

CONTENTS

Foreword	0-1	5. TRANSPORTATION	
Before servicing this machine	0-2	1. Road traveling	5-1
Table to enter S/No and distribution	0-3	2. Preparation for transportation	5-2
EC regulation approved	0-4	3. Loading the machine	5-3
Safety labels	0-5	4. Fixing the machine	5-4
Machine data plate	0-13	5. Loading and unloading by crane	5-6
Guide (direction, S/No, symbol)	0-14	6. Towing the machine	5-7
1. SAFETY HINTS			
1. Before operating the machine	1-1	6. MAINTENANCE	
2. During operating the machine	1-15	1. Instructions	6-1
3. During maintenance	1-24	2. Tightening torque	6-5
4. Parking	1-28	3. Spec of fuel, coolant and lubricants	6-8
2. SPECIFICATIONS			
1. Major components	2-1	4. Maintenance check list	6-10
2. Specifications	2-2	5. Maintenance chart	6-13
3. Weight	2-6	6. Service instruction	6-15
4. Specification for major components	2-7	7. Electrical system	6-42
3. CONTROL DEVICES			
1. Cab devices	3-1	8. Air conditioner and heater	6-45
2. Cluster	3-2	7. TROUBLESHOOTING GUIDE	
3. Monitors	3-10	1. Engine	7-1
4. Switches	3-24	2. Electrical system	7-2
5. Control device	3-30	3. Power train system	7-3
6. Air conditioner and heater	3-32	4. Hydraulic system	7-4
7. Others	3-36	8. OTHERS	
4. OPERATION			
1. Suggestion for new machine	4-1	1. Central grease lubrication system	8-1
2. Check before starting the engine	4-2	2. Quick coupler	8-6
3. Starting and stop the engine	4-3	INDEX	9-1
4. Warming-up operation	4-8		
5. Operation of the working device	4-9		
6. Traveling of the machine	4-10		
7. Efficient working method	4-15		
8. Adjustment of the work equipment	4-22		
9. Operation in the special work sites	4-24		
10. Storage	4-26		