

# Shop Manual

**HYDRAULIC  
EXCAVATOR**

**PC210 -11E0**

**PC210LC -11E0**

**PC210NLC-11E0**

**PC230NHD-11E0**

**SERIAL NUMBERS**

PC210-11E0 - K76984 and up

PC210LC-11E0 - K76984 and up

PC210NLC-11E0 - K75210 and up

PC230NHD-11E0 - K75008 and up



---

# 00 INDEX AND FOREWORD

---

# INDEX

00 INDEX AND FOREWORD .....	00-1
ABBREVIATION LIST .....	00-20
FOREWORD, SAFETY, BASIC INFORMATION .....	00-26
HOW TO READ THE SHOP MANUAL.....	00-26
SAFETY NOTICE FOR OPERATION.....	00-28
PRECAUTIONS TO PREVENT FIRE.....	00-36
ACTIONS IF FIRE OCCURS .....	00-38
PRECAUTIONS FOR DISPOSING OF WASTE MATERIALS .....	00-39
ACTIONS TAKEN TO MEET EXHAUST GAS REGULATIONS.....	00-40
METHOD FOR CHECKING ENGINE TYPE .....	00-41
PRECAUTIONS FOR DEF.....	00-43
STORE AdBlue/DEF .....	00-44
PRECAUTIONS FOR HANDLING HYDRAULIC EQUIPMENT .....	00-45
PRECAUTIONS FOR DISCONNECTION AND CONNECTION OF PIPINGS.....	00-48
PRECAUTIONS FOR HANDLING ELECTRICAL EQUIPMENT.....	00-55
PRECAUTIONS FOR HANDLING FUEL SYSTEM EQUIPMENT .....	00-57
PRECAUTIONS FOR HANDLING INTAKE SYSTEM EQUIPMENT .....	00-58
PRACTICAL USE OF KOMTRAX .....	00-59
DISCONNECT AND CONNECT PUSH-PULL TYPE COUPLER .....	00-60
PRECAUTIONS FOR DISCONNECTION AND CONNECTION OF CONNECTORS .....	00-64
METHOD FOR DISCONNECTING AND CONNECTING DEUTSCH CONNECTOR .....	00-68
METHOD FOR DISCONNECTING AND CONNECTING SLIDE LOCK TYPE CONNECTOR .....	00-69
METHOD FOR DISCONNECTING AND CONNECTING CONNECTOR WITH LOCK TO PULL ...	00-71
METHOD FOR DISCONNECTING AND CONNECTING CONNECTOR WITH LOCK TO PUSH ..	00-72
METHOD FOR DISCONNECTING AND CONNECTING CONNECTOR WITH HOUSING TO ROTATE .	00-74
HOW TO READ ELECTRICAL WIRE CODE .....	00-75
EXPLANATION OF TERMS FOR MAINTENANCE STANDARD.....	00-79
STANDARD TIGHTENING TORQUE TABLE.....	00-82
CONVERSION TABLE .....	00-89
01 SPECIFICATIONS .....	01-1
CONTENTS .....	01-2
ABBREVIATION LIST .....	01-3
SPECIFICATIONS .....	01-9
SPECIFICATION DRAWING.....	01-9
WORKING RANGE DRAWINGS .....	01-11
SPECIFICATIONS .....	01-12
WEIGHT TABLE .....	01-16
TABLE OF FUEL, COOLANT, AND LUBRICANTS .....	01-18
10 STRUCTURE AND FUNCTION .....	10-1
CONTENTS .....	10-2
ABBREVIATION LIST .....	10-6
UREA SCR SYSTEM.....	10-12
LAYOUT DRAWING OF UREA SCR SYSTEM .....	10-13
UREA SCR SYSTEM DIAGRAM .....	10-18
FUNCTION OF UREA SCR SYSTEM.....	10-19
COMPONENT PARTS OF UREA SCR SYSTEM.....	10-40
BOOT-UP SYSTEM.....	10-49
LAYOUT DRAWING OF BOOT-UP SYSTEM.....	10-49
SYSTEM OPERATING LAMP SYSTEM .....	10-51
BATTERY DISCONNECT SWITCH .....	10-52
ENGINE SYSTEM .....	10-53
LAYOUT DRAWING OF ENGINE SYSTEM.....	10-53
ENGINE CONTROL SYSTEM .....	10-55
AUTO-DECELERATION SYSTEM.....	10-58
ENGINE AUTOMATIC WARM-UP SYSTEM.....	10-60

OVERHEAT PREVENTION SYSTEM .....	10-62
TURBOCHARGER PROTECTION SYSTEM .....	10-65
AUTOMATIC IDLE STOP SYSTEM .....	10-67
COMPONENT PARTS OF ENGINE SYSTEM .....	10-70
COOLING SYSTEM.....	10-88
LAYOUT DRAWING OF COOLING SYSTEM .....	10-88
FAN SPEED CONTROL SYSTEM OF FAN CLUTCH .....	10-90
ENGINE OUTPUT CONTROL SYSTEM OF FAN CLUTCH .....	10-92
COMPONENT PARTS OF COOLING SYSTEM.....	10-94
CONTROL SYSTEM.....	10-95
LAYOUT DRAWING OF CONTROL SYSTEM .....	10-95
MACHINE MONITOR SYSTEM .....	10-98
KomVision SYSTEM .....	10-100
KOMTRAX SYSTEM.....	10-114
PPC LEVERS .....	10-115
AUTOMATIC GREASE SYSTEM.....	10-117
COMPONENT PARTS OF CONTROL SYSTEM.....	10-131
SENSOR.....	10-166
HYDRAULIC SYSTEM.....	10-169
LAYOUT DRAWING OF HYDRAULIC SYSTEM .....	10-169
CLSS .....	10-175
ENGINE AND PUMP COMBINED CONTROL SYSTEM.....	10-194
PUMP AND VALVE CONTROL SYSTEM .....	10-200
COMPONENT PARTS OF HYDRAULIC SYSTEM .....	10-203
WORK EQUIPMENT SYSTEM .....	10-288
LAYOUT DRAWING OF WORK EQUIPMENT SYSTEM .....	10-288
STRUCTURE OF VALVE CONTROL .....	10-293
ONE-TOUCH POWER MAXIMIZING SYSTEM .....	10-295
PPC LOCK SYSTEM .....	10-297
WORK EQUIPMENT AND TRAVEL AUTOMATIC LOCK SYSTEM .....	10-298
OIL FLOW ADJUSTER SYSTEM FOR ATTACHMENT.....	10-300
TOOL CONTROL SYSTEM .....	10-303
COMPONENT PARTS OF WORK EQUIPMENT SYSTEM.....	10-305
SWING SYSTEM.....	10-334
LAYOUT DRAWING OF SWING SYSTEM .....	10-334
SWING CONTROL SYSTEM DIAGRAM .....	10-338
COMPONENT PARTS OF SWING SYSTEM.....	10-342
TRAVEL SYSTEM.....	10-357
LAYOUT DRAWING OF TRAVEL SYSTEM.....	10-357
TRAVEL CONTROL SYSTEM DIAGRAM.....	10-361
COMPONENT PARTS OF TRAVEL SYSTEM .....	10-363
UNDERCARRIAGE AND FRAME.....	10-384
LAYOUT DRAWING OF UNDERCARRIAGE .....	10-384
WORK EQUIPMENT.....	10-386
STRUCTURE OF WORK EQUIPMENT .....	10-386
FUNCTION OF WORK EQUIPMENT .....	10-387
WORK EQUIPMENT CLEARANCE ADJUSTMENT SHIM.....	10-388
BUCKET CLEARANCE ADJUSTMENT SHIM .....	10-389
CAB AND ITS ATTACHMENTS .....	10-390
ROPS CAB .....	10-390
CAB MOUNT .....	10-391
CAB TIPPING STOPPER .....	10-392
20 STANDARD VALUE TABLE .....	20-1
CONTENTS .....	20-2
ABBREVIATION LIST .....	20-3
STANDARD VALUE TABLE FOR ENGINE .....	20-9
STANDARD VALUE TABLE FOR ENGINE: PC210-11E0, PC210LC-11E0, PC210NLC-11E0, PC230NHD-11E0 .....	20-9

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

<https://shopservicemanual.com/>

Service Manuals from 2\$