

# CONTENTS

Foreword .....	0-1	8. Operation in the special work sites .....	4-24
Before servicing this machine .....	0-2	9. Normal operation of excavator .....	4-26
EC regulation approved .....	0-3	10. Attachment lowering .....	4-27
Table to enter S/No and distribution .....	0-4	11. Storage .....	4-28
Safety labels .....	0-5	12. RCV lever operating pattern .....	4-30
Machine data plate .....	0-19	13. Switching hydraulic attachment circuit .....	4-32
Guide (direction, S/No, symbol) .....	0-20		
<b>SAFETY HINTS</b>			
1. Before operating the machine .....	1-1	1. Road traveling .....	5-1
2. During operating the machine .....	1-16	2. Preparation for transportation .....	5-2
3. During maintenance .....	1-23	3. Dimension and weight .....	5-3
4. Parking .....	1-26	4. Loading the machine .....	5-5
5. Fixing the machine .....	5-7	6. Loading and unloading by crane .....	5-8
<b>SPECIFICATIONS</b>			
1. Major components .....	2-1	MAINTENANCE	
2. Specifications .....	2-2	1. Instruction .....	6-1
3. Working range .....	2-4	2. Tightening torque .....	6-6
4. Weight .....	2-6	3. Fuel, coolant and lubricants .....	6-9
5. Lifting capacities .....	2-7	4. Maintenance check list .....	6-11
6. Bucket selection guide .....	2-9	5. Maintenance chart .....	6-16
7. Specification for major components .....	2-10	6. Service instruction .....	6-18
8. Recommended oils .....	2-13	7. Electrical system .....	6-46
9. Air conditioner and heater .....	6-49	8. Air conditioner and heater .....	6-49
<b>CONTROL DEVICES</b>			
1. Cab devices .....	3-1	TROUBLESHOOTING GUIDE	
2. Cluster .....	3-2	1. Engine .....	7-1
3. Switches .....	3-25	2. Electrical system .....	7-2
4. Levers and pedals .....	3-35	3. Others .....	7-3
5. Air conditioner and heater .....	3-38	HYDRAULIC BREAKER AND QUICK CLAMP	
6. Others .....	3-42	1. Selecting hydraulic breaker .....	8-1
<b>OPERATION</b>			
1. Suggestion for new machine .....	4-1	2. Circuit configuration .....	8-2
2. Check before starting the engine .....	4-2	3. Maintenance .....	8-3
3. Starting and stop the engine .....	4-3	4. Precaution while operating the breaker .....	8-4
4. Mode selection system .....	4-7	5. Quick clamp .....	8-6
5. Operation of the working device .....	4-12	INDEX .....	9-1
6. Traveling of the machine .....	4-13		
7. Efficient working method .....	4-19		