

Shop Manual

HYDRAULIC
EXCAVATOR

PC78US-11

SERIAL NUMBERS 50001 and up

KOMATSU

00 Index and Foreword

Index

00 Index and Foreword	00-1
Foreword, Safety, Basic Information	00-15
How to Read the Shop Manual	00-15
Safety Notice for Operation	00-17
Precautions to Prevent Fire	00-25
Procedures If Fire Occurs	00-27
Precautions When You Discard Waste Materials	00-28
Precautions When You Handle Hydraulic Equipment	00-29
Precautions When You Disconnect and Connect Pipings	00-32
Precautions When You Handle Electrical Equipment	00-39
Precautions When You Handle Fuel System Equipment	00-41
Precautions When You Handle Intake System Equipment	00-42
Practical Use of KOMTRAX	00-43
Disconnect and Connect Push-Pull Type Coupler	00-44
Precautions for Disconnection and Connection of Connectors	00-48
Disconnect and Connect Deutsch Connector	00-52
How to Disconnect and Connect Slide Lock Type Connector	00-53
Disconnect and Connect Connector with Lock to Pull	00-55
Disconnect and Connect Connector with Lock to Push	00-56
Disconnect and Connect Connector with Housing to Rotate	00-58
How to Read the Codes for Electric Cable	00-59
Explanation of Terms for Maintenance Standard	00-63
Standard Tightening Torque Table	00-66
Conversion Table	00-73
Abbreviation List	00-78
01 Specification	01-1
Table of Contents	01-2
Specifications	01-3
Specification Drawing	01-3
Working Range Drawings	01-6
Specifications	01-7
Weight Table	01-11
Fuel, Coolant, Lubricants (For North America)	01-13
10 Structure and Function	10-1
Table of Contents	10-2
Boot-up System	10-5
Layout Drawing of Boot-up System	10-5
System Operating Lamp System	10-6
Battery Disconnect Switch	10-8
Engine System	10-9
Layout Drawing of Engine System	10-9
Engine Control System	10-11
Auto-Deceleration System	10-14
Engine Automatic Warm-up System	10-16
Overheat Prevention System	10-18
Turbocharger Protection System	10-19
Automatic Idle Stop System	10-20
Component Parts of Engine System	10-23
Cooling System	10-37
Layout Drawing of Cooling System	10-37
Control System	10-39
Layout Drawing of Control System	10-39
Machine Monitor System	10-41
KOMTRAX System	10-43
Component Parts of Control System	10-44
Hydraulic System	10-75

Layout Drawing of Hydraulic System.....	10-75
CLSS	10-78
Engine and Pump Combined Control System	10-81
Component Parts of Hydraulic System.....	10-85
Work Equipment System.....	10-167
Layout Drawing of Work Equipment System.....	10-167
PPC Lock System	10-169
Work Equipment and Travel Automatic Lock System	10-170
Attachment Oil Flow Adjuster System	10-172
Component Parts of Work Equipment System	10-174
Swing System	10-202
Layout Drawing of Swing System.....	10-202
Swing Control System Diagram	10-204
Component Parts of Swing System.....	10-206
Travel System	10-219
Layout Drawing of Travel System.....	10-219
System Diagram of Travel Control System.....	10-221
Component Parts of Travel System.....	10-223
Undercarriage and Frame	10-237
Layout Drawing of Undercarriage.....	10-237
Idler Cushion.....	10-239
Work Equipment	10-240
Structure of Work Equipment	10-240
Function of Work Equipment	10-241
Work Equipment Clearance Adjustment Shim.....	10-242
Bucket Clearance Adjustment Shim	10-243
CAB Related Parts	10-244
ROPS CAB	10-244
CAB Mount	10-245
Remove Wiring Harness Out of Cab	10-247
20 Standard Value Table	20-1
Table of Contents	20-2
Standard Value Table for Engine	20-3
Standard Value Table for Engine: PC78US-11	20-3
Standard Value Table for Machine.....	20-5
Standard Value Table for Machine: PC78US-11	20-5
Machine Posture and Procedures to Measure Performance	20-19
30 Testing and Adjusting	30-1
Table of Contents	30-2
Precautions Before Work	30-5
Related Information on Testing and Adjusting	30-6
Tools for Testing and Adjusting.....	30-6
Sketch of Tools for Testing and Adjusting	30-11
Engine and Cooling System	30-13
Examine Engine Speed.....	30-13
Examine Exhaust Gas Color	30-17
Examine and Adjust Valve Clearance.....	30-20
Examine Compression Pressure	30-22
Examine Blowby Pressure	30-25
Examine Engine Oil Pressure	30-27
Visual Check Inside of EGR Valve	30-29
Clean Inside of EGR Valve	30-31
Examine Fuel Pressure.....	30-34
Examine Fuel Return Rate and Leakage.....	30-36
Bleed Air from Fuel System.....	30-41
Examine Fuel Circuit for Leakage	30-43
Handle Cylinder Cut-out Mode Operation.....	30-45
Handle No-Injection Cranking Operation	30-46

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

<https://shopservicemanual.com/>

Service Manuals from 2\$