

NEW HOLLAND

TN55

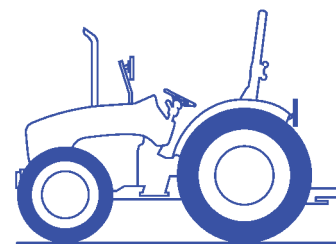
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OPERATOR'S MANUAL



NEW HOLLAND

FEDERAL EMISSIONS WARRANTY

New Holland warrants that your new 1996 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 emission control parts.

Fuel Injection Pump
Fuel Injectors
Turbocharger
Intake Manifold
Charge Air Cooler
Exhaust Manifold
Boost Pressure Tubing-connection to Aneroid Device ON F.I.P.

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.

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TO THE USER

GENERAL

This Use and Maintenance Manual provides a guide for the user with regard to running-in, use and maintenance of the tractor.

Read this manual carefully and keep in a convenient place for future reference. Do not hesitate to contact your local dealer for any questions concerning the tractor. The dealer can provide skilled personnel, trained by the Manufacturer, original spare parts and all tools and equipment necessary for your service requirements.

The tractor is designed as a power generator and drive-propulsion unit for use in normal and traditional agricultural conditions.

The tractor is also designed to provide maximum performance, economic running and easy use over a wide range of operations. Prior to delivery, all machines are carefully inspected (by both the Manufacturer and your local authorised dealer), to make sure that they reach the user in perfect condition. To maintain the tractor in this condition and ensure trouble-free operation, the routine maintenance described in Section 3 of this manual must be carried out at the specified intervals.

CLEANING THE TRACTOR

Your tractor is an advanced machine, fitted with an electro-hydraulic control system. Care should be taken when cleaning the tractor, especially if a pressurised water cleaner is used.

- Never stand too close to the tractor or direct the water jet on electrical components, seals or intake openings, etc.
- Never direct jets of cold water at the hot engine or exhaust. See also Section 3 (Recommendations for bodywork maintenance).

SAFETY

Safety precautions for the operator and bystanders are shown on pages vii to xiii inclusive. Read the safety instructions and follow recommendations and hints **before** starting to use the tractor.

SERVICE AFTER THE FIRST 50 HOURS OF WORK

The operations required for the first service are shown at the end of the Manual, immediately prior to the index. After the first 50 hours of use, return to the dealer with your tractor and this Manual in order to carry out the Manufacturer's checks and to fill in the certificates included on pages 1 and 3). The first sheet (page 1) must be compiled on completion of the service and held by the dealer. The second sheet (page 3) must be kept in the Manual for documentation and reference purposes. **Check that both copies are signed by both yourself and the dealer.**

SPARE PARTS

"Non-original" spare parts have not been tested or authorised by the Manufacturer. Instalment and/or use of such products may adversely affect the tractor's design specifications, thereby compromising operational safety. The manufacturer cannot be held responsible for any damage resulting from the use of "non-original" spare parts.

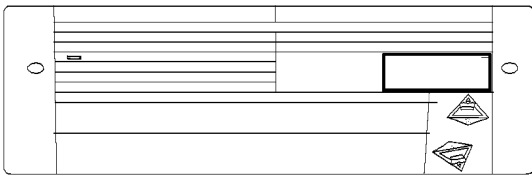
No modifications may be made to the tractor without written authorisation from the Manufacturer.

WARRANTY

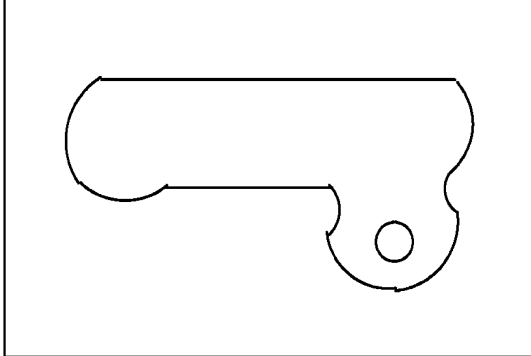
The tractor is guaranteed in accordance with current legislation in your country and in line with contractual agreements reached with the dealer at the time of sale. However, the warranty is no longer valid if the rules and instructions for the use and maintenance of the tractor, described in this Manual, are not observed.

TRACTOR IDENTIFICATION

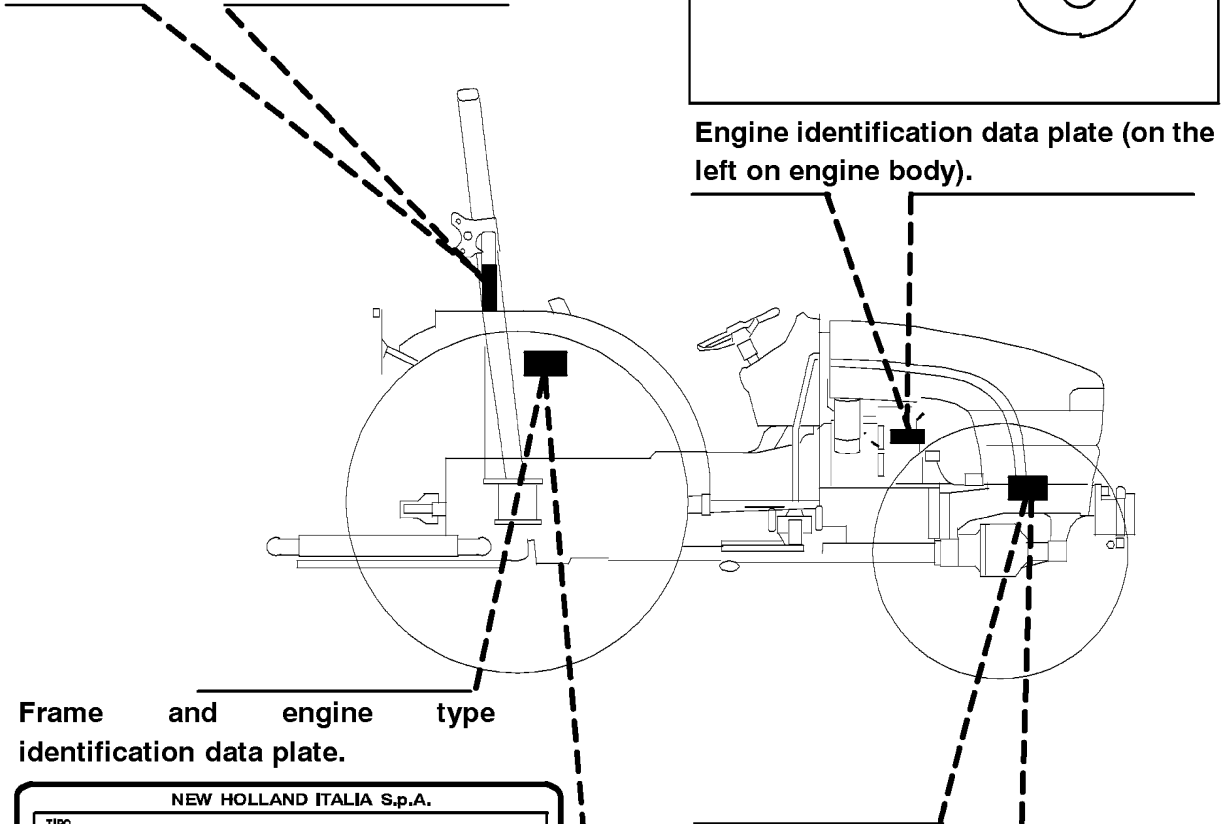
Serial numbers and/or production codes identify the tractor and its main components. The identification data must be supplied by the dealer for requests for spare parts or service operations. Identification data is of fundamental importance in the event of theft of the tractor. The location of the various identification data is shown below.



Frame identification data plate.



Engine identification data plate (on the left on engine body).



Frame and engine type identification data plate.

NEW HOLLAND ITALIA S.p.A.	
TIPO	
OMOLOGAZIONE	
TELAIO	
MASSA TOTALE AMMISSIBILE (kg)	
CARICO AMMISSIBILE SULL'ASSE ANTERIORE (kg)	DA: A:
CARICO AMMISSIBILE SULL'ASSE POSTERIORE (kg)	DA: A:
CARICO RIMORCHIABILE AMMISSIBILE	
MASSA RIMORCHIABILE NON FRENATA (kg)	
MASSA RIMORCHIABILE CON FRENATURA INDIPENDENTE (kg)	
MASSA RIMORCHIABILE CON FRENATURA AD INERZIA (kg)	
MASSA RIMORCHIABILE CON FRENATURA ASSISTITA (kg)	
NEW HOLLAND ITALIA S.p.A. MODENA ITALY MADE IN ITALY	COEFFICIENTE ASSORBIMENTO

Tractor frame number identification data plate (stamped on the axle support under the bonnet).

☆ 0000000000 ☆

IMPORTANT ECOLOGICAL CONSIDERATIONS

Soil, air and water are essential elements for agriculture and for life in general. If local legislation does not control the treatment of certain substances, the production of which is necessitated by advanced technologies, products derived from chemical and petrochemical products must be used and disposed of according to the rules of common sense.

The following recommendations may be of help:

■ Find out what the relevant legislation in your country stipulates.

■ Ask your suppliers of lubricants, oils, fuels, anti-freeze, detergents, etc., for information on the effects of these products on humans and the environment and for instructions concerning their use, storage and disposal. In many cases, local agricultural consultants will be able to provide assistance.

SUGGESTIONS

1. Avoid using unsuitable, pressurised filling systems or fuel cans when filling tanks, as these may cause considerable spillage and leakage of liquids.
2. As a general rule, do not allow liquid fuels, lubricants, acids, solvents, etc., to come into contact with the skin. The majority of these products contain substances that are potential health hazards.
3. Modern lubricants contain additives. Do not burn contaminated fuel oils and/or oils used in conventional heating systems.

4. Avoid spillage when transferring used engine cooling liquids, engine and transmission lubricants, hydraulic oils, brake fluids, etc.. Never mix used brake oil with fuel oil, or fuel oil with lubricants. Store safely until suitable disposal can be arranged according to national legislation or local regulations.

5. Modern anti-freeze liquids and solutions, e.g.: anti-freeze and other additives, must be replaced every two years. They must not be left to be absorbed into the ground, but must be collected and disposed of in a suitable manner.

6. Do not open the air conditioning systems to carry out work. These systems contain gas which must not be released into the atmosphere. Contact your dealer or specialised personnel, who are equipped with the appropriate equipment and are authorised to re-fill the system.

7. Any leakage or defect in the engine cooling or hydraulic systems must be repaired immediately.

8. Do not increase the pressure in pressurised systems, as this may cause component parts to burst.

9. When welding, make sure that hoses are properly protected as sparks or molten material may puncture or weaken the tubes and sleeves, resulting in leakage of oil, cooling liquid, etc..

10. Do not adjust the setting of the fuel delivery system as this will alter the emission of exhaust fumes.

NOTE: *The engines installed on the tractors comply with anti-pollution legislation.*

ALWAYS WORK SAFELY



This symbol is used to alert the reader to important information which directly concerns personal safety.

Read the following safety instructions carefully and follow the recommendations in order to avoid potential hazards and safeguard your health and safety.

In the text of this manual you will find the symbol alongside the following key words:

CAUTION - When the warning is to prevent potential damage to the machine, which could also put the operator's safety at risk.

DANGER - This warning specifically indicates a potential danger to the user or to any other person directly involved.

Failure to observe the instructions preceded by the aforementioned key words (**CAUTION** and **DANGER**) may result in severe or fatal injury to the persons involved.

Furthermore, this manual also contains instructions in italics preceded by the terms **NOTE** and **WARNING**, with the following relevance in relation to machine protection:

NOTE - Underlines the correct procedure or technique to be followed by the operator.

WARNING - Informs the operator of the danger of damaging the machine if the specified procedure is not followed.

IMPORTANT WARNINGS

The machine is designed and produced exclusively for agricultural use.

All other use will be considered to be contrary to the use specified by NEW HOLLAND, who cannot be held liable for damage to property or the machine, or for personal injuries which may result.

Persons who risk improper use will therefore assume the responsibility for any consequences arising from such use.

Compliance with the instructions for use, maintenance and repairs described in this manual, are the essential preconditions for the use specified by NEW HOLLAND.

The machine must only be used, serviced or repaired by personnel trained in the relevant working methods and safety regulations and who have been authorised to work on the machine.

The user must also observe the rules concerning general safety and accident prevention, including the Highway Code when driving on public highways.

Any arbitrary modifications made to this machine will release NEW HOLLAND from any liability resulting from damage or injury.

NEW HOLLAND and all distribution organisations, inclusive of, but not restricted to, national, regional or local distributors, cannot be held liable for damage resulting from the malfunction of parts and/or components not approved by NEW HOLLAND.

Under no circumstances will a guarantee be issued for products made or sold by NEW HOLLAND that are damaged as a result of the malfunction of parts and/or components not approved by NEW HOLLAND.

WORKING SAFELY

GENERAL

■ During the manufacturing of this tractor, every step has been taken to ensure safe operation. However, the best way to avoid accidents is to exercise caution at all times. Once the accident has already happened it is too late to remember what steps should have been taken.

■ Read this manual carefully before starting, using, carrying out maintenance, refuelling or performing any other type of operation on the tractor.

■ The time spent reading this manual will allow you to get to know your tractor, thereby saving time and effort.. This will also help prevent accidents from taking place.

■ Read all the safety decals on the machine and follow the instructions thereon before starting, operating, refuelling or carrying out maintenance on the machine. Promptly replace any decals that are damaged, lost or illegible.

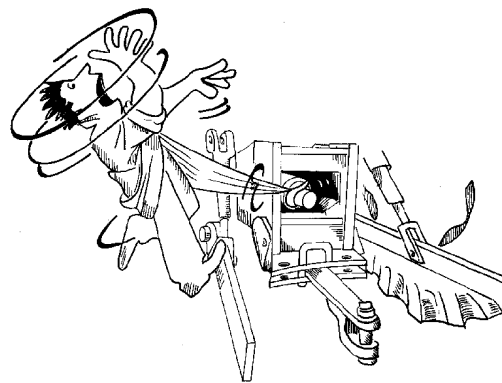
Clean the decals if they are covered by mud or debris.

■ Remember that the tractor is exclusively designed for agricultural use. Any other use will require prior authorisation from NEW HOLLAND.

■ It is advisable to keep a first aid kit on hand.

■ The tractor must only be used by responsible personnel, trained in tractor use and authorised to operate the machine.

■ Do not alter the injection system calibration in an attempt to increase maximum engine speed.



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■ Do not wear loose clothing that may be trapped in moving parts.

Check that all rotating parts connected to the power take-off are correctly protected.

SAFETY NORMS

■ Do not alter the calibration of the pressure relief valves in the various hydraulic circuits (hydrostatic steering, hydraulic lift, auxiliary distributors, etc.).

■ Avoid using the tractor in unsuitable physical conditions, stop work instead.

■ Enter and leave the tractor using the steps and handles provided. Keep these fittings free of mud and debris.

■ Always operate with the cab or roll bar correctly and securely fitted on the tractor: periodically check that the fittings are not loose and that all parts of the structure are free from any damage and deformation. Do not modify the roll bar by welding parts, drilling holes, etc., as this could adversely affect the rigidity of the structure.

STARTING THE TRACTOR

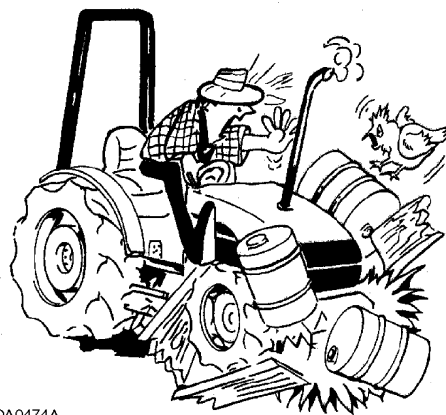
■ Before starting the engine, check that the hand-brake is on and that the gears and power take-off are disengaged, even if the tractor is fitted with a start-up safety device. Never disconnect the start-up safety switch. If the switch does not work correctly, contact your local dealer for eventual repair operations.

■ Before starting the engine, make sure that all attached implements are lowered to the ground.

■ Before starting the engine, check that all covers and guards are correctly in position (roll bar, engine side

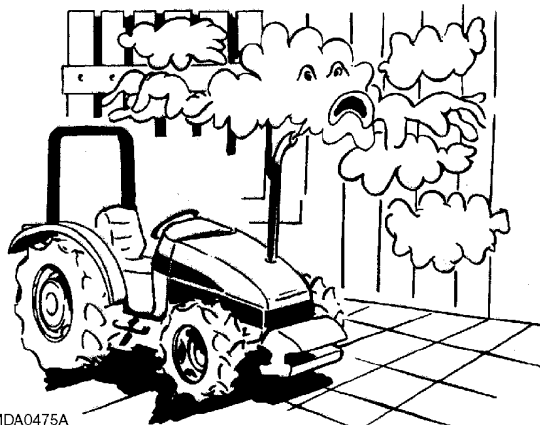
panels, power take-off guard, front axle transmission shaft cover, etc.).

■ **Never start or manoeuvre the tractor unless seated in the driving position.**



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■ Before moving the tractor, always check that the area is free of persons or obstacles.

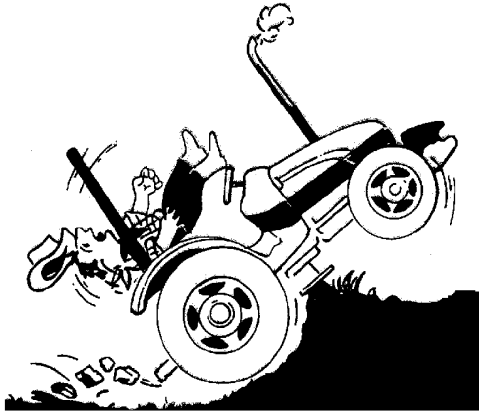


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■ Never run the engine in a closed space without ensuring adequate ventilation. Exhaust fumes are damaging to the health and can be lethal.

USING THE TRACTOR

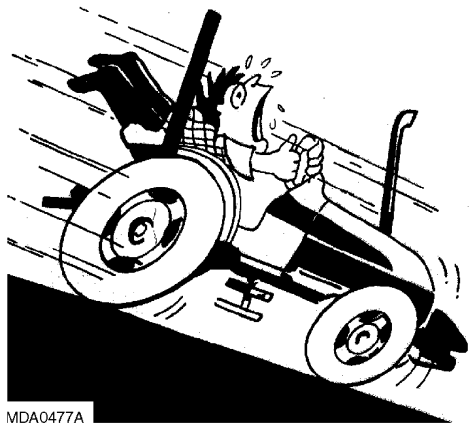
■ Select the most suitable wheel setting for the work in hand, i.e.: the setting that provides the best stability.



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■ Engage the clutch slowly: if engaged too quickly, especially when the tractor is getting out of a hole, ditch or operating on muddy ground or steep slopes, the tractor may overturn.

Release the clutch immediately if the front wheels start to lift.



MDA0477A

■ When travelling downhill, keep the tractor in gear. Never release the clutch and never leave the gears in neutral.

■ When the tractor is moving, the operator must remain correctly seated in the driving position.

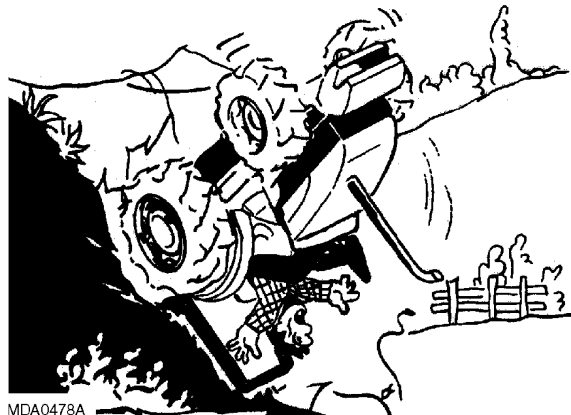
■ Never get on or off the tractor while in movement.

■ When using the brakes, press the pedal down slowly.

■ Avoid curving at high speeds.

■ Always use the tractor at a speed that will guarantee safe operation on the type of land being worked. When working on uneven ground, use maximum care to ensure proper stability.

■ If you have to work with the tractor on a gradient, for example on hillsides, drive at moderate speed especially when taking curves.

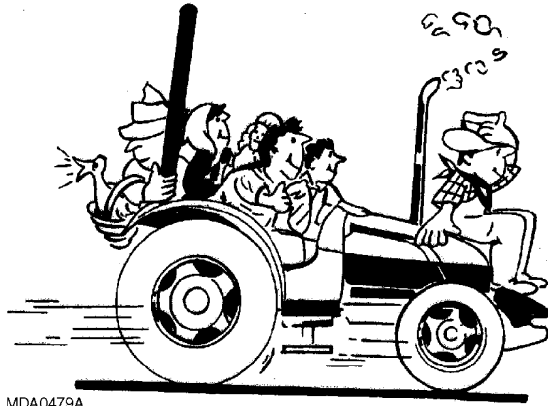


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■ Proceed with maximum caution when working with the wheels near the edge of ditches or slopes.

■ When driving on public highways, observe the Highway Code.

■ When driving, do not rest your feet on the brake or clutch pedals.



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■ Never carry passengers, not even inside the cab, unless the machine is fitted with an approved extra seat.

■ When driving on roads, connect the brake pedals using the plate provided. Braking with single pedals can cause the tractor to skid. Avoid excessive wear on the brakes by using engine braking .

TOWING AND TRANSPORT

■ To guarantee tractor stability when moving, adjust the hitching device according to the trailer or implement to be used (see Caution on page 2-56).

■ Drive slowly when towing extremely heavy loads.

■ For your own safety, do not tow trailers that are not fitted with an independent braking system.

■ If the tractor is used to tow heavy loads, always use the hitching device and never hitch loads onto the

lower arms or the top link of the three-point linkage. This may result in tipping overturning.



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■ When towing, do not negotiate curves with the differential lock engaged as this may prevent you from steering the tractor.

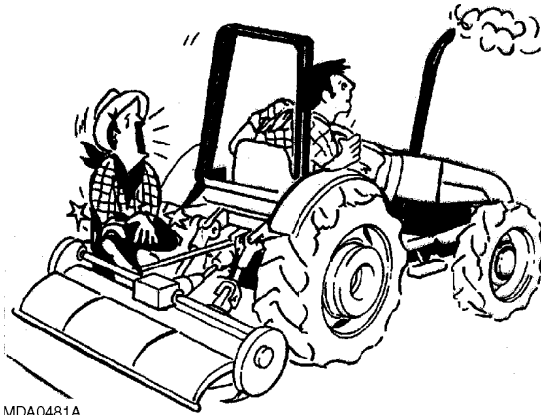
USING IMPLEMENTS AND AGRICULTURAL MACHINERY

■ Do not connect implements or machinery that require more power than can be generated by your tractor model.

■ Never negotiate sharp curves with the power take-off under a heavy load; this may damage the universal joints on the transmission shaft connected to the power take-off.

■ Never stand between the reversing tractor and the implement when hitching.

■ When using implements that require the tractor to be stationary with the engine running, keep the gear and range levers in the neutral position, apply the handbrake and use suitable wheel chocks.



■ Do not operate machines connected to the power take-off without first ensuring that the operating range of the machine is free of bystanders. Also check that all rotating parts connected to the power take-off shaft are correctly protected.

■ Add rear ballast when using lifting equipment fitted to the front of the tractor.

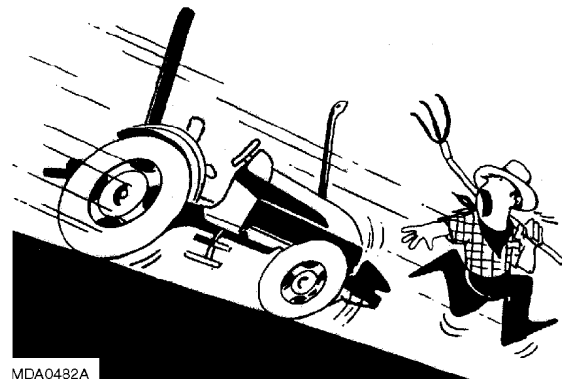
STOPPING THE TRACTOR

■ When the tractor is stationary, never leave connected implements in the raised position. All implements must be lowered before stopping the engine.

■ Before leaving the driving position, move the gear lever to the neutral position, disengage the power take-off, apply the handbrake, stop the engine and put the tractor in gear.

Always remove the ignition key from the dashboard when leaving the tractor unattended.

■ Park on flat surfaces, where possible, put the tractor into gear and apply the handbrake. On slopes, in addition to applying the handbrake, put the tractor in first gear when facing downhill. As an additional safety measure, use wheel chocks (available as an optional); **this procedure is compulsory when parking with a trailer hitched or with the electro-hydraulic shuttle.**



TRACTOR MAINTENANCE



CAUTION: In this manual, some illustrations show panels or covers removed in order to facilitate explanations.

Never use the tractor without the panels or guards in place.

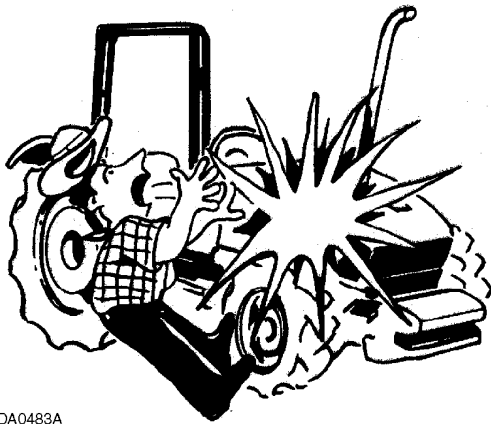
■ Do not work on the tyres with unsuitable equipment or without the necessary experience. Incorrect tyre fitting may put safety at risk.

If in doubt, contact skilled personnel.

■ When changing or storing tyres, make sure they are stacked correctly and cannot roll or topple over causing personal injury.

SAFETY NORMS

- Before removing any hydraulic tubing, check that the system is not pressurised.



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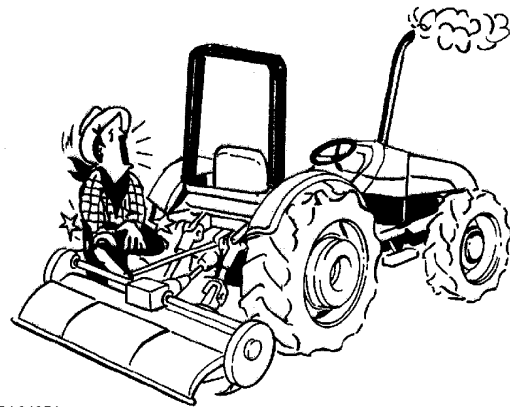
- Leaks of pressurised oil can cause serious injuries. When looking for leaks use the appropriate safety equipment: screens, safety glasses and gloves.

- Before touching any electrical components, disconnect the ground lead from the battery.



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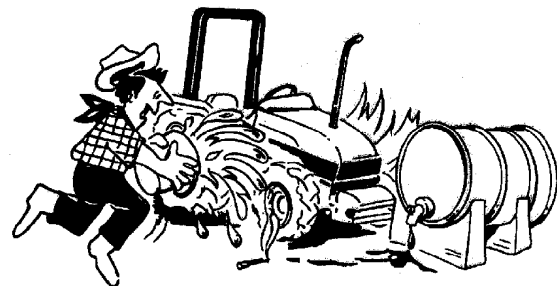
- Only remove the radiator cap after the engine has been allowed to cool. With the engine switched off, use a cloth to slowly unscrew the cap and release the pressure before completely removing the cap.



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- Before inspecting, cleaning or carrying out maintenance on the tractor (or any implement connected to the tractor), always ensure that the engine is switched off, the gears are in neutral, the brakes are on, the power take-off is disengaged and that all moving parts are stationary.

- Do not fill up the fuel tank completely if the tractor is to work in extremely sunny conditions, as the fuel may expand and escape. If this occurs, dry up the spillage immediately.



MDA0486A

- Always keep a fire extinguisher at hand.

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