

# SERVICE MANUAL

Crawler Excavators  
E265B

**VERSION - C**

Print No.87495895A

From S/N - N7DA26001



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**NEW HOLLAND**

CONSTRUCTION



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# REPAIR MANUAL

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## E265B EXCAVATOR

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CNH America LLC reserves the right to make improvements in design or changes in specifications at any time without incurring any obligation to install them on units previously sold.

All data given in this publication is subject to production variations. Dimensions and weights are only approximate. Illustrations do not necessarily show products in standard condition. For exact information about any particular product, please consult your Dealer

Revision History			
Issue	Issue Date	Applicable Machine	Remarks
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# **0. SAFETY**

## GENERAL SAFETY INFORMATION



**Do not operate or perform any maintenance on this machine until all instructions found in the OPERATOR'S MANUAL and this MANUAL have been thoroughly read and understood. Improper operation or maintenance of this machine may cause accidents and could result in serious injury or death.**

**Always keep the manual in storage. If it is missing or damaged, place an order with an authorized Distributor for a replacement. If you have any questions, please consult an authorized Distributor.**

- (1) Most accidents that occur during operation are due to neglect of precautionary measures and safety rules. Sufficient care should be taken to avoid these accidents. Erroneous operation, lubrication or maintenance services are very dangerous and may cause injury or death of personnel. Therefore all precautionary measures, NOTES, DANGERS, WARNINGS and CAUTIONS contained in the manual and on the machine should be read and understood by all personnel before starting any work with or on the machine.
- (2) Operation, inspection, and maintenance should be carefully carried out, and safety must be given the first priority. Messages of safety are indicated with marks. The safety information contained in the manual is intended only to supplement safety codes, insurance requirements, local laws, rules and regulations.
- (3) Messages of safety appear in the manual and on the machine : All messages of safety are identified by either word of "DANGER", "WARNING" and "CAUTION".

- 1) **DANGER-** Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury and is represented as follows:



- 2) **WARNING-** Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury and is represented as follows:



- 3) **CAUTION-** Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert for possible damage to the machine and its components and is represented as follows:



- (4) It is very difficult to forecast every danger that may occur during operation. However, safety can be ensured by fully understanding proper operating procedures for this machine according to methods recommended by Manufacturer.
- (5) While operating the machine, be sure to perform work with great care, so as not to damage the machine, or allow accidents to occur.
- (6) Continue studying the manual until all Safety, Operation and Maintenance procedures are completely understood by all persons working with the machine.

## SAFETY PRECAUTIONS



The proper and safe lubrication and maintenance for this machine 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 service technicians 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 technician 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 decals 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 Operator's Compartment. Remove ignition keys.
- (4) If possible, make all repairs with the machine parked on a firm, level surface. Block the machine so it does not roll while working on or under the machine. Hang a "Do Not Operate" tag in the Operator's 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.



**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 greater if the machine has just been stopped because fluids can be hot.

## SAFETY

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- (13) Always use 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) Maintenance and repair work while holding the bucket raised is dangerous due to the possibility of a falling attachment. Fully lower the attachment and place the bucket to the ground before starting any 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 card-board 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. Shields that protect against oil spray onto hot exhaust components in event of a line, tube or seal failure must be installed correctly.
- (21) 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.
- (22) 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.

**NOTE:**

This Manual contains information necessary for the maintenance and repairing services of your hydraulic excavator. Information is categorized into 6 Chapters: Specification, Maintenance, System, Disassembly, Troubleshooting and Engine.

- The Chapter, "Specification" describes the specifications for the entire machine, which is instructive for replacement and repairing of attachments.
- The Chapter, "Maintenance" provides material which is helpful for maintenance service and adjustments for entire machine.
- The Chapter, "System" describes the operating system, such as the hydraulic system, electrical system, components, and so on.
- The Chapter, "Disassembly" describes the removal and installation of assemblies mounted on the upper structure and undercarriage, and the assembling and disassembling of the associated hydraulic equipment.
- The Chapter, "Troubleshooting" describes how to find the fault equipment.
- The Chapter, "Engine" describes engine repair using of the "Maintenance Manual" provided by the engine manufacture.

KOBELCO reserves the right to make improvements in design or changes in specifications at any time without incurring any obligation to install them on units previously sold.



# 1. OUTLINE

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