

NEW HOLLAND

8160

8260

8360

8560

Serial Number 116200B and Above

86593406 6/99

OPERATOR'S MANUAL



NEW HOLLAND



CAUTION: THIS SYMBOL IS USED THROUGHOUT THIS BOOK WHENEVER PERSONAL SAFETY IS INVOLVED. TAKE TIME TO READ AND FOLLOW THE INSTRUCTIONS. BE CAREFUL!.

CAUTION: PICTURES IN THIS MANUAL MAY SHOW PROTECTIVE SHIELDING OPEN OR REMOVED TO BETTER ILLUSTRATE A PARTICULAR FEATURE OR ADJUSTMENT.

BE CERTAIN, HOWEVER, TO CLOSE OR REPLACE ALL SHIELDING BEFORE OPERATING THE MACHINE.

IMPROVEMENTS

New Holland North America, Inc. 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

Title	Page
Section 1 - General Information and Safety	
To the owner	1-1
Product identification	1-2
Ecology and the environment	1-4
Safety precautions	1-5
Safety decals	1-11
International symbols	1-14
Airborne noise emission	1-15
Section 2 - Controls, Instruments and Operation	
Cab	2-2
Seats	2-17
Handbrake, Throttle and Foot Controls	2-25
Instrument Console	2-27
Analogue and Analogue/Digital Instruments	2-30
Electronic Instrument Panel	2-36
Mechanical Transmission (16 x 16 and 20 x 16)	2-56
Hi Lo Transmission (24 x 12 and 23 x 12)	2-67
Semi-Powershift Transmission (18 x 6 and 17 x 6)	2-72
Electronic Management Unit	2-79
Power Take-Off	2-86
Mechanical Lower Link Sensing Hydraulics	2-89
Electronic Draft Control	2-90
Remote Control Valves	2-94
Section 3 - Field Operation	
Starting and Stopping the Engine	3-2
Rear Power Take-Off	3-8
Front Power Take-Off and Hydraulic Lift	3-17
Mechanical Lower Link Sensing Hydraulics	3-23
Electronic Draft Control	3-28
Remote Control Valves	3-34
Three-point Linkage	3-45
Front Wheel Track Adjustment	3-53
Rear Wheel Track Adjustment	3-60
Ballasting and Tyres	3-74
Section 4 - Lubrication and Maintenance	
General information	4-1
Lubrication and maintenance chart	4-6
Servicing when warning lights illuminate	4-7
10-hour/daily service	4-13
50-hour service	4-14
300-hour service	4-23
600-hour service	4-33
1200-hour/12 month service	4-37
1200-hour/24 month service	4-42
1800-hour service	4-46
General maintenance - as required	4-48

Section 5 - Fault Finding	
Introduction	5-1
Engine	5-2
Transmission - Semi-Powershift	5-5
Transmission - Hi Lo	5-6
Transmission - Mechanical	5-7
Hydraulics	5-8
3-point linkage	5-9
Brakes	5-10
Cab	5-10
Electrical	5-11
Section 6 - Vehicle Storage	6-1
Section 7 - Accessories	
Safety Frame (ROPS)	7-2
Roof Beacon	7-3
Automatic Engine Shut Down	7-3
Hydraulic Trailer Brakes	7-4
Air-Operated Trailer Brakes	7-5
Walterscheid Hitch	7-7
Walterscheid Automatic Stabilisers	7-9
Sway Block Stabilisers	7-11
Drawbars and Towing Attachments	7-13
Section 8 - Specification	
General Dimensions	8-1
Weight	8-4
Engine	8-5
Fuel System	8-5
Cooling System	8-6
Transmission Availability	8-6
Hydraulic System Availability	8-7
Three-Point Lift	8-7
Front Power Lift	8-8
Brakes	8-8
Steering	8-8
Maximum Operating Angle	8-8
Front Power Take-Off Availability	8-9
Rear Power Take-Off Availability	8-9
Electrical Equipment	8-10
Lubricant and Fluid Capacities	8-10
Lubricant and Fluid Specifications	8-12
Section 9 - First 50-hour Service Forms	9-5
Section 10 - Index	10-1

FEDERAL EMISSIONS WARRANTY

New Holland warrants that your new 1997 and later heavy-duty off-road diesel engine was designed, built, and equipped to conform to applicable U.S. Environmental Protection Agency regulations for a period of use of five years or 3,000 hours of operation, whichever occurs first.

The new model year, class of diesel engine, and emission application determination for your engine are identified on the emission control information label affixed to the top of your engine's rocker arm cover. The warranty period begins on the date the new equipment is sold to the first retail purchaser.

Any emission control system parts which are proven defective during normal use will be repaired or replaced during the warranty period. The warranty repairs and service will be performed by any authorized New Holland dealer at the dealer's place of business, with no charge for parts or labor (including diagnosis).

As the engine owner, you are responsible to perform all the required maintenance listed in your owner's manual. New Holland will not deny an emission warranty claim solely because you have no record of maintenance; however, a claim may be denied if your failure to perform maintenance resulted in the failure of a warranted part. Receipts covering regular maintenance should be retained in the event of questions and these receipts should be passed on to each subsequent owner of the engine.

It is recommended replacement parts used for maintenance or repairs be New Holland Service Parts to maintain the quality originally designed into your emission certified engine. The use of non-New Holland parts does not invalidate the warranty on other components unless the use of such parts causes damage to warranted parts.

New Holland wishes to assure the emission control systems warranty is being properly administered. If you believe you have not received the service entitled to under this warranty, you should contact the nearest New Holland Branch Office for assistance. The address and phone number of each Branch Office is in your vehicle owner's manual. If additional assistance or information is needed, contact:

Service Department
New Holland North America, Inc.
500 Diller Avenue
New Holland, PA 17557
(717) 355-1121

Please note that the Emission Warranty does not cover:

1. Systems and parts that were not first installed on the new equipment or engine as original equipment by New Holland.
2. Part malfunctions caused by abuse, misuse, improper adjustment, modification, alteration, tampering, disconnection, improper or inadequate maintenance, or use of non-recommended fuels and lubricating oils.
3. Accident caused damage, acts of nature, or other events beyond New Holland's control.
4. Replacement of expendable items made in connection with scheduled maintenance.
5. Parts requiring replacement, inspection or adjustment maintenance intervals for reasons other than being defective.
6. Parts which are not New Holland Service Parts.
7. Loss of time, inconvenience, loss of use of equipment/engine or commercial loss.
8. Equipment with altered or disconnected hourmeter where the hours cannot be determined.
9. Equipment normally operated outside the United States.
10. Non-defective parts replaced by other than New Holland dealers.

Coverage

This emission control system warranty applies to the following 675T-WM emission control parts.

Fuel Injection Pump
Fuel Injectors
Turbocharger
Intake Manifold
Charge Air Cooler
Exhaust Manifold

SECTION 1

GENERAL INFORMATION AND SAFETY

TO THE OWNER

GENERAL

This Manual has been prepared to assist you in the correct procedure for running-in, driving and operating and for the maintenance your new tractor. Your tractor, which was designed to power and propel itself, is intended for use in normal and customary agricultural applications.

Read this Manual carefully and keep it in a convenient place for future reference. If at any time you require advice concerning your tractor, do not hesitate to contact your authorised dealer. He has 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.

CLEANING THE TRACTOR

Your tractor is a state-of-the-art machine with sophisticated, electronic controls. This should be borne in mind 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 1-5 to 1-10 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 9, 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 9-5 and 9-7). The first sheet (page 9-5) is the dealer's copy and should be removed by the dealer after the service has been carried out. The second sheet (page 9-7) 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 its 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 authorised, 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.

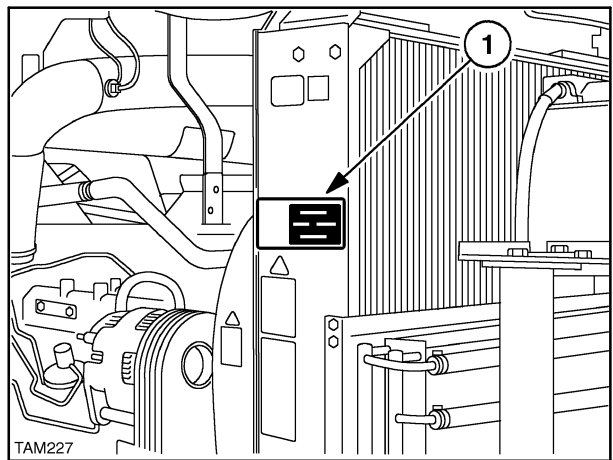
PRODUCT IDENTIFICATION

The tractor and major components are identified using serial 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.

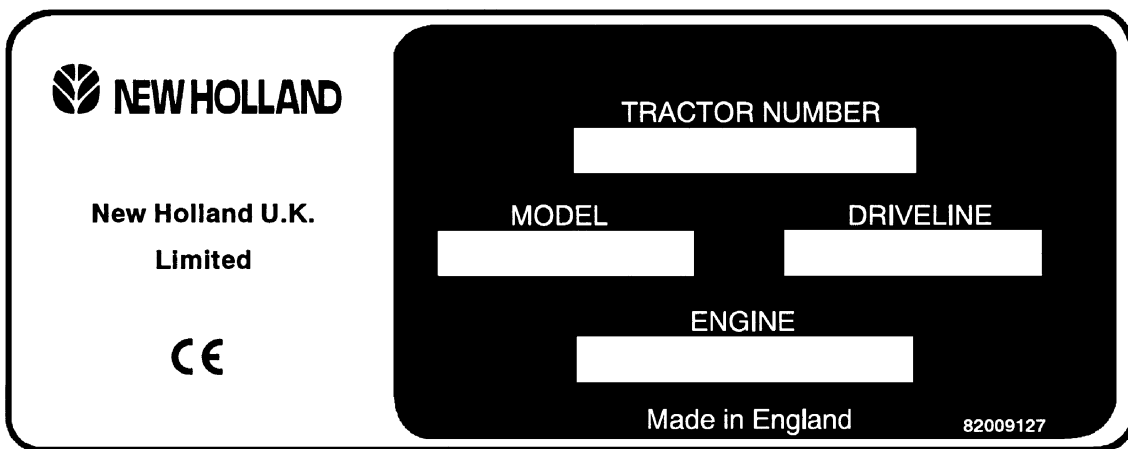
The following provides the locations of the identification data.

Vehicle Identification Plate - Figure 1

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

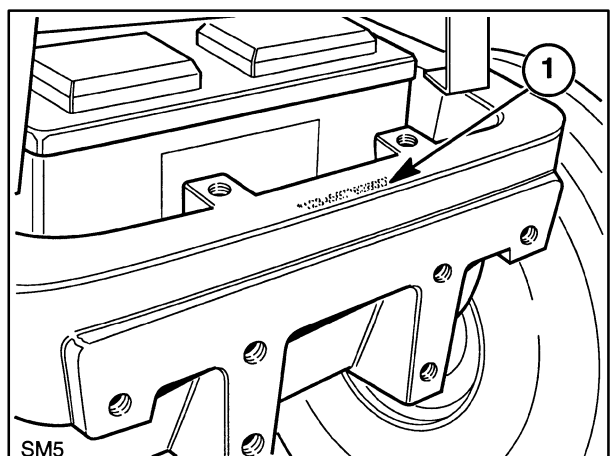


1



Tractor Identification - Figure 2

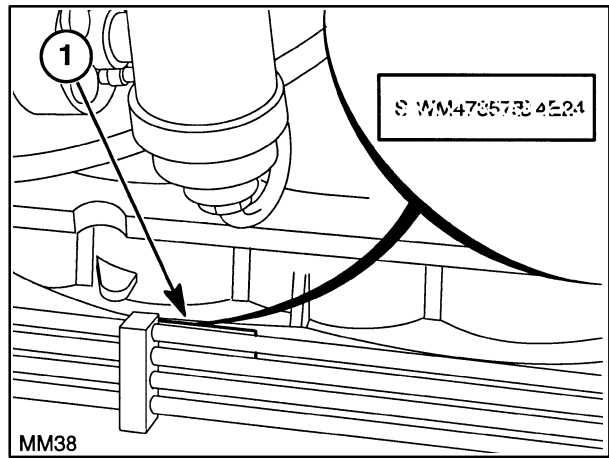
The serial number and model identification information is stamped on the top of the front support (1). These numbers are also repeated on the vehicle identification plate reproduced above.



2

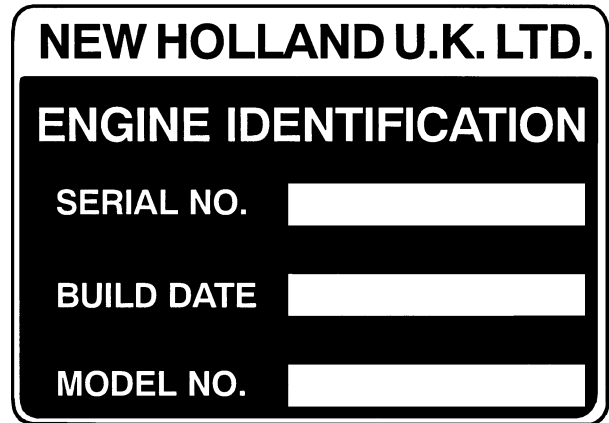
Engine Identification - Figures 3 and 4

The engine serial number and date code are stamped on a lug (1) Figure 3, protruding from the rear, right-hand side of the engine. This information is repeated on the engine identification plate, Figure 4, and on the vehicle identification plate reproduced on page 1-2.



3

The engine identification plate is located on the right-hand side of the rocker cover, toward the rear of the engine. Record the information on the identification plate reproduced in Figure 4.

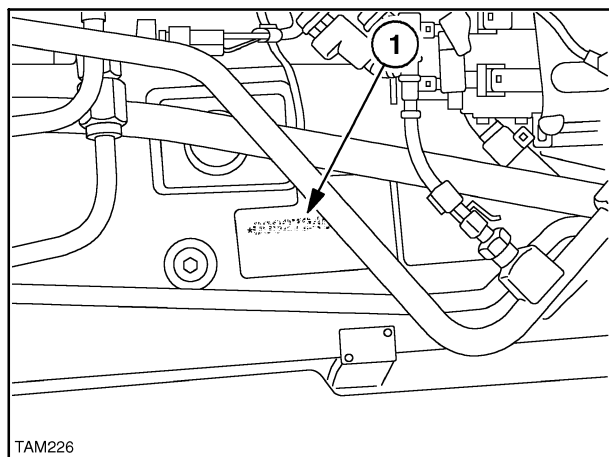


4

Driveline Identification - Figure 5

The serial number (1) is stamped on the right-hand side of the transmission housing. This information is repeated on the vehicle identification plate (Figure 1). Record the information below for quick reference.

Serial No. _____



5

SAFETY PRECAUTIONS

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

Throughout this Manual you will see text in *italics*, preceded by the words **NOTE**, **ATTENTION**, **IMPORTANT CAUTION**, **WARNING** or **DANGER**. Such text has the following significance:


Machine Safety


NOTE: *This text stresses a correct operating technique or procedure.*


ATTENTION: *This text warns the operator of potential machine damage if a certain procedure is not followed.*

IMPORTANT: *This text informs the reader of something that he needs to know to prevent minor machine damage if a certain procedure is not followed.*

Personal Safety

 **CAUTION:** *The word CAUTION is used where a safe behavioural practice, according to operating and maintenance instructions and common safety practices will protect the operator and others from accident involvement.*

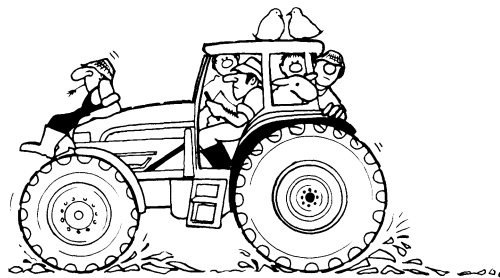
 **WARNING:** *The word WARNING denotes a potential or hidden hazard which could possibly cause serious injury. It is used to warn operators and others to exercise due care and attention to avoid a surprise accident with machinery.*

 **DANGER:** *The word DANGER denotes a forbidden practice in connection with a serious hazard.*

Failure to follow the CAUTION, WARNING and DANGER instructions may result in serious bodily injury or even death.

THE TRACTOR

1. 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.



6. Do not permit anyone but the operator to ride on the tractor unless a passenger seat is fitted. There is no safe place for extra passengers otherwise.
7. Keep children away from the tractor and farm machinery at all times.
8. 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.

3. Use a rotating beacon when driving on public roads to indicate that the vehicle is slow moving and is a possible hazard.

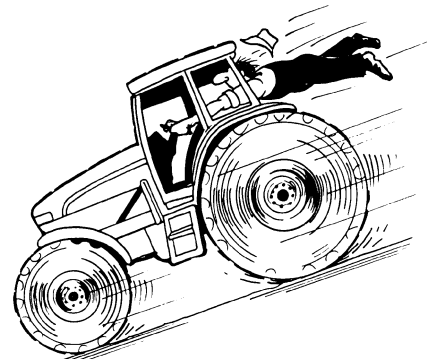
4. Dip the tractor lights when meeting a vehicle at night. Make sure the lights are adjusted to prevent blinding the driver of an oncoming vehicle.

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 (4WD tractors only).



6. On four wheel drive tractors, the drive to the front axle is automatically engaged, to provide four wheel braking, when both footbrakes 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.



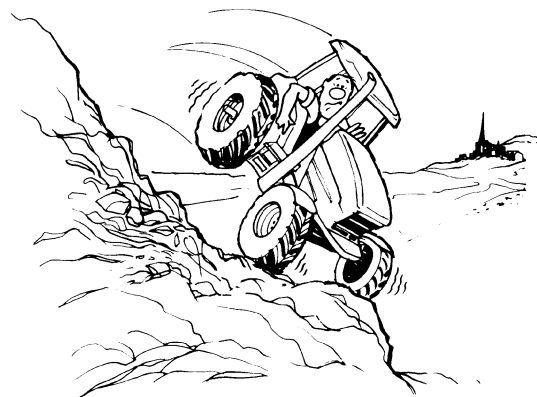
8. Keep the tractor in the same gear when going downhill as would be used when going uphill. Do not coast or freewheel down hills.

9. Any towed vehicle whose total weight exceeds that of the towing tractor must be equipped with brakes for safe operation.

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 tyres are frozen to the ground, reverse the tractor out to prevent overturning.

OPERATING THE TRACTOR

1. Apply the parking brake, place the P.T.O. control in the 'OFF' position, the lift control lever in the down position, the remote control valve levers in the neutral position and the transmission levers in neutral before starting the tractor.

2. Do not start the engine or operate controls (other than the external hydraulic lift switches) while standing beside the tractor. Always sit in the tractor seat when starting the engine or operating the controls.

3. Do not bypass the transmission and P.T.O. neutral start switches. Consult your authorised dealer if your neutral start controls malfunction. Use jump leads only in the recommended manner. Improper use can result in a tractor runaway.

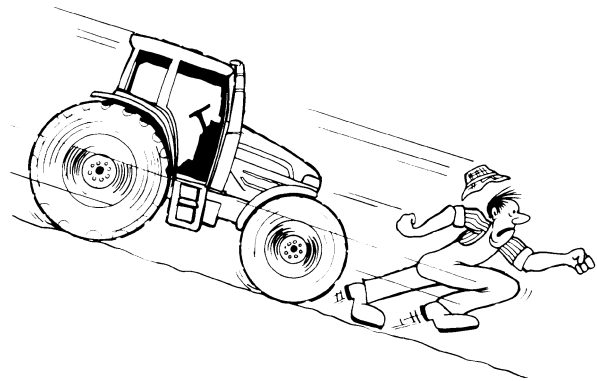


4. Avoid accidental contact with the gear shift levers while the engine is running. Unexpected tractor movement can result from such contact.

5. Do not get off the tractor while it is in motion.

6. If the power steering or engine ceases operating, stop the tractor immediately as the tractor will be more difficult to control.

7. Before leaving the tractor, park the tractor on level ground, apply the parking brake, lower attached implements to the ground, disengage the P.T.O. and stop the engine.



8. Do not park the tractor on a steep incline.

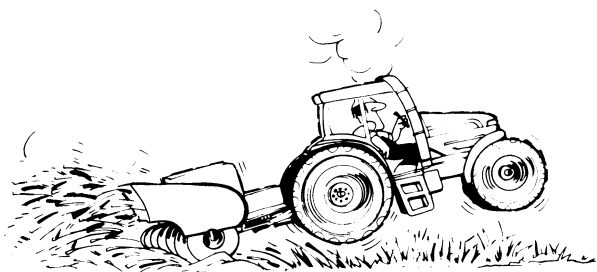
9. The cab is designed to provide the minimum noise level at the operator's ears and meets or exceeds applicable standards in this respect. However, noise (sound pressure level) in the workplace can exceed 85 dB(A) when working between buildings or in confined spaces, with cab windows open. Therefore, it is recommended that operators wear suitable ear protectors when operating in high noise level conditions.



10. Do not run the tractor engine in an enclosed building without adequate ventilation. Exhaust fumes are toxic and can cause death.

11. Pull only from the pick-up hitch, swinging drawbar or the lower link drawbar in the lowered position. Use only a drawbar pin that locks in place. Pulling from the tractor rear axle or any point above the axle may cause the tractor to overturn.

12. Always select Position Control when attaching equipment and when transporting equipment. Be sure hydraulic couplers are properly mounted and will disconnect safely in case of accidental detachment of the implement.



13. If the front end of the tractor tends to rise when heavy implements are attached to the three-point hitch, install front end or front wheel weights. Do not operate the tractor with a light front end.

14. Engage the clutch slowly when driving out of a ditch, gully or up a steep hillside. Disengage the clutch promptly if the front wheels rise off the ground.

15. Ensure any attached equipment or accessories are correctly installed, are approved for use with the tractor, do not overload the tractor and are operated and maintained in accordance with the instructions issued by the equipment or accessory manufacturer.

16. Remember that your tractor, if abused or incorrectly used, can be dangerous and become a hazard both to the operator and to bystanders. Do not overload or operate with attached equipment which is unsafe, not designed for the particular task or is poorly maintained.

17. Do not leave equipment in the raised position when the vehicle is stopped or unattended.

18. Do not drive equipment near open fires.

19. Always wear a protective mask when working with toxic spray chemicals. Follow the directions on the chemical container.

OPERATING THE P.T.O.

1. When operating P.T.O.- driven equipment, shut off the engine, switch off the P.T.O. and wait until the P.T.O. stops before getting off the tractor and disconnecting the equipment.



2. Do not wear loose clothing when operating the power take-off or especially when near rotating equipment.

3. When operating stationary P.T.O.-driven equipment, always apply the tractor parking brake and block the rear wheels front and back.



4. To avoid injury, do not clean, adjust, unplug or service P.T.O. driven equipment when the tractor engine is running. Ensure that the P.T.O. is switched off.

5. Make sure the P.T.O. guard is in position at all times and always replace the P.T.O. cap when the P.T.O. is not in use.

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