

OPERATOR'S MANUAL

U80C

Tier 4

Tractor Loader

PIN NCC570800 and above

Part number 47492960

2nd edition English

April 2013

Replaces part number 84587650



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Every 3000 hours

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Every 4000 hours

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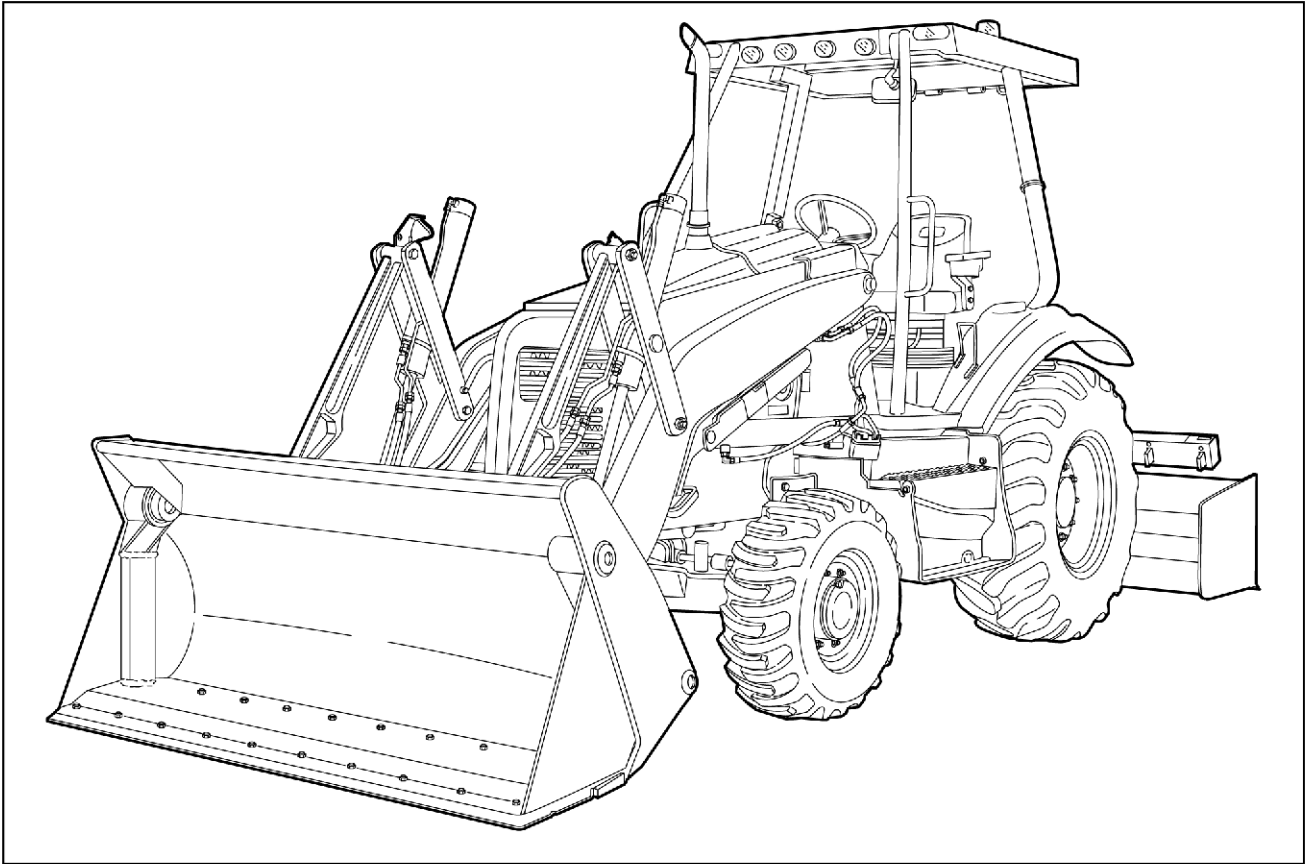
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1 - GENERAL INFORMATION

Intended use



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This tractor loader, with standard equipment and authorized attachments, is intended for general earth moving purposes, handling, ditch digging, etc. Use only approved accessories and attachments designed for your machine. This Operator's Manual does not include instructions for attachments. Read the manual(s) provided with the authorized attachment to learn safe maintenance and operation of the machine. Make sure the machine is suitably equipped for the type of work to be performed. Your NEW HOLLAND CONSTRUCTION Dealer is available for any further information. They will also provide any after-sales service you may need, and genuine NEW HOLLAND CONSTRUCTION spare parts, your guarantee of quality and match. NEW HOLLAND CONSTRUCTION customer assistance is also available. Call 1-888-365-NHCE (1-888-365-6423) or email customerservice.na@cnh.com.

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

Do not use this machine for any purpose or in any manner other than as described in the manual, decals, or other product safety information provided with the machine. These materials define the machine's intended use.

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 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!*

CNH America LLC technical manuals

Manuals are available from your dealer for the operation, service, and repair of your machine. For prompt convenient service, contact your dealer for assistance in obtaining the manuals for your machine.

Your dealer can expedite your order for Operator's Manuals, Parts Catalogs, Service Manuals, and maintenance records.

Always give the machine name, model, and Product Identification Number (PIN) of your machine so your dealer can provide the correct manuals for your machine.

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

All data given in this manual is subject to production variations.

NOTICE: *Operating and service messages displayed on the electronic operating panel may vary from what is shown in the Operator's Manual. Should this occur, adhere to the latest instruction on the electronic operating panel.*

Dimensions and weights are approximate only and the illustrations do not necessarily show the machine in standard condition. For exact information about any particular machine, consult your dealer.

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 electro-magnetic field generated by the add-on system should not exceed **24 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 onboard electronics. Failure to comply with these rules will render the warranty null and void.

Note to the owner

This manual contains important information about the safe operation, adjustment, and maintenance of your tractor loader. This manual is divided into chapters as outlined in the table of contents. Refer to the index at the end of this manual for locating specific items about your machine. The tractor loader conforms to current safety regulations.

Use this manual as a guide. Your machine will remain a reliable working tool as long as it is kept in working condition and serviced properly.

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.

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 the complete and most current information from your dealer before you start any machine operation.

The Operator's Manual is to be stored in the manual compartment equipped on this machine. Make sure this manual is complete and in good condition. Consult your dealer to obtain additional manuals or manuals in other languages. An Association of Equipment Manufacturers (AEM) safety booklet is included with each machine. Take the time to read the booklet and understand its content.

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 machine.

Read the Operator's Manual

Improper operation of this machine can cause death or serious injury. Before using the machine, make certain that every operator:

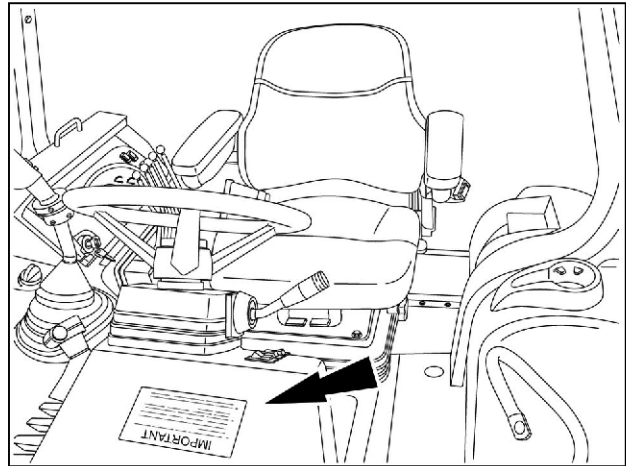
- is instructed in safe and proper use of the machine.
- reads and understands the manual(s) pertaining to the machine.
- reads and understands all safety signs on the machine.
- clears the area of other persons and domestic animals.
- learns and practices safe use of machine controls in a safe, clear area before operating this machine on a job site.

It is your responsibility to observe pertinent laws and regulations and follow CNH America LLC instructions on machine operation and maintenance.

Manual storage

Keep the Operator's Manual and the Association of Equipment Manufacturers (AEM) safety booklet in the storage compartment provided on the tractor loader. The Operator's Manual and the AEM safety booklet must be available for use by all operators.

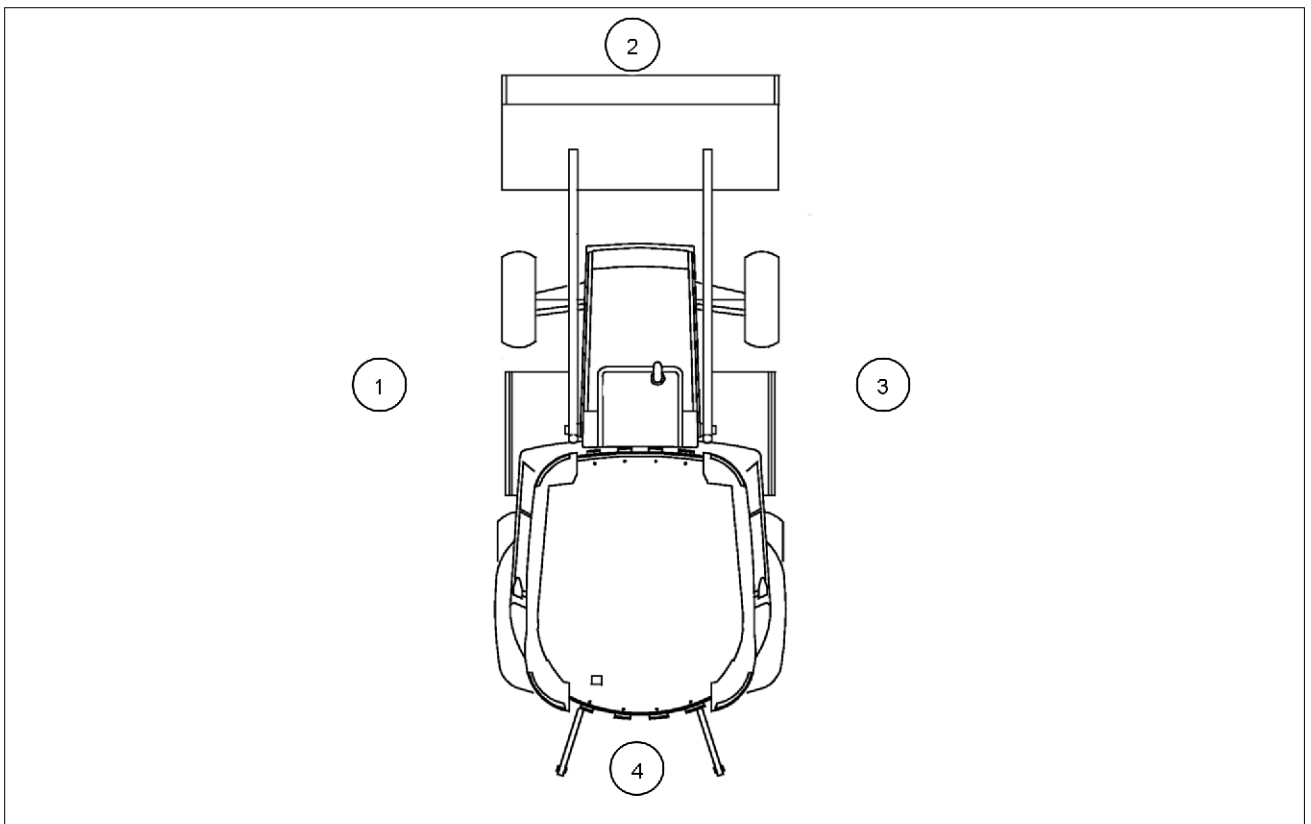
The manual storage compartment is in front of the steering wheel.



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Right, left, front and rear of the machine

The terms right-hand and left-hand, when used in this manual, indicate the right and left sides of the machine as seen from the operator's seat.

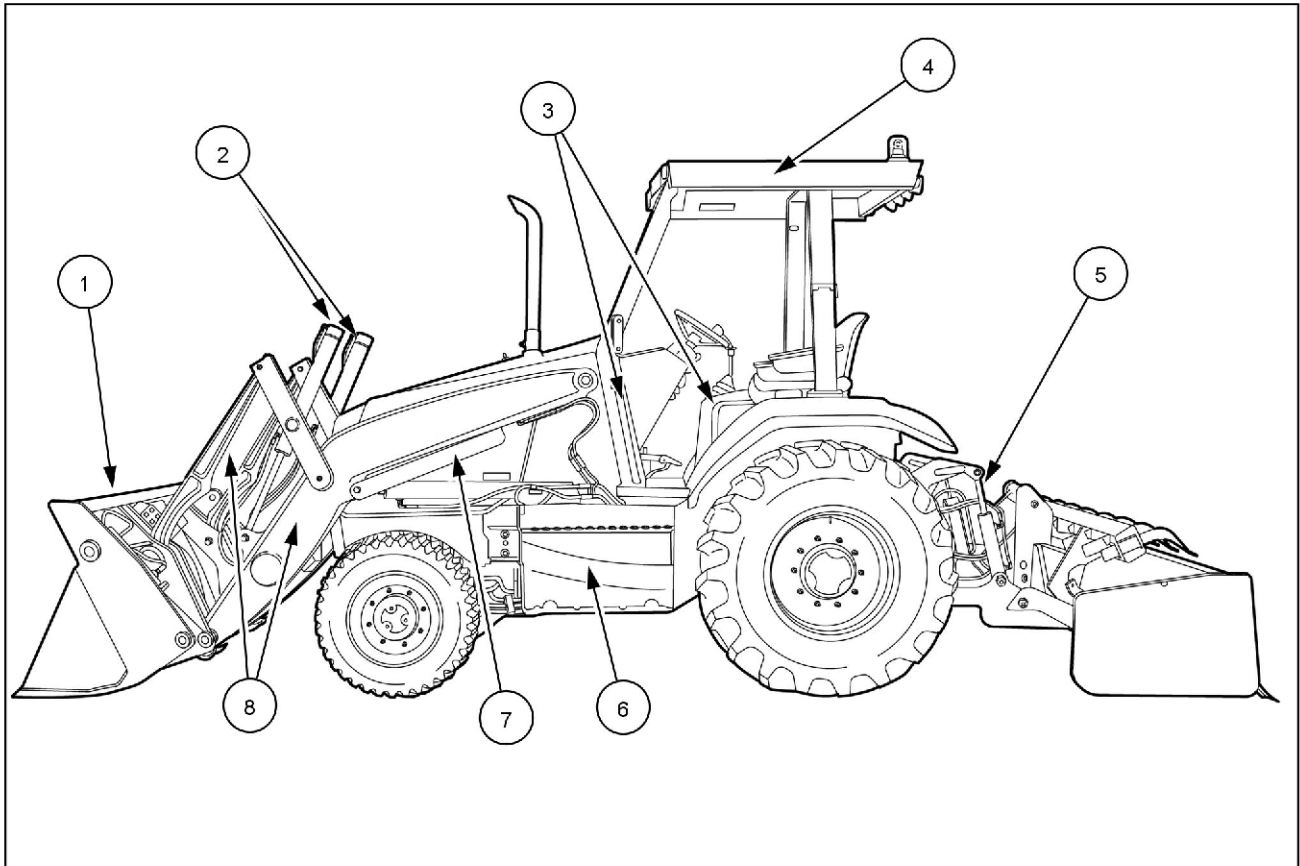


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1. Left-hand side
2. Front
3. Right-hand side
4. Rear

Component Identification

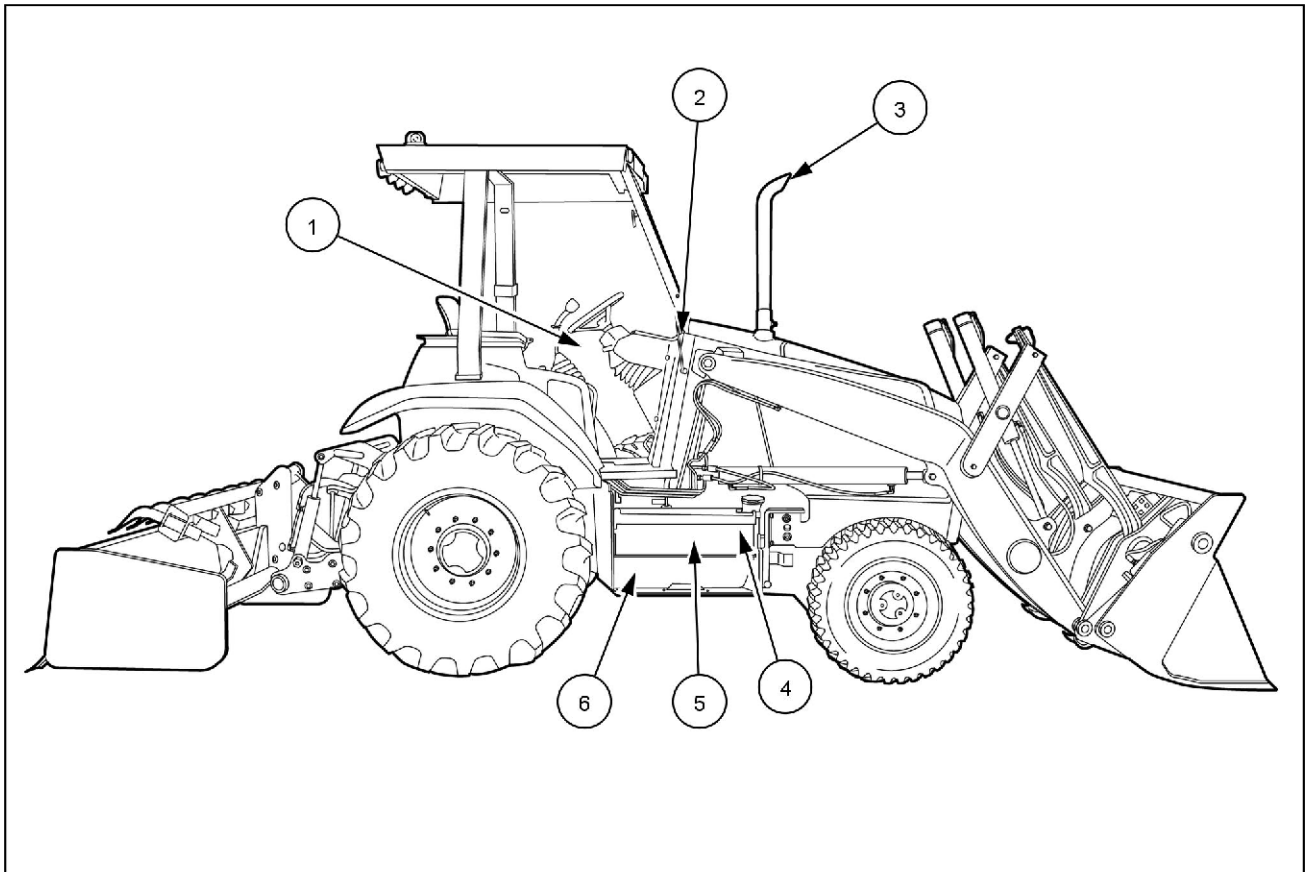
Left side of machine



RAPH12UTL0116GA 1

1. Loader bucket
2. Bucket cylinders
3. Hand holds
4. Canopy with optional beacon (cab not shown)
5. Three point hitch with optional box grader
6. Fuel tank with entry step
7. Loader arm support strut
8. Loader arm and bucket linkage

Right side of machine

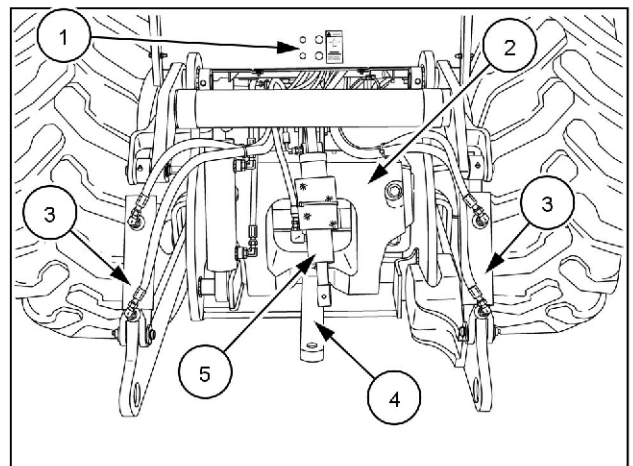


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1. Operator platform
2. Hand holds (only one on the right hand side)
3. Exhaust stack
4. Hydraulic tank
5. Tool box (optional equipment)
6. Battery compartment

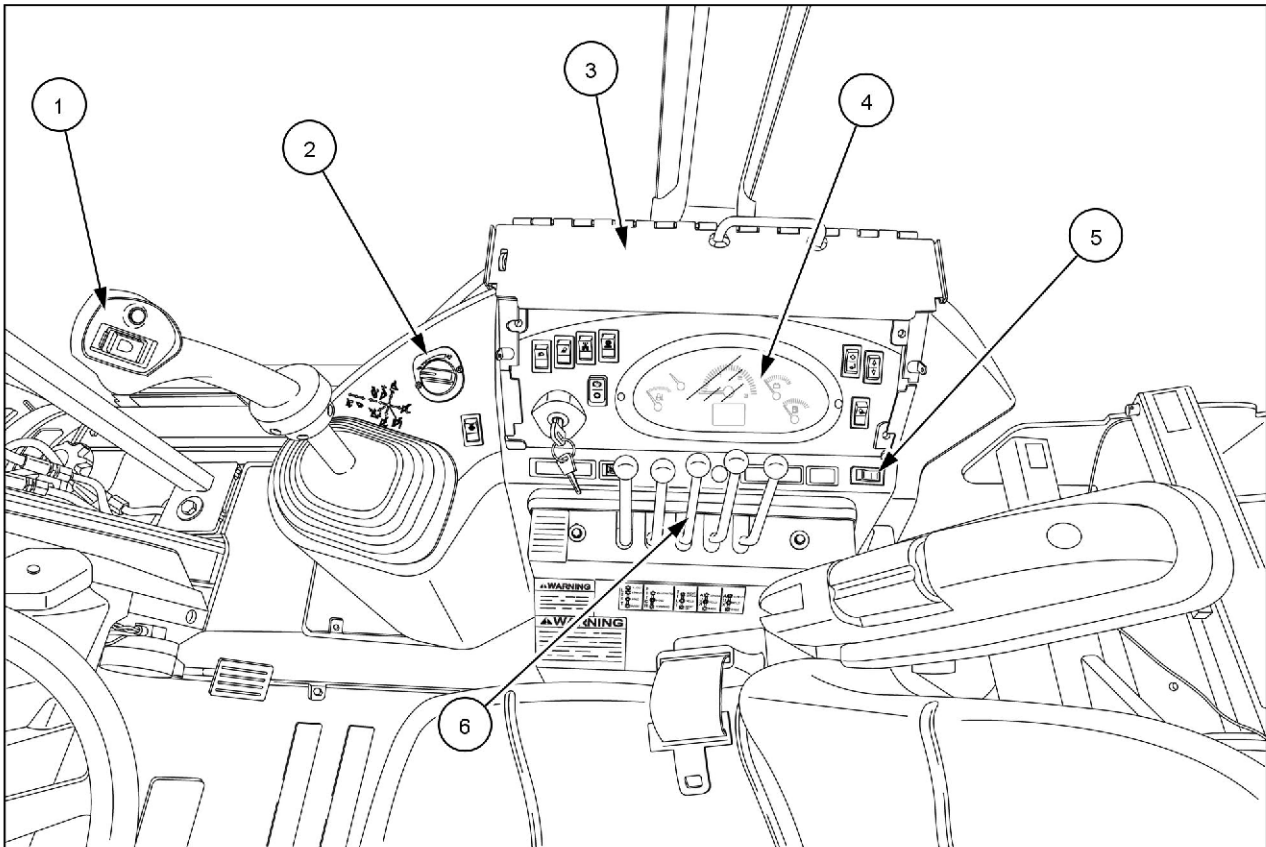
Rear of machine

1. Auxiliary hydraulic ports with flow control regulator
2. Rear counterweight
3. Three point hitch — lower link with anti-sway caliper
4. Drawbar (optional equipment)
5. Three point hitch — upper link



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Right side console

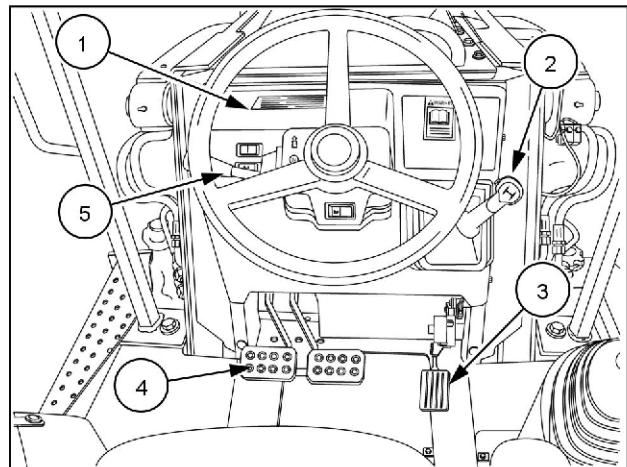


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1. Loader control with clutch cutout and differential push buttons
2. Electronic hand throttle (if equipped)
3. Vandal lock-up cover (optional equipment on canopy machines only)
4. Console controls and switches
5. Three point hitch mode control switch
6. Three point hitch control levers

Front console

1. Manual storage compartment
2. Transmission control lever with clutch cutout push button
3. Foot throttle
4. Left and right brake pedals with locking lever
5. Directional control lever: Forward - Neutral - Reverse (FNR)



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Product Identification Number (PIN)

Record the machine and Product Identification Numbers (PIN). If needed, provide these numbers to your dealer when you require parts or information for your machine. 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

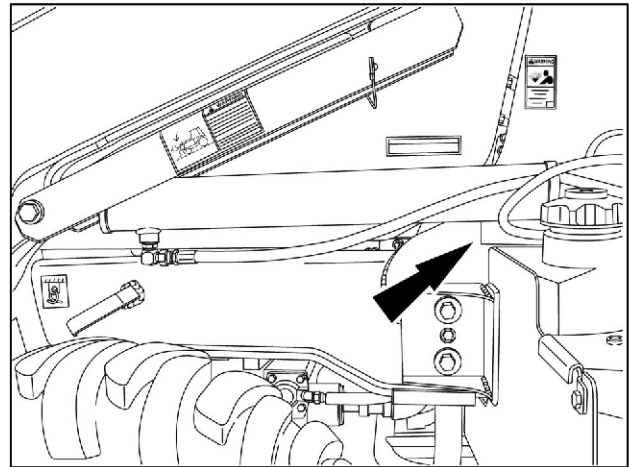
Model name

PIN

Model year

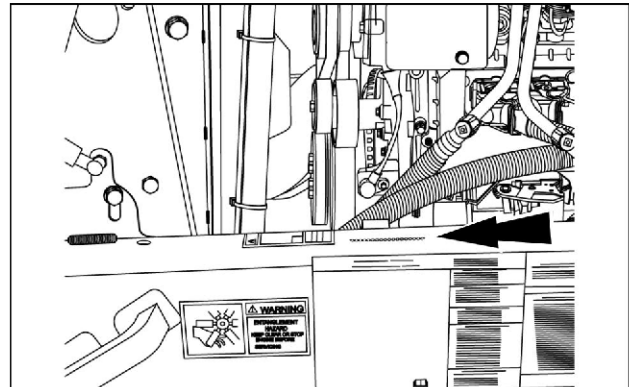
The PIN plate is located on the left-hand side beneath the pivot for the loader lift cylinder. The PIN is 17 characters long.

NOTE: Hoses removed for illustration clarity.



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NOTE: The PIN is also stamped on the chassis (left hand side of the engine).

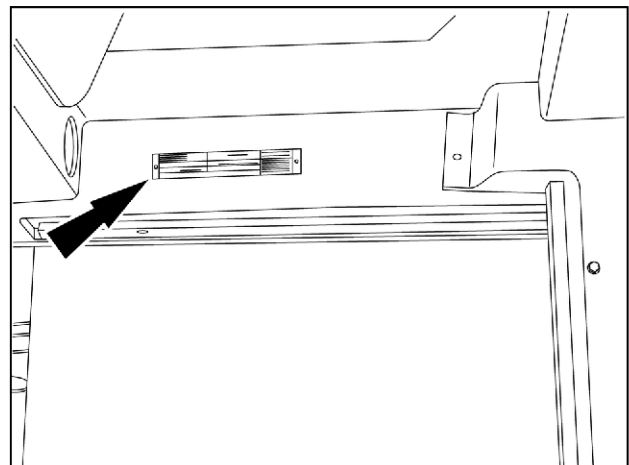


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Roll-Over Protective Structure (ROPS) — Canopy

PIN

Locate the PIN plate on the upper left-hand side of the ROPS frame.

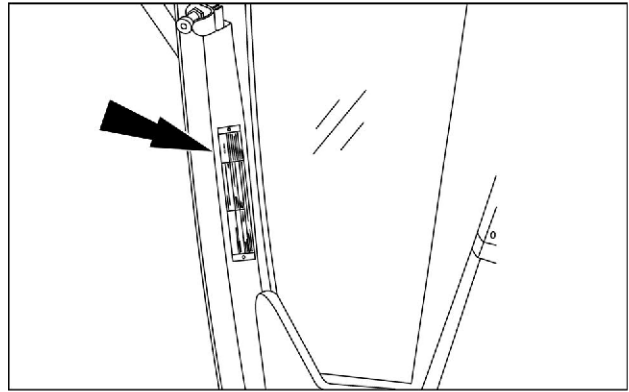


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Roll-Over Protective Structure (ROPS) — Cab

PIN

Locate the PIN plate on the upper left-hand side of the ROPS frame.

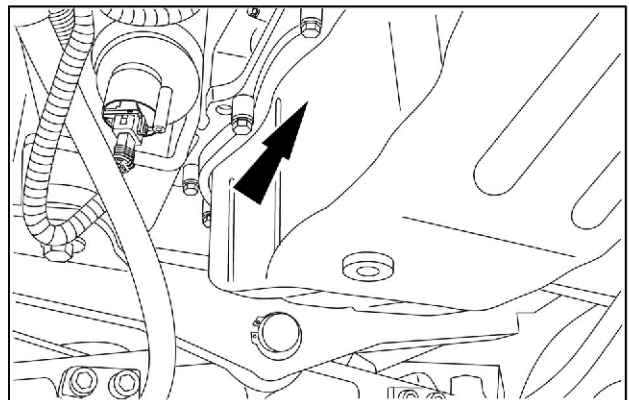


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Engine

PIN

Locate the PIN plate on the left-hand side of the oil pan near the fuel water separator.

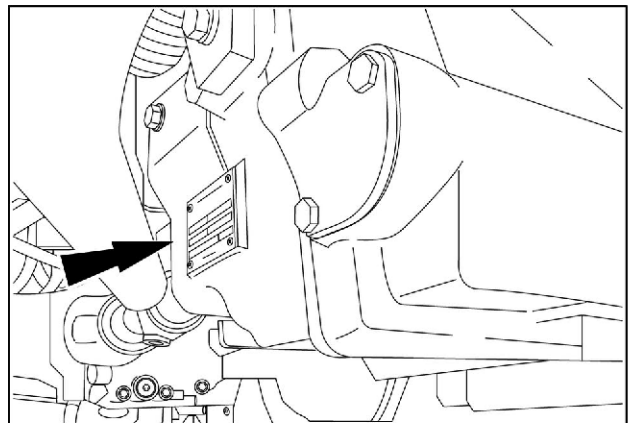


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Transmission

PIN

Locate the PIN plate on the right-hand side of the transmission housing.

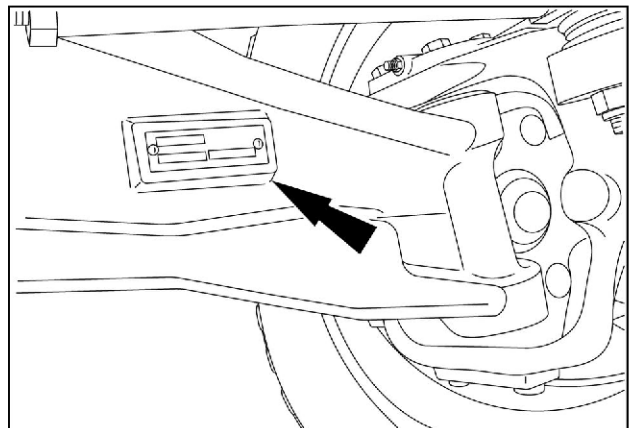


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Front axle — Two wheel drive (2WD)

PIN

Locate the PIN plate on the left-hand rear side of the front axle.

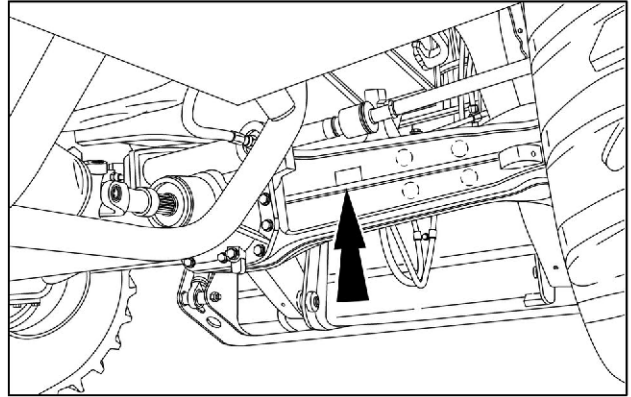


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Front axle — Four wheel drive (4WD)

PIN

Locate the PIN plate on the left-hand rear side of the front axle.

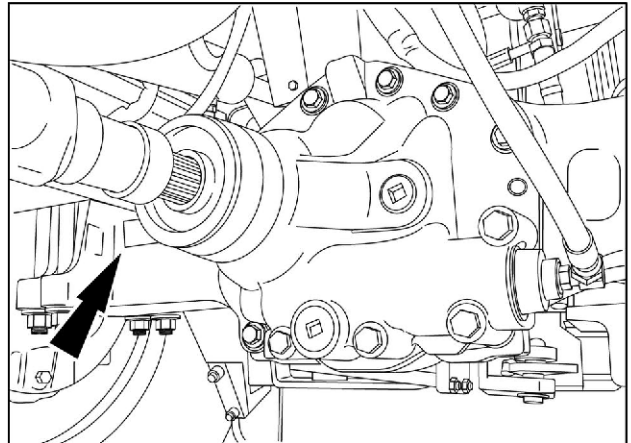


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Rear axle

PIN

Locate the PIN plate on the left-hand front side of the rear axle.



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Loader bucket

Not shown

Bucket type

PIN

Exhaust Gas Recirculation (EGR) - Diesel Particulate Filter (DPF) exhaust treatment - Product overview

What is Exhaust Gas Recirculation (EGR)?

Your NEW HOLLAND CONSTRUCTION machine is equipped with additional components to comply with national and local exhaust emissions requirements. EGR works by recirculating a portion of the engine's exhaust gases back into the engine's combustion chamber to lower combustion temperatures.

The main components of the EGR system include:

- EGR valve
- Diesel Particulate Filter (DPF)
- Diesel Oxidation Catalyst (DOC)
- Exhaust gas temperature sensors
- Differential pressure sensor
- Throttle valve actuator

What is a Diesel Particulate Filter (DPF)?

A Diesel Particulate Filter (DPF) is a filter mounted in the exhaust stream. During normal operating conditions, the exhaust gases pass through the porous walls of the DPF and trap Particulate Matter (PM) generated by the combustion process of the engine. When channels inside the DPF fill up with PM, the system must be cleaned. The cleaning process is called Regeneration.

How does the regeneration process work?

When the DPF becomes restricted, the system will need to be cleaned or regenerated by raising exhaust temperatures to burn off the trapped Particulate Matter (PM). This process is usually done automatically, but may require a manual regeneration sequence to be activated depending on operating conditions. Burned PM will leave behind traces of ash within the DPF. The ash must be cleaned out by a NEW HOLLAND CONSTRUCTION dealer outfitted with machines specifically designed to clean DPF systems. In severe cases the DPF may need to be replaced. Refer to the Maintenance Chart on page **7-23** for service intervals.

Automatic regeneration

When the DPF enters automatic regeneration mode, the display will indicate "DPF ON", several conditions need to be followed to properly let the machine perform this function.

- During this mode do not idle or shut the machine down. Allow the regeneration process to finish.
- Hot exhaust gasses will be generated, use in well ventilated area away from combustible materials.
- Use the machine under normal work scenarios until the automatic regeneration process has completed.

Manual regeneration or forced regeneration

When automatic regeneration of the DPF is unsuccessful the Engine Control Unit (ECU) will initiate the manual regeneration process. During the manual regeneration mode, the display will indicate "DPF ON", several conditions need to be followed to properly let the machine perform this function.

- During this mode, the machine will be unusable
- Move the machine to a safe place away from combustible materials.
- Hot exhaust gasses will be generated, use in well ventilated area away from combustible materials.
- Allow the regeneration process to finish before shutting the machine off.

Finding a Diesel Particulate Filter (DPF) cleaning facility

To find a NEW HOLLAND CONSTRUCTION dealer that is fully equipped to service your DPF system, please call the number below.

