



WARNING

CALIFORNIA PROPOSITION 65

Breathing diesel engine exhaust exposes you to chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

- Always start and operate the engine in a well-ventilated area.
- If in an enclosed area, vent the exhaust to the outside.
- Do not modify or tamper with the exhaust system.
- Do not idle the engine except as necessary.

For more information go the www.P65warnings.ca.gov/diesel.

91K4-07310-EN

⚠ Breathing diesel engine exhaust exposes you to chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

- Always start and operate the engine in a well-ventilated area.
- If in an enclosed area, vent the exhaust to the outside.
- Do not modify or tamper with the exhaust system.
- Do not idle the engine except as necessary.

* For more information go to www.P65warnings.ca.gov/diesel.

CONTENTS

Foreword	0-1	4. Operation of the working device	4-7
Emission-related components warranty (USA and CANADA only)	0-1-1	5. Traveling of the machine	4-8
Before servicing this machine	0-2	6. Efficient working method	4-11
EC regulation approved	0-3	7. Operation in the special work sites	4-15
Table to enter S/No and distribution	0-4	8. Normal operation of excavator	4-17
Safety labels	0-5	9. Attachment lowering	4-18
Machine data plate	0-14	10. Storage	4-19
Guide(Direction, S/No, Symbol)	0-15	11. RCV lever operating pattern	4-21
1. SAFETY HINTS		12. Handling the rubber track	4-23
1. Before operating the machine	1-1	13. Switching hydraulic attachment circuit	4-28
2. During operating the machine	1-16		
3. During maintenance	1-23		
4. Parking	1-26		
2. SPECIFICATIONS		5. TRANSPORTATION	
1. Major components	2-1	1. Preparation for transportation	5-1
2. Specifications	2-2	2. Dimension and weight	5-2
3. Working range	2-3	3. Loading the machine	5-4
4. Weight	2-4	4. Fixing the machine	5-6
5. Lifting capacities	2-5	5. Loading and unloading by crane	5-7
6. Bucket selection guide	2-9		
7. Undercarriage	2-10		
8. Specification for major components	2-11	6. MAINTENANCE	
9. Recommended oils	2-14	1. Instruction	6-1
3. CONTROL DEVICES		2. Tightening torque	6-5
1. Cab devices	3-1	3. Fuel, coolant and lubricants	6-8
2. Cluster	3-3	4. Maintenance check list	6-10
3. Switches	3-9	5. Maintenance chart	6-15
4. Levers and pedals	3-13	6. Service instruction	6-17
5. Air conditioner and heater	3-16	7. Electrical system	6-34
6. Others	3-18	8. Air conditioner and heater	6-37
4. OPERATION		7. TROUBLESHOOTING GUIDE	
1. Suggestion for new machine	4-1	1. Engine	7-1
2. Check before starting the engine	4-2	2. Electrical system	7-2
3. Starting and stop the engine	4-3	3. Others	7-3
8. HYDRAULIC BREAKER			
1. Selecting hydraulic breaker	8-1		
2. Circuit configuration	8-2		
3. Maintenance	8-3		
4. Precaution when operating the breaker	8-4		
5. Quick coupler	8-6		