

ORIGINAL INSTRUCTIONS

OPERATOR'S MANUAL

Workmaster™ 25S
Tier 4B (final)
Compact Tractor



Part number 51409930
1st edition English
November 2017



Contents

1 GENERAL INFORMATION

Note to the Owner	1-1
Intended use.....	1-2
Electro-Magnetic Compatibility (EMC)	1-4
Product Identification Number (PIN).....	1-5
Operator's manual storage on the machine	1-6
Machine orientation.....	1-7
Note to the Owner	1-8

2 SAFETY INFORMATION

Safety rules and signal word definitions	2-1
Safety rules	2-2
Do not operate tag.....	2-7
Ecology and the environment	2-8
Safety signs	2-9
Instructional signs	2-21

3 CONTROLS AND INSTRUMENTS

Access to operator's platform

Access to operator's platform	3-1
-------------------------------------	-----

Operator's seat

Seat belt	3-1
Operator's seat - Adjust	3-2

Forward controls

Multifunction light switch.....	3-4
Instrument cluster panel	3-5
Power Take-Off (PTO) switch.....	3-7
Mid-mount two-spool control valve lever	3-8
Hand throttle lever	3-10
Forward travel pedal.....	3-11
Reverse travel pedal	3-11
Cruise control switch	3-12
Key switch	3-13
Park brake lever	3-14
Service brake pedal	3-15

Left-hand side controls

Auxiliary power outlet.....	3-16
Power Take-Off (PTO) shift lever.....	3-17

Right-hand side controls

Four-Wheel Drive (4WD) lever	3-18
Transmission range lever.....	3-19
Hydraulic Power Lift (HPL) lever	3-20

Rearward controls

Hydraulic Power Lift (HPL) drop rate control valve	3-21
Mid-mount mower deck height adjustment knob	3-22
Differential lock pedal.....	3-23
Rear remote control valve - Optional	3-24

Exterior controls

Hood release latch	3-25
--------------------------	------

4 OPERATING INSTRUCTIONS

Commissioning the unit

Engine - Running-in Procedure.....	4-1
Safety rules - Diesel fuel	4-2
General specification - Biodiesel fuels	4-3
Refueling the tractor	4-5

Starting the unit

Starting the engine	4-6
Cold starting aids	4-7
Starting the tractor with jumper cables	4-8

Stopping the unit

Stopping the engine	4-9
Stopping the unit - Brakes	4-10
Emergency stopping.....	4-11

Moving the unit

Steering - Operation	4-12
Hydrostatic Transmission (HST) - Operation	4-13
Transmission operation at low ambient temperatures.....	4-14

Parking the unit

Park brake - Operation	4-15
------------------------------	------

5 TRANSPORT OPERATIONS

Road transport

Road transport - Overview	5-1
---------------------------------	-----

Shipping transport

Carrying the tractor on a transporter	5-2
---------------------------------------------	-----

6 WORKING OPERATIONS

General information

External lighting - Operating	6-1
Roll Over Protective Structure (ROPS) Fold up/down	6-3
Ballasting the tractor	6-5
Tractor ballasting weights	6-6
Operator presence system	6-8

General field operation

Hydraulic Power Lift (HPL) - Operation	6-9
Rear three-point hitch - Overview	6-10
Attaching three-point hitch equipment	6-11
Drawbar - Operation	6-13
Power Take-Off (PTO) - Operation	6-14

7 MAINTENANCE

General information

Safety rules	7-1
Engine cooling system - Basic instructions	7-2
Engine side panel remove and install	7-3
Battery location and service	7-6
Consumables	7-7

Maintenance planning

Maintenance chart	7-8
-------------------------	-----

Every 8 hours or daily

Engine lubrication system - Check	7-9
Engine cooling system - Check	7-10
Transmission - Check	7-11
Radiator screen cleaning	7-12

After the first 50 hours of operation

Engine - Change fluid	7-13
Fuel filters - Replace	7-14
Pre-filter - Replace	7-15
Hydraulic oil suction filter - Replace	7-16
Hydrostatic Transmission (HST) oil filter - Replace	7-17
Roll Over Protective Structure (ROPS) frame - Check	7-18
Wheel hardware - Check	7-19

Every 50 hours

Transmission - Check	7-20
Mechanical service brakes - Check	7-21
Hydrostatic transmission (HST) neutral adjustment - Check	7-22
Belt - Check	7-23
Tire pressure - Check	7-24
Front axle differential fluid level - Check	7-25
Air cleaner - Cleaning	7-26

Every 250 hours

Engine - Change fluid	7-27
Oil filter - Replace	7-28
Oil filter - Replace	7-29
Roll Over Protective Structure (ROPS) frame - Check	7-30
Front wheels - Tighten	7-31
Front wheels toe-in - Check	7-32
Air cleaner - Replace	7-33

Every 500 Hours

Front axle differential fluid - Change	7-34
Transmission - Change fluid	7-35
Fuel filters - Replace	7-36
Pre-filter - Replace	7-37

Every 1000 hours

Engine valve clearance - Check and adjust	7-38
-------------------------------------------------	------

Every two years

Engine cooling system - Drain fluid - And flush	7-38
-------------------------------------------------------	------

General maintenance

Fuel injection system - Bleed	7-39
Belt - Adjust	7-41
Battery - Test	7-42
Fuses - Check	7-43
Main fuse - Check	7-44
Headlight - Replace	7-45
Turn signal and hazard bulb - Replace	7-46
Front wheels - Tighten	7-47

Storage

Storage - Storing	7-48
Storage - Check	7-48

8 TROUBLESHOOTING

Symptom(s)

Troubleshooting - Foreword	8-1
Engine - Troubleshooting	8-1
Mechanical service brakes - Troubleshooting	8-2
Regulated/Low pressure system - Troubleshooting	8-2
Steering - Troubleshooting	8-3
Hydrostatic transmission - Troubleshooting	8-3
Electrical system - Troubleshooting	8-4

9 SPECIFICATIONS

Tractor general specifications	9-1
Tractor dimensions	9-5

10 FORMS AND DECLARATIONS

Pre-delivery report - Dealer's copy	10-1
Pre-delivery report - Owner's copy	10-3

1 - GENERAL INFORMATION

Note to the Owner

This manual contains information concerning the adjustment and maintenance of your new equipment. You have purchased a dependable machine, but only by proper care and operation can you expect to receive the performance and long service built into this equipment. Please have all operators read this manual carefully and keep it available for ready reference.

Your NEW HOLLAND dealer will instruct you in the general operation of your new equipment. (Refer to the 'Delivery Report' at the back of this manual.) Your dealer's staff of factory-trained service technicians will be glad to answer any questions that may arise regarding the operation of your machine. New Holland Top Service is also available. Call 1-866-NEWHLND (1-866-639-4563) or email na.topservice@cnh.com.

Your NEW HOLLAND dealer carries a complete line of genuine NEW HOLLAND service parts. These parts are manufactured and carefully inspected to insure high quality and accurate fitting of any necessary replacement parts. Be prepared to give your dealer the model and product identification number of your new equipment when ordering parts. Locate these numbers now and record them below. Refer to the 'General Information' section of this manual for the location of the model and product identification numbers of your machine.

PLEASE RECORD THE FOLLOWING INFORMATION


Model

Product Identification Number (PIN)

Date Purchased

Engine Model

Engine (PIN)

	<p>This is the safety alert symbol. It is used with and without signal words to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible death or injury.</p>
-------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

⚠ 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.

W0012A

ATTENTION: *The engine and fuel system on your machine is designed and built to government emission standards. Tampering by dealer, customers, operators, and end 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!*

Improvements

CNH INDUSTRIAL AMERICA LLC is continually striving to improve its products. We reserve 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.

Intended use

▲ WARNING

Roll-over hazard!

Always pull from the drawbar. DO NOT attach chains or ropes to the Roll Over Protective Structure (ROPS) for pulling purposes, as the machine could tip over. When driving through door openings or under low overhead objects, make sure there is sufficient clearance for the ROPS.

Failure to comply could result in death or serious injury.

W0463A

Your tractor is designed and made to pull, to carry, and to power a variety of mounted or towed equipment, although within some physical limits. The working speed and performance may depend on a number of various parameters, such as weather and terrain conditions. Though the tractor is designed to perform in combination with a variety of equipment in most crops and conditions, there may be a number of combinations of above parameters, for which there is severe degradation of performance of the tractor and/or its mounted or trailed equipment. If you notice degradation of performance, contact your dealer for assistance. He may have useful information for improvements, or a kit may be available to enhance the performance.

- Do not use the tractor for another purpose than intended by the manufacturer and outlined in this manual.
- Do not use the tractor beyond its limits of terrain gradient and stability as outlined further in this manual. Using the tractor beyond these limits may result in roll-over or tip-over. Observe the recommendations in this manual.
- Use only approved accessories and attachments that are designed for your machine. Consult your dealer on changes, additions or modifications that may be required for your machine. Do not make any unauthorized modifications to your machine.
- Do not use the tractor on higher speeds than allowed by the load and the environment. A wet surface or other low adherence conditions may increase the braking distance or result in vehicle instability. Always adapt your traveling speed according to the load of the vehicle and the characteristics of the road.
- Do not use the tractor near or on soft verges of canals and brooks or banks and verges that are undermined by rodents. The tractor may sink sideways and roll-over.
- Do not use the tractor on brittle bridge heads and poor bridge floors. These constructions may collapse and cause roll-over of the tractor. Always check out the condition and carrying capacity of bridges and ramps prior to engage.
- Do not use the tractor without wearing the seat restraint system during activities where roll-over or tip-over hazards exist. The Roll Over Protection Structure (ROPS) cab or ROPS structure will only be fully effective when the driver remains attached to his seat.
- Do not use equipment mounted on the tractor which is not correctly matching and firmly fixed. Such equipment may increase the risk for roll-over and hit the tractor when coming loose. Ensure that the dimensions of the three-point linkage interface of both the tractor and the equipment are matching according to the categories defined in ISO 730. Ensure that the dimensions and speed of the Power Take-Off (PTO) shaft on the tractors are matching those of the equipment.
- Do not use the tractor in combination with equipment, without having consulted the specific operator's manual provided with the equipment. The tractor is a universal tool to carry, tow, and drive a variety of equipment. This manual alone cannot provide you with all the information required for the safe operation of the combination.
- Do not use the tractor beyond its limits of dynamic stability. High speed, abrupt maneuvers, and fast and short cornering will increase the risk of roll-over.
- Do not use the tractor for pulling work, in cases where you do not know whether the load will yield, for instance when pulling stumps. The tractor may flip over when the stump is not yielding.
- Be cautious that the center of gravity of the tractor may increase when loads on the front-end loader or the three-point linkage are raised. In these conditions, the tractor may roll-over earlier than expected.
- Do not step down from the tractor without shutting down the PTO, shifting the transmission to park or neutral and applying the park brake, unless continued PTO operation is required for some equipment, such as pumps or wood chippers. 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 tractor will have no means to stop the power transmission, other than the PTO clutch of the tractor.
- You shall take the necessary precautions to always be aware of the possible presence of bystanders, certainly when maneuvering in confined areas, such as the farm yard and sheds. Keep people away from the tractor during work; ask bystanders to leave the field. There is not only the risk to be overrun by the tractor, but objects ejected by some

equipment mounted on the tractor, such as a rotary mower, 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. Wait to cut the edge of the field till it is clear of bystanders.

- Do not allow riders on the tractor; do not allow people standing on the access way or step to the cab when the tractor is moving. Your view to the left will be obstructed and a rider risks to fall from the tractor during unforeseen or abrupt movements.
- Always stay clear from implements operating area and especially do not stand between tractor and trailed vehicle either three-point linkage when operating lift controls; ensure no bystanders are near these operating areas.
- Your tractor 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 bypass any function on the tractor. You will be exposed to serious hazards, and moreover, the behavior of the tractor may become unpredictable.
- A tractor has only one operator station and is a one man operated vehicle. Other people on or around the tractor during normal operation are not allowed.
- All persons who will be operating this machine shall possess a valid local vehicle operating permit and/or other applicable local age work permits.
- The machine is designed and produced exclusively for agricultural use.
- The machine is not designed for light/heavy forestry applications; usage is prohibited for forestry applications.
- All other use will be considered to be contrary to the use specified by CNH INDUSTRIAL AMERICA LLC, who cannot be held liable for damage to property or the machine, or for personal injuries which may result.
- Persons who risk improper use will therefore assume the responsibility for any consequences arising from such use.
- Compliance with the instructions for use, maintenance and repairs described in this manual, are the essential pre-conditions for the use specified by CNH INDUSTRIAL AMERICA LLC.
- The machine must only be used, serviced, or repaired by personnel trained in the relevant working methods and safety regulations and who have been authorized to work on the machine.
- The engine and fuel system on your machine is designed and built to government emissions standards. Tampering by dealer, 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!
- The user must also observe the rules concerning general safety and accident prevention, including the Highway Code when driving on public highways.
- Any arbitrary modifications made to this machine will release CNH INDUSTRIAL AMERICA LLC from any liability resulting from damage or injury.
- CNH INDUSTRIAL AMERICA LLC and all its distribution organizations, inclusive of, but not restricted to, national, regional, or local distributors, cannot be held liable for damage resulting from the malfunction of parts and/or components not approved by CNH INDUSTRIAL AMERICA LLC.
- Under no circumstances will a guarantee be issued for products made or sold by CNH INDUSTRIAL AMERICA LLC that are damaged as a result of the malfunction of parts and/or components not approved by CNH INDUSTRIAL AMERICA LLC.

Electro-Magnetic Compatibility (EMC)

Interference may arise as a result of add-on equipment that 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 on board electronics

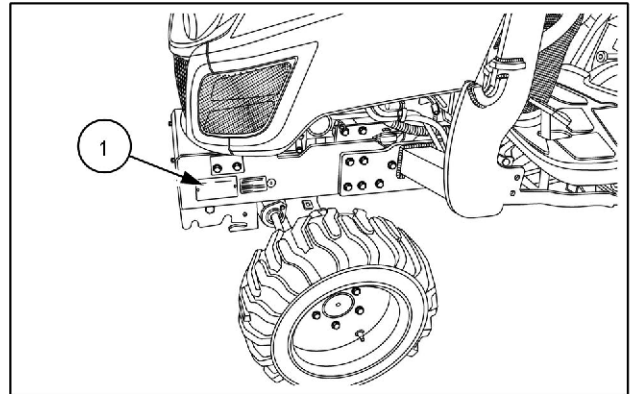
Failure to comply with these rules will render the NEW HOLLAND warranty null and void.

Product Identification Number (PIN)

Chassis number

The Product Identification Number (PIN) plate **(1)** for the chassis is located on the left-hand side of the frame, near the left front wheel.

The numbers on the plate are important in the event your tractor should require future service.

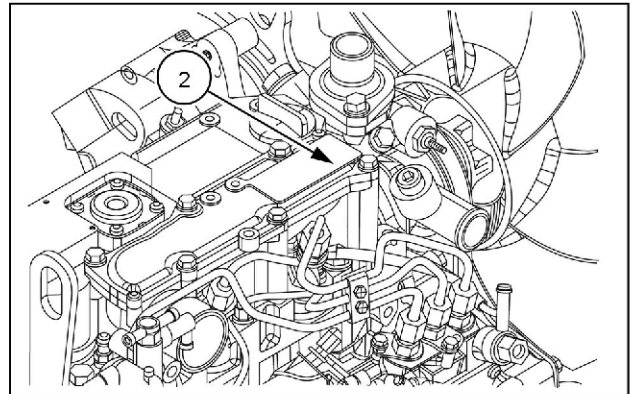


NHIL17CT01347AA 1

Engine number

The Product Identification Number (PIN) plate **(2)**, for the engine is located on the forward end of the valve cover.

The numbers on the plate are important in the event your engine should require future service.

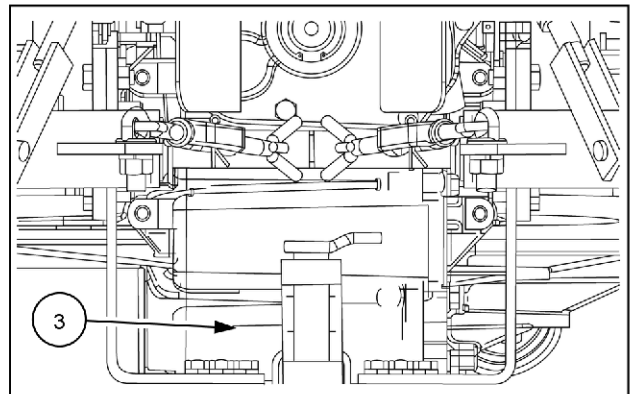


NHIL17CT01119AA 2

Transmission number

The Product Identification Number (PIN) plate **(3)**, for the transmission is located below the Power Take-Off (PTO) shield.

The numbers on the plate are important in the event your transmission should require future service.

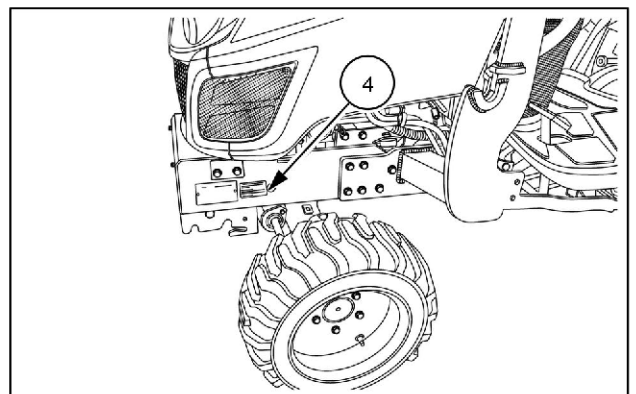


NHIL17CT01120AA 3

Emissions plate

The emissions information plate **(4)** is located to the rear of the chassis PIN plate.

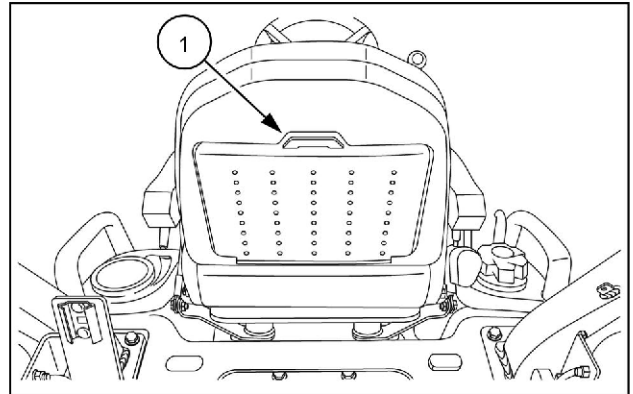
The plate contains important emissions related information.



NHIL17CT01347AA 4

Operator's manual storage on the machine

The operator's manual must be stored in a compartment **(1)** located in the rear of the operator's seat back and be kept available for use by all operators.

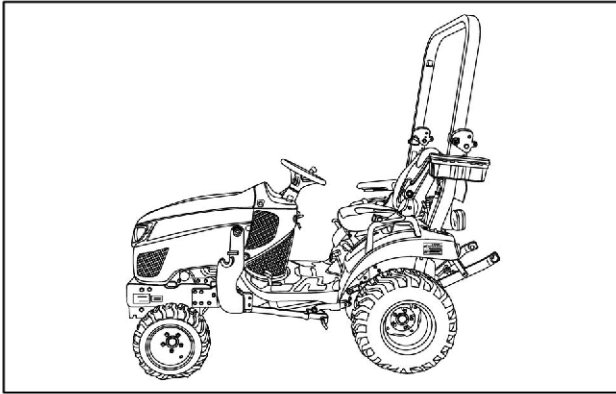


NHIL17CT01221AA 1

Machine orientation

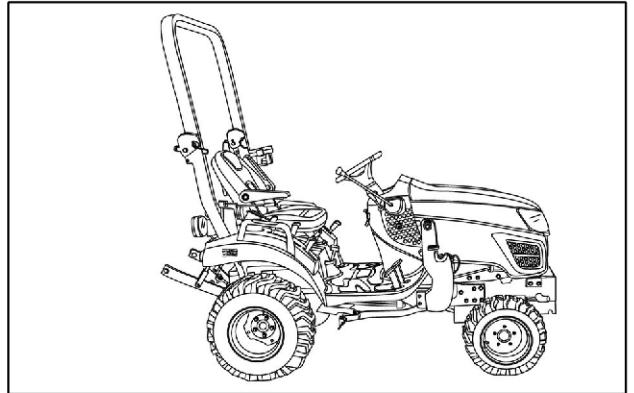
NOTE: On this equipment, left-hand and right-hand are determined by standing behind the unit, looking in the direction of travel.

Left-hand view



NHIL17CT01343AA 1

Right-hand view



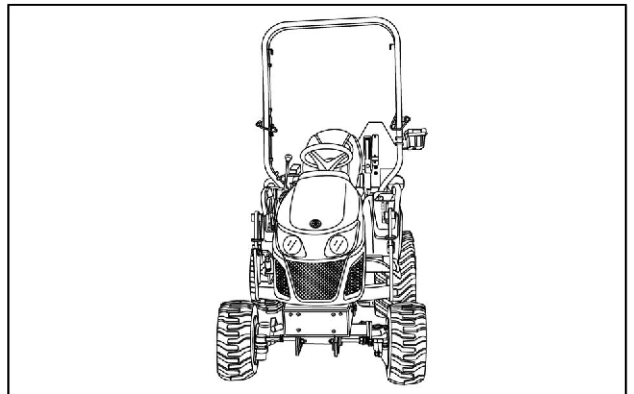
NHIL17CT01345AA 2

Rear view



NHIL17CT01346AA 3

Front view



NHIL17CT01344AA 4

Note to the Owner

YANMAR CO., LTD. EMISSION CONTROL SYSTEM WARRANTY - USA ONLY

Your Warranty Rights and Obligations:

The California Air Resources Board (CARB), the United State Environmental Protection Agency (EPA) and YANMAR CO., LTD. hereafter referred to as YANMAR, are pleased to explain the emission control system warranty on your 2016, 2017, or 2018 model year industrial compression-ignition engine. California-certified, new off-road compression-ignition engines must be designed, built and equipped to meet the State's stringent anti-smog standards. In the remaining forty nine (49) states, new non-road compression-ignition engines must be designed, built and equipped to meet the United States EPA emissions standards. YANMAR must warrant the emission control system on your engine for the periods of time listed below provided there has been no abuse, neglect or improper maintenance of your engine.

Your emission control system may include parts such as the fuel injection system, the air induction system, the electronic control system, EGR (Exhaust Gas Recirculation) system and the diesel particulate filter system. Also included may be hoses, belts, connectors and other emission-related assemblies.

Where a warrantable condition exists, YANMAR will repair your off-road compression-ignition engine at no charge to you including diagnosis, parts and labor.

Manufacturer's Warranty Period:

2016, 2017, or 2018 model year off-road compression-ignition engines are warranted for the periods listed below. If any emission-related part on your engine is found to be defective during the applicable warranty period, the part will be repaired or replaced by YANMAR.

If your engine is certified as	And its maximum power is	And its rated speed is	Then its warranty period is
Variable speed or constant speed	Less than 19.0 kW (25.8 Hp)	Any speed	1,500 hours or two (2) years whichever comes first. In the absence of a device to measure the hours of use, the engine has a warranty period of two (2) years.
Constant speed	19.0 – 37.0 kW (25.8 – 50.3 Hp)	3000 RPM or higher	1,500 hours or two (2) years whichever comes first. In the absence of a device to measure the hours of use, the engine has a warranty period of two (2) years.
Constant speed	19.0 – 37.0 kW (25.8 – 50.3 Hp)	Less than 3000 RPM	3,000 hours or five (5) years whichever comes first. In the absence of a device to measure the hours of use, the engine has a warranty period of five (5) years.
Variable speed	19.0 – 37.0 kW (25.8 – 50.3 Hp)	Any speed	3,000 hours or five (5) years whichever comes first. In the absence of a device to measure the hours of use, the engine has a warranty period of five (5) years.
Variable speed or constant speed	Greater than 37.0 kW (50.3 Hp)	Any speed	3,000 hours or five (5) years whichever comes first. In the absence of a device to measure the hours of use, the engine has a warranty period of five (5) years.

Warranty Coverage:

This warranty is transferable to each subsequent purchaser for the duration of the warranty period. YANMAR recommends that repair or replacement of any warranted part will be performed at an authorized YANMAR dealer.

Warranted parts not scheduled for replacement as required maintenance in the owner's manual shall be warranted for the warranty period. Warranted parts scheduled for replacement as required maintenance in the owner's manual are warranted for the period of time prior to the first scheduled replacement. Any warranted parts scheduled for replacement as required maintenance that are repaired or replaced under warranty shall be warranted for the remaining period of time prior to the first scheduled replacement. Any part not scheduled for replacement that is repaired or replaced under warranty shall be warranted for the remaining warranty period.

During the warranty period, YANMAR is liable for damages to other engine components caused by the failure of any warranted part during the warranty period.



Thank you very much
for your reading.
Please click here
to get more information.