

## SECTION 1 GENERAL

Group 1 Safety Hints .....	1-1
Group 2 Specifications .....	1-9

## SECTION 2 STRUCTURE AND FUNCTION

Group 1 Pump Device .....	2-1
Group 2 Main Control Valve .....	2-21
Group 3 Swing Device .....	2-43
Group 4 Travel Device .....	2-54
Group 5 RCV Lever .....	2-60
Group 6 Accelerator Pedal .....	2-67
Group 7 Brake Pedal .....	2-68
Group 8 Transmission .....	2-71
Group 9 Transmission control valve .....	2-78
Group 10 Steering Valve .....	2-80
Group 11 Axle .....	2-82

## 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 .....	3-13
Group 5 Combined Operation .....	3-28

## SECTION 4 ELECTRICAL SYSTEM

Group 1 Component Location .....	4-1
Group 2 Electrical Circuit .....	4-3
Group 3 Electrical Component Specification .....	4-22
Group 4 Connectors .....	4-31

## 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	Anti-Restart system	5-11
Group 9	Self-Diagnostic System	5-12
Group 10	Engine Control System	5-15
Group 11	EPPR(Electro Proportional Pressure Reducing) Valve	5-22
Group 12	Monitoring system	5-25

## **SECTION 6 TROUBLESHOOTING**

Group 1	Before Troubleshooting	6-1
Group 2	Hydraulic and Mechanical System	6-4
Group 3	Electrical System	6-23
Group 4	Mechatronics System	6-39

## **SECTION 7 MAINTENANCE STANDARD**

Group 1	Operational Performance Test	7-1
Group 2	Major Components	7-19
Group 3	Work Equipment	7-28

## **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	8-44
Group 6	Travel Motor	8-67
Group 7	Transmission	8-91
Group 8	Steering Valve	8-146
Group 9	Front Axle	8-171
Group 10	Rear Axle	8-239
Group 11	RCV Lever	8-282
Group 12	Turning Joint	8-297
Group 13	Boom, Arm, Bucket, Dozer and Outrigger Cylinders	8-304
Group 14	Work Equipment	8-325

## **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 Power train System	9-9
Group 6 Structure	9-11
Group 7 Work Equipment	9-15