

ORIGINAL INSTRUCTIONS - according to Directive 2006/42/EC, Annex I 1.7.4.1

OPERATOR'S MANUAL

L213 L223

L215 L225

L218 L230

L220

Tier 3

200 Series Skid Steer Loader

L213 PIN NBM441228 and above

L215 PIN NBM439248 and above

L218 PIN NBM437313 and above

L220 PIN NBM435678 and above

L223 PIN NBM434543 and above

L225 PIN NBM433048 and above

L230 PIN NBM432323 and above

C227

C232

C238

Tier 3

200 Series Compact Track Loader

C227 PIN NBM429443 and above

C232 PIN NBM427253 and above

C238 PIN NBM425088 and above

Part number 47540641

5th edition English

July 2013

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EVERY 50 HOURS

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1 - GENERAL INFORMATION

Note to the Owner



931002659 1

CNH AMERICA LLC
P.O. Box 9228
Wichita, Kansas
U.S.A
67277



DEALER'S STAMP OR
CARD

This manual contains important information about the safe operation, adjustment and maintenance of your skid steer. Refer to the detailed INDEX at the end of this manual for locating specific items about your machine. The skid steer conforms to current safety regulations. Use this manual as a guide. Your skid steer will remain a reliable working tool as long as it is kept in good working condition and serviced properly.

This skid steer, with standard equipment and authorized attachments, is intended for above ground material handling. Use only approved accessories and attachments designed for your machine.

This operators manual is to be stored in the manual compartment equipped on this machine. Make sure this manual is complete and in good condition. Contact your dealer to obtain additional manuals. Contact your dealer for any further information or assistance about your machine. Your dealer has corporation approved service parts. Your dealer has technicians with special training that know the best methods of repair and maintenance for your skid steer. Your New Holland Construction Dealer is available for any further information. New Holland Construction Customer Service is also available. Call 1-888-365-NHCE (1-888-365-6423) or email customerservice.na@cnh.com.

The information in this manual is provided on the basis of information that was available at the time that the manual was written. Settings, procedures, part numbers, software, and other items can change. These changes can affect the service that is given to the machine. Ensure that you have complete and current information from your dealer before you start any machine operation.

Personal safety



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible death or injury.

Throughout this manual and on machine decals, you will find the signal words DANGER, WARNING, and CAUTION followed by special instructions. These precautions are intended for the personal safety of you and those working with you.

DO NOT operate or permit anyone to operate or service this machine until you or the other persons have read and understand the safety, operation, and maintenance instructions in this manual. Use only trained operators who have demonstrated the ability to operate and service this machine correctly and safely. All persons who will be operating this machine shall possess a valid local vehicle operating permit and/or other applicable local age work permit. The information in this manual is provided on the basis of information that was available at the time that the manual was written. Settings, procedures, part numbers, software and other items can change. These changes can affect the service that is given to the machine. Ensure that you have complete and most current information from your dealer before you start your machine operation.

DO NOT use this machine for any application or purpose other than those described in this manual. Consult an authorized dealer on changes, additions or modifications that can be required for this machine to comply with various country regulations and safety requirements. Unauthorized modifications will cause serious injury or death. Anyone making such unauthorized modifications is responsible for the consequences.

ATTENTION: The engine and fuel system on your machine is designed and built to government emissions standards. Tampering by dealers, customers and operators is strictly prohibited by law. Failure to comply could result

in government fines, rework charges invalid warranty, legal action and possible confiscation of the machine until rework to original condition is completed. Engine service and or repairs must be done by a certified technician only!

Declaration of conformity

On this page is provided copy of the "EC" Declaration of Conformity. The EC Declaration of Conformity is the manufacturer's declaration about machine compliance to relevant EU provisions.

Please keep the original document in a safe place. Local authorities may require you to show this document in order to assure compliance of your machine.

Translation of this declaration in your own country language is provided on the reverse page of the original document. For your better and easier understanding of the document hereafter you'll find some explanatory notes.

1. Under section 1.2 are listed those options or variants which have safety related functions. Some of them are standard provided, like FOPS or ROPS (please refer to page 6-4 for other detail).
2. Under point 2 are listed all information required by EU "Outdoor Noise" Directive 2000/14/EC. Please refer to your own original EC Declaration of Conformity for specific machine information. Other information about machine guaranteed sound power level (LwA) can be found on page 1-4. On the same page are indicated information about operators station noise level (LpA), which is not matter of above mentioned EU Directive and therefore not indicated on it.
3. Generic serial number or Product Identification Number (PIN) for this machine type. Sequence of letters and numbers may vary depending on machine configuration.
4. EC Declaration of Conformity serial number or Product Identification Number (PIN). Please make reference to this number when requiring information or support to Case Construction about EC Declaration of Conformity.
5. Signature of a person authorized to sign the document on behalf of the company.



"EC" DECLARATION OF CONFORMITY

The undersigned declare that the machine described below has been designed and manufactured in compliance with the following European Directives, as amended, and the regulations transposing them into national laws:

1. 2006/42/EC "SAFETY OF MACHINERY"

1.1 European Harmonised standards under which conformity is declared:

EN474-1:2006+A1:2009; EN474-3:2006+A1:2009.

1.2 Main safety components installed and supplied with the machine:

	Yes	No
1.2.1 Falling Object Protective Structure (F.O.P.S.)	<input type="checkbox"/>	<input type="checkbox"/>
1.2.2 Object handling application kit (EN 474-5 §5.6.4; EN 474-1 Annex E)	<input type="checkbox"/>	<input type="checkbox"/>
1.2.3 Roll Over Protective Structure (R.O.P.S.)	<input type="checkbox"/>	<input type="checkbox"/>
1.2.4 Cab front guard	<input type="checkbox"/>	<input type="checkbox"/>
1.2.7 //	<input type="checkbox"/>	<input type="checkbox"/>

1.4 Name and address of the person authorized to compile the technical file:

2. 2000/14/EC "Noise emission"

2.1 Conformity assessment procedure followed:

2.2 Name and address of the Notified Body involved:

2.3 Measured sound power level LWA (ref. 1 pW):

2.4 Guaranteed sound power level LWA (ref. 1 pW):

2.5 Engine power (as defined by ISO 14396):

2.6 Holder of the technical documentation:

Annex

2

dB(a)

dB(a)

kW

3. 2004/108/EC "ELECTROMAGNETIC COMPATIBILITY"

3.1 European Harmonised standards under which conformity is declared: EN 13309:2000

4. OTHER APPLICABLE DIRECTIVE/S: //

5. Manufacturer:

6. Category: **SKID STEER LOADER**

7. Type:

8. Serial number:

3

9. EC Representative: where applicable

4

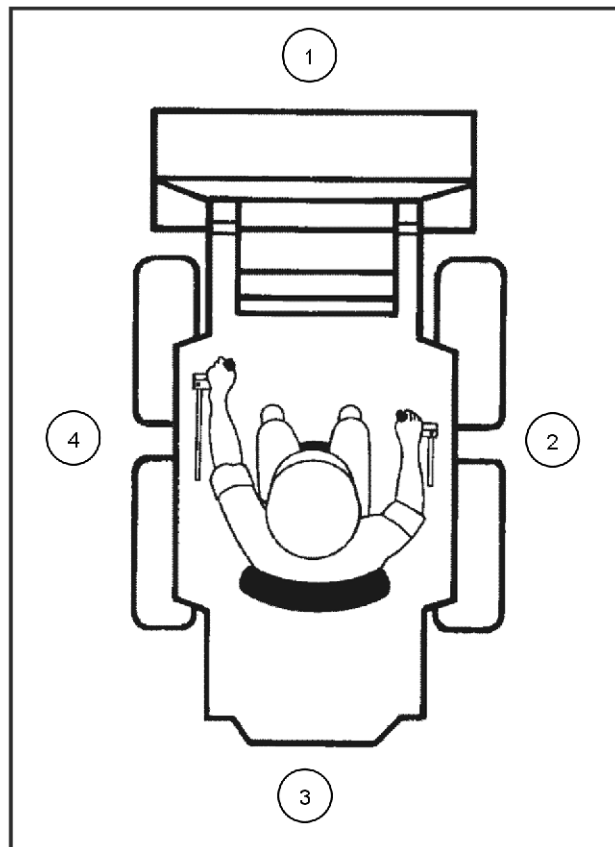
5

Location:

Date:

Authorized Signature
(name and function)

Right, left, front and rear of the machine



RAPH12SSL0057BA 1

The terms front (1), right (2), rear (3), and left (4) are used in this manual to indicate the direction as seen from the operator's seat.

Identification numbers

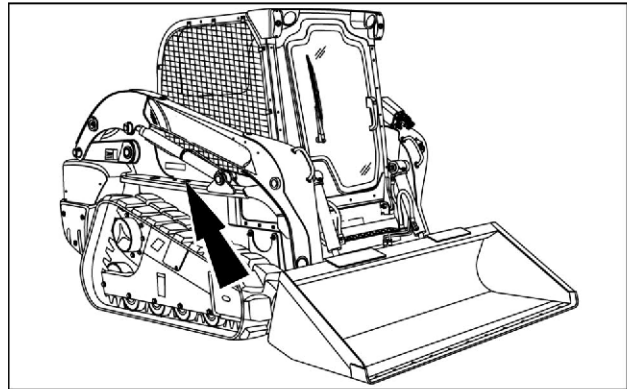
Write your machine model number, Product Identification Number (PIN) and serial numbers on the lines provided below. Always give these numbers and component plate numbers to your dealer when you need parts or information for your machine.

Make a record of the numbers. Keep this record and your manufacturers statement of origin in a safe place. If the machine is stolen, report the numbers to your local law enforcement agency.

MACHINE
Machine Model and Type
Product Identification Number
Year of Build
Engine Serial Number
Hydrostatic Pump Serial Number
Bucket Serial Number

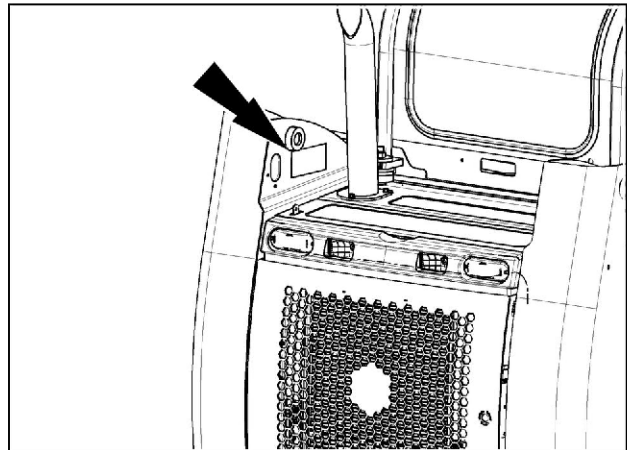
Product Identification Number (PIN).

- Outside right side of chassis - vertical lift



9310748611 1

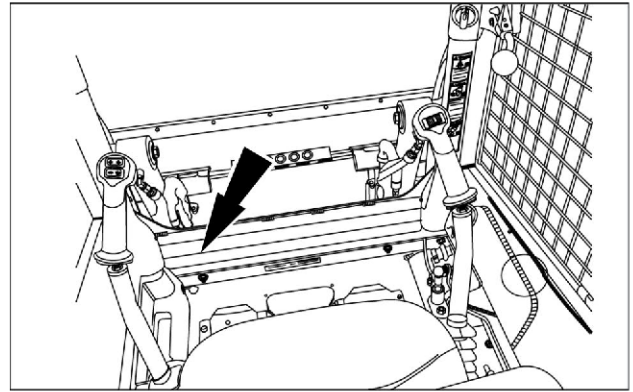
- Inside left side lift arm tower - radial lift



931002296A 2

Roll Over Protective Structure (ROPS) certification plate.

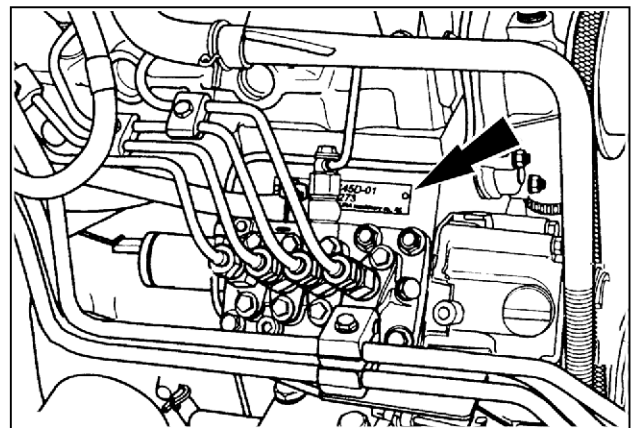
- Front edge (lower) inside cab.



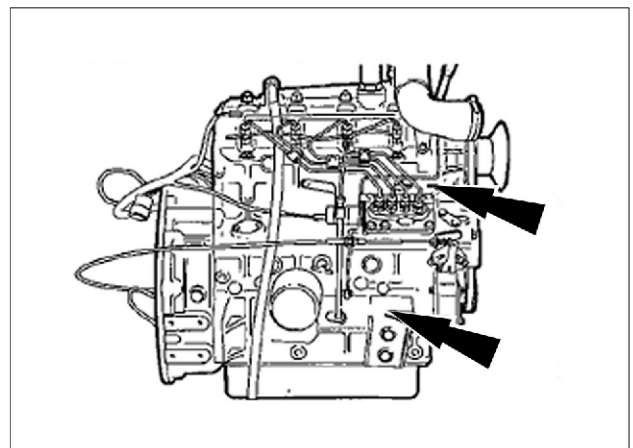
931007505A 3

Engine serial number plate

Located on the fuel injection - ISM engines.	
L213	ISM engine
L215	
L218	
L220	



76075756 4

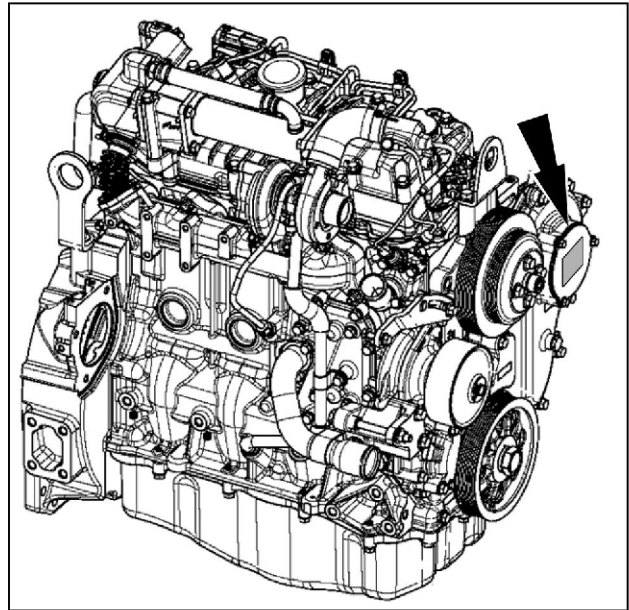


RCPH11SSL004AAD 5

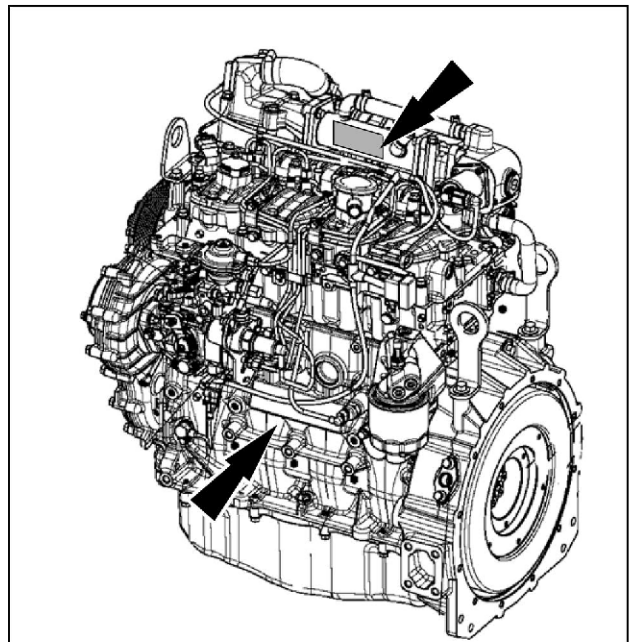
1 - GENERAL INFORMATION

Located at the end of the engine that is facing rearward

L223	F5C engines
L225	
L230	
C227	
C232	
C238	

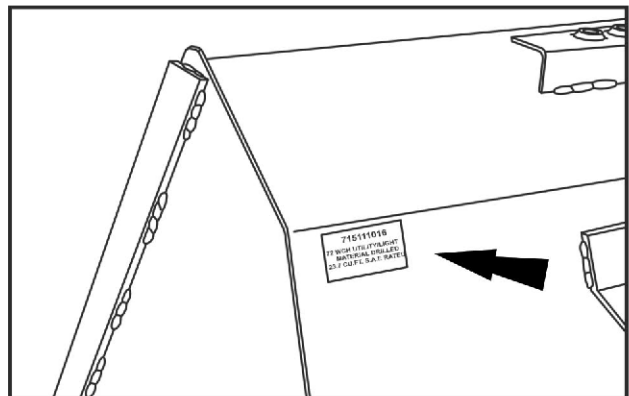


931002236 6



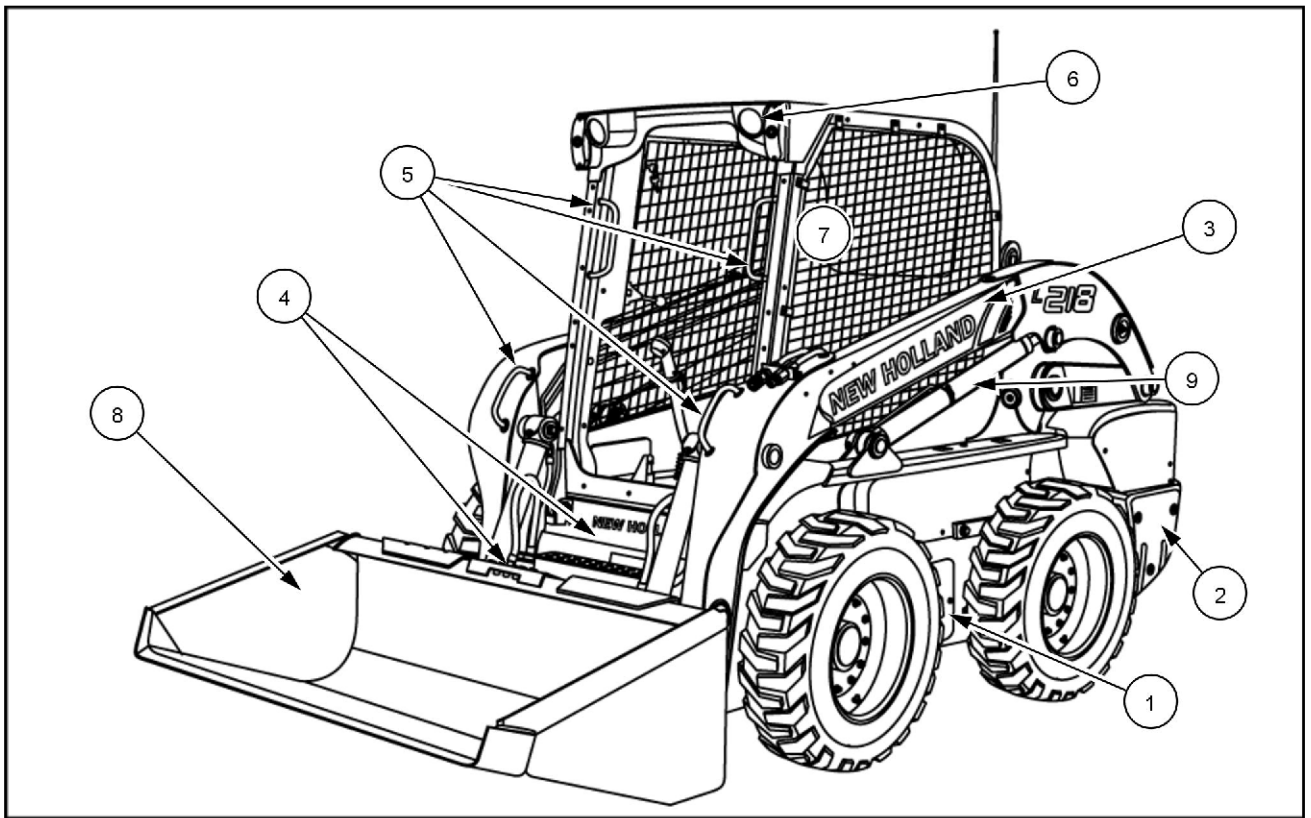
931002237 7

Bucket identification plate



BT04F026-01 8

Machine components



93107444 1

- | | |
|-------------------------------------|-------------------------------------|
| (1) Chain compartment access | (6) Front light |
| (2) Service access cover | (7) Operator's compartment |
| (3) Loader lift arm | (8) Bucket |
| (4) Steps | (9) Loader arm lift cylinder |
| (5) Hand holds | |

2 - SAFETY INFORMATION

Signal word definitions


Personal safety





This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible death or injury.

Throughout this manual and on machine decals, you will find the signal words DANGER, WARNING, and CAUTION followed by special instructions. These precautions are intended for the personal safety of you and those working with you.

Read and understand all the safety messages in this manual before you operate or service the machine.

 DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury. The color associated with DANGER is RED.

 WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury. The color associated with WARNING is ORANGE.

 CAUTION, used with the safety alert symbol, indicates a hazardous situation which, if not avoided, could result in minor or moderate injury. The color associated with CAUTION is YELLOW.

FAILURE TO FOLLOW DANGER, WARNING, AND CAUTION MESSAGES COULD RESULT IN DEATH OR SERIOUS INJURY.

Machine safety

NOTICE: Notice indicates a situation which, if not avoided, could result in machine or property damage.

Throughout this manual you will find the signal word Notice followed by special instructions to prevent machine or property damage. The word Notice is used to address practices not related to personal safety.

Information

NOTE: Note indicates additional information which clarifies steps, procedures, or other information in this manual.

Throughout this manual you will find the word Note followed by additional information about a step, procedure, or other information in the manual. The word Note is not intended to address personal safety or property damage.

Safety rules

General safety rules

Use caution when operating the machine on slopes. Raised equipment, full tanks and other loads will change the center of gravity of the machine. The machine can tip or roll over when near ditches and embankments or uneven surfaces.

Never permit anyone other than the operator to ride on the machine.

Never operate the machine under the influence of alcohol, drugs, or while otherwise impaired.

When digging or using ground engaging attachments be aware of buried cables. Contact local utilities to determine the locations of services.

Pay attention to overhead power lines and hanging obstacles. High voltage lines may require significant clearance for safety.

Hydraulic oil or diesel fuel leaking under pressure can penetrate the skin, causing serious injury or infection.

- DO NOT use your hand to check for leaks. Use a piece of cardboard or paper.
- Stop engine, remove key and relieve the pressure before connecting or disconnecting fluid lines.
- Make sure all components are in good condition and tighten all connections before starting the engine or pressurizing the system.
- If hydraulic fluid or diesel fuel penetrates the skin, seek medical attention immediately.
- Continuous long term contact with hydraulic fluid may cause skin cancer. Avoid long term contact and wash the skin promptly with soap and water.

Keep clear of moving parts. Loose clothing, jewelry, watches, long hair, and other loose or hanging items can become entangled in moving parts.

Wear protective equipment when appropriate.

DO NOT attempt to remove material from any part of the machine while it is being operated or components are in motion.

Make sure all guards and shields are in good condition and properly installed before operating the machine. Never operate the machine with shields removed. Always close access doors or panels before operating the machine.

Dirty or slippery steps, ladders, walkways, and platforms can cause falls. Make sure these surfaces remain clean and clear of debris.

A person or pet within the operating area of a machine can be struck or crushed by the machine or its equipment. DO NOT allow anyone to enter the work area.

Raised equipment and/or loads can fall unexpectedly and crush persons underneath. Never allow anyone to enter the area underneath raised equipment during operation.

Never operate engine in enclosed spaces as harmful exhaust gases may build up.

Before starting the machine, be sure that all controls are in neutral or park lock position.

Start the engine only from the operator's seat. Do not connect or short across terminals on the starter solenoid. Attach jumper cables as described in the manual. Starting in gear may cause death or serious injury.

Always keep windows, mirrors, all lighting, and Slow Moving Vehicle (SMV) emblem clean to provide the best possible visibility while operating the machine.

Operate controls only when seated in the operator's seat, except for those controls expressly intended for use from other locations.

Before leaving the machine:

1. Park machine on a firm level surface.
2. Put all controls in neutral or park lock position.
3. Engage park brake. Use wheel chocks if required.
4. Lower all hydraulic equipment — Implements, header, etc.
5. Turn off engine and remove key.

When, due to exceptional circumstances, you would decide to keep the engine running after leaving the operator's station, then the following precautions must be followed:

1. Bring the engine to low idle speed.

General maintenance safety

Keep area used for servicing the machine clean and dry. Clean up spilled fluids.

Service machine on a firm level surface.

Install guards and shields after servicing the machine.

Close all access doors and install all panels after servicing the machine.

Do not attempt to clean, lubricate, clear obstructions or make adjustments to the machine while it is in motion or while the engine is running.

Always make sure working area is clear of tools, parts, other persons and pets before you start operating the machine.

Unsupported hydraulic cylinders can lose pressure and drop the equipment causing a crushing hazard. Do not leave equipment in a raised position while parked or during service, unless securely supported.

Jack or lift the machine only at jack or lift points indicated in this manual.

Incorrect towing procedures can cause accidents. When towing a disabled machine follow the procedure in this manual. Use only rigid tow bars.

Operator presence system

Your machine is equipped with an operator presence system to prevent the use of some features while the operator is not in the operator's seat.

Personal Protective Equipment (PPE)

Wear Personal Protective Equipment (PPE) such as hard hat, eye protection, heavy gloves, hearing protection, protective clothing, etc.

2. Disengage all drive systems.

3. **WARNING**

Some components may continue to run down after disengaging drive systems. Make sure all drive systems are fully disengaged.

Failure to comply could result in death or serious injury.

W0113A

Shift the transmission into neutral.

4. Apply the parking brake.

Stop the engine, remove key and relieve pressure before disconnecting or connecting fluid lines.

Stop the engine and remove key before disconnecting or connecting electrical connections.

Scalding can result from incorrect removal of coolant caps. Cooling system operates under pressure. Hot coolant can spray out if a cap is removed while the system is hot. Allow system to cool before removing cap. When removing a cap turn it slowly to allow pressure to escape before completely removing the cap.

Replace damaged or worn tubes, hoses, electrical wiring, etc.

Engine, pumps, exhaust components, and hydraulic lines may become hot during operation. Take care when servicing such components. Allow surfaces to cool before handling or disconnecting hot components. Wear protective equipment when appropriate.

When welding, follow the instructions in the manual. Always disconnect the battery, Engine Control Unit (ECU), and alternator B+ and D+ terminal wires before welding on the machine. Always wash your hands after handling battery components.

The operator presence system should never be disconnected or bypassed.

If the system is inoperable, the system must be repaired.

Do Not Operate tag

Before you start servicing the machine, attach a 'Do Not Operate' warning tag to the machine in an area that will be visible.

Hazardous chemicals

If you are exposed to or come in contact with hazardous chemicals you can be seriously injured. The fluids, lubricants, paints, adhesives, coolant, etc. required for the function of your machine can be hazardous. They may be attractive and harmful to domestic animals as well as humans.

Material Safety Data Sheets (MSDS) provide information about the chemical substances within a product, safe handling and storage procedures, first aid measures and procedures to be taken in the event of a spill or accidental release. MSDS are available from your dealer.

Before you service your machine check the MSDS for each lubricant, fluid, etc. used in this machine. This information indicates the associated risks and will help you service the machine safely. Follow the information in the MSDS, on manufacturer containers, as well as the information in this manual when servicing the machine.

Dispose of all fluids, filters, and containers in an environmentally safe manner according to local laws and regulations. Check with local environmental and recycling centers or your dealer for correct disposal information.

Store fluids and filters in accordance with local laws and regulations. Use only appropriate containers for the storage of chemicals or petrochemical substances.

Keep out of reach of children or other unauthorized persons.

Additional precautions are required for applied chemicals. Obtain complete information from the manufacturer or distributor of the chemicals before using them.

U.S. EPA and California Emissions Control Warranty Statement

NEW HOLLAND CONSTRUCTION warrants to the ultimate purchaser and each subsequent purchaser that the engine is designed, built and equipped so as to conform with U.S. Environmental Protection Agency regulations applicable at the time of manufacture and that it is free from defects in workmanship or material which would cause it not to meet these regulations for a period of:

- 2 years or 1,500 hours of operation, whichever occurs first, for engines less than 19kW/25HP
- 5 years or 3,000 hours of operation, whichever occurs first, for engines greater than or equal to 19kW/25HP

NOTE: *This warranty applies to all units operated in the United States or Canada.*

Coverage

The model year, class of diesel engine, and emission application determination for your engine are identified on the Emission Control Information Label. This label is affixed to one of the following areas of the engine: the top of engine's rocker arm cover, the right-hand side of the oil pan, and the right-hand side of the engine front gear cover. The warranty period begins on the date the new equipment is sold to the first retail purchaser. The presence of the emission control label is the indication that the engine conforms to the applicable standards. Any emission control system parts which are proven defective during normal use will be repaired or replaced during the warranty period.

The engine owner has responsibility to perform all the required maintenance listed in the Owner's Manual. NEW HOLLAND CONSTRUCTION will not deny an emission warranty claim solely because no record of maintenance exists; however, a claim may be denied if failure to perform maintenance resulted in the failure of a warranted part.

It is recommended that replacement parts used for maintenance or repairs be NEW HOLLAND CONSTRUCTION Service Parts to maintain the quality originally designed into your emission certified engine. The use of non- NEW HOLLAND CONSTRUCTION parts does not invalidate the warranty on other components unless the use of such parts causes damage to warranted parts.

The manufacturer is liable for damages to other engine components caused by the failure of any warranted emission control system part. NEW HOLLAND CONSTRUCTION is not responsible for failures resulting from improper repair or the use of parts that are not genuine NEW HOLLAND CONSTRUCTION or NEW HOLLAND CONSTRUCTION approved parts.

