

ORIGINAL INSTRUCTIONS

OPERATOR'S MANUAL

TK4.80F

TK4.80V

TK4.80N

TK4.90F

TK4.90V

TK4.90N

TK4.90

TK4.90M

TK4.100F

TK4.100V

TK4.100N

TK4.100

TK4.100M

TK4.110

TK4.110M

Tractor

Part number 51634532

5th edition English

June 2019

Replaces part number 51566919



Contents

1 GENERAL INFORMATION

Note to the owner.....	1-1
Tractor intended use.....	1-3
Electro-magnetic interference (EMC).....	1-5
Metric and imperial units abbreviations.....	1-6
Operator's manual storage	1-8
Machine orientation.....	1-9
Exhaust Gas Recirculation (EGR) exhaust treatment - Product overview	1-10

2 SAFETY INFORMATION

Safety rules.....	2-1
Safety rules - General information	2-2
Safety rules – Maintenance	2-3
Safety rules – Explosions and fires	2-4
Safety rules - Fire extinguisher	2-5
Safety rules – Battery	2-6
Safety rules – Operator presence system	2-6
Safety rules - Power Take-Off (PTO)	2-6
Safety rules - Reflectors and warning lights	2-6
Safety rules - Seat belts	2-7
Safety rules - Operator protective structure	2-7
Safety rules - HVAC system	2-10
Safety rules - Personal Protective Equipment (PPE)	2-11
Safety rules - "Do not use" sign	2-11
Safety rules - Hazardous chemicals	2-12
Safety rules - Near utilities	2-12
Safety rules - In the event of electrical storms	2-12
Safety rules – Mounting and dismounting the machine	2-13
Safety rules - Lifting and overhead loads	2-13
Safety rules Road traffic	2-14
Safety rules Working at heights	2-15
Ecology and the environment	2-16
Tractor jacking points.....	2-17
Frame - Personal safety.....	2-18
Personal safety.....	2-19
Safety signs	2-20

3 CONTROLS AND INSTRUMENTS

Access to operator's platform

Cab - Access/Exit.....	3-1
Cab and platform - Localization overview	3-2

Operator's seat

Operator's seat	3-8
Seat belt	3-12

Forward controls

Instrument panel.....	3-13
Front controls	3-18
Handbrake.....	3-21

Right-hand side controls

Right-hand console.....	3-22
-------------------------	------

Display

Programming tractor functions	3-22
Adjusting the dashboard/display brightness	3-24
Activating/deactivating buzzer.....	3-26
Setting units of measurement	3-27
Programming maintenance work	3-28
Regenerating the diesel particulate filter (DPF) automatically/manually	3-30
Resetting the oil change counter	3-35
Viewing error codes	3-36
Clock adjustment	3-37

Warning and advisory symbols

Display warnings overview	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	4-5
Electronic battery isolator - Operating	4-6

Moving the unit

Machine movement start-up.....	4-7
--------------------------------	-----

5 TRANSPORT OPERATIONS

Road transport

Transporting the machine Road transport	5-1
---	-----

Recovery transport

Recovery and towing	5-2
Towing the tractor.....	5-3

6 WORKING OPERATIONS

General information

Engine - Operating	6-1
Roll over protective structure (ROPS).....	6-2

Transmission

Transmission - Operating (8AV + 8RM)	6-4
Transmission - Operating (16AV + 8RM)	6-5

Steering clutches and brakes

Steering clutches and brakes.....	6-6
-----------------------------------	-----

Centre clutch

Safety devices	6-7
Standard version	6-8
Steering-O-Matic™ Plus hydraulic control version	6-9

Rear Power Take-Off (PTO)

Safety rules.....	6-10
General	6-11
Changing the Power Take-Off (PTO) shaft	6-12
Attaching Power-Take Off (PTO) driven equipment	6-14
Power Take-Off (PTO) with mechanical control - function	6-15
Power take-off speeds.....	6-16

Rear hydraulic lift

Safety rules.....	6-17
Rear hydraulic lift with mechanical control	6-17

Rear three-point hitch

Rear three-point hitch - Operating.....	6-19
Additional equipment attachment points	6-22
Hitching tools for quick coupling	6-24

Towbar	
General safety rules	6-25
Drilled cross bar on tool attachment.....	6-25
Swinging drawbar	6-26

Ballasting	
Ballasts and supports - Safety rules.....	6-28
Front ballast - Localization overview	6-28

Cab climate control	
Air-conditioning system.....	6-30

Rear remote control valves	
Safety rules.....	6-31
Remote control valve operation	6-32

Power sockets	
Power sockets.....	6-36

Electrical System	
Machine lights	6-37

7 MAINTENANCE

General information	
General safety before you service.....	7-1
Introduction	7-3
Body maintenance.....	7-4
General specification - Biodiesel fuels	7-6
General specification - Diesel fuel	7-8
Recommended engine oil for operating temperature ranges.....	7-8
Organic Acid Technology (OAT) coolant.....	7-9
Dealer service and parts	7-10
Consumables.....	7-11
Capacities	7-11
Opening the engine bonnet.....	7-12
Removing the engine side shields.....	7-13

Maintenance planning	
Maintenance chart.....	7-14

As required	
Radiator - Check – Fluid level	7-16
Radiator - Cleaning.....	7-17
Power Take-Off (PTO) clutch release control - Check.....	7-17
Hydraulic service brakes - Adjust.....	7-17

Hand brake lever - Adjust	7-18
Clutch hydraulic system oil reservoir - Check — Oil level	7-19
Track rollers - Check - rollers and idler wheels	7-19
Track tension units - Check Track chains	7-20
Oil reservoir - Check – Steering friction oil level	7-20
Fuel filters - Cleaning glass first stage fuel filter	7-21
Windshield washer fluid reservoir - Filling	7-23
Headlight - Adjust – Adjustment	7-24
Cab climate control - Check	7-25
Air filter - Check	7-26

AT WARNING MESSAGE DISPLAY

Air cleaner - Cleaning	7-27
Fuel filters - Drain fluid	7-28
Engine - Replace - Engine oil and filter	7-28
Master clutch release control - Adjust – Steering clutch	7-29

Every 10 hours of operation or daily

Engine - Check — Oil level	7-30
----------------------------------	------

After the first 50 hours of operation

Maintenance - Tighten.....	7-31
Maintenance - Check.....	7-31
Maintenance - Replace.....	7-31
Maintenance - Cleaning	7-31
Maintenance - Test	7-32
Maintenance - Grease.....	7-32

Every 50 hours

Front suspension articulations - Grease - Leaf spring fixation pin	7-33
Rear three-point hitch - Grease	7-33
Rear suspension cross bar - Grease	7-33
Master clutch release control - Grease – sleeve	7-34

Every 100 hours

Heat exchanger - Cleaning.....	7-35
Aftercooler - Cleaning	7-35
Accessory belt - Check	7-35
Air-conditioning condenser - Cleaning - Cleaning	7-36
Cab air recirculation filter - Cleaning	7-37
Cab air filter - Cleaning	7-39

Every 300 hours

Air cleaner - Cleaning	7-40
Air conditioning compressor belt - Check	7-41
Final drive housing - Check — Oil level	7-42

Oil filters - Cleaning – steering clutches oil	7-42
Oil dipstick - Check - transmission and hoist oil level	7-43
Lift oil filters - Replace	7-43
Track chain - Adjust - Track voltage	7-44
Hydraulic service brakes - Grease	7-44

Every 600 hours

Engine - Replace - Oil and filter	7-45
Fuel filters - Replace	7-48

Every 1200 hours or annually

Air cleaner - Replace	7-50
Oil reservoir - Replace – steering clutches oil	7-51
Fuel tank - Drain fluid.....	7-51
Cab air recirculation filter - Replace	7-51
Cab air filter - Replace.....	7-53

Every 1200 hours or two years

Accessory belt - Replace	7-54
Compressor drive belt - Replace	7-54
Oil dipstick - Replace – hoist and drive line oil	7-54
Final drive housing - Replace	7-55
Radiator - Change fluid - Conventional coolant	7-56

Every two years

Blowby recirculation filter - Replace	7-58
Receiver-dryer - Replace	7-59

Every 3600 hours or four years

Radiator - Change fluid - OAT coolant	7-60
Diesel Particulate Filters (DPF) - Replace.....	7-62

Electrical system

Battery - Check	7-63
Front light - Adjust	7-65
Front light - Replace	7-66
External lighting - Check	7-67

Fuse and relay locations

Fuse and relay box - Part identification - Fuses and Relays	7-68
Fuse and relay box - Replace	7-77
Primary fuse compartment	7-77

Storage

Tractor storage	7-79
Removal of tractor from storage	7-80

8 TROUBLESHOOTING

Fault code resolution

Viewing error codes	8-1
Error code identification	8-1

Alarm(s)

Frame - Troubleshooting ENGINE	8-2
Electrical system - Troubleshooting ELECTRICAL SYSTEM	8-4
Clutch - Troubleshooting	8-5
Hydraulic systems - Troubleshooting HYDRAULIC SYSTEM	8-6
Rear three-point hitch - Troubleshooting	8-7
Remote control valves - Troubleshooting – QUICK COUPLERS	8-8
Cab climate control - Troubleshooting.....	8-9

9 SPECIFICATIONS

Dimensions and weights	9-1
Tracks - Dimension	9-9
Speed table for 8 x 8 gearbox	9-10
Speed table for 16x8 gearbox	9-11
General specification	9-13
Consumables.....	9-17
Capacities	9-17

10 ACCESSORIES

Cab radio set - Operating.....	10-1
Tool bag - Overview	10-9
Beacon - Overview	10-11

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!*

Tractor 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 interference (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.

Metric and imperial units abbreviations

TYPICAL APPLICATIONS	RECOMMENDED SI (METRIC) UNITS		IMPERIAL UNIT	
	NAME	SYMBOL	NAME	SYMBOL
AREA				
	hectare	ha	acre	ha
	square meter	m ²	square foot	ft ²
			square inch	in ²
	square millimetre	mm ²	square inch	in ²
ELECTRICITY				
	ampere	A	ampere	A
	volt	V	volt	V
	microfarad	μF	microfarad	μF
	ohm	Ω	ohm	Ω
FORCE				
	kilonewton	kN	pound	lb
	newton	N	pound	lb
FORCE PER LENGTH				
	Newton metres	Nm	pound inch	lb in
FREQUENCY				
	megahertz	MHz	megahertz	MHz
	kilohertz	kHz	kilohertz	kHz
	hertz	Hz	hertz	Hz
FREQUENCY - ROTATIONAL				
	revolution per minute	r/min rpm	revolution per minute	r/min rpm
LENGTH				
	kilometre	km	mile	mi
	meter	m	foot	ft
	centimetre	cm	inch	in
	millimetre	mm	inch	in
	micrometer	μm		
MASS				
	kilogram	kg	pound	lb
	gram	g	ounce	oz
	milligram	mg		
POWER				
	kilowatt	kW	horsepower	Hp
	watt	W	Btu/hour	Btu/hr
			Btu/minute	Btu/min
PRESSURE or STRESS (FORCE PER AREA)				
	kilopascal	kPa	pound per square inch	psi
			inch of mercury	inHg
	pascal	Pa	inch of water	inH ₂ O
	megapascal	MPa	pound per square inch	psi

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