

CONTENTS

Foreword	0-1
Before servicing this machine	0-2
EC regulation approved	0-3
Table to enter S/No and distribution	0-4
Safety labels	0-5
Machine data plate	0-19
Guide (direction, S/No, symbol)	0-20

SAFETY HINTS

1. Before operating the machine	1-1
2. During operating the machine	1-16
3. During maintenance	1-24
4. Parking	1-27

SPECIFICATIONS

1. Major components	2-1
2. Specifications	2-2
3. Working range	2-3
4. Weight	2-4
5. Lifting capacities	2-5
6. Grapple guide	2-8
7. Specification for major components	2-10
8. Recommended oils	2-14

CONTROL DEVICES

1. Cab devices	3-1
2. Cluster	3-2
3. Switches	3-25
4. Levers and pedals	3-35
5. Air conditioner and heater	3-48
6. Others	3-42

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	4-7
5. Operation of the working device	4-12
6. Operation of cab	4-13
7. Traveling of the machine	4-15
8. Efficient working method	4-21
9. Operation in the special work sites	4-24
10. Normal operation of excavator	4-26
11. Attachment lowering	4-27
12. Storage	4-28

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	6-44
8. Air conditioner and heater	6-47

TROUBLESHOOTING GUIDE

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

INDEX	8-1
-------------	-----