

# CONTENTS

Foreword .....	0-1	7. Efficient working method .....	4-27
Before servicing this machine .....	0-2	8. Operation in the special work sites .....	4-32
EC regulation approved .....	0-3	9. Normal operation of excavator .....	4-34
Table to enter S/No and distribution .....	0-4	10. Attachment lowering .....	4-35
Safety labels .....	0-5	11. Storage .....	4-36
Machine data plate .....	0-18	12. RCV lever operating pattern .....	4-38
Guide (direction, S/No, symbol) .....	0-19	13. Switching hydraulic attachment circuit .....	4-39

## SAFETY HINTS

1. Before operating the machine .....	1-1
2. During operating the machine .....	1-16
3. During maintenance .....	1-23
4. Parking .....	1-26

## SPECIFICATIONS

1. Major components .....	2-1
2. Specifications .....	2-2
3. Working range .....	2-3
4. Weight .....	2-5
5. Lifting capacities .....	2-7
6. Bucket selection guide .....	2-8
7. Specification for major components .....	2-10
8. Recommended oils .....	2-13

## CONTROL DEVICES

1. Cab devices .....	3-1
2. Cluster .....	3-2
3. Switches .....	3-34
4. Levers and pedals .....	3-45
5. Air conditioner and heater .....	3-48
6. Others .....	3-55

## OPERATION

1. Suggestion for new machine .....	4-1
2. Check before starting the engine .....	4-2
3. Starting and stop the engine .....	4-3
4. Mode selection system .....	4-10
5. Operation of the working device .....	4-20
6. Traveling of the machine .....	4-21

## TRANSPORTATION

1. Road traveling .....	5-1
2. Preparation for transportation .....	5-2
3. Dimension and weight .....	5-3
4. Loading the machine .....	5-5
5. Fixing the machine .....	5-7
6. Loading and unloading by crane .....	5-8

## MAINTENANCE

1. Instruction .....	6-1
2. Tightening torque .....	6-6
3. Fuel, coolant and lubricants .....	6-9
4. Maintenance check list .....	6-11
5. Maintenance chart .....	6-16
6. Service instruction .....	6-18
7. Electrical system .....	6-42
8. Air conditioner and heater .....	6-45

## TROUBLESHOOTING GUIDE

1. Engine .....	7-1
2. Electrical system .....	7-2
3. Others .....	7-3

## HYDRAULIC BREAKER AND QUICK CLAMP

1. Selecting hydraulic breaker .....	8-1
2. Circuit configuration .....	8-2
3. Maintenance .....	8-3
4. Precaution while operating the breaker .....	8-4
5. Quick clamp .....	8-6

INDEX .....	9-1
-------------	-----