

# Shop Manual

HYDRAULIC  
EXCAVATOR

***PC290LC-11E0***

SERIAL NUMBERS 35268 and up

**KOMATSU**



---

# 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 ..... 00-42

        STORE AdBlue/DEF ..... 00-43

        PRECAUTIONS FOR HANDLING HYDRAULIC EQUIPMENT ..... 00-44

        PRECAUTIONS FOR DISCONNECTION AND CONNECTION OF PIPINGS ..... 00-47

        PRECAUTIONS FOR HANDLING ELECTRICAL EQUIPMENT ..... 00-54

        PRECAUTIONS FOR HANDLING FUEL SYSTEM EQUIPMENT ..... 00-56

        PRECAUTIONS FOR HANDLING INTAKE SYSTEM EQUIPMENT ..... 00-57

        PRACTICAL USE OF KOMTRAX ..... 00-58

        DISCONNECT AND CONNECT PUSH-PULL TYPE COUPLER ..... 00-59

        PRECAUTIONS FOR DISCONNECTION AND CONNECTION OF CONNECTORS ..... 00-63

        METHOD FOR DISCONNECTING AND CONNECTING DEUTSCH CONNECTOR ..... 00-67

        METHOD FOR DISCONNECTING AND CONNECTING SLIDE LOCK TYPE CONNECTOR ..... 00-68

        METHOD FOR DISCONNECTING AND CONNECTING CONNECTOR WITH LOCK TO PULL ..... 00-70

        METHOD FOR DISCONNECTING AND CONNECTING CONNECTOR WITH LOCK TO PUSH ..... 00-71

        METHOD FOR DISCONNECTING AND CONNECTING CONNECTOR WITH HOUSING TO ROTATE ..... 00-73

        HOW TO READ ELECTRICAL WIRE CODE ..... 00-74

        EXPLANATION OF TERMS FOR MAINTENANCE STANDARD ..... 00-78

        STANDARD TIGHTENING TORQUE TABLE ..... 00-81

        CONVERSION TABLE ..... 00-88

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 ..... 01-15

        TABLE OF FUEL, COOLANT, AND LUBRICANTS ..... 01-17

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 ..... 10-31

    BOOT-UP SYSTEM ..... 10-40

        LAYOUT DRAWING OF BOOT-UP SYSTEM ..... 10-40

        SYSTEM OPERATING LAMP SYSTEM ..... 10-42

        BATTERY DISCONNECT SWITCH ..... 10-43

    ENGINE SYSTEM ..... 10-44

        LAYOUT DRAWING OF ENGINE SYSTEM ..... 10-44

        ENGINE CONTROL SYSTEM ..... 10-46

        AUTO-DECELERATION SYSTEM ..... 10-49

        ENGINE AUTOMATIC WARM-UP SYSTEM ..... 10-51

OVERHEAT PREVENTION SYSTEM .....	10-53
TURBOCHARGER PROTECTION SYSTEM .....	10-56
AUTOMATIC IDLE STOP SYSTEM .....	10-58
COMPONENT PARTS OF ENGINE SYSTEM .....	10-61
COOLING SYSTEM .....	10-79
LAYOUT DRAWING OF COOLING SYSTEM .....	10-79
CONTROL SYSTEM .....	10-81
LAYOUT DRAWING OF CONTROL SYSTEM .....	10-81
MACHINE MONITOR SYSTEM .....	10-84
KomVision SYSTEM .....	10-85
KOMTRAX SYSTEM .....	10-89
COMPONENT PARTS OF CONTROL SYSTEM .....	10-90
HYDRAULIC SYSTEM .....	10-134
LAYOUT DRAWING OF HYDRAULIC SYSTEM .....	10-134
CLSS .....	10-140
ENGINE AND PUMP COMBINED CONTROL SYSTEM .....	10-159
PUMP AND VALVE CONTROL SYSTEM .....	10-165
COMPONENT PARTS OF HYDRAULIC SYSTEM .....	10-168
WORK EQUIPMENT SYSTEM .....	10-252
LAYOUT DRAWING OF WORK EQUIPMENT SYSTEM .....	10-252
STRUCTURE OF VALVE CONTROL .....	10-257
ONE-TOUCH POWER MAXIMIZING SYSTEM .....	10-259
PPC LOCK SYSTEM .....	10-261
WORK EQUIPMENT AND TRAVEL AUTOMATIC LOCK SYSTEM .....	10-262
OIL FLOW ADJUSTER SYSTEM FOR ATTACHMENT .....	10-264
TOOL CONTROL SYSTEM .....	10-266
COMPONENT PARTS OF WORK EQUIPMENT SYSTEM .....	10-268
SWING SYSTEM .....	10-303
LAYOUT DRAWING OF SWING SYSTEM .....	10-303
SWING CONTROL SYSTEM DIAGRAM .....	10-307
COMPONENT PARTS OF SWING SYSTEM .....	10-311
TRAVEL SYSTEM .....	10-326
LAYOUT DRAWING OF TRAVEL SYSTEM .....	10-326
TRAVEL CONTROL SYSTEM DIAGRAM .....	10-330
COMPONENT PARTS OF TRAVEL SYSTEM .....	10-332
UNDERCARRIAGE AND FRAME .....	10-353
LAYOUT DRAWING OF UNDERCARRIAGE .....	10-353
WORK EQUIPMENT .....	10-355
STRUCTURE OF WORK EQUIPMENT .....	10-355
FUNCTION OF WORK EQUIPMENT .....	10-356
WORK EQUIPMENT CLEARANCE ADJUSTMENT SHIM .....	10-357
BUCKET CLEARANCE ADJUSTMENT SHIM .....	10-358
CAB AND ITS ATTACHMENTS .....	10-359
ROPS CAB .....	10-359
CAB MOUNT .....	10-360
CAB TIPPING STOPPER .....	10-361
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: PC290LC-11E0 .....	20-9
STANDARD VALUE TABLE FOR MACHINE .....	20-13
STANDARD VALUE TABLE FOR MACHINE: PC290LC-11E0 .....	20-13
MACHINE POSTURE AND PROCEDURE FOR MEASURING PERFORMANCE .....	20-26
STANDARD VALUE TABLE FOR ELECTRICAL .....	20-30
STANDARD VALUE TABLE FOR ELECTRICAL .....	20-30
30 TESTING AND ADJUSTING .....	30-1
CONTENTS .....	30-2

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

<https://shopservicemanual.com/>

Service Manuals from 2\$