

SECTION 1 GENERAL

Group 1 Safety Hints	1-1
Group 2 Specifications	1-10

SECTION 2 STRUCTURE AND FUNCTION

Group 1 Pump Device	2-1
Group 2 Main Control Valve	2-20
Group 3 Swing Device	2-47
Group 4 Travel Device	2-58
Group 5 RCV Lever	2-72
Group 6 RCV Pedal	2-79

SECTION 3 HYDRAULIC SYSTEM

Group 1 Hydraulic Circuit	3-1
Group 2 Main Circuit	3-2
Group 3 Pilot Circuit	3-5
Group 4 Single Operation	3-14
Group 5 Combined Operation	3-24

SECTION 4 ELECTRICAL SYSTEM

Group 1 Component Location	4-1
Group 2 Electrical Circuit	4-3
Group 3 Electrical Component Specification	4-21
Group 4 Connectors	4-29

SECTION 5 MECHATRONICS SYSTEM

Group 1 Outline	5-1
Group 2 Mode selection System	5-3
Group 3 Automatic Deceleration System	5-6
Group 4 Power Boost System	5-7
Group 5 Travel Speed Control System	5-8
Group 6 Automatic Warming Up Function	5-9
Group 7 Engine Overheat Prevention Function	5-10
Group 8 Variable Power Control System	5-11

Group 9 Attachment Flow Control System	5-12
Group 10 Boom Floating Control System	5-13
Group 11 Intelligent Power Control System	5-14
Group 12 Anti-Restart System	5-16
Group 13 Self-Diagnostic System	5-17
Group 14 Engine Control System	5-54
Group 15 EPPR (Electro Proportional Pressure Reducing) Valve	5-55
Group 16 Monitoring System	5-60
Group 17 Fuel Warmer System	5-95

SECTION 6 TROUBLESHOOTING

Group 1 Before Troubleshooting	6-1
Group 2 Hydraulic and Mechanical System	6-4
Group 3 Electrical System	6-24
Group 4 Mechatronics System	6-40

SECTION 7 MAINTENANCE STANDARD

Group 1 Operational Performance Test	7-1
Group 2 Major Components	7-21
Group 3 Track and Work Equipment	7-29

SECTION 8 DISASSEMBLY AND ASSEMBLY

Group 1 Precaution	8-1
Group 2 Tightening Torque	8-4
Group 3 Pump Device	8-7
Group 4 Main Control Valve	8-30
Group 5 Swing Device	8-54
Group 6 Travel Device	8-84
Group 7 RCV Lever	8-116
Group 8 Turning Joint	8-130
Group 9 Boom, Arm and Bucket Cylinder	8-135
Group 10 Undercarriage	8-152
Group 11 Work Equipment	8-164

SECTION 9 COMPONENT MOUNTING TORQUE

Group 1	Introduction guide	9-1
Group 2	Engine system	9-2
Group 3	Electric system	9-4
Group 4	Hydraulic system	9-6
Group 5	Undercarriage	9-10
Group 6	Structure	9-11
Group 7	Work equipment	9-15