

ORIGINAL INSTRUCTIONS

OPERATOR'S MANUAL

T4.80F

T4.90F

T4.100F

T4.110F

Tractor

Part number 47847507

1st edition English
October 2015



Contents

1 GENERAL INFORMATION

Note to the Owner	1-1
Intended use.....	1-3
Electro-Magnetic Compatibility (EMC)	1-5
Manual scope and required training level	1-6
Metric and imperial units abbreviations.....	1-7
Identification plates	1-9
Approval data plate.....	1-11
Operator's manual storage	1-12
Machine orientation.....	1-13

2 SAFETY INFORMATION

Safety rules and signal word definitions	2-1
Safety rules - General information	2-2
Safety rules – Maintenance	2-3
Safety rules - Wheels and tires	2-4
Safety rules – Explosions and fires	2-5
Safety rules - Fire extinguisher	2-6
Safety rules – Battery	2-7
Safety rules – Operator presence system	2-8
Safety rules - Power Take-Off (PTO)	2-9
Safety rules - Seat belts	2-10
Safety rules - Operator protective structure	2-11
Safety rules - Category 2 cabin (standard)	2-13
Safety rules - Category 4 cabin (option)	2-14
Safety rules - HVAC system	2-16
Safety rules - Personal Protective Equipment (PPE)	2-17
Safety rules - "Do not use" sign	2-18
Safety rules - Hazardous chemicals	2-19
Safety rules - Near utilities	2-20
Safety rules - In the event of electrical storms	2-21
Safety rules – Mounting and dismounting the machine	2-22
Safety rules - Lifting and overhead loads	2-23
Ecology and the environment	2-24
Noise level.....	2-25
Vibration levels	2-26
Safety signs	2-27
Towing the tractor for recovery	2-34
Tractor jacking points.....	2-35
Burn prevention.....	2-36
Emergency exit	2-37

3 CONTROLS AND INSTRUMENTS

Access to operator's platform

Getting to know the internal parts of the cab	3-1
---	-----

Operator's seat

Mechanical suspension seat	3-4
Air seat	3-5
Safety belt	3-6

Forward controls

Dashboard	3-7
Front controls	3-12

Left-hand side controls

Left-hand side controls	3-16
-------------------------------	------

Right-hand side controls

Right hand side controls	3-18
--------------------------------	------

Overhead controls

Overhead controls	3-20
Heating, ventilation or air-conditioning control	3-22

Display

Instrument cluster Analog-Digital Instrument Cluster (ADIC) - Program	3-24
Ground speed calibration	3-25
Ground speed calibration	3-26
Calibrating tool width	3-27
Programming maintenance work	3-28
Activating/deactivating buzzer	3-30
Setting units of measurement	3-31
Regenerating the diesel particulate filter (DPF) automatically/manually	3-32
Resetting the oil change counter	3-37
Viewing error codes	3-38

4 OPERATING INSTRUCTIONS

Commissioning the unit

Basic operating safety rules	4-1
Refueling	4-2

Starting the unit

Starting the engine	4-3
---------------------------	-----

Stopping the unit

Stopping the engine	4-4
Battery isolator control switch	4-5

Moving the unit

Machine movement start-up	4-6
Low idle speed management	4-7
Transmission with gear reducer and mechanical reversing mechanism	4-8
Transmission with gear reducer and electrohydraulic reversing mechanism	4-9
Transmission with gear reducer, mechanical reversing mechanism and splitter	4-10
Transmission with gear reducer, electrohydraulic reversing mechanism, HI-LO control and electrohydraulic clutch	4-11
Transmission with gear reducer, electrohydraulic reversing mechanism, HI-LO control and electrohydraulic clutch	4-14

5 TRANSPORT OPERATIONS

Road transport

Transporting the machine	5-1
--------------------------------	-----

Recovery transport

Towing the tractor	5-2
--------------------------	-----

6 WORKING OPERATIONS

Engine accelerator controls

Hand throttle control lever - Overview	6-1
Foot throttle control - Overview	6-1

Constant engine RPM

Constant engine RPM	6-1
---------------------------	-----

Clutch pedal

Clutch pedal	6-2
--------------------	-----

Brakes

Grouped safety messages	6-3
Service brakes	6-4
Handbrake	6-5
Park lock	6-6

Trailer braking systems

Hydraulic trailer brakes (universal version)	6-7
Hydraulic trailer brakes (Italian type) Not available on all markets	6-8

Four-Wheel Drive (4WD)

Four-wheel drive with electro-hydraulic control	6-10
---	------

Differential lock system

Differential lock	6-11
-------------------------	------

Cab pressurizing system

Air filtration system of Category 4 cab - Operating	6-12
---	------

Remote control valves

Remote control valves - Safety rules	6-19
Remote control valves - Operating	6-19
Electrohydraulically controlled rear remote control valves	6-23
Mid-mount remote control valve - Operating	6-27
Mid-mount remote control valve - Operating	6-29

Rear Power Take-Off (PTO)

Two-speed rear Power Take-Off (PTO) - Grouped Safety Message	6-31
Power Take-Off (PTO) - Adjust	6-31
Power take-off speeds	6-33
Non-synchronised power take-off	6-35
Synchronised power take-off	6-36

Front Power Take-Off (PTO)

Front Power Take-Off (PTO) - Safety rules	6-37
Front Power Take-Off (PTO) - Operating	6-37

Rear hydraulic lift

Remote control valves - Safety rules	6-39
Hydraulic lift with mechanical control	6-39
Proportional control lever	6-42
Rear hydraulic lift with mechanical control	6-43

Hydraulic lift with electronic control

Hydraulic lift with electronic control	6-48
--	------

Rear three-point hitch

Rear three-point hitch - Operating	6-53
Rear three-point hitch - Operating	6-57
Quick hitch - Operating	6-58

Three-point hitch front

Front hitch - Operating	6-60
-------------------------------	------

Towbar

Rear three-point hitch - Personal safety	6-62
Towbar	6-63

Rear tow hitch

Safety rules	6-64
Towing hitch	6-65

Wheels and tires

Wheels - General specification	6-67
Tire dimensions	6-71

Track adjustment

Adjustment of the front tracks	6-73
Adjustment of the front tracks	6-74
Front tracks diagram	6-75
Rear tracks diagram	6-76

Ballasting

Ballasting	6-77
------------------	------

7 MAINTENANCE

General information

General safety before you service	7-1
Introduction	7-3
Body maintenance	7-4
Fuel storage	7-6
Organic Acid Technology (OAT) coolant	7-7
Capacities	7-8
Consumables	7-9
Opening the engine bonnet	7-10
Removing the engine side shields	7-11

Maintenance planning

Maintenance chart	7-12
-------------------------	------

As required

Expansion tank - Level make up	7-15
Windshield washer fluid reservoir - Level make up	7-16
Road lamps – Adjust	7-16
Clutch pedal - Adjust	7-17
Parking brake - Adjust	7-18

Oil cooler Drive line - Cleaning	7-19
Radiator and intercooler - Cleaning	7-21
Tires — Pressure check and general conditions	7-22
Air cleaner - Cleaning	7-22
Fuel filters - Cleaning glass first stage fuel filter	7-23
Cab climate control - Check	7-25
Engine lubrication system - Replace oil	7-26
Cab air filter category 2 - Check	7-28
Cab air filter category 4 - Check	7-29

AT WARNING MESSAGE DISPLAY

Engine air filter - Cleaning	7-30
Fuel filters - Drain fluid	7-31
Brake fluid - Level make up	7-33
Expansion tank - Check Coolant Level	7-34
Engine oil level - Check	7-34

Every 10 hours or daily

Brake fluid - Level make up	7-35
Engine lubrication system - Check	7-35
Engine cooling system - Check expansion tank fluid level	7-37
Brake fluid reservoir - Check	7-38
Engine air cleaner - check	7-38
Windshield washer fluid reservoir - Check	7-38
Oil cooler Transmission - Check	7-39
Radiator and intercooler - Control	7-40
Fuel filters - Check glass pre - filter	7-41
Brake pedals - Check coupling pin	7-42

Initial 50 hours

Maintenance - Tighten	7-43
Maintenance - Check	7-43
Maintenance - Replace	7-44
Maintenance - Cleaning	7-44
Maintenance - Test	7-44
Maintenance - Grease	7-45

Every 50 hours

Hydraulic lift and linkage - Greasing	7-46
Four-Wheel Drive (4WD) steering cylinders - Grease	7-47
Front axle 4WD - Greasing	7-48
Drive Shaft Sleeve for 4WD Front Axle Connection - Greasing	7-49
Front three-point hitch - Greasing	7-50
Oil cooler Transmission - Check	7-51
Radiator and intercooler - Control	7-52

Every 100 hours

Oil cooler Drive line - Cleaning	7-53
Radiator and intercooler - Cleaning	7-55
Oil cooler and lines - Check drives	7-56
Air conditioner condenser - Cleaning	7-57
Cab air filter category 2 - Clean	7-59
Cab air recirculation filter - Cleaning	7-60

Every 150 hours

Cab air filter category 4 - Replace	7-61
---	------

Every 300 hours

Alternator drive belt - Check.....	7-62
Air conditioning compressor belt - Check	7-63
Hydraulic oil filter - Replace	7-64
Transmission oil filter - Replace	7-65
Drive line lubrication - Check the oil level	7-66
Engine air filter - Cleaning	7-67
Brake system - Control	7-68
4WD front axle housing (SuperSteer™) - Check the oil level	7-69
4WD front axle final drives Check the oil level	7-70
4WD front axle steering knuckles - Greasing	7-71

Every 600 hours

Front and rear wheel nuts - Check tightening torque	7-72
Oiling system - Change oil and filter (Models without a cab)	7-73
Oiling system - Change oil and filter (Models with a cab)	7-76
Fuel filters - Replace	7-78
Fuel filters - Cleaning.....	7-81
Clutch pedal - Control	7-82
Air intake lines - Check	7-83
Front Power Take-Off (PTO) - Check.....	7-84
Front Power Take-Off (PTO) - Check Oil breather	7-84

Every 1200 hours or annually

Cab air filter category 2 - Replace	7-86
Cab air recirculation filter - Replace	7-87
Engine air filters - Replace	7-88
Fuel reservoir - Drain	7-89
Rear wheel hub - Greasing	7-90

Every 1200 hours or two years

Front axle housing oil, 4WD replacement	7-91
4WD front axle final drives - Change oil	7-92
Hydraulic system oil replacement	7-93

Alternator drive belt - Replace	7-94
Air conditioning compressor belt - Replace	7-94
Engine cooling system - Change fluid (conventional liquid)	7-95
Front Power Take-Off (PTO) - Change oil	7-100

Every 3600 hours

Engine cooling system - Change fluid (OAT fluid)	7-102
Diesel Particulate Filters (DPF) - Replace.....	7-107

Electrical system

Battery access and service.....	7-108
Battery cut-off switch	7-112

Light adjustments

Road lamps – Adjust	7-113
Road lamps replacement	7-114

Fuse and relay locations

Fuse and relay box - Overview	7-115
Fuse identification	7-116
Cab fuse box	7-120
Maxi fuse box.....	7-122

Storage

Tractor storage	7-123
-----------------------	-------

Calibrations

Hi-Lo unit - Calibrate	7-124
Main lift system - Calibrate	7-127

8 TROUBLESHOOTING

Fault code resolution

TRUBLESHOOTING ENGINE	8-1
Electrical system - Troubleshooting ELECTRICAL SYSTEM	8-2
Hydraulic systems - Troubleshooting HYDRAULIC SYSTEM	8-3
Couplers - Troubleshooting.....	8-3
Rear three-point hitch - Troubleshooting	8-4
Hydraulic service brakes - Troubleshooting	8-4
Cab climate control - Troubleshooting.....	8-4

Alarm(s)

Alarms	8-5
Display warnings overview	8-6

Symptom(s)

SYMPTOM(S)	8-9
SYMPTOM(S)	8-9

9 SPECIFICATIONS

Dimensions and weights	9-1
Maximum permitted loads on front and rear axle.....	9-4
Maximum permitted loads on drawbar	9-5
Maximum permitted loads on towing hitch	9-6
Additional equipment attachment points	9-7
Speed table for 16x16 gearbox.....	9-8
Speed table for 28x16 gearbox.....	9-9
Speed table for 32x16 gearbox.....	9-10
Speed table 44x16 gearbox	9-11
Capacities	9-12
Consumables	9-13
Engine oil temperature chart - Recommended engine oil for operating temperature ranges	9-14
Technical data	9-15

10 ACCESSORIES

Radio	10-1
-------------	------

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.

The NEW HOLLAND dealer will provide instructions on the general operation of new equipment. The dealer's staff, assigned to maintenance, is available for any questions related to the operation of the 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 code and product identification numbers of your machine.

PLEASE RECORD THE FOLLOWING INFORMATION
Model :
Product Identification Number (PIN):



Warning 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

The machine has been designed and built according to the highest standards of quality and it complies with all current safety regulations. However, the risk of accidents can never be completely excluded. That is why it is essential to observe elementary safety rules and precautions.

Read this manual carefully, paying particular attention to the instructions concerning safety, operation and maintenance so as to avoid the risk of injury while operating or servicing the machine.

Do not use this machine for any application or purpose other than those described in this manual. If the machine is to be used for work involving the use of special attachments, accessories or equipment, consult your NEW HOLLAND Dealer in order to make sure that any adaptations or modifications made are in keeping with the machine's technical specifications and with prevailing safety requirements.

Any modification or adaptation which is not approved by the manufacturer may invalidate the machine's initial conformity with safety requirements.

The machine must undergo regular inspections, the frequency of which varies according to the type of use. Consult your authorized NEW HOLLAND dealer.

Always keep this manual in the operator's compartment (in the seat back, behind the operator's seat). Make sure it is always complete and in good condition. To receive extra copies of the manual or copies in languages other than that of your country of residence, please contact your NEW HOLLAND dealer.

The manufacturer is committed to the constant improvement of 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.

NOTICE: *The information in this manual is provided on the basis of the information that was available at the time the manual was written. Settings, procedures, part numbers, software and other items may change, which may affect the maintenance of the machine. Ensure that you have complete and current information from your dealer before you start any machine operation. All data given in this book is subject to production variations.*

Engine tampering statement:

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 with this prohibition 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!*

Intended use

NOTE: *Your tractor 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 and to always refer to information and prescriptions outlined in this manual to prevent all residual potential risks. If you need further assistance please do not hesitate to contact your dealer.*

Your tractor is designed and made to pull, carry and power a variety of mounted or towed equipment, although within some physical limits. The working speed and performance may depend on various factors, such as weather and terrain conditions. Though the tractor is designed to perform in combination with a variety of equipment, there may be a number of combinations of the 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.

Please carefully read and consider the following precautions:

- Do not use the tractor for purposes other than those intended by the manufacturer and outlined in this manual.
- Do not use the tractor beyond its limits of terrain gradient and stability. Using the tractor beyond these limits may result in roll-over or tip-over. Observe the recommendations in this manual.
- Do not use the tractor at higher speeds than those 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 travelling 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 unstable crossings or bridges and/or on soft surfaces or ones that are not strong enough. These constructions may collapse and cause roll-over of the tractor. Always inspect the condition and carrying capacity of bridges and ramps before crossing.
- Do not use equipment mounted on the tractor which is not correctly matching and firmly fixed. The use of implements or accessories that have not been approved or are not correctly connected may increase the risk of roll-over of the tractor if they come loose. Ensure that the dimensions of the three-point linkage interface of both the tractor and the equipment comply with the categories defined in ISO 730. Ensure that the dimensions and speed of the PTO shaft on the tractors match 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 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 centre 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 must take the necessary precautions (e.g. assistance) to always be aware of the possible presence of bystanders, especially when manoeuvring 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 of being run over 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 be projected outside the field and hit unprotected people such as cyclists 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 to stand on the access step to the cab when the tractor is moving. Your view to the left will be obstructed and a rider risks falling from the tractor during unexpected or abrupt movements.
- Always stay clear from the implements operating area and especially do not stand between the tractor and the implement or the trailed vehicle when operating lift controls; ensure no bystanders are near these operating areas.
- Certain functions of your tractor are controlled by software and some of them are safety-related. Do not attempt to modify or download software not certified and distributed by the manufacturer. Electronic settings and logics may be destroyed and seriously affect the functioning of the tractor. This may result in unpredictable and unsafe behaviour of the tractor. Always refer to your dealer; he has the appropriate tools and data sets

and owns the officially released software versions and updates for your tractor.

- 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 behaviour of the tractor may become unpredictable.

- The tractor has only one operator station and this is a one man operated vehicle. There is no need for other people on or around the tractor during normal operation. Do not allow riders on the tractor; do not allow people to stand near the access to the cab or on the step when the tractor is moving. Your view to the left will be obstructed and a rider risks falling from the tractor during unexpected or abrupt movements.

Electro-Magnetic Compatibility (EMC)

This machine complies strictly with the European Regulations on electro-magnetic emissions. However, 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:

- Ensure that each piece of non- NEW HOLLAND equipment fitted to the machine bears the CE mark.
- 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.

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

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