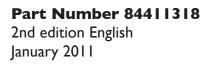
# ORIGINAL INSTRUCTIONS OPERATOR'S MANUAL

**T7.220 T7.235 T7.250 T7.260 T7.270** Sidewinder II<sup>™</sup> Auto Command - Power Command





# TO THE OWNER

This manual contains information concerning the adjustment and maintenance of your New Holland T7.220, T7.235, T7.250, T260, T7.270 Tractor. 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 tractor. Please have all operators read this manual carefully and keep it available for ready reference.

This machine was designed to power and propel itself. It is intended to load and move materials with a variety of buckets and forks. Allied attachments built and supplied by other manufacturers can be used on the tractor where recommended and approved by New Holland.

DO NOT use this machine for any purpose or in any manner other than as described in this manual, decals, or other product safety information provided with this machine. These materials define the machine's intended use.

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

Your New Holland dealer will instruct you in the general operation of your tractor. (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 tractor.

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 PIN number of the engine and tractor, 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 PIN numbers of your tractor.

Model	Engine Model	
PIN Number	Engine Serial Number	

## **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.

# CONTENTS

SECTION 0	
To the Owner	0-1
Improvements	0-1
SECTION 1	
General Information and Safety	1-1
End User License Agreement Terms	1-2
Product Identification	1-3
Ecology and the Environment	1-6
Precautionary Statements	1-7
Safety Precautions	1-8
Operator Protective Structure	1-15
Operators Seats	1-16
Fire or Explosion Prevention	1-17
Fire Prevention - Engine Area	1-18
Service Area, Fire Extinguisher, First Aid Kit	1-19
Safety Decals	1-20
International Symbols	1-29
Airborne Noise Emission	1-30
Selective Catalytic Reduction (SCR)	1-31
SECTION 2	
Controls, Instruments, and Operation	2-1
Integrated Control Panel	2-2
Cab	2-5
Seats	2-23

Instrument Console	2-30
Analog/Digital Instrument Cluster	2-33
Instrument Panel Displays	2-37
Enhanced Keypad and Performance Monitor (Where Fitted)	2-52
Programming the Displays	2-56
Brake Controls and Operation	2-77
Power Command Transmission	2-83
Auto Command Transmission	2-106
Differential Lock	2-127
Four Wheel Drive (Where Fitted)	2-129
Terraglide™ Front Axle Suspension (Where Fitted)	2-132

#### **SECTION 3**

Field Operations	3-1
Starting the Engine	3-4
Engine Power Management	3-10
Engine Speed Management	3-12
Custom Headland Management	3-16
Fast Steer (Where Fitted)	3-36
Front P.T.O. and 3-Point Hitch (Where Fitted)	3-38
Rear Power Take-off	3-49
Electronic Draft Control	3-79
Electro-Hydraulic Remote Valves (Where Fitted)	3-94
Continuous Oil Supply for Remote Service (Where Fitted)	3-122
Three-point Hitch	3-127
Drawbars and Towing Attachments	3-135
Hydraulic Trailer Brakes	
Front Wheel Track Adjustment (Four Wheel Drive)	3-140
Wheels with Cast Center Disc	3-150
Ballasting and Tires	3-153

#### **SECTION 4**

Lubrication and Maintenance	1
General Lubrication, Fuel, Bio-Diesel and Maintenance Information	-1
Protective Guards	10
Lubricants and Coolants	12
Lubricant and Coolant Specification 4-1	14
Lubrication and Maintenance Chart 4-1	15
When the Warning Symbol Appears 4-1	17
Every 10 Hours of Operation or Daily (Whichever Occurs First)	19
Every 50 Hours Complete the Preceding Operations Plus the Following	21
Every 300 Hours Carry Out the Preceding Checks Plus the Following	31
Every 600 Hours Carry Out the Preceding Checks Plus the Following	35
Every 1200 Hours or 12 Months (Whichever Occurs First) Carry Out the Preceding Checks Plus the Following	43
Every 1200 Hours or 2 Years (Whichever Occurs First) Carry Out the Preceding Checks Plus the Following	52
Every 3 Years Carry Out the Following 4-5	58
General Maintenance (To Be Performed as and When Required)	59
Fuses and Relays	75
Protecting the Electronic and Electrical Systems During Battery Charging or Welding	83
Storing the Tractor	84

#### **SECTION 5**

Troubleshooting	5-1
SECTION 6	
Accessories	6-1
SECTION 7	
Specifications	7-1
General Dimensions All Models	
Minimum Hardware Tightening Torques7	'-18
SECTION 8	
Delivery Report	8-1
First 50 Hour Service	8-5
Check and Adjust, as Required	8-5

#### Your warranty rights and obligations - For machines sold in California

CNH must warrant the diesel emission control system in the application for which it is sold or leased to be free from defects in design, materials, workmanship, or operation of the diesel emission control system which cause the diesel emission control system to fail to conform to the emission control performance level it was verified to, or to the requirements in the California Code of Regulations, Title 13, Sections 2700 to 2706, and 2710, for the periods of time listed below, provided there has been no abuse, neglect, or improper maintenance of your diesel emission control system, vehicle or equipment, as specified in the owner's manuals. Where a warrantable condition exists, this warranty also covers the engine from damage caused by the diesel emission control system, subject to the same exclusions for abuse, neglect or improper maintenance of your vehicle or equipment. Please review your owner's manual for other warranty information. Your diesel emission control system may include a core part (e.g., particulate filter, diesel oxidation catalyst, selective catalytic reduction converter) as well as hoses, connectors, and other emission control system at no cost to you including diagnosis, parts, and labor.

#### Warranty coverage - For machines sold in California

For a (engine size) engine used in a(n) (type of application) application, the warranty period will be (years or hours or miles of operation) whichever occurs first. If any emission-related part of your diesel emission control system is defective in design, materials, workmanship, or operation of the diesel emission control system thus causing the diesel emission control system to fail to conform to the emission control performance level it was verified to, or to the requirements in the California Code of Regulations, Title 13, Sections 2700 to 2706, and 2710, within the warranty period, as defined above, CNH will repair or replace the diesel emission control system, including parts and labor.

#### Owner's warranty responsibility - For machines sold in California

As the equipment owner, you are responsible for performing the required maintenance described in your owner's manual. CNH recommends that you retain all maintenance records and receipts for maintenance expenses for your equipment and diesel emission control system. If you do not keep your receipts or fail to perform all scheduled maintenance, CNH may have grounds to deny warranty coverage. You are responsible for presenting your equipment and diesel emission control system to a CNH dealer as soon as a problem is detected. The warranty repair or replacement should be completed in a reasonable amount of time, not to exceed 30 days. If a replacement is needed, this may be extended to 90 days should a replacement not be available, but must be performed as soon as a replacement becomes available.

### CALIFORNIA Proposition 65 Warning

Diesel engine exhaust and some of its constituents are known to the State of California to cause cancer, birth defects, and other reproductive harm.

Battery posts, terminals and related accessories contain lead and lead compounds,

Wash hands after handling.

# **SECTION 1**

# **GENERAL INFORMATION AND SAFETY**

#### GENERAL

This Manual has been prepared to assist you in the correct procedure for running-in, driving and operating and for the maintenance of your new tractor. Read this Manual carefully. Your tractor is intended for use in normal and customary agricultural applications.

If at any time you require advice concerning your tractor, do not hesitate to contact your authorized dealer. They have factory trained personnel, genuine manufacturers' parts and the necessary equipment to carry out all your service requirements.

Your tractor 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 tractor was carefully inspected, both at the factory and by your dealer to ensure that it reaches you in optimum condition. To maintain this condition and ensure trouble-free operation, it is important that the routine services, as specified in Section 4 of this Manual, are carried out at the recommended intervals.

#### **OPERATORS MANUAL STORAGE**

A storage pocket for the Operators Manual can be found on the rear of the seat. The manual should be kept in this pocket at all times when not in use.

#### **CLEANING THE TRACTOR**

Your tractor is a state-of-the-art machine with sophisticated, electronic controls. This should be taken into consideration when cleaning the tractor, particularly if using a high pressure washer. Even though every precaution has been taken to safeguard electronic components and connections, the pressure generated by some of these machines is such that complete protection against water ingress cannot be guaranteed.

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

#### SAFETY

Pages 1-8 to 1-14 inclusive 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 tractor.

#### **FIRST 50 HOUR SERVICE**

In Section 8, at the back of this Manual, you will find the 50-hour service reports.

After you have operated the tractor for 50 hours, take your tractor, together with this Manual, to your dealer. He will then perform the factory recommended 50 hour service and complete the service report sheets (pages 8-5 and 8-7). The first sheet (page 8-5) is the dealer's copy and should be removed by the dealer after the service has been carried out. The second sheet (page 8-7) is your copy of the service performed. **Ensure that you and the dealer sign both copies**.

#### SERVICE PARTS

It should be pointed out that genuine parts have been examined and approved by the Company. The installation and/or use of 'non-genuine' products could have negative effects upon the design characteristics of your tractor and thereby affect it's safety. The Company is not liable for any damage caused by the use of 'non-genuine' parts and accessories. Only genuine New Holland replacement parts should be used. The use of non-genuine parts may invalidate legal approvals associated with this product.

It is prohibited to carry out any modifications to the tractor unless specifically authorized, in writing, by the After Sales Service department of the Company.

#### WARRANTY

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

#### END USER LICENSE AGREEMENT TERMS

- You have acquired a device ("DEVICE") that includes Software licensed by CNH America LLC from Microsoft Licensing, GP or its affiliates ("MS"). Those installed software products of MS origin, as well as associated media, printed materials, and "online" or electronic documentation ("SOFTWARE") are protected by international intellectual property laws and treaties. The SOFTWARE is licensed, not sold. All rights reserved.
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- NO WARRANTIES FOR THE SOFTWARE. THE SOFTWARE is provided "AS IS" and with all faults. THE ENTIRE RISK AS TO SATISFAC-TORY QUALITY, PERFORMANCE, ACCURA-CY AND EFFORT (INCLUDING LACK OF NEGLIGENCE) IS WITH YOU. ALSO, THERE IS NO WARRANTY AGAINST INTERFERENCE

WITH YOUR ENJOYMENT OF THE SOFT-WARE OR AGAINST INFRINGEMENT. IF YOU HAVE RECEIVED ANY WARRANTIES RE-GARDING THE DEVICE OR THE SOFTWARE, THOSE WARRANTIES DO NOT ORIGINATE FROM, AND ARE NOT BINDING ON, MS.

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- Limitations on Reverse Engineering, Decompilation, and Disassembly. You may not reverse engineer, decompile, or disassemble the SOFTWARE, except and only to the extent that such activity is expressly permitted by application law notwithstanding this limitation.
- SOFTWARE TRANSFER ALLOWED BUT WITH RESTRICTIONS. You may permanently transfer rights under this EULA only as part of a permanent sale or transfer of the DEVICE, and only if the recipient agrees to this EULA. If the SOFTWARE is an upgrade, any transfer must also include all prior versions of the SOFTWARE.
- EXPORT RESTRICTIONS. You acknowledge that SOFTWARE is subject to U.S. export jurisdiction. You agree to comply with all applicable international and national laws that apply to the SOFTWARE, including the U.S. Export Administration Regulations, as well as end-user, end-use and destination restrictions issued by U.S. and other governments. For additional information see http://www.microsoft.com/exporting/.

#### **PRODUCT IDENTIFICATION**

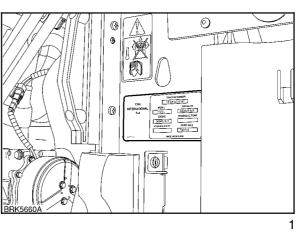
The tractor and major components are identified using product identification numbers and/or manufacturing codes.

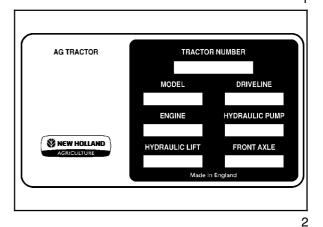
Tractor identification data must be supplied to the dealer when requesting parts or service and will also be needed to aid in identifying the tractor if it is ever stolen.

The following provides the locations of the identification data.

#### Vehicle Identification Plate

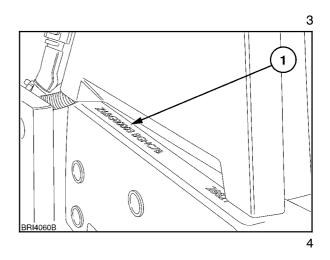
The vehicle identification plate, Figure 1, is located on the right-hand radiator support. Record the information on the sample identification plate.





#### **Tractor Product Identification Number**

The product identification number and model identification information is stamped on the right-hand side of the front support, 1. These numbers are also repeated on the vehicle identification plate reproduced above.

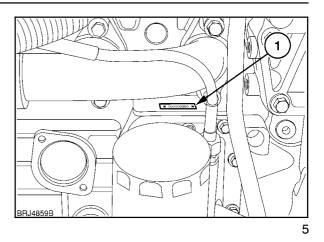


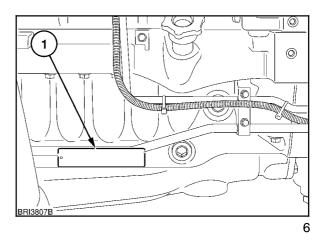
#### **Engine Identification**

The engine product identification number (PIN) and date of manufacture are stamped on the right-hand side of engine block, 1, below the manifold. Record the number below.

Engine PIN:

The details are repeated on the information plate located on the left side of the engine oil pan.





Further information relating to engine adjustments and emission level compliance are also shown on the engine information plate.

**NOTICE:** The details displayed on the engine information plate may change according to the country in which the tractor is sold.

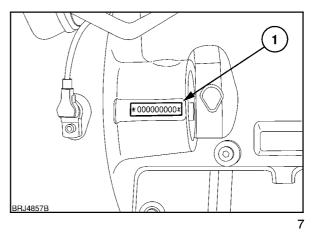
Pm	ENISSION	CONTROL INFORMATION	Endincelle	S IT PAPT NAD	ENGINE E IN ITALY
ENGINE FAMILY	MCOEL	Maria Contra		SERIAL Rumber	
	ADVERSTISED	ENDER CATEGORY:			
NOR ROAD AND STATIONAR	DIESEL ENGINES AND CAL	FORMIA REGULATION FOR		Ud	
ECS:		DELEGATED ASSENBLY	Ua	ЦΡ	Uc

#### **Driveline Identification**

#### **Power Command Transmission**

The product identification number plate, 1, is located on the right-hand side of the transmission casing behind the the battery carrier. This number is repeated on the vehicle identification plate and should be recorded below for quick reference.

Driveline PIN:

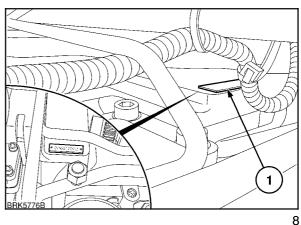


#### **Auto Command Transmission**

A product identification number plate, 1, is located on top of the transmission casing on the right-hand side of the tractor.

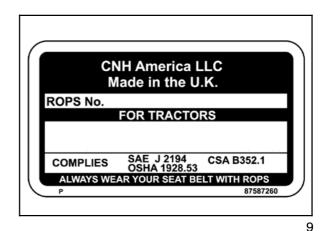
The plate can be found adjacent to the rear of the hydrostatic drive unit. This number is repeated on the vehicle identification plate and should be recorded below for quick reference.

Driveline PIN:



#### **ROPS identification plate**

The ROPS identification plate can be found on the right-hand side of the cab trim panel, below the rear window.



#### ECOLOGY AND THE ENVIRONMENT

Soil, air, and water are vital factors of agriculture and life in general. When legislation does not yet rule the treatment of some of the substances which are required by advanced technology, common sense should govern the use and disposal of products of a chemical and petrochemical nature.

The following are recommendations which may be of assistance:

- Become acquainted with and ensure that you understand the relative legislation applicable to your country.
- Where no legislation exists, obtain information from suppliers of oils, filters, batteries, fuels, antifreeze, cleaning agents, etc., with regard to their effect on man and nature and how to safely store, use and dispose of these substances. Agricultural consultants will, in many cases, be able to help you as well.

#### **HELPFUL HINTS**

- 1. Avoid filling tanks using cans or inappropriate pressurized fuel delivery systems which may cause considerable spillage.
- In general, avoid skin contact with all fuels, oils, acids, solvents, etc. Most of them contain substances which may be harmful to your health.
- Modern oils contain additives. Do not burn contaminated fuels and or waste oils in ordinary heating systems.
- 4. Avoid spillage when draining off used engine coolant mixtures, engine, gearbox and hydraulic

oils, brake fluids, etc. Do not mix drained brake fluids or fuels with lubricants. Store them safely until they can be disposed of in a proper way to comply with local legislation and available resources.

- Modern coolant mixtures, i.e. antifreeze and other additives, should be replaced every two years. They should not be allowed to get into the soil but should be collected and disposed of safely.
- Do not open the air-conditioning system yourself. It contains gases which should not be released into the atmosphere. Your dealer or air conditioning specialist has a special extractor for this purpose and will have to recharge the system properly.
- 7. Repair any leaks or defects in the engine cooling or hydraulic system immediately.
- 8. Do not increase the pressure in a pressurized circuit as this may lead to a component failure.
- 9. Protect hoses during welding as penetrating weld splatter may burn a hole or weaken them, allowing the loss of oils, coolant, etc.

A careful operator is the best operator. Most accidents can be avoided by observing certain precautions. To help prevent accidents, read and take the following precautions before driving, operating, or servicing the tractor. Equipment should be operated only by those who are responsible and instructed to do so.

## PRECAUTIONARY STATEMENTS

### PERSONAL SAFETY

Throughout this manual and on machine decals, you will find precautionary statements ("DANGER", "WARNING", and "CAUTION") followed by specific instructions. These precautions are intended for the personal safety of you and those working with you. Please take the time to read them.



Δ

This word "DANGER" indicates an immediate hazardous situation that, if not avoided, will result in death or serious injury. The color associated with Danger is RED.

M1169

### WARNING

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

M1170



This word "CAUTION" indicates a potentially hazardous situation that, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices. The color associated with Caution is YELLOW.

M1171

FAILURE TO FOLLOW THE "DANGER", "WARNING", AND "CAUTION" INSTRUCTIONS MAY RESULT IN SERIOUS BODILY INJURY OR DEATH.

### MACHINE SAFETY

The precautionary statement ("**NOTICE**") is followed by specific instructions. This statement is intended for machine safety.

**NOTICE:** The word "NOTICE" is used to inform the reader of something he needs to know to prevent minor machine damage if a certain procedure is not followed.

### **INFORMATION**

**NOTICE:** Instructions used to identify and present supplementary information.

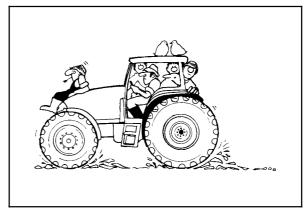
#### SAFETY PRECAUTIONS

#### THE TRACTOR

- Read the Operator's Manual carefully before using the tractor. Lack of operating knowledge can lead to accidents.
- 2. Only allow properly trained and qualified persons to operate the tractor.
- 3. To prevent falls, use the handrails and step plates when getting on and off the tractor. Keep steps and platform clear of mud and debris.
- 4. Replace all missing, illegible or damaged safety decals.
- 5. Keep safety decals free of dirt or grime.
- Do not permit anyone but the operator to ride on the tractor except for driver training or instruction. When used for these purposes an additional seat may be fitted in the cab. Passengers should not be carried on the tractor at any time.
- 7. Keep children away from the tractor and farm machinery at all times.
- Do not modify or alter or permit anyone else to modify or alter the tractor or any of its components or any tractor function without first consulting your dealer.
- 9. Install all guards before starting the engine or operating the tractor.

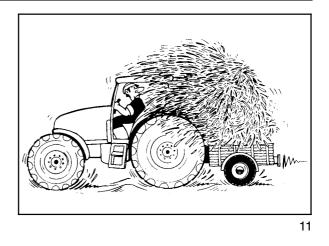
#### **DRIVING THE TRACTOR**

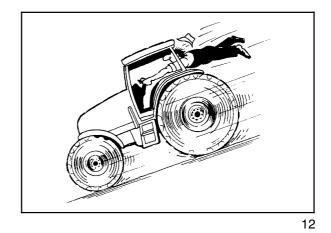
- 1. Always sit in the driver's seat while starting or driving the tractor.
- 2. When driving on public roads, have consideration for other road users. Pull in to the side of the road occasionally to allow any following traffic to pass. Do not exceed the legal speed limit set in your country for agricultural tractors.
- Use a rotating beacon and/or Slow Moving Vehicle warning when driving on public roads to indicate that the vehicle is slow moving and is a possible hazard.
- 4. Dip the tractor lights when meeting a vehicle at night. Make sure the lights are adjusted to prevent blinding the driver of an oncoming vehicle.

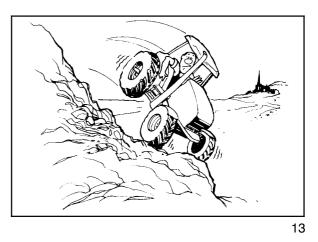


10

- 5. Reduce speed before turning or applying the brakes. Brake both wheels simultaneously when making an emergency stop. Ensure that both brake pedals are locked together when travelling at road speeds or when on public roads to ensure correct operation of trailer brakes, balanced operation of the tractor brakes and four wheel braking (FWD tractors only).
- 6. On four wheel drive tractors, the drive to the front axle is automatically engaged, to provide four wheel braking, when both foot brakes are applied. Owners should be aware of the effectiveness of four wheel braking which greatly enhances braking performance. Appropriate care should be exercised during fierce braking.
- 7. Use extreme caution and avoid hard application of the tractor brakes when towing heavy loads at road speeds.
- 8. Keep the tractor in the same gear when going downhill as would be used when going uphill. Do not coast or freewheel down hills.
- 9. For safe operation any towed vehicle whose total weight exceeds that of the towing tractor must be equipped with a braking system that complies with the legal requirements of that country.
- 10. Never apply the differential lock when turning. When engaged, the differential lock will prevent the tractor from turning.
- 11. Always check overhead clearance, especially when transporting the tractor. Watch where you are going, especially at row ends, on roads and around trees and low overhanging obstacles.
- 12. To avoid overturns, drive the tractor with care and at speeds compatible with safety, especially when operating over rough ground, when crossing ditches or slopes and when turning corners.
- 13. Use extreme caution when operating on steep slopes.
- 14. If the tractor becomes stuck or the tires are frozen to the ground, reverse the tractor out to prevent overturning.







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