

# Shop Manual

**830B**  
**850B**  
**870B**  
**830C**  
**850C**  
**870C**

## MOTOR GRADER

	<b>830B</b>	<b>203163</b>	
	<b>830C</b>	<b>202753</b>	
	<b>850B</b>	<b>202575</b>	
SERIAL NUMBERS	<b>850C</b>	<b>202727</b>	and UP
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	<b>870C</b>	<b>202775</b>	

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## PRODUCT PUBLICATIONS INFORMATION

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Special publications, such as service tool, air conditioning and turbocharger service manuals are also available as well as selected Operation and Service manuals in foreign languages.

The Publications listed below are available for this particular machine(s).

DESCRIPTION	FORM NUMBER
<b>PARTS BOOK - PAPER:</b>	
Chassis and Engine 830B/C .....	BEPB002801
Chassis and Engine 850B/C .....	BEPBG58612
Chassis and Engine 870B/C .....	BEPBG78100
<b>OPERATION AND MAINTENANCE MANUAL:</b>	
Chassis and Engine .....	CEAM009800
<b>SHOP MANUAL</b>	
Chassis .....	CEBM011200
Engine 114E-2 Series .....	CEBM000601
Engine 102E-2 Series .....	SEBM010016
<b>SAFETY MANUAL</b>	
Machine specific .....	1085 960 R2

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# SAFETY

## SAFETY NOTICE

### IMPORTANT SAFETY NOTICE

Proper service and repair is extremely important for the safe operation of your machine. The service and repair techniques recommended and described in this manual are both effective and safe methods of operation. Some of these operations require the use of tools specially designed for the purpose.

To prevent injury to workers, the symbols  and  are used to mark safety precautions in this manual. The cautions accompanying these symbols should always be followed carefully. If any dangerous situation arises or may possibly arise, first consider safety, and take the necessary actions to deal with the situation.

### GENERAL PRECAUTIONS

Mistakes in operation are extremely dangerous. Read the OPERATION & MAINTENANCE MANUAL carefully BEFORE operating the machine.

1. Before carrying out any greasing or repairs, read all the precautions given on the decals which are fixed to the machine.
2. When carrying out any operation, always wear safety shoes and helmet. Do not wear loose work clothes, or clothes with buttons missing.
  - Always wear safety glasses when hitting parts with a hammer.
  - Always wear safety glasses when grinding parts with a grinder, etc.
3. If welding repairs are needed, always have a trained, experienced welder carry out the work. When carrying out welding work, always wear welding gloves, apron, glasses, cap and other clothes suited for welding work.
4. When carrying out any operation with two or more workers, always agree on the operating procedure before starting. Always inform your fellow workers before starting any step of the operation. Before starting work, hang UNDER REPAIR signs on the controls in the operator's compartment.
5. Keep all tools in good condition and learn the correct way to use them.
6. Decide a place in the repair workshop to keep tools and removed parts. Always keep the tools and parts in their correct places. Always keep the work area clean and make sure that there is no dirt or oil on the floor. Smoke only in the areas provided for smoking. Never smoke while working.

### PREPARATIONS FOR WORK

1. Before adding oil or making repairs, park the machine on hard, level ground, and block the wheels or tracks to prevent the machine from moving.
2. Before starting work, lower blade, ripper, bucket or any other work equipment to the ground. If this is not possible, insert the safety pin or use blocks to prevent the work equipment from falling. In addition, be sure to lock all the control levers and hang warning signs on them.
3. When disassembling or assembling, support the machine with blocks, jacks or stands before starting work.

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Service Manuals from 2\$