump .....	44
Control valve .....	71
Swing motor .....	121
Travel motor .....	123
PPC valve .....	138
Solenoid valve .....	160
Attachment circuit selector valve (for high pressure circuit).....	163
Attachment circuit selector valve (for low pressure circuit).....	165
Center swivel joint.....	168
Accumulator .....	170
Work equipment .....	171
Work equipment.....	171
Work equipment shim .....	172
Bucket play adjustment shim .....	173
Cab and its attachments .....	174
Cab mount and cab tipping stopper.....	174
ROPS cab.....	175
Electrical system.....	176
Electrical control system .....	176
Machine monitor system.....	219
KOMTRAX system.....	240
Sensor .....	243
20 Standard value tables	
Contents.....	2
Standard service value table.....	3
Standard value table for engine .....	3
Standard value table for machine .....	5
Standard value table for electrical system .....	22
30 Testing and adjusting	
Related information on testing and adjusting.....	3
Tools for testing and adjusting.....	3
Sketch of tools for testing and adjusting .....	6
Engine and cooling system .....	7
Testing engine speed .....	7
Testing boost pressure .....	8
Testing and adjusting valve clearance .....	11
Testing compression pressure.....	14
Testing blowby pressure.....	18
Testing fuel pressure .....	20
Testing fuel discharge, return and leakage .....	25
Bleeding air from fuel system .....	30
Testing fuel circuit for leakage .....	32
Checking and adjusting air conditioner compressor belt tension.....	35
Replacing fan belt .....	36
Power train.....	37
Testing swing circle bearing clearance.....	37
Undercarriage and frame.....	38

It's a preview. You can download the full file by clicking the link below.

<https://shopservicemanual.com/>

Service Manuals from 2\$