

# OPERATOR'S MANUAL

---

**TL60E**

**TL75E**

**TL85E**

**TL95E**

Tractor

**Part number 47957755**

1<sup>st</sup> edition English

February 2016

*Replaces part number 47441438*



# Contents

---

## 1 GENERAL INFORMATION

Note to the owner.....	1-1
Identification from engine .....	1-3
Nameplate .....	1-3
Ecology and the environment .....	1-4
Noise levels.....	1-5
Operating tips.....	1-6
International symbols.....	1-8

## 2 SAFETY INFORMATION

Safety precautions.....	2-1
Shielding offered by the machine .....	2-2
Roll Over Protection Structure (ROPS) .....	2-4
Safety Decals - Cab models .....	2-5
Safety decals - Platform models .....	2-13
Before operating the machine .....	2-20
Driving the vehicle .....	2-21
Machine operation.....	2-22
Operation of Power Take-Off (PTO) .....	2-23
Servicing.....	2-24
Diesel fuel .....	2-26
Fire or Explosion Prevention .....	2-27
Air conditioner .....	2-28
Intended use statement .....	2-29

## 3 CONTROLS AND INSTRUMENTS

### ACCESS TO OPERATOR'S PLATFORM

General check.....	3-1
Introduction .....	3-2
Rearview mirrors .....	3-3
Rear view mirrors.....	3-3
Cab - Overview .....	3-4
Platform header - Overview .....	3-5

### OPERATOR'S SEAT

Seat belt.....	3-6
----------------	-----

### FORWARD CONTROLS

Controls front .....	3-7
Ignition switch .....	3-7
Four Wheel Drive (4WD) control .....	3-8
Differential eletro-hydraulic lock .....	3-8
Cold starting aids .....	3-9
Work lights.....	3-10
Hazard warning light operation .....	3-10

---

Left-hand control lever.....	3-11
Windshield wiper and washer controls .....	3-12
Clutch - Pedal .....	3-12
Inching pedal and throttle.....	3-13
Foot pedals of brake .....	3-13
Adjustments the steering column .....	3-13

## LEFT-HAND SIDE CONTROLS

Left-hand side controls .....	3-14
-------------------------------	------

## RIGHT-HAND SIDE CONTROLS

Park brake .....	3-15
Throttle by hand .....	3-15
Controls valve .....	3-15
Hydraulic controls .....	3-16
Power Take-Off (PTO) controls.....	3-17

## REARWARD CONTROLS

Cigarette lighter or electrical socket.....	3-18
---	------

## OVERHEAD CONTROLS

Interior lights.....	3-18
Controls of the air conditioner .....	3-19

## INSTRUMENT CLUSTER

Instrument panel.....	3-21
Gauges .....	3-23

## 4 OPERATING INSTRUCTIONS

### COMMISSIONING THE UNIT

General instructions .....	4-1
Filling the fuel tank .....	4-2

### STARTING THE UNIT

Starting the engine .....	4-3
Cold starting aids.....	4-4
Booster battery procedure.....	4-5

### STOPPING THE UNIT

Stopping the engine .....	4-6
---------------------------	-----

## 5 TRANSPORT OPERATIONS

### PREPARING FOR ROAD TRANSPORT

Machine loading in a transporter .....	5-1
--	-----

---

## RECOVERY TRANSPORT

Towing the machine .....	5-1
--------------------------	-----

## 6 WORKING OPERATIONS

### GENERAL INFORMATION

Traction Front Wheel Drive (FWD) .....	6-1
Differential lock system .....	6-2
Electrohydraulic differential lock (if equipped) .....	6-3

### TRANSMISSION

Operation - 12x4 Mechanical transmission .....	6-4
Travel speeds - 12x4 Mechanical transmission .....	6-5
Operation - 12x12 Mechanical transmission .....	6-6
Travel speeds - 12x12 Mechanical transmission .....	6-7
Operation - 20x12 Mechanical transmission .....	6-8
Travel speeds - 20x12 Mechanical transmission .....	6-9
Informational decals - Transmission .....	6-10
Inching pedal and throttle .....	6-13
Throttle by hand .....	6-13

### REAR POWER TAKE-OFF

Operating precautions .....	6-14
Rear Power Take-Off (PTO) operation with mechanical engagement .....	6-14
Rear Power Take-Off (PTO) operation with electrical hydraulic activation .....	6-18
Operating speeds of the Power Take-Off (PTO) .....	6-21

### HYDRAULIC REMOTE CONTROL VALVES

Operation with remote valves .....	6-23
Installing attachments .....	6-25

### THREE POINT HITCH

Attach the implement on the hydraulic lift .....	6-26
Adjustments - Three-point hydraulic lift .....	6-27
Hydraulics .....	6-29
Operation of the hydraulic system .....	6-29
Maximum Work Height of the hydraulic lift .....	6-32
Quick guide - Use of hydraulic system levers .....	6-33
Quick guide for hydraulic lift configuration .....	6-34

### DRAWBARS AND TOWING ATTACHMENTS

Attaching a trailer .....	6-35
Tractor drawbar .....	6-35

### WHEEL TRACK ADJUSTMENT

Front wheel tread settings - Version without Auxiliary Front Wheel Drive (AFWD) .....	6-37
Front wheel tread settings .....	6-39

---

Steering stops .....	6-42
Front wheel alignment .....	6-43
Rear wheel tread settings .....	6-44

## BALLASTING AND TIRES

Tires .....	6-47
Tires - Inflation .....	6-49
Tires - Acceptable pressures and loads .....	6-50
Tires - Compatibility table .....	6-52
Tires and ballasting .....	6-58
Ballasting - Limits .....	6-60
Ballasting solid .....	6-61
Ballasting liquid .....	6-62

## 7 MAINTENANCE

### GENERAL INFORMATION

Introduction .....	7-1
Fuel handling precautions .....	7-3
Diesel fuel .....	7-5
Specifications – Biodiesel fuel .....	7-6
Fluids and lubricants .....	7-8
General instructions from the machine .....	7-9
Protective devices .....	7-10

### MAINTENANCE CHART

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

### WHEN THE WARNING LAMP LIGHTS

Engine air filter - Cleaning .....	7-13
Brake fluid – Check .....	7-15

### EVERY 10 HOURS OR EACH DAY

Fuel system water separator - Drain .....	7-17
Engine coolant level .....	7-17
Checking the engine oil level .....	7-18
Battery - Cleaning .....	7-19
Cleaning the radiators .....	7-19

### FIRST 50 HOURS

First 50 Hour Service .....	7-20
-----------------------------	------

### EVERY 50 HOURS

Air conditioning system .....	7-21
Cab air filters .....	7-22
Wheel nuts torque .....	7-23
Lubrication points .....	7-24

## EVERY 300 HOURS

Change engine oil and filter .....	7-28
Replacement of fuel filter .....	7-29
Fuel transfer pump - Cleaning .....	7-29
Replace fuel prefilter .....	7-30
Engine crankcase breather filter - Cleaning .....	7-30
Hydraulic oil filter - Replace .....	7-31
Hydraulic oil level .....	7-31
Front axle differential – Checking the oil level .....	7-32
Park brake - Adjust .....	7-32
Activated charcoal filter .....	7-32
Alternator drive belt - Adjustment .....	7-33
Air conditioning filter drier – Check .....	7-34

## EVERY 600 HOURS

Cab air filters - Replace .....	7-35
Fuel injection system - Cleaning .....	7-35
Front axle hub oil - Change fluid .....	7-37

## EVERY 1200 HOURS OR ANNUALLY

Engine valve clearance – Check .....	7-38
Engine air filter - Replace .....	7-38
Fuel tank - Cleaning .....	7-39
Front axle drive shaft - Check .....	7-39
Front Axle Oil - Replace .....	7-40
Transmission oil - Replace .....	7-41

## EVERY 1200 HOURS OR EVERY 2 YEARS

Fuel injectors – Check .....	7-43
Engine coolant replacement.....	7-44

## GENERAL MAINTENANCE

Fuel system - Bleed .....	7-46
Clutch pedal free play .....	7-47
PTO clutch adjustment .....	7-48
Fuel tank screen filter - Cleaning .....	7-49
A/C compressor belt - Adjustment .....	7-49
Windshield washer reservoir – Check .....	7-50
Brakes - Air bleeding .....	7-50
Battery – Check .....	7-52
Fuses and Relays .....	7-53
Work lights and lights - Adjustment .....	7-57
Lamps - Replace .....	7-57
Cab – Check .....	7-60
Protecting the electronic and electrical systems during battery charging or welding ..	7-61
Transmission housing - Check .....	7-62

---

## STORAGE

Storing the machine .....	7-63
Preparation for use after storage .....	7-65

## 8 TROUBLESHOOTING

### SYMPTOM(S)

Engine .....	8-1
Hydraulic System .....	8-2
Three-point hitch .....	8-2
Brakes .....	8-4
Cab .....	8-4
Electrical System .....	8-5

## 9 SPECIFICATIONS

Overall Dimensions .....	9-1
Fluids and lubricants .....	9-5
Engine .....	9-7
Transmission .....	9-7
Brakes .....	9-7
Power Take-Off (PTO) .....	9-8
Hydraulic System .....	9-8
Electrical system .....	9-8

---

# 1 - GENERAL INFORMATION

## Note to the owner

### General Information

This manual has been prepared to assist you in the correct procedure for running in, driving and operating your new machine, and for its maintenance. Read this manual carefully. Your machine is designed to be used in normal and customary agricultural applications.

If you require advice concerning your machine at any time, do not hesitate to contact your NEW HOLLAND dealer. He has factory trained personnel, genuine manufacturers' parts and the necessary equipment to carry out all your service requirements.

The specification are provided for your information and guidance. For further information concerning your machine and equipment, consult your NEW HOLLAND dealer.

All data given in this book is subject to production variations. Dimensions and weight are approximate only. The illustrations do not necessarily show machines in standard condition or imply that these features are available in all countries. For exact information about a particular machine, see your NEW HOLLAND dealer.

Your machine has been designed and built to give maximum performance, economy and ease of operation under a wide variety of operating conditions. Prior to delivery, the machine was carefully inspected, both at the factory and by your dealer, to ensure that it reaches you in optimum condition. To keep it in this condition and ensure problem-free operation, it is important that you perform routine checks at the recommended intervals, as specified in the maintenance table on the page **Maintenance chart**.

### Operator's manual storage

The operator's manual supplied with your machine is an important source of information and should be stored safely.

The manual has been written specifically for your tractor so it is important that you make a note of the print number and issue date, which can be found on the cover. In the event the manual is lost or damaged it can be replaced with the correct version.

### About this manual

This manual gives information for use of your machine, as intended and under the conditions foreseen by the manufacturer during normal operation and routine service and maintenance.

Read and understand it; keep it in good condition and always keep it in a safe place.

This manual does not contain all the information related to periodical service, converting and repairs to be carried out by NEW HOLLAND professional service personnel.

The Table of Contents page(s) are provided to have an overview of main manual's topics. A detailed alphabetic index is available at the end of this manual for locating specific items.

### Normal operation

- Normal operation means the use of the machine for the purpose intended by the manufacturer by an operator familiar with the machine and the mounted or towed equipment and complying with the information for operation and safe practices, as specified by the manufacturer in this manual and by the decals on the machine and the equipment.
- Normal operation includes preparing and storing the machine, swinging components into and out of work position, adding and removing ballast, and connecting and removing accessories.
- Normal operation includes adjusting and setting up the machine and equipment, for the specific conditions of the field and/or the crop.

### Routine service

- Routine servicing and maintenance means activities that must be performed daily by an operator familiar with the machine's characteristics and in compliance with the routine servicing information and with safe practice, as specified by the manufacturer in this manual and by decals on the machine, in order to keep it working properly. The routine service includes activities such as filling up, cleaning, washing, topping up fluid, applying grease, and replacing consumable items such as bulbs.

### Converting, periodical service and repair

- Periodic servicing means activities that must be performed at given intervals by trained personnel familiar with the machine's characteristics and in compliance with the periodic servicing information and with safe practice, as specified by the manufacturer in this manual and in other company literature, in order for the machine to keep to its expected working lifespan.
- Conversion means activities that must be performed by professional service personnel familiar with the machine's characteristics and in compliance with the conversion information, as specified by the manufacturer



in this manual, as well as with other company instructions or literature, in order to prepare the machine for a specific configuration.

- Repair means activities that must be performed by professional service personnel familiar with the machine's characteristics and in compliance with the repair information, as specified by the manufacturer in the dealer's manual, in order to restore the machine to correct working order following a fault or reduced performance.

## Cleaning the machine

When using a high pressure washer, do not stand too close to the machine and avoid directing the jet at electronic components, electrical connections, breathers, seals, filler necks, etc. Never direct a cold water jet at a hot engine or exhaust.

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

## Safety

The pages in Section 2 list the precautions to be observed to ensure your safety and the safety of others. Read the safety precautions and follow the advice offered before operating the machine.

## Servicing after the first 50 hours

On page **7-20** you will find the operations that need to be performed after the first 50 hours of service.

This service should be performed by your NEW HOLLAND dealer.

**NOTICE:** *It is important that the 50 h service is carried out in line with the recommendation to guarantee that the machine is providing optimal performance and efficiency.*

## Replacement parts

It should be pointed out that genuine parts have been examined and approved by the Company. Fitting and/or using non-genuine products could have negative effects on the design characteristics of your machine, thereby affecting its safety. The Company is not liable for any damage caused by the use of 'non-genuine' parts and accessories. Only genuine replacement parts should be used. The use of non-genuine parts may invalidate legal approvals associated with this product.

Making any modifications to the machine is prohibited, without specific written authorization from the manufacturer's After Sales Service department.

## Warranty

Your machine is warranted according to legal rights in your country and the contractual agreement with the selling dealer. No warranty shall, however, apply if the machine has not been used, adjusted and maintained as per the instructions given in the operator's manual.

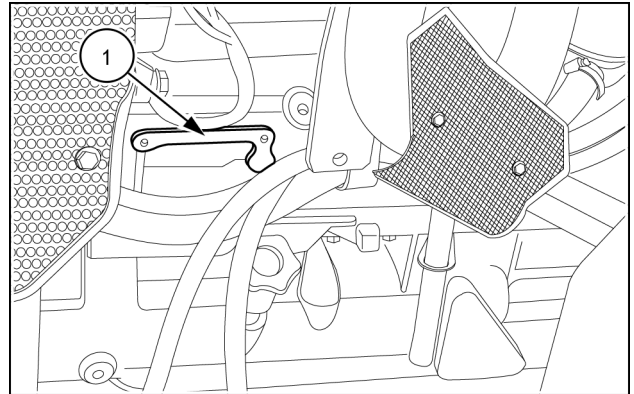
## Using Biodiesel

Before using biodiesel in your machine, refer to the information on page **7-5** as regards storing and using biodiesel.

## Identification from engine

The engine identification is engraved on a plate **(1)** on the left-hand side of the engine block. Note down the number here:

Engine Serial No.: \_\_\_\_\_



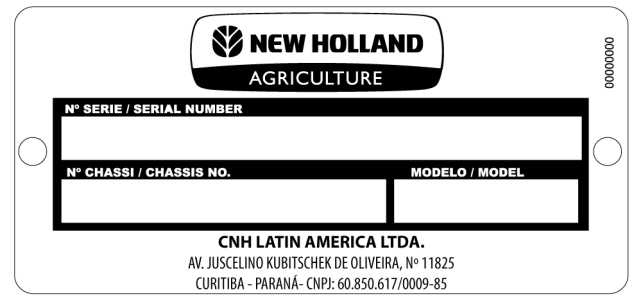
CUIL13TR00965AA 1

## Nameplate

The Product Identification Number (PIN) is on a plaque located on front axle cradle, left-hand side.

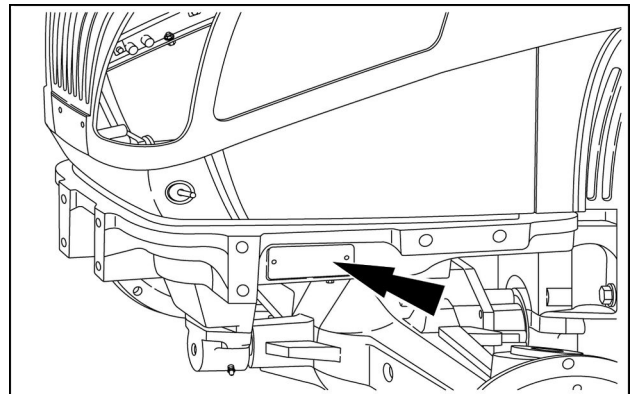
Product Identification Number (PIN): \_\_\_\_\_

Nameplate code: 84258358



BRAG12TRLUE0350 1

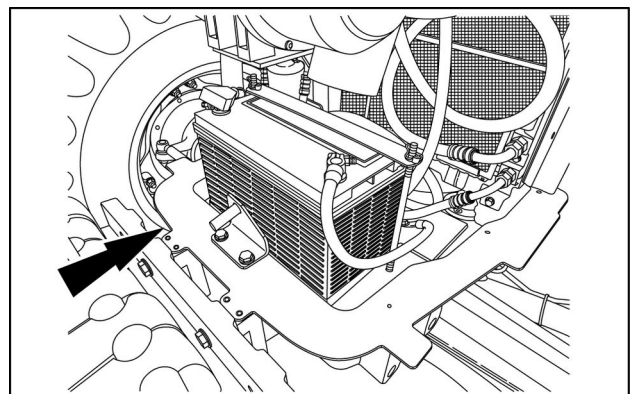
Product identification plate **(1)**.



CUIL13TR01266AA 2

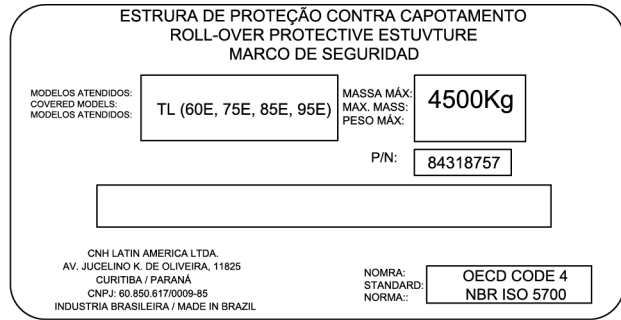
The Product Identification Number (PIN) is engraved on the support cradle of the front axle, in front of the battery. Note down that identification here.

PIN: \_\_\_\_\_



CUIL13TRO0194AA 3

There is a plate fixed in the rear of the cab or platform that provides information about the Rollover Protective Structure (ROPS) and the machine's maximum permissible weight.



CUIL13TR01093AA 4

## Ecology and the environment

Soil, air, and water quality is important for all industries and life in general. When legislation does not yet rule the treatment of some of the substances that advanced technology requires, sound judgment should govern the use and disposal of products of a chemical and petrochemical nature.

Familiarize yourself with the relative legislation applicable to your country, and make sure that you understand this legislation. Where no legislation exists, obtain information from suppliers of oils, filters, batteries, fuels, anti-freeze, cleaning agents, etc., with regard to the effect of these substances on man and nature and how to safely store, use, and dispose of these substances. Your NEW HOLLAND dealer can also provide assistance.

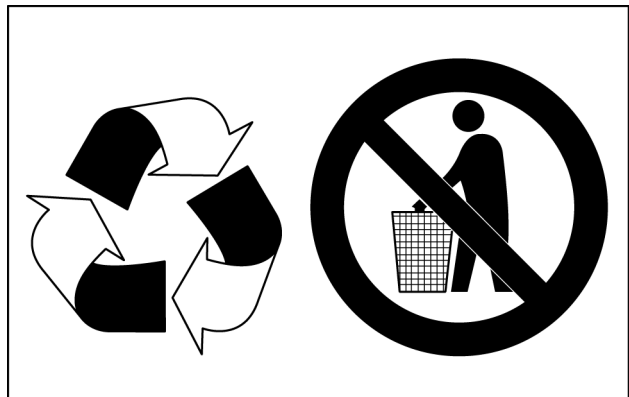
### Helpful hints

- Avoid the use of cans or other inappropriate pressurized fuel delivery systems to fill tanks. Such delivery systems may cause considerable spillage.
- In general, avoid skin contact with all fuels, oils, acids, solvents, etc. Most of these products contain substances that may be harmful to your health.
- Modern oils contain additives. Do not burn contaminated fuels and or waste oils in ordinary heating systems.
- Avoid spillage when you drain fluids such as used engine coolant mixtures, engine oil, hydraulic fluid, brake fluid, etc. Do not mix drained brake fluids or fuels with lubricants. Store all drained fluids safely until you can dispose of the fluids in a proper way that complies with all local legislation and available resources.
- Do not allow coolant mixtures to get into the soil. Collect and dispose of coolant mixtures properly.
- Do not open the air-conditioning system yourself. It contains gases that should not be released into the atmosphere. Your NEW HOLLAND dealer or air-conditioning specialist has a special extractor for this purpose and can recharge the system properly.
- Repair any leaks or defects in the engine cooling system or hydraulic system immediately.

- Do not increase the pressure in a pressurized circuit as this may lead to a component failure.

### Battery recycling

Batteries and electric accumulators contain several substances that can have a harmful effect on the environment if the batteries are not properly recycled after use. Improper disposal of batteries can contaminate the soil, groundwater, and waterways. NEW HOLLAND strongly recommends that you return all used batteries to a NEW HOLLAND dealer, who will dispose of the used batteries or recycle the used batteries properly. In some countries, this is a legal requirement.



NHIL14GEN0038AA 1

### Mandatory battery recycling

**NOTE:** The following requirements are mandatory in Brazil.

Batteries are made of lead plates and a sulfuric acid solution. Because batteries contain heavy metals such as lead, CONAMA Resolution 401/2008 requires you to return all used batteries to the battery dealer when you replace any batteries. Do not dispose of batteries in your household garbage.

Points of sale are obliged to:

- Accept the return of your used batteries
- Store the returned batteries in a suitable location

- Send the returned batteries to the battery manufacturer for recycling

## Noise levels

### ▲ CAUTION

**Avoid possible hearing loss!**  
**The machine operator must wear hearing protection.**  
**Failure to comply could result in minor or moderate injury.**

C0070A

### ▲ WARNING

**Personal Protective Equipment (PPE) required.**  
**When assembling, operating, or servicing the machine, wear protective clothing and PPE necessary for the particular procedure. Some PPE that may be necessary includes protective shoes, eye and/or face protection, hard hat, heavy gloves, filter mask, and hearing protection.**  
**Failure to comply could result in death or serious injury.**

W0353A

Noise is considered the most common of the pollutants that cause physical problems. Brazilian legislation establishes maximum limits for intensity and continuous or intermittent noise exposure durations. The tolerance limits for continuous and intermittent noise are detailed in Annex 1 to the regulatory Standard (NR15) of 1990. See the legislation in force in your country.

Noise emission tests were performed while your machine was being developed. The tests were performed in line with Directive 2003/10 of the European Economic Community (EEC) or European Community (EC). Tables 01 and 02 show .

Table 01: Noise levels in dB (decibel) at operator ear level, measured as per Directive 2003/10 of the European Economic Community (EEC) or European Community (EC) for models with cab.

Model	Setup 1	Setup 2	Setup 3	Setup 4	Setup 5	Setup 6	Setup 7
TL60E	67,6	67,4	83,0	83,0	83,5	83,8	84,5
TL75E	69,2	71,8	83,0	83,2	83,8	83,9	86,0
TL85E	68,2	68,6	83,4	87,1	83,8	86,1	88,1
TL95E	70,4	69,5	83,5	84,1	83,1	84,2	84,4

Table 02: Noise levels in dB (decibel) at operator ear level, measured as per Directive 2003/10 of the European Economic Community (EEC) or European Community (EC) for models with no cab.

Model	Setup 1	Setup 2	Setup 3	Setup 4	Setup 5	Setup 6	Setup 7
TL60E	67,6	67,4	83,0	83,0	83,5	83,8	84,5
TL75E	69,2	71,8	83,0	83,2	83,8	83,9	86,0
TL85E	68,2	68,6	83,4	87,1	83,8	86,1	88,1
TL95E	70,4	69,5	83,5	84,1	83,1	84,2	84,4

### Table of configurations

Settings	Test conditions			
	Machine stopped	Road speed	Engine speed	Ports
Setup 1	X	-	Idling	Closed
Setup 2	X	-		Open
Setup 3	X	-	Maximum rpm	Closed
Setup 4	X	-		Open
Setup 5	-	7,5 km/h	-	Closed
Setup 6	-	7,5 km/h	-	Open
Setup 7	-	35 km/h	-	Closed

It is important to stress that the use of ear protectors is recommended for the Operator and people who work close to the machines, regardless of the noise intensity and time of exposure.

During operation, the machines may be driving or powering other equipment, and this in turn also produces noise. As a result, the real noise levels perceived by the Operator and people who work close to the machines can vary considerably. Always consider wearing ear protectors that are good quality, intact, and that offer maximum protection.

## Operating tips

It is important that you read the following information before operating the machine.

**NOTE:** *Before driving or operating the machine, study the safety precautions in Section 2 of this Manual.*

Read this section carefully for a thorough understanding of operational requirements. It details the location and operation of the various instruments, switches and controls on your machine. Even if you operate other machines, you should thoroughly read this section of the manual and ensure that you are familiar with the location and function of all of the features of the machine.

Do not start the engine or attempt to drive or operate the machine until you are completely familiar with all of the controls. It is too late to learn once the machine is moving. If in doubt about any aspect of machine operation, consult your NEW HOLLAND dealer.

### Run in procedure

**NOTICE:** *Your new machine will provide long and reliable service if given proper care during the first 50-hour running-in period and if serviced at the recommended intervals.*

Avoid overloading the machine. Operating in too high a gear under heavy load may cause excessive engine overloading. Overloading occurs when the engine will not respond to a throttle increase.

Do not operate without a load on the engine. This can be as harmful to the engine as overloading. Vary the type of operation carried out so the engine is submitted to a mix of heavy and light loads during the running-in period.

Use the lower gear ratios when towing heavy loads and avoid continuous operation at constant engine speeds. Operating the machine in a low gear with a light load and high engine speed will waste fuel. You will save fuel and minimise engine wear by selecting the correct transmission ratio for each particular operation.

Check the instruments and warning lights frequently and keep the radiator and oil reservoirs topped up to the recommended levels.

### Pre-orientation checks

Before operating the machine, ensure that you are thoroughly familiar with the location and operation of the controls.

Perform daily lubrication and maintenance operations in accordance with Section 7.

After completing the daily maintenance operations, walk around the machine in order to perform a visual inspection. Special attention must be given to the following items:

- Poly 'V' belt for cracks or damage.
- Engine and exhaust areas for accumulation of debris.
- Hoses, lines and fittings for leaks or damage.
- Tyres for damage
- Loose hardware
- Transmission and hydraulic pump assembly / filter area for leaks or a build up of debris

Make any necessary repairs before using the machine.

## Fuel-saving tips for optimum output

Adequate maintenance of the machine considerably reduces fuel consumption.

1. Store fuel in properly cleaned, rust and contaminant free containers.
2. Always fill the reservoir tank at the end of each day to reduce overnight condensation of moisture in the air, so as to avoid damage to the fuel system.
3. Fuel filters should be replaced as per recommended time schedule as the filtering capacity is not retained after this specified time. It may allow harmful contamination and damage the fuel injection system. Follow the maintenance schedule to drain the water from the filters and clean the supply pump filter.
4. Always use genuine fuel filters. See your NEW HOLLAND dealer.
5. Repair diesel leaks, if any, immediately.
6. Dirt particles that may enter the engine cause premature wear of lining and piston rings. This causes loss of power and excessive consumption of engine oil and fuel. Make sure that there are no leaks from the hoses and that the seal of the air filter chamber is in good condition. Keep the hose clamps tightened.
7. Follow the run-in procedure provided in this manual to achieve optimal performance of your machine.
8. If you keep the engine running at idle speed unnecessarily for long periods, this wastes fuel.
9. Do not rest your foot on the clutch pedal as this will cause clutch slippage, loss of engine power and increased fuel consumption. Maintain the specified play in the clutch pedal.
10. Always drive the machine in the correct gear.
11. Use a lower gear to drive down a slope and use the brakes sparingly.
12. Maintain the proper tire pressures for field work as well as for roadwork. Refer the tyre pressure chart given in this manual. Worn out tyres cause wheel slippage and waste fuel. Either retread or discard the full set of tires if they are very worn. Adhere to tyre ballasting as and when required to reduce wheel slippage and fuel consumption.
13. Always use the appropriate implements to reduce diesel fuel wastage. Implements should be maintained in good condition, as usage of worn out implements will waste fuel.
14. Always plough length wise and plan your field run to reduce fuel consumption. Adjust the wheel gauge to suit the implement and avoid overlap when you work in the field.
15. Adjust the proper engine rotation when you work with equipment driven by the Power Take-Off (PTO). If you select the wrong rotation, it will result in excess fuel consumption.

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](mailto:ebooklibonline@outlook.com)