

OPERATOR'S MANUAL

Boomer™ 40

Boomer™ 50

Compact Tractor

Part number 47605465

1st edition English

December 2013



Contents

1 GENERAL INFORMATION

Note to the Owner	1-1
Biodiesel fuel	1-2
Tractor intended use.....	1-3
Electro-magnetic compatibility (EMC).....	1-4
Product identification	1-5
Operator's manual storage	1-6
Machine orientation.....	1-7

2 SAFETY INFORMATION

Precautionary statements and signal word definitions	2-1
Safety rules	2-2
Do not operate tag.....	2-11
Roll Over Protective Structure (ROPS)	2-12
Ecology and the environment	2-13
Safety signs	2-14
Instructional signs	2-25
International symbols.....	2-31

3 CONTROLS AND INSTRUMENTS

OPERATOR'S SEAT

Seat belt	3-1
Seat controls	3-2
Roll Over Protective Structure (ROPS).....	3-3

FORWARD CONTROLS

Instrument cluster	3-5
Cruise control.....	3-7
Transmission shuttle shift lever.....	3-8
Clutch pedal	3-9
Brake pedals	3-9
Foot throttle pedal	3-10
Hand throttle lever	3-11
Horn switch	3-12
PTO switch	3-13
Key switch	3-14
Differential lock pedal.....	3-15
HST foot pedals	3-16
Tilt steering lever	3-16
Multifunction light switch.....	3-17

LEFT-HAND SIDE CONTROLS

Transmission range lever.....	3-18
Park brake	3-18
Front-wheel drive lever	3-19
Mid PTO lever	3-20

RIGHT-HAND SIDE CONTROLS

Hydraulic system	3-21
Draft control	3-22
Rear remote control valve(s)	3-23
Two-spool control valve	3-24
Transmission main shift lever.....	3-25
HST transmission range lever.....	3-26

EXTERIOR CONTROLS

Hood release lever	3-27
--------------------------	------

4 OPERATING INSTRUCTIONS

COMMISSIONING THE UNIT

Engine break-in procedure	4-1
Power Take-Off (PTO) operation	4-2
Three-point linkage	4-4
Attaching three-point equipment	4-5
Extendible drawbar	4-8
Hydraulic lift rocker	4-9
HPL drop rate control valve	4-9

STARTING THE UNIT

Key switch	4-10
Cold starting aids	4-10
Starting the engine	4-11
Starting the tractor with jumper cables	4-14

STOPPING THE UNIT

Stopping the engine	4-15
Emergency stopping	4-16
Brakes	4-17

MOVING THE UNIT

Steering wheel adjustment	4-19
Steering operation	4-20
Transmission operation at low ambient temperatures.....	4-21
Hydrostatic transmission (HST) operation.....	4-22
16 x 16 Synchronized transmission operation.....	4-24

PARKING THE UNIT

Parking the unit.....	4-26
-----------------------	------

5 TRANSPORT OPERATIONS

ROAD TRANSPORT

External lighting	5-1
Hazard warning light operation	5-2
Turn signal operation	5-2
Headlight/work light operation	5-3
Rear work light operation	5-4
Driving the vehicle	5-5

SHIPPING TRANSPORT

Carrying the tractor on a transporter	5-6
---	-----

RECOVERY TRANSPORT

Towing	5-6
--------------	-----

6 WORKING OPERATIONS

GENERAL INFORMATION

Tractor ballasting	6-1
Tractor ballasting weights	6-2
Liquid Ballast	6-4

7 MAINTENANCE

GENERAL INFORMATION

General Information	7-1
Safety rules diesel fuel	7-3
Biodiesel fuel	7-3
Refueling the tractor	7-4

MAINTENANCE CHART

Maintenance Chart	7-5
-------------------------	-----

Every 10 hours of operation or daily

Engine oil level	7-6
Engine cooling system	7-8

After the first 50 hours of operation

Engine oil and filter	7-9
Fuel filter	7-10
Hydraulic oil filter	7-10
Hydrostatic (HST) oil filter	7-11
Roll Over Protective Structure (ROPS)	7-11
Wheels bolt/nut	7-13

Every 50 hours

Grease fittings	7-14
Transmission fluid level.....	7-15
Clutch pedal free play	7-16
Brake pedal free play	7-16
Hydrostatic Transmission (HST) neutral adjustment	7-17
Fan belt	7-18
Tires and wheels	7-18
Front axle differential fluid level	7-20
Air cleaner	7-20

Every 100 hours

Fuel filter.....	7-22
------------------	------

Every 300 hours

Engine oil and filter	7-23
Hydraulic oil filter	7-23
Hydrostatic (HST) oil filter	7-23
Fuel filter.....	7-23
Fan belt	7-23
Wheels bolt/nut	7-23
Roll Over Protective Structure (ROPS)	7-24
Front wheels toe-in	7-25
Air cleaner primary element	7-25

Every 600 hours

Front axle differential fluid	7-26
Transmission fluid	7-27

Every 1000 hours

Air cleaner inner element.....	7-28
Engine coolant	7-29

General maintenance

Fuel injection system - Bleed	7-30
Fuel injectors - Bleed	7-32
Hydrostatic Transmission (HST) neutral adjustment	7-34
Fan belt	7-35
Roll Over Protective Structure (ROPS)	7-36
Battery	7-37
Alternator	7-37
Fuses	7-38
Maxi fuse	7-39
Headlight	7-39
Tail/brake light bulb	7-40
Turn signal/hazard light bulb	7-40
Wheels bolt/nut	7-42

Front wheels toe-in	7-43
Brake pedal free play	7-44
Clutch pedal free play	7-44

STORAGE

Storage - Storing	7-45
Storage - Check	7-46

8 TROUBLESHOOTING

SYMPTOM(S)

Engine - Troubleshooting	8-1
Clutch - Troubleshooting	8-2
Hydraulic service brakes - Troubleshooting	8-2
Hydraulic Lift System - Troubleshooting	8-2
Steering - Troubleshooting	8-3
Hydrostatic transmission - Troubleshooting	8-3
Electrical system - Troubleshooting	8-4

9 SPECIFICATIONS

Wheel tread settings	9-1
Tire inflation pressures	9-2
Liquid ballast	9-2
General specifications	9-3
Tractor dimensions	9-6

10 ACCESSORIES

Optional equipment	10-1
--------------------------	------

11 FORMS AND DECLARATIONS

Delivery report - owner copy	11-1
Delivery report - dealer copy	11-3

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.

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

	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.
---	--

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

IMPROVEMENTS

CNH 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.

Biodiesel fuel

Fatty Acid Methyl Ester Biodiesel (Biodiesel Fuel) consists of a family of fuels derived from vegetable oils treated with methyl esters.

NOTICE: *Biodiesel Fuel blends are approved for your engine only if they comply with EN14214 Specification Standards or ASTM D6751.*

NOTICE: *It is imperative that you check which blend is approved for your engine with your NEW HOLLAND dealer. Be aware that the use of Biodiesel Fuel that does not comply with the Standards mentioned above could lead to severe damage to the engine and fuel system of your machine. The use of fuels that are not approved may void NEW HOLLAND Warranty coverage.*

Biodiesel Fuel Usage Conditions

NOTICE: *The Biodiesel Fuel must meet the fuel Specification mentioned above.*

Biodiesel Fuel must be purchased from a trusted supplier that understands the product and maintains good fuel quality. Biodiesel Fuel must be pre-blended by the supplier. Mixing Biodiesel Fuels on-site can result in incorrect mixture that can lead to problems with both engine and fuel system.

Engine performance is affected by the use of Biodiesel Fuel. There may be up to **12 %** reduction in power or torque depending on the blend used.

NOTICE: *DO NOT modify the engine and/or injection pump settings to recover the reduced performance.*

The reduced power must be accepted if using any Biodiesel Fuel blend.

Some modification may be required to allow your engine to run Biodiesel Fuel. Consult your dealer for complete information on these modifications.

Biodiesel Fuel has a higher cloud point than Diesel Fuel.

NOTICE: *The use of high Biodiesel Fuel blends are not recommended in cold weather conditions.*

With Biodiesel Fuels, it may be necessary to change the engine oil, engine oil filter and fuel filter elements more frequently than with Diesel Fuels. Biodiesel Fuel can remove rust and particles from the inside of on-site fuel storage tanks that would normally adhere to the sides of the tank. Like particle deposits that commonly occur with Diesel Fuel, these particles can become trapped by the machine fuel filters, causing blockage and shortening filter life. In cold weather, this is more likely to happen. Consult your NEW HOLLAND dealer for information on cold weather operation and proper maintenance intervals when using any Biodiesel Fuel blend.

When handling Biodiesel Fuel, care must be taken not to allow water into the fuel supply. Biodiesel Fuel will actually attract moisture from the atmosphere.

Fuel tanks must be kept as full as possible to limit the amount of air and water vapors in them. It may be necessary to drain the fuel filter water tap more frequently.

Potential oxidation and stability could be a problem with the fuel stored in the machine.

NOTICE: *Machines must not be stored for more than three months with Biodiesel Fuel blends in the fuel system.*

If long storage periods are necessary, the engine must run on Diesel Fuel for 20 hours to flush the Biodiesel Fuel out of the engine fuel system prior to storage.

NOTICE: *Biodiesel Fuel must not be stored in on-site storage tanks for more than three months.*

Any spillage of Biodiesel Fuel must be cleaned up immediately before it can cause damage to the environment and the paint finish of the machine.

Before using Biodiesel Fuel blends you should consult with your dealer to receive full information about the approved blend for your machine and any detailed conditions of its usage.

NOTICE: *Be aware that not fulfilling the requirements and conditions of Biodiesel Fuel usage will void your machine's NEW HOLLAND Warranty coverage.*

Tractor intended use

This machine was designed to power and propel itself. It is intended for agricultural use to pull or carry tractor attachments or load and move materials when equipped with a front end loader with a variety of buckets.

PROHIBITED USAGE

No parts or attachments should be fitted to this machine, which have not been released by NEW HOLLAND. They might affect machine operation, safety of the user or other people, stability or wear characteristics of the machine.

NOTICE: *Use only approved accessories and attachments 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.*

NOTICE: *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.*

NOTICE: *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!*

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

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:

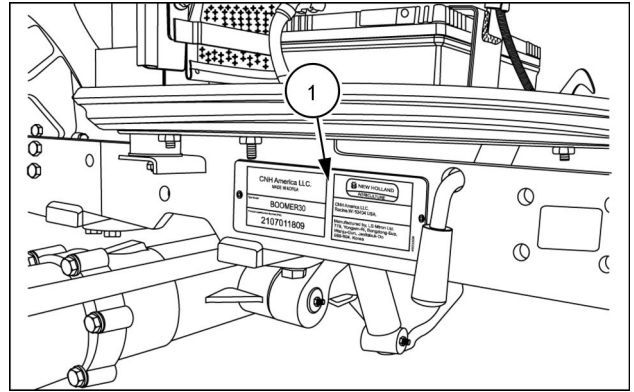
- The maximum power of emission equipment (radio, telephones, etc.) must not exceed the limits imposed by the national authorities of the country where you use the machine
- The electro-magnetic field generated by the add-on system should not exceed **24 V/m** at any time and at any location in the proximity 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.

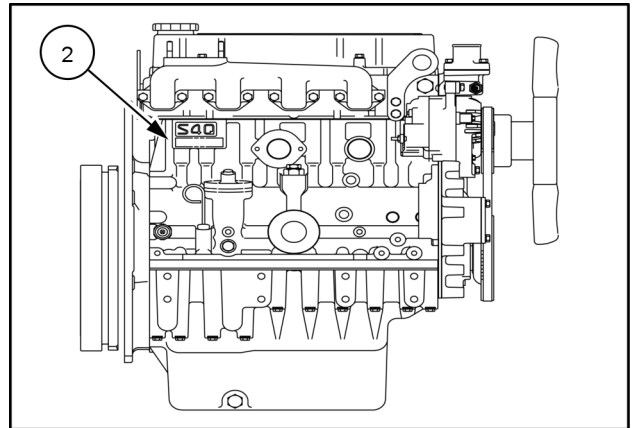
Product identification

The Product Identification Plate **(1)** is located on the right-hand side of the frame, next to the hood release.

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

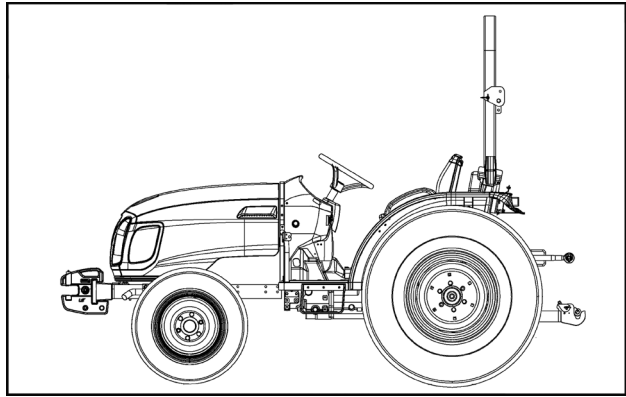


The engine identification number **(2)** is located on the right rear side of the engine block. The engine identification number is stamped into the engine block,



Operator's manual storage

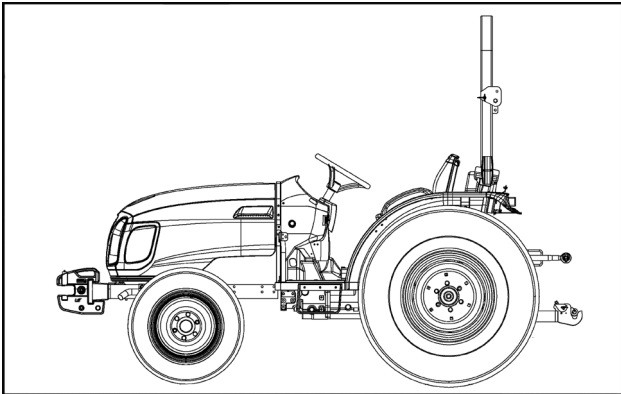
The operator's manual must be stored in a secure place prior to operation and it must be kept available for use by all operators.



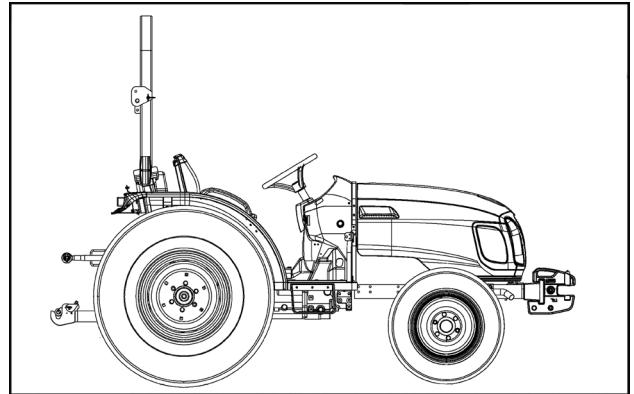
NHIL13CT00889AA 1

Machine orientation

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

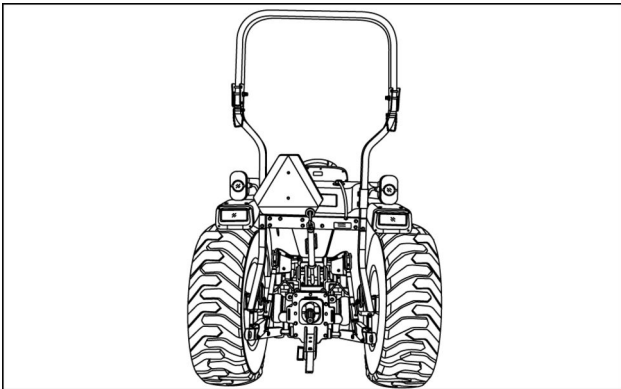


NHIL13CT00889AA 1



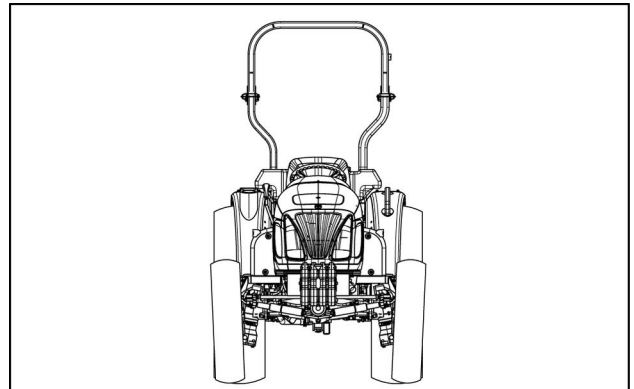
NHIL13CT00890AA 2

Left-hand view



93110438 3

Right-hand view



NHIL13CT00928AA 4

Rear view

Front view

2 - SAFETY INFORMATION

Precautionary statements and 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.

M1169A



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

M1170A



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.

M1171A

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. The color associated with Notice is BLUE.

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.

Thank you so much for reading.
Please click the “Buy Now!”
button below to download the
complete manual.



After you pay.

You can download the most
perfect and complete manual in
the world immediately.

Our support email:

ebooklibonline@outlook.com