

# Shop Manual

HYDRAULIC  
EXCAVATOR

***PC210i -10***  
***PC210LCi-10***

SERIAL NUMBERS 451080 and up

**KOMATSU**



## **SHOP MANUAL**

# **HYDRAULIC EXCAVATOR**

**PC210I-10  
PC210LCI-10**

Model

Serial Number

PC210I-10      451080 and up  
PC210LCI-10

---

## **00 Index and foreword**

---

---

**Index**

00 Index and foreword .....	00-1
Index .....	00-2
Foreword, safety and general information .....	00-16
Important safety notice .....	00-16
How to read the shop manual .....	00-23
Explanation of terms for maintenance standard .....	00-25
Handling equipment of fuel system devices .....	00-27
Handling of intake system parts .....	00-28
Handling of hydraulic equipment .....	00-29
Method of disconnecting and connecting of push-pull type coupler .....	00-31
Handling of electrical equipment .....	00-34
How to read electric wire code .....	00-42
Precautions when performing operation .....	00-45
Practical use of KOMTRAX .....	00-50
Standard tightening torque table .....	00-51
List of abbreviation .....	00-57
Conversion table .....	00-62
01 Specification .....	01-1
Table of contents .....	01-2
Specifications .....	01-3
Specification drawing .....	01-3
Working range drawings .....	01-5
Specifications .....	01-7
Weight table .....	01-13
Table of fuel, coolant, and lubricants .....	01-17
10 Structure and function .....	10-1
Table of contents .....	10-2
Engine and cooling system .....	10-3
Engine related parts .....	10-3
KVGT .....	10-5
EGR system piping drawing .....	10-12
EGR system circuit diagram .....	10-14
EGR valve .....	10-16
EGR cooler .....	10-18
KCCV layout drawing .....	10-20
KCCV ventilator .....	10-22
KDPF .....	10-24
Cooling system .....	10-28
Power train .....	10-30
Power train system .....	10-30
Swing circle .....	10-32
Swing machinery .....	10-33
Final drive .....	10-35
Undercarriage and frame .....	10-37
Track frame and idler cushion .....	10-37
Hydraulic system .....	10-39
Hydraulic component layout .....	10-39
Valve control .....	10-41
Hydraulic tank .....	10-43
CLSS .....	10-45
Main pump .....	10-50
Control valve .....	10-76
Swing motor .....	10-133
Travel motor .....	10-145
PPC valve .....	10-158
Solenoid valve .....	10-181
Attachment circuit selector valve (for high pressure circuit) .....	10-184

Attachment circuit selector valve (for low pressure circuit).....	10-186
Center swivel joint.....	10-189
Accumulator .....	10-191
EPC valve for intelligent Machine Control.....	10-192
Work equipment .....	10-197
Work equipment.....	10-197
Work equipment shim.....	10-198
Bucket play adjustment shim.....	10-199
Cab and its attachments .....	10-200
Cab mount and cab tipping stopper .....	10-200
ROPS cab .....	10-201
Electrical system .....	10-202
Electrical control system .....	10-202
Machine monitor system.....	10-288
KOMTRAX system.....	10-311
Sensor .....	10-314
20 Standard value tables.....	20-1
Table of contents .....	20-2
Standard service value table.....	20-3
Standard value table for engine .....	20-3
Standard value table for machine .....	20-5
Standard value table for electrical system.....	20-23
30 Testing and adjusting .....	30-1
Table of contents .....	30-2
Related information on testing and adjusting .....	30-3
Tools for testing and adjusting .....	30-3
Sketch of tools for testing and adjusting .....	30-11
Engine and cooling system.....	30-12
Testing engine speed .....	30-12
Testing boost pressure .....	30-13
Testing exhaust gas color .....	30-15
Testing and adjusting valve clearance .....	30-17
Testing compression pressure.....	30-20
Testing blowby pressure .....	30-24
Testing engine oil pressure .....	30-25
Testing EGR valve and KVGT oil pressures .....	30-26
Measuring fuel pressure .....	30-27
Measuring fuel delivery, return and leakage.....	30-33
Bleeding air from fuel system .....	30-38
Testing fuel circuit for leakage .....	30-40
Handling cylinder cutout mode operation.....	30-41
Handling no-injection cranking operation.....	30-42
Testing and adjusting air conditioner compressor belt tension .....	30-43
Replacing fan belt .....	30-45
Power train.....	30-46
Testing swing circle bearing clearance .....	30-46
Undercarriage and frame.....	30-47
Testing and adjusting track tension .....	30-47
Hydraulic system .....	30-48
Releasing remaining pressure from hydraulic circuit.....	30-48
Testing and adjusting oil pressure in work equipment, swing, and travel circuits.....	30-53
Testing oil pressure of control circuit .....	30-57
Testing and adjusting oil pressure in pump PC control circuit.....	30-60
Testing and adjusting oil pressure in pump LS control circuit .....	30-63
Testing output pressure of solenoid valve .....	30-68
Testing PPC valve output pressure .....	30-72
Adjusting play of work equipment and swing PPC valves.....	30-74
Testing pump swash plate sensor .....	30-75
Isolating the parts causing hydraulic drift in work equipment.....	30-76

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

<https://shopservicemanual.com/>

Service Manuals from 2\$