



# **E115SR**

# **E135SR**

**WORKSHOP MANUAL**  
**ENGLISH**

Print No. 604.13.426

Edition: 03/2005  
English - Printed in Italy

Printed by Studio ti - 20005

## **AVOID ACCIDENTS**

Most accidents, whether they occur in industry, on the farm, at home or on the highway, are caused by the failure of some individuals to follow simple and fundamental safety rules or precautions. For this reason **MOST ACCIDENTS CAN BE PREVENTED** by recognising the real cause and doing something about it before the accident occurs.

Regardless of the care used in the design and construction of any type of equipment there are conditions that cannot be completely safeguarded against without interfering with reasonable accessibility and efficient operation. Carefully read indications, cautions and safety warning quoted in the "SAFETY RULES" section.

A careful operator is the best insurance against an accident.

The complete observance of one simple rule would prevent many thousand serious injuries each year.

That rule is:

**Never attempt to clean, oil or adjust a machine while it is in motion.**



### **ATTENTION**

**On machines having hydraulically, mechanically and/or cable controlled equipment (such as showels, loaders, dozers, scrapers etc.) be certain the equipment is lowered to the ground before servicing, adjusting and/or repairing.**

**If it is necessary to have the equipment partially or fully raised to gain access to certain items, be sure the equipment is suitably supported by means other than the hydraulic lift cylinders, cable and/or mechanical device used for controlling the equipment.**

---

**COPYRIGHT BY NEW HOLLAND KOBELCO CONSTRUCTION  
MACHINERY S.p.A.**

**Product Support - Documentation Centre  
Strada di Settimo, 323 - 10099 - S. Mauro T.SE (TO) ITALY**

All rights reserved. Reproduction of text and illustrations in whole or in part, is strictly prohibited.

## INDEX

### SPECIFICATIONS

- Section 1 - Outline
- Section 2 - Specification
- Section 3 - Attachment dimension

### MAINTENANCE

- Section 11 - Tools
- Section 12 - Standard maintenance time schedule
- Section 13 - Maintenance standard and test procedure

### SYSTEM

- Section 21 - Mechatro control system
- Section 22 - Hydraulic system
- Section 23 - Electric system
- Section 24 - Components system
- Section 25 - Air-conditioner system

### DISASSEMBLING

- Section 31 - Disassembling and assembling
- Section 32 - Attachment
- Section 33 - Upper structure
- Section 34 - Travel system

### TROUBLESHOOTING

- Section 41 - Troubleshooting (mechatro control)
- Section 42 - Troubleshooting (Hydraulic)
- Section 43 - Troubleshooting (Electric)
- Section 44 - Troubleshooting (Engine)

### ENGINE

- Section 51 - Engine

### OPT

- Section 63 - Mounting the breaker and nibbler & breaker

**SAFETY PRECAUTIONS****WARNING**

*The proper and safe lubrication and maintenance for this machine, recommended by Distributor, are outlined in the OPERATOR'S MANUAL for the machine.*

*Improper performance of lubrication or maintenance procedures are dangerous and could result in injury or death. Read and understand the MANUAL before performing any lubrication or maintenance.*

The serviceman or mechanic may be unfamiliar with many of the systems on this machine. This makes it important to use caution when performing service work. A knowledge of the system and or components is important before the removal or disassembly of any component.

Because of the size of some of the machine components, the serviceman or mechanic should check the weights noted in this manual. Use proper lifting procedures when removing any components. Weight of components table is shown in the section; SPECIFICATIONS.

The following is a list of basic precautions that must always be observed.

1. Read and understand all Warning plates and decal on the machine before Operating, Maintaining or Repairing this machine.
2. Always wear protective glasses and protective shoes when working around machines. In particular, wear protective glasses when using hammers, punches or drifts on any part of the machine or attachments. Use welders gloves, hood/goggles, apron and the protective clothing appropriate to the welding job being performed. Do not wear loose fitting or torn clothing. Remove all rings from fingers, loose jewelry, confine long hair and loose clothing before working on this machinery.
3. Disconnect the battery and hang a "Do Not Operate" tag in the Operators Compartment. Remove ignition keys.
4. If possible, make all repairs with the machine parked on a level, hard surface. Block the machine so it does not roll while working on or under the machine. Hang a "Do Not Operate" tag in the Operators Compartment.
5. Do not work on any machine that is supported only by lift, jacks or a hoist. Always use blocks or jack stands, capable of supporting the machine, before performing any disassembly.

**WARNING**

*Do not operate this machine unless you have read and understand the instructions in the OPERATOR'S MANUAL. Improper machine operation is dangerous and could result in injury or death.*

6. Relieve all pressure in air, oil or water systems before any lines, fittings or related items are disconnected or removed. Always make sure all raised components are blocked correctly and be alert for possible pressure when disconnecting any device from a system that utilizes pressure.
7. Lower the bucket, dozer, or other attachments to the ground before performing any work on the machine. If this cannot be done, make sure the bucket, dozer, ripper or other attachment is blocked correctly to prevent it from dropping unexpectedly.
8. Use steps and grab handles when mounting or dismounting a machine. Clean any mud or debris from steps, walkways or work platforms before using. Always face to the machine when using steps, ladders and walkways. When it is not possible to use the designed access system, provide ladders, scaffolds, or work platforms to perform safe repair operations.
9. To avoid back injury, use a hoist when lifting components which weigh 20 kg (45 lbs) or more. Make sure all chains, hooks, slings, etc., are in good condition and are the correct capacity. Be sure hooks are positioned correctly. Lifting eyes are not to be side loaded during a lifting operation.
10. To avoid burns, be alert for hot parts on machines which have just been stopped and hot fluids in lines, tubes and compartments.
11. Be careful when removing cover plates. Gradually back off the last two capscrews or nuts located at opposite ends of the cover or device and carefully pry cover loose to relieve any spring or other pressure, before removing the last two capscrews or nuts completely.
12. Be careful when removing filler caps, breathers and plugs on the machine. Hold a rag over the cap or plug to prevent being sprayed or splashed by liquids under pressure. The danger is even

## SAFETY PRECAUTIONS

---

- greater if the machine has just been stopped because fluids can be hot.
13. Always use the proper tools that are in good condition and that are suited for the job at hand. Be sure you understand how to use them before performing any service work.
  14. Reinstall all fasteners with the same part number. Do not use a lesser quality fastener if replacements are necessary.
  15. Repairs which require welding should be performed only with the benefit of the appropriate reference information and by personnel adequately trained and knowledgeable in welding procedures. Determine type of metal being welded and select correct welding procedure and electrodes, rods or wire to provide a weld metal strength equivalent at least to that of the parent metal. Make sure to disconnect battery before any welding procedures are attempted.
  16. Do not damage wiring during removal operations. Reinstall the wiring so it is not damaged nor will be damaged in operation of the machine by contacting sharp corners, or by rubbing against some object or hot surface. Do not connect wiring to a line containing fluid.
  17. Be sure all protective devices including guards and shields are properly installed and functioning correctly before starting a repair. If a guard or shield must be removed to perform the repair work, use extra caution and replace the guard or shield after repair is completed.
  18. The maintenance and repair work while holding the bucket raised is dangerous due to the possibility of a falling attachment. Don't fail to lower the attachment and place the bucket to the ground before starting the work.
  19. Loose or damaged fuel, lubricant and hydraulic lines, tubes and hoses can cause fires. Do not bend or strike high pressure lines or install ones which have been bent or damaged. Inspect lines, tubes and hoses carefully. Do not check for leaks with your hands. Very small (pinhole) leaks can result in a high velocity oil stream that will be invisible close to the hose. This oil can penetrate the skin and cause personal injury. Use cardboard or paper to locate pinhole leaks.
  20. Tighten connections to the correct torque. Make sure that all heat shields, clamps and guards are installed correctly to avoid excessive heat, vibration or rubbing against other parts during operation.
  21. Shields that protect against oil spray onto hot exhaust components in event of a line, tube or seal failure must be installed correctly.
  22. Do not operate a machine if any rotating part is damaged or contacts any other part during operation. Any high speed rotating component that has been damaged or altered should be checked for balance before reusing.
  23. Be careful when servicing or separating the tracks (crawlers). Chips can fly when removing or installing a track (crawlers) pin. Wear safety glasses and long sleeve protective clothing. Tracks (crawlers) can unroll very quickly when separated. Keep away from front and rear of machine. The machine can move unexpectedly when both tracks (crawlers) are disengaged from the sprockets. Block the machine to prevent it from moving.
-

Thank you so much for reading.  
Please click the “Buy Now!”  
button below to download the  
complete manual.



After you pay.

You can download the most  
perfect and complete manual in  
the world immediately.

Our support email:

[ebooklibonline@outlook.com](mailto:ebooklibonline@outlook.com)