

ORIGINAL INSTRUCTIONS

OPERATOR'S MANUAL

W50C

W60C

W70C

W80C

Tier 4B (Final)

Compact Wheel Loader

Part number 51443167

1st edition English

February 2018



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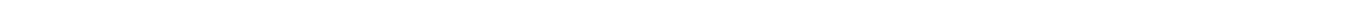
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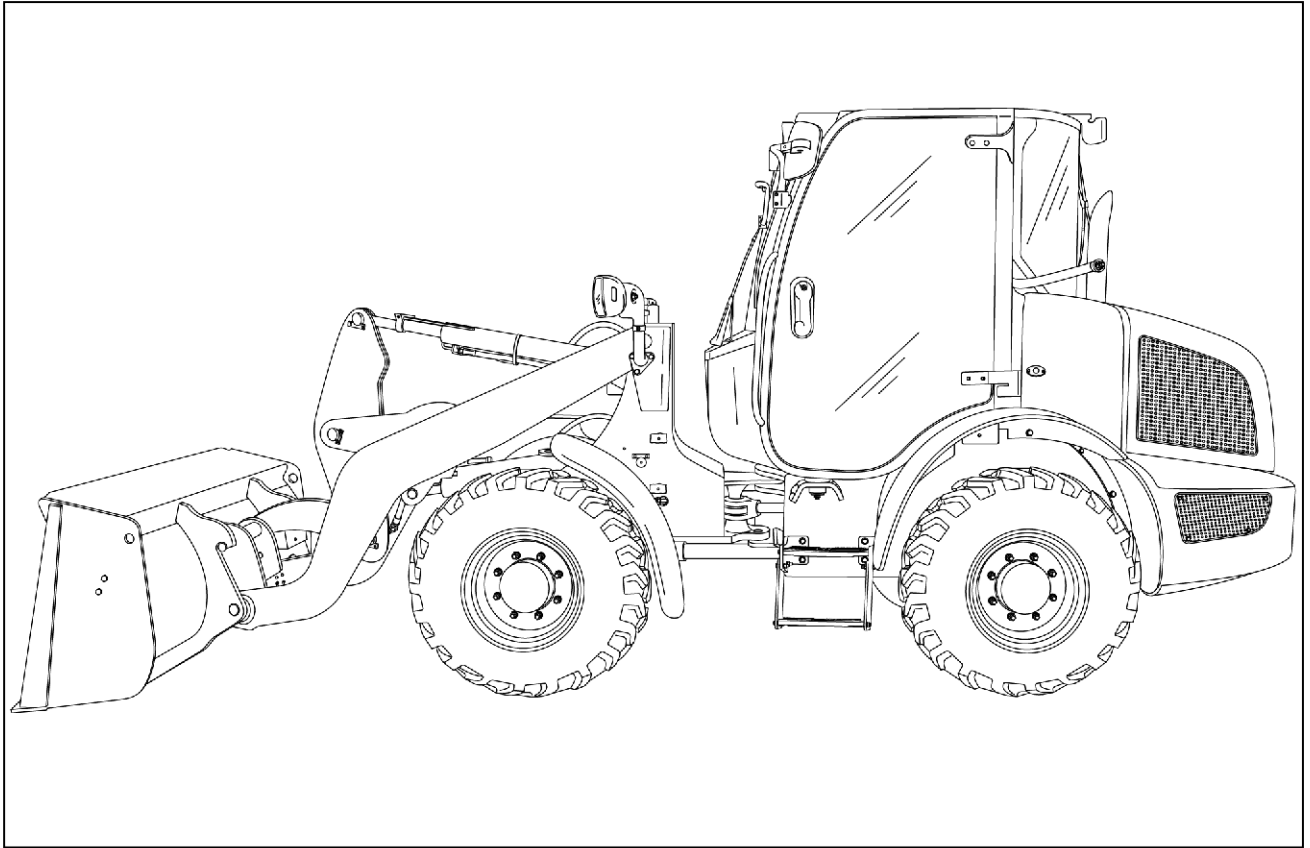
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1 - GENERAL INFORMATION

Note to the owner



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Read this manual before you start the engine or operate the machine. If you need more information, see your authorized dealer.

This manual contains important information about the safe operation, adjustment, and maintenance of your machine. Refer to the index at the back of this manual for locating specific items about your machine. The Compact Wheel Loader conforms to current safety regulations.

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.

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.

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 or manuals in languages other than that of the country of use.

Parts and accessories

Your authorized dealer carries a complete line of genuine service parts. These parts are manufactured and carefully inspected to insure high quality and accurate fitting of any necessary replacement parts.

Genuine parts and accessories have been specifically designed for these machines. "Non-genuine" parts and accessories have not been examined or approved by the manufacturer. The installation or use of such products could have negative effects upon the design characteristics of your machine, and thereby affect its safety. The manufacturer is not liable for any damage caused by the use of "non-genuine" parts and accessories.

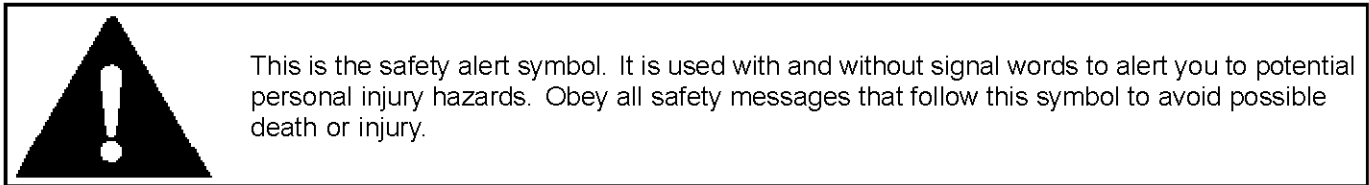
Company policy

Company policy, which is continually striving to improve its products, reserves the right to make improvements or changes when it becomes practical and possible to do so, without incurring any obligation to make changes or additions to the equipment sold previously.

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

ATTENTION: *the fuel system and engine on your machine are designed and built to government emissions standards. Tampering by dealers, customers, operators, and users 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!*

Safety alert symbols



⚠ WARNING

Illustrations in this manual may show protective shielding open or removed to better illustrate a particular feature or adjustment.

Replace all shields before operating the machine.

Failure to comply could result in death or serious injury.

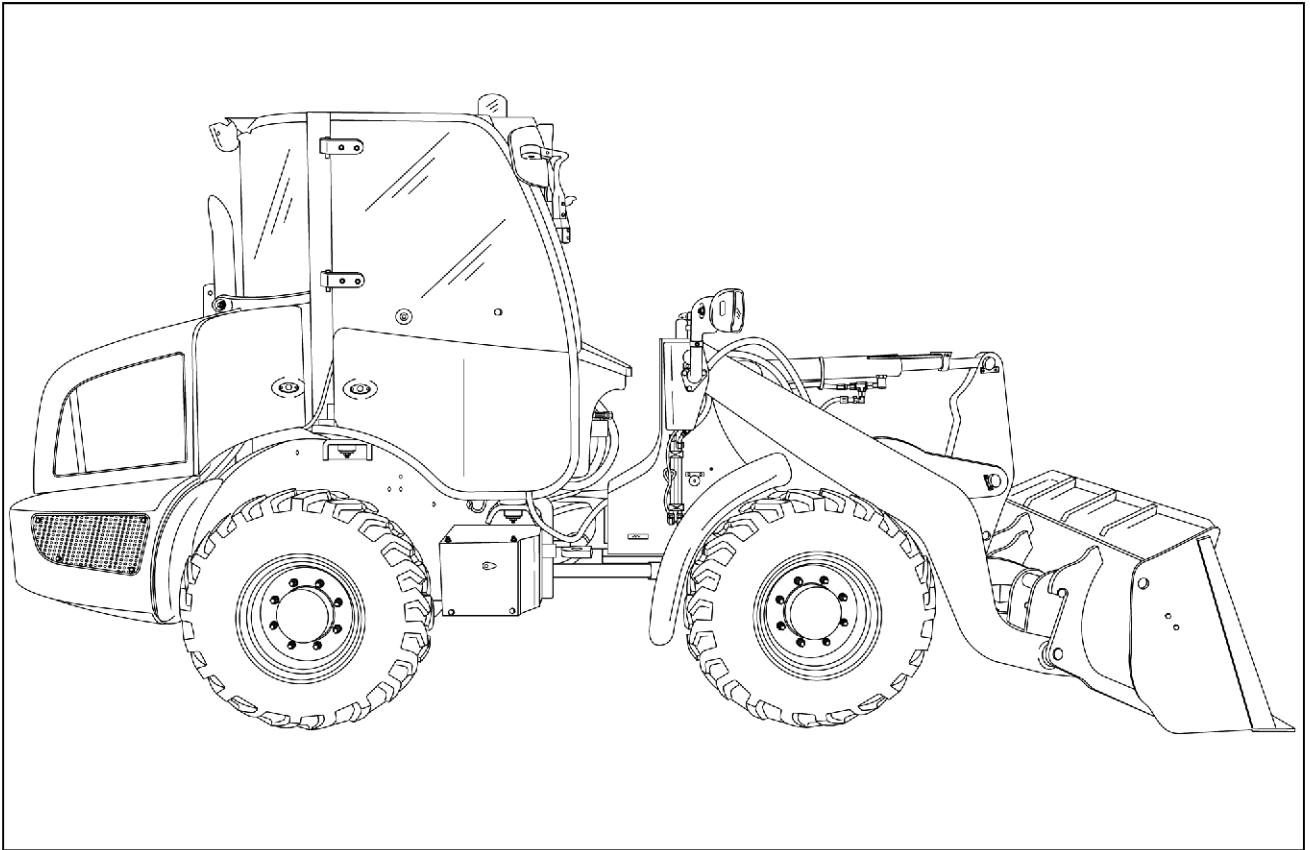
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Models main specifications

NOTE: *the following table provides general data of the main specifications for all models equipped with standard equipment (standard tires, general purpose bucket and Horizontal Pin Quick Coupler). See "Machine specifications and dimensions" – Chapter 8 in this manual for more information.*

Model	W50 Z-bar	W50 Tool Carrier	W60 Z-bar	W60 Tool Carrier	W70 standard model	W70 High Speed	W80 standard model	W80 High Speed
Engine net power	43 kW (58 Hp)	43 kW (58 Hp)	48 kW (64 Hp)	48 kW (64 Hp)	55 kW (74 Hp)	55 kW (74 Hp)	55 kW (74 Hp)	55 kW (74 Hp)
Operating weight	5050 kg (11133 lb)	4950 kg (10913 lb)	5200 kg (11464 lb)	5000 kg (11023 lb)	5600 kg (12346 lb)	5600 kg (12346 lb)	6000 kg (13228 lb)	6000 kg (13228 lb)
Wheelbase	2075 mm (82 in)	2075 mm (82 in)	2075 mm (82 in)	2075 mm (82 in)	2225 mm (88 in)	2225 mm (88 in)	2225 mm (88 in)	2225 mm (88 in)
Max height (cab)	2458 mm (97 in)	2458 mm (97 in)	2457 mm (97 in)	2457 mm (97 in)	2627 mm (103 in)	2627 mm (103 in)	2680 mm (106 in)	2680 mm (106 in)
Type of implement	Z-bar	Tool Carrier (TC)	Z-bar	Tool Carrier (TC)	Z-bar	Z-bar	Z-bar	Z-bar
Transmission	2 speeds	2 speeds	2 speeds	2 speeds	2 speeds	3 speeds	2 speeds	3 speeds

Intended use



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This Compact Wheel Loader, with standard equipment and attachments is intended to be used for digging and general earth moving purposes such as land leveling, truck loading, and material rehandling. Any other use is considered contrary to that established and, therefore, improper. This machine is not intended to be used for lifting other objects or transporting loads at high speeds.

This machine is not intended to be used in dangerous conditions, like on the railway etc.

DO NOT use this machine for any application or purpose other than those described in this manual, decals, or other product safety information provided with the machine. These materials define the machine's intended use.

If the loader is to be used in an application that involves special attachments or equipment, such as forestry, etc., consult an authorized dealer. 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.

Before permitting a new operator on this machine, make certain:

- That the operator has received the necessary training to operate the machine correctly and safely.
- That the operator has read and understands the instructions given in this manual.

All persons who will be operating this machine shall possess a valid local vehicle operating permit and/or other applicable local age work permits.

NOTICE: your Compact Wheel Loader is designed according to European directives related to health and safety risks; though it has been designed to minimize all the potential risks it is mandatory to carefully read, understand and observe all the decals and labels of the PPP (Plant Protection Product) and to always refer to information and prescriptions outlined in this manual to prevent all residual potential risks. In case you may need further assistance please do not hesitate to contact your dealer. The machine was designed and made according to the strictest quality standards and complies with 2006/42/EC.

- Do not trespass the maximum speed limit of **10 km/h (6 mph)** when the machine is in load condition. Injury to operator or damage to machine may occur if operation limits are exceeded.
- Do not use the machine for another purpose than intended by the manufacturer and outlined in this manual.

- Do not use the machine on higher speeds than allowed by the load and environment. A wet surface or other low adherence conditions may increase the braking distance or result in vehicle instability. Adapt always your travelling speed according to the load of the vehicle and the characteristics of the road.
- Do not use the machine on brittle bridge heads and poor bridge floors. These constructions may collapse and cause rollover of the machine. Check out always the conditions and carrying capacity of bridges and ramps prior to engage.
- Do not use the machine without wearing the seat restraint system during activities where roll over or tip-over hazard exist. The ROPS cab or ROPS structure will only be fully effective when the driver remains attached to the seat.
- Do not use equipment mounted on the machine which is not correctly matching and firmly fixed. Such equipment may increase the risk for-over and hit the machine when coming loose.
- Do not use the machine beyond its limits of dynamic stability. High speed, abrupt manoeuvres and fast and short cornering will increase the risk of roll over.
- Do not step down from the machine without, shifting the transmission to neutral and applying the park brake. The latter equipment may have an emergency stop device on the equipment itself, as human intervention is needed during operation. But other equipment, engaged and driven by the machine will have no means to stop the power transmission, other than the clutch of the machine.
- You shall take the necessary precautions to always be aware of the possible presence of bystanders. Do not work if bystanders are within the range of the operation of the machine. Keep people away from the machine during work; bystanders must leave the working area. There is not only the risk to be overrun by the machine but objects ejected by some equipment mounted on the machine may cause harm. Stones may be thrown further than the mowed crop. Pay the necessary attention while operating next to public roads or footpaths. Thrown objects can get projected outside the field and hit unprotected people like bikers or pedestrians.
- Do not allow riders on the machine do not allow people standing on the access way or step to the cab when the machine is moving. Your view to the left-hand will be obstructed and a rider risks to fall from the machine during unforeseen or abrupt movements.
- Always stay clear from implements operating area. When operating lift controls ensure no bystanders is near to these operating areas.
- Your Compact Wheel Loader may be equipped with a number of sensors to control safety functions. Tripping these sensors will result in a safe operation mode. Do not attempt to by pass any function on the machine. You will be exposed to serious hazard, and moreover, the behavior of the machine may become unpredictable.
- A machine has only one operator station and is a one man operated vehicle. Other people on or around the machine during normal operation are not allowed.
- The machine is intended to be used under normal conditions for the applications described in this manual. If the machine is used for other purposes or in dangerous environments, for example in a flammable or explosive atmosphere, special safety regulations must be followed and the machine must be equipped for use in these environments.

Electro-magnetic compatibility (EMC)

Interference may arise as a result of add on equipment which may not necessarily meet the required standards. As such interference can result in serious malfunction of the unit and/or create unsafe situations, you must observe the following:

- The maximum power of emission equipment (radio, telephones, etc.) must not exceed the limits imposed by the national authorities of the country where you use the machine.
- The electromagnetic field generated by the add on system should not exceed **100 V/m** at any time and at any location in the proximity of electronic components.
- The add on equipment must not interfere with the functioning of the on board electronics.

Failure to comply with these rules will render the NEW HOLLAND CONSTRUCTION warranty null and void.

Manual scope and required training level

Introduction to this manual

This manual gives information about the use of your NEW HOLLAND CONSTRUCTION machine as intended and under the conditions foreseen by NEW HOLLAND CONSTRUCTION during normal operation, routine service, and maintenance.

This manual does not contain all the information that relates to periodic service, conversions, and repairs that only trained service personnel can perform. Some of these activities may require appropriate facilities, technical skills, and/or tools that NEW HOLLAND CONSTRUCTION does not supply with the machine.

The manual contains the chapters as shown on the Contents pages. See the Index at the end of this manual to locate specific items about your NEW HOLLAND CONSTRUCTION machine.

Normal operation

Normal operation consists of the use of this machine for the purpose NEW HOLLAND CONSTRUCTION intends by an operator that:

- Is familiar with the machine and any mounted equipment or towed equipment
- Complies with the information on operation and safe practices as specified by NEW HOLLAND CONSTRUCTION in this manual and by the signs on the machine

Normal operation includes:

- Preparation and storage of the machine
- Addition and removal of ballast
- Connection and disconnection of mounted equipment and/or towed equipment
- Adjustment and configuration of the machine and equipment for the specific conditions of the job site, field, and/or crop
- Movement of components into and out of working positions

Routine service and maintenance

Routine service and maintenance consists of the daily activities necessary to maintain the proper machine function. The operator must:

- Be familiar with the machine characteristics
- Comply with the information on routine service and safe practices as specified by NEW HOLLAND CONSTRUCTION in this manual and by the signs on the machine

Routine service can include:

- Fueling

- Cleaning
- Washing
- Topping up fluid levels
- Greasing
- Replacing consumable items such as light bulbs

Periodic service, conversions, and repairs

Periodic service consists of activities that are necessary to maintain the expected life of the NEW HOLLAND CONSTRUCTION machine. These activities have defined intervals.

Trained service personnel familiar with the machine characteristics must perform these activities at the defined intervals. Trained service personnel must comply with the information on periodic service and safe practices as partly specified by NEW HOLLAND CONSTRUCTION in this manual and/or other company literature.

Periodic service includes:

- Oil change service for the engine, hydraulic circuits, or transmission
- Periodic exchange of other substances or components as required

Conversion activities rebuild the NEW HOLLAND CONSTRUCTION machine in a configuration that is appropriate for a specific job site, crop, and/or soil conditions (e.g., installation of dual wheels). Conversion activities must be done:

- By trained service personnel familiar with the machine characteristics
- By trained service personnel that comply with the information on conversion as partly specified by NEW HOLLAND CONSTRUCTION in this manual, assembly instructions, and/or other company literature

Repair activities restore proper function to a NEW HOLLAND CONSTRUCTION machine after a failure or degradation of performance. Dismantling activities occur during the scrapping and/or dismantling of the machine.

Trained service personnel familiar with the machine characteristics must perform these activities. Trained service personnel must comply with the information for repair as specified by NEW HOLLAND CONSTRUCTION in the service manual.

Before you operate

Read this manual before you start the engine or operate this NEW HOLLAND CONSTRUCTION machine. Contact your NEW HOLLAND CONSTRUCTION dealer if:

- You do not understand any information in this manual

- You need more information
- You need assistance

All persons training to operate, or who will operate this NEW HOLLAND CONSTRUCTION machine should be

old enough to possess a valid local vehicle operating permit (or meet other applicable local age requirements). These persons must demonstrate the ability to operate and service the NEW HOLLAND CONSTRUCTION machine in a correct and safe manner.

Product identification

Model, serial number, and year of manufacture

Record the machine and part identification numbers. When ordering parts, obtaining information or assistance, always supply your dealer with the type and serial number of your machine or accessories. Keep a record of these numbers and your Manufacturer's Statement of Origin in a safe place. If the machine is stolen, report the numbers to your local law enforcement agency.

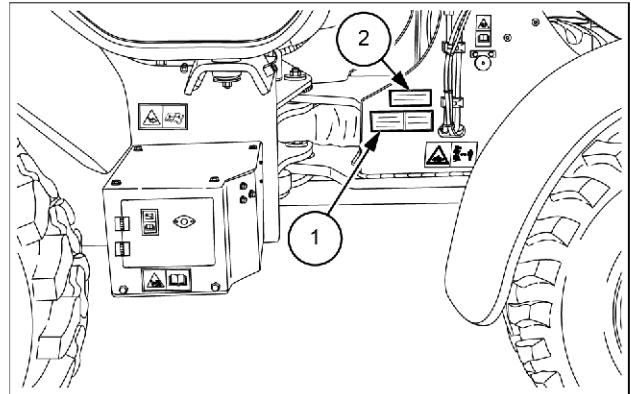
Machine identification

Model name

PIN

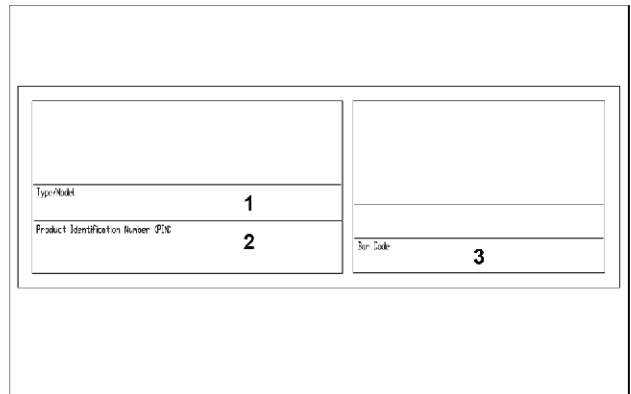
Model year

The Product identification number (PIN) plate **(1)** is located on the right-hand side of the machine.



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1. Indicates only the machine model.
2. Indicates the homologation code number, if foreseen.
3. Indicates the bar code of the machine.



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The decal **(2)** is located on the right-hand side of the machine.

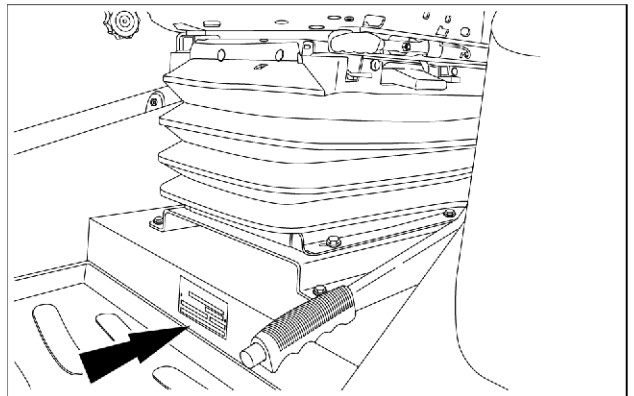
The decal **(2)** is only for Canadian market and shows the compliance with the standard ICES-002.



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Roll-Over Protective Structure/Falling Object Protective Structure (ROPS/FOPS)

The serial number plate is under the operator's seat.

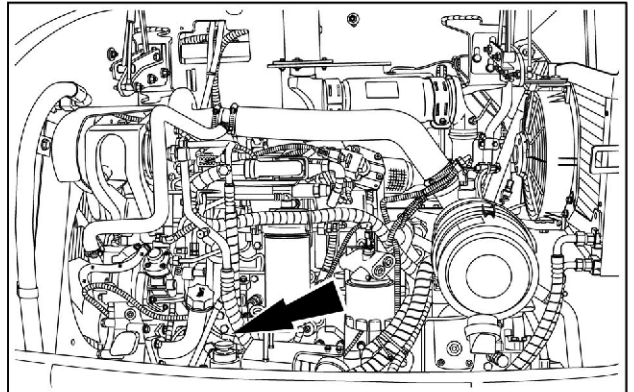


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Engine make and model

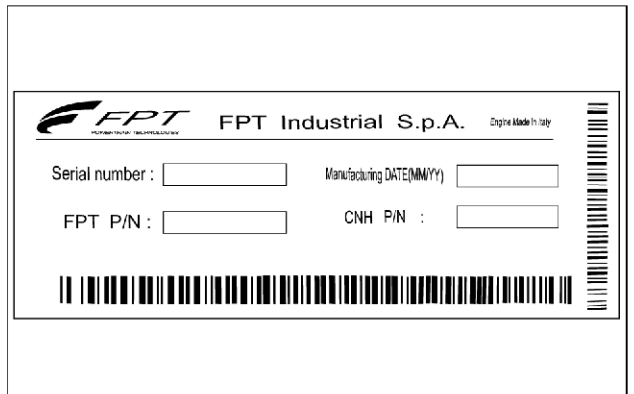
Engine serial number

The serial number plate is located on the engine block, behind the fuel prefilter. Close to the engine serial plate there is the engine approval plate that is needed for inspection purposes to proceed with the registration of the machine.



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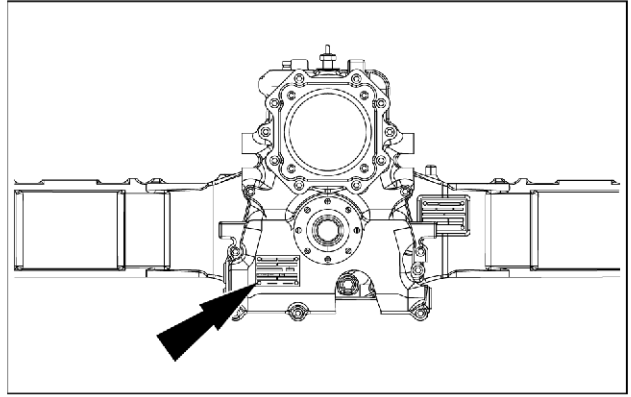
The serial number plate contains the main information of the engine.



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Transmission

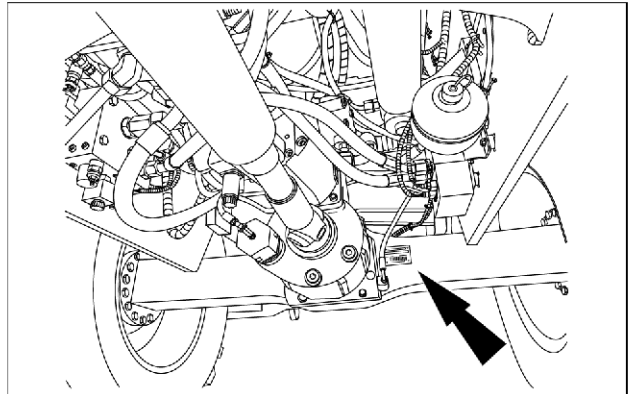
The serial number is on the transmission face plate.



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Axle

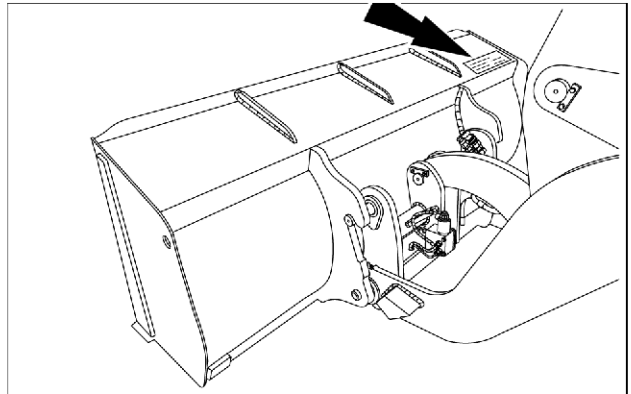
The serial number plate is on the axle cross member.



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Bucket

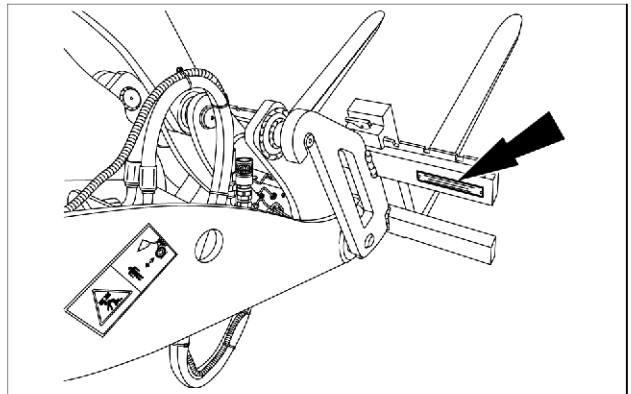
The serial number plate is located on the right-hand side of the bucket.



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Forks

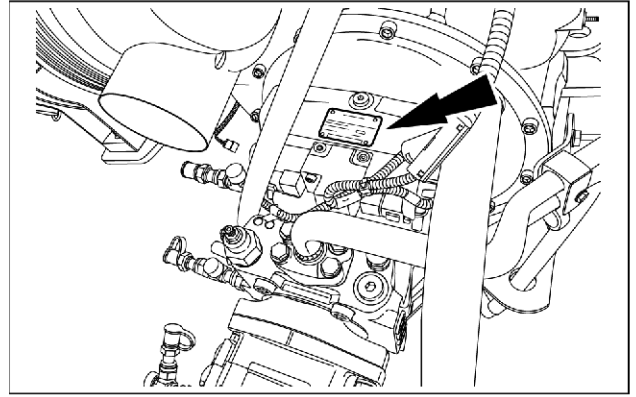
The serial number plate is located on the right-hand side of the forks.



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Hydrostatic pump

The serial number plate is located on the upper side of the hydrostatic pump.

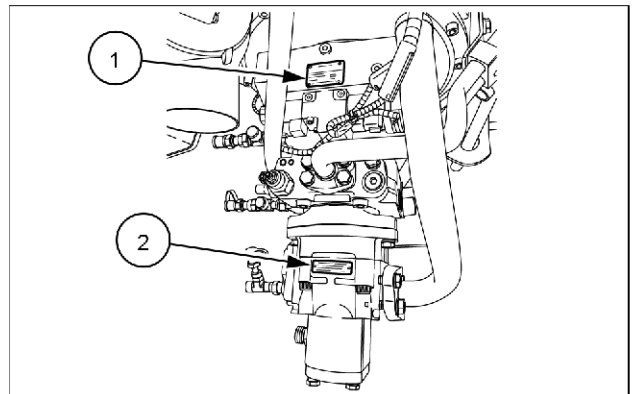


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High Flow pump (optional)

If the machine is equipped with the High Flow, two serial number plates can be found:

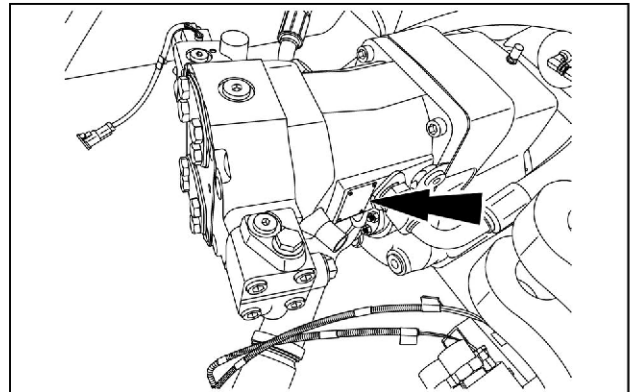
- (1) Hydrostatic pump serial number plate
- (2) High Flow pump serial number plate



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Travel motor

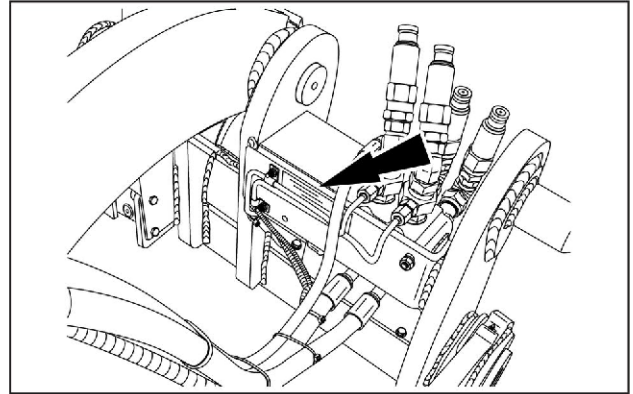
The serial number plate is located on the left-hand side of the travel motor.



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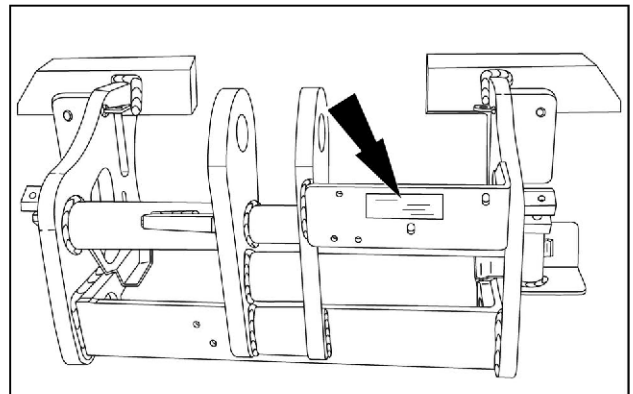
Quick Coupler

The serial number plate is located on the rear right-side of the Quick Coupler frame.



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Horizontal Pin (HP) Quick Coupler

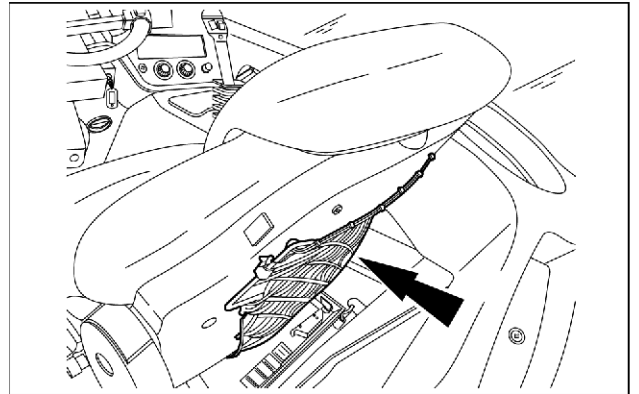


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Skid Steer Loader (SSL) Quick Coupler

Operator's manual storage on the machine

The Operator's Manual storage is located on the back of the operator's seat.

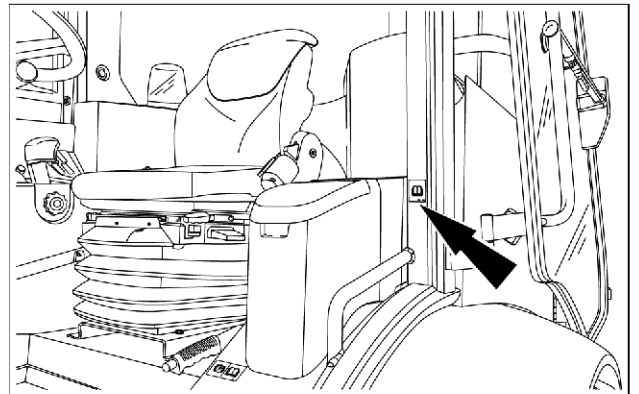


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The Operator's Manual decal is located on the pillar in the cab, to the left-hand of the operator's seat.

READ THIS MANUAL COMPLETELY and make certain you understand the controls. All equipment has a limit. Make sure you understand the speed, brakes, steering, stability and load characteristics of this machine before you start to operate.

DO NOT remove this manual or the safety manual from the machine. See your dealer for additional manuals. Keep the Operator's Manual in the storage compartment provided on the machine. The Operator's Manual must be available for use by all operators.



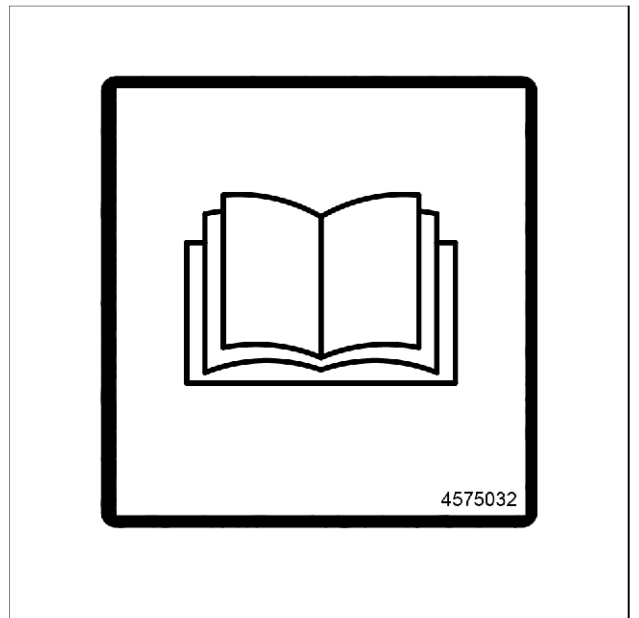
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When you see this symbol read your operator's manual.



When you see this symbol refer to your service manual.

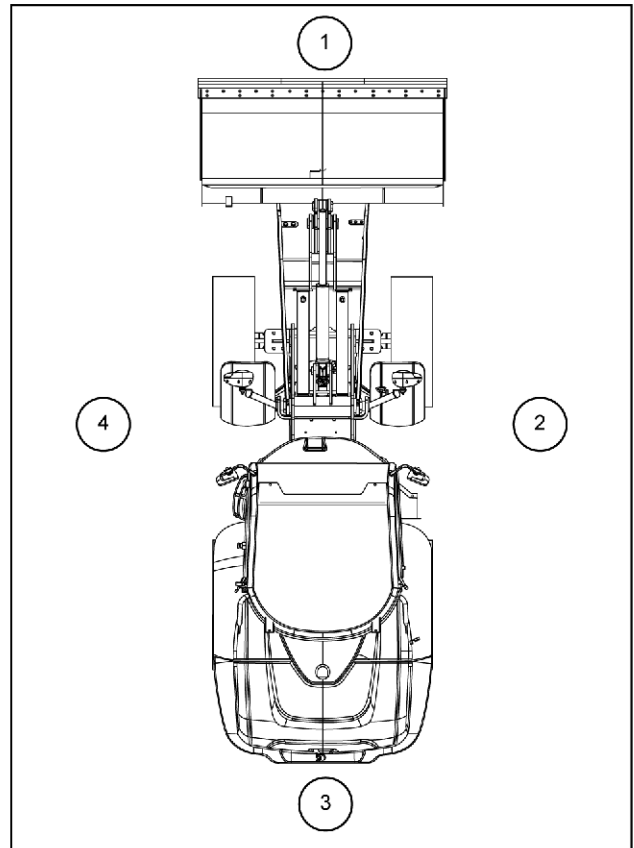


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Machine orientation

The terms right-hand, left-hand, front, and rear are used in this manual to indicate the sides as they are seen from the operator's seat.

1. Front
2. Right-hand
3. Rear
4. Left-hand



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