

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	2-17
Group 3 Swing Device	2-51
Group 4 Travel Device	2-62
Group 5 RCV Lever	2-76
Group 6 RCV Pedal	2-83

SECTION 3 HYDRAULIC SYSTEM

Group 1 Hydraulic Circuit	3-1
Group 2 Main Circuit	3-3
Group 3 Pilot Circuit	3-6
Group 4 Single Operation	3-16
Group 5 Combined Operation	3-26

SECTION 4 ELECTRICAL SYSTEM

Group 1 Component Location	4-1
Group 2 Electrical Circuit	4-3
Group 3 Electrical Component Specification	4-23
Group 4 Connectors	4-35

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 Intelligent Power Control System	5-13
Group 11 Anti-Restart System	5-15
Group 12 Self-Diagnostic System	5-16
Group 13 Engine Control System	5-62
Group 14 EPPR (Electro Proportional Pressure Reducing) Valve	5-62
Group 15 Monitoring System	5-68
Group 16 Fuel Warmer System	5-110
Group 17 1 or 2-Way Optional Piping Pressure Removal System	5-111
Group 18 2DMG+ System	5-112

SECTION 6 TROUBLESHOOTING

Group 1 Before Troubleshooting	6-1
Group 2 Hydraulic and Mechanical System	6-4
Group 3 Electrical System	6-25
Group 4 Mechatronics System	6-44
Group 5 Air conditioner and Heater System	6-72

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	8-33
Group 5 Swing Device	8-57
Group 6 Travel Device	8-87
Group 7 RCV Lever	8-119
Group 8 Turning Joint	8-133
Group 9 Boom, Arm and Bucket Cylinder	8-138
Group 10 Undercarriage	8-159
Group 11 Work Equipment	8-171