

NEW HOLLAND  
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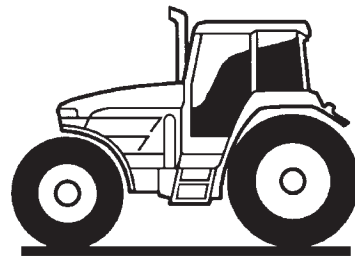
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# OPERATOR'S MANUAL



NEW HOLLAND

<b>Title</b>	<b>Page</b>
<b>Introduction</b>	
To the Owner .....	ii
Product Identification .....	iii
Important ecological considerations .....	iv
Safety precautions .....	v
Safety Decals .....	xii
Universal symbols .....	xvii
Noise Emission .....	xviii
 <b>Section 1 - General Information</b>	
Guards Covers .....	1-2
Commands and instruments - position and function .....	1-3
 <b>Section 2 - Operation</b>	
ROPS and cab .....	2-2
Seats .....	2-13
Parking Brake, Foot Controls, and Instruments .....	2-15
Analogue and analogue/digital instruments .....	2-19
Starting and Cutting the Engine .....	2-25
12 x 12 and 24 x 24 Transmission .....	2-28
Differential lock and front wheel drive .....	2-33
Independent power take off (PTO) .....	2-35
Hydraulic system with a third point sensor .....	2-41
Remote control valves .....	2-43
Three-Point Hitch .....	2-49
Draw bar and hitches .....	2-56
Front Track Adjustment .....	2-60
Rear Track Adjustment .....	2-62
Ballast and tires .....	2-64
 <b>Section 3 - Lubrication and Maintenance</b>	
General Information .....	3-1
Lubrication and Maintenance Table .....	3-8
What to do when the gauge lights go on .....	3-9
10 hours/daily Inspection .....	3-12
50 hours Service .....	3-15
300 hours Service .....	3-23
600 hours Service .....	3-30
1200 hours/12 months Service .....	3-34
1200 hours/24 months Service .....	3-39
General Maintenance - As necessary .....	3-42
 <b>Section 4 - Specifications</b>	
 <b>Section 5 - First 50 hour servicing form</b>	
 <b>Section 6 - Table of Contents</b>	

## INTRODUCTION

This manual has been prepared to assist in the correct processes of running-in, driving, and operation, as well as maintenance for your new tractor. Your tractor is designed to perform normal and habitual agricultural applications functions.

Please read this manual thoroughly, and keep it in an adequate place for future consultation. If, at any time, you need any advice on your tractor, do not hesitate to get in touch with your local New Holland Authorized Dealer. They have factory-trained personnel, and original parts, as well as the necessary equipment to attend to all your Servicing needs.

Your tractor has been conceived and built to ensure maximum performance, savings and user-friendliness under a wide range of usage conditions. Before being delivered, the tractor has been carefully inspected, at the factory as well as at the New Holland Dealer so as to ensure it is delivered in perfect conditions. In order to maintain these conditions and ensure a trouble-free operation, it is of utmost importance that the routine inspections, such as those listed in Section 3 of this Manual, be carried out at the specified intervals.

## CLEANING YOUR TRACTOR

Your tractor is a machine, a true work of art, fitted with sophisticated controls. This condition should be considered when washing your tractor, especially if you use high water pressure equipment. Although every precaution has been taken to protect the electronic components and their connections, the pressure under which many washing machines work is such that a complete water resistance cannot be ensured.

- When using high pressure water systems, do not stand too close to it and avoid directing the spray directly onto the electronic components, their connections, vents, sealants, filling caps, etc.
- Never direct a spray of cold water over an engine or exhaust system that are hot.

## SAFETY

Pages VI through XI, inclusive, present guidance that is to be observed aimed at ensuring your safety and that of third parties. Please read the safety guidance and observe their advice **before** working with the tractor.

## SERVICING AFTER THE FIRST 50 HOURS

At the end of this manual, (before the table of contents), you can find the description of the first 50 hours service.

After the first 50 hours of work, bring your tractor, together with this Manual, to your New Holland Dealer in order to have the factory recommended 50 hours inspection carried out, filling out the Section 5 report sheets (pages 1 and 3). The first sheet (page 1), is a copy for the New Holland Dealer to remove after carrying out the inspection. The second sheet (page 3) is your copy and it is proof that the inspection was indeed carried out. **Make sure both copies get signed by you and by the New Holland Dealer.**

## REPLACEMENT PARTS

It should be made clear that the genuine parts have been examined and approved by New Holland. The assembly and/or use of non-genuine parts may bring about negative effects to the tractor's features and, implicitly, affect your safety. New Holland is not liable for any damage which may have been caused by the use of "non-genuine" parts and accessories. Only New Holland replacement parts should be used. The application of "non-genuine" parts may make null any legal approvals related to the tractor.

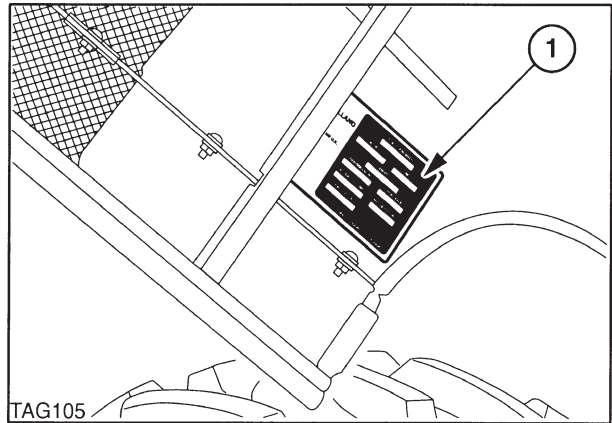
It is forbidden to make any changes to the tractor unless specifically authorized, in writing, by New Holland.

## GUARANTEE

Your tractor is guaranteed under the current legal rights in our country and through contractual agreement with the New Holland Dealer involved in its sale. Nonetheless, no guarantee may be applied if the tractor is not used, adjusted and maintained in accordance with the instructions given in the Operator Manual.

The tractor and its main components are identified by serial numbers and/or production codes. The identification data must be supplied to the New Holland Dealer when wishing to purchase parts or Services and they shall also be needed to help identify your tractor in the case of theft.

The following text points the places for the identification elements.

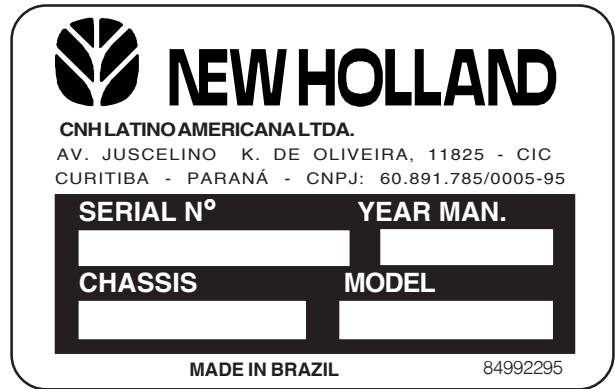


1

**Vehicle Identification Plate – Figures 1 and 2**

The vehicle identification plate is located on the inside right hand side of the hood. See figure 1.

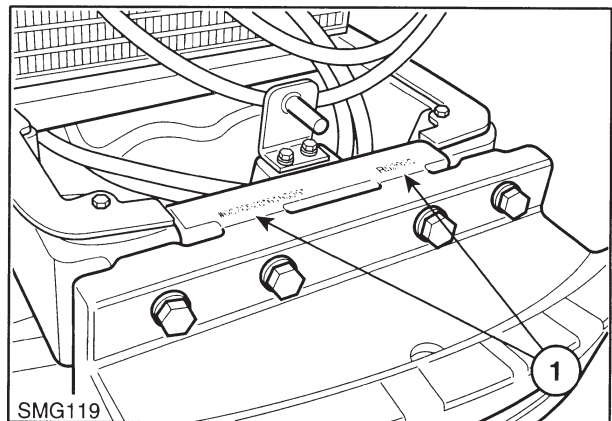
Note down the information on the plate shown in figure 2.



2

**Tractor identification – Figure 3**

The serial number information and the model information are marked onto the top of the front support (1). These numbers are the same as those in the vehicle identification plate shown above.



3

## IMPORTANT ECOLOGICAL CONSIDERATIONS

The soil, the water, and the air make up the vital factors for agriculture and for life in general. Wherever the legislation does not yet condition the treatment of certain substances required by advanced technology, good sense should be the guide as to how to destroy the chemical and petrochemical products.

The following text is of recommendations that may be very useful:

- Get familiarized and make sure you understand the legislation related to these cases applicable in Brazil.
- Whenever there is no legislation, get information from your suppliers about oils, filters, batteries, fuels, anti-freeze, cleaning products, etc. as to their effects on humans and on nature as well as about how to store, use and destroy such substances. The agricultural technicians, in most cases, can help you out with this issue.

### USEFUL SUGGESTIONS

1. Avoid filling up fuel deposits with cans or inadequate fuel delivery systems under pressure, which may originate considerable spillage.
2. As a general rule, avoid skin contact with of all types of fuels, oils, acids, solvents, etc. Most of these products contain substances that may be hazardous to your health.
3. Modern oils contain additives. Do not burn contaminated fuels and/or used oils in normal heating systems.

4. Avoid spillages when draining the oil used in the engine, cooling system, gear box lubricants, hydraulic oil, brake oil, etc. Do not mix brake oils with fuels or lubricants. Store such products with adequate safety until being able to proceed with their destruction correctly and in accordance with the legal requirements and the resources available.

5. The modern substances used in the cooling systems, i.e., anti-freeze and other additives should be replaced every two years. They should not be discarded to the ground, but are to be collected and destroyed within the strictest safety conditions.

6. Do not open the air conditioning system. It contains gasses that must not be released into the atmosphere. Your New Holland Dealer or air conditioner specialist has a special gas extraction unit, followed by recharging the system.

7. Immediately repair any leakage or defect in the engine cooling system or in the hydraulic system.

8. Never increase the pressure of a pressurized circuit for it can originate the explosion of some component.

9. Protect all piping during soldering operations because the sparks may weaken or open holes in them, which can originate the loss of oils, coolants, etc.

### TRACTOR TOW

**IMPORTANT:** *The tractor should only be towed for a short distance, for example, getting out of a building. Never tow it along roads or as a means of haulage.*

Use a tow bar or a strong chain to tow the tractor. When towing it from the rear, only use the tow bar, the tow hook or the 3-point hitch. When towing it from the front, use the tow hook installed on the front weights support. Another person is needed to assist in the operation of steering and braking the tractor.

To avoid damage to the transmission or other components that turn and are not lubricated during towing, please observe the following:

- Only tow the tractor for a short distance.
- Never go faster than 8 km/h (5 MPH).
- If possible, leave the engine running to ensure lubrication and power steering operation.



**PRECAUTION:** *Never tow the tractor at speeds over 8 km/h. The steering works much more slowly and demands a lot more effort when the engine is not running.*



**WARNING:** *Never use cables or ropes to tow the tractor. If the cable or rope splits or slips, they most likely will do it strongly enough to cause serious personal accidents.*

When using a chain, connect it with the open side of the tow hook facing up. If the hook slips, the chain will fall instead of being thrown upwards.

**NOTE:** *If the engine is not running, the front-wheel drive should be coupled, no matter the position of the front-wheel drive control switch.*

### TRACTOR HAULAGE

Haul the tractor with all four wheels atop a trailer or truck.

Fix the tractor firmly to the trailer or truck carrying it.

**IMPORTANT:** *Never place chains around the front-wheel drive transmission shaft, steering cylinder, or other components that may get damaged from the contact with the chains in a situation of greater effort.*

Use the tow bar or the respective support as the fixing point.

**IMPORTANT:** *Cover the silencer outlet to keep the wind from entering and spinning the compressor turbine damaging its bearings.*

*The compressor turbine should be kept from free spinning (without the engine running), because under these circumstances there is no lubrication to the bearings.*

A careful operator is the best operator. Most accidents can be avoided by following some guidelines. To avoid accidents, read and follow the guidelines below **before** driving, working on or servicing the tractor. The equipment should only be used by people who are responsible and skilled to do so.

**WORDS OF PRECAUTION**

Throughout this manual, there is text in Italics preceded by the words **NOTE, ATTENTION, IMPORTANT OBSERVATION, WARNING or DANGER**. Such text has the following meanings:

**Safety of the equipment**

**NOTE:** *This text highlights a correct operation technique or process.*

**ATTENTION:** *This text warns the operator of potential damage to the equipment if certain procedures are not followed.*

**IMPORTANT:** *This text is to inform the operator of anything he may need to know, aimed at avoiding small damages, in case a certain procedure is not followed.*

**Personal Safety**

**CAUTION:** *The word CAUTION is used when some safe behavior, according to the operating and maintenance instructions as well as the common safety practices, will protect the operator and third parties from getting involved in accidents.*

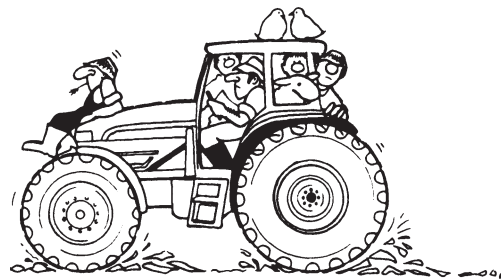
**WARNING:** *The word WARNING denotes the potential presence of a hypothetical accident which may cause serious injury. It is used to warn operators and third parties to be very careful and pay special attention to avoid any freak accidents with the equipment.*

**DANGER:** *The word DANGER denotes a prohibited practice related to a serious accident.*

The non-observation of the CAUTION, WARNING and DANGER instructions may result in serious personal accidents or even death.

**THE TRACTOR**

1. Read the Operator Manual carefully before starting to use the tractor. A lack of knowledge regarding the way it works may result in accidents.
2. Only adequately trained and qualified people should be authorized to work on the tractor.
3. To avoid falling, use the handrails and steps to get on or off the tractor. Always keep the steps and platform free of dirt and mud.
4. Replace all the safety decals which are missing, unreadable or damaged.
5. Keep the safety decals free of dirt.



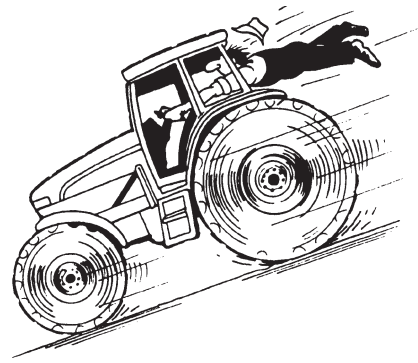
6. Do not allow anyone but the operator onto the tractor, unless there is a passenger seat available. There is no other place that is safe for passengers, other than the seat.
7. Keeping children away, whatever the circumstances, from the tractor and any other agricultural equipment.
8. Do not, nor allow anyone to, modify or alter the tractor or any of its components or any of its functions, without first consulting your New Holland Dealer.
9. Install all the guards before starting the engine or using the tractor.

**DRIVING THE TRACTOR**

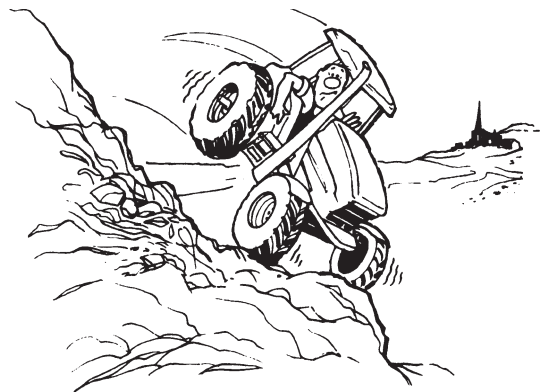
1. Always take the driver seat to run the tractor or to drive it.
2. When driving on public roads, please take into consideration the other users. Pull to the right whenever there is another vehicle wishing to pass. Never exceed the maximum speed established for tractors.
3. Use a turning signal when driving in public roads, which is to warn that your vehicle is conditioned to low speeds, which may represent an eventual cause for accidents.
4. When crossing another vehicle, dip your headlights at night. Check whether your headlights are focused to avoid causing problems to other drivers of oncoming traffic.
5. Reduce your speed before turning around or applying the brakes. Check whether the brake pedals are linked whenever driving on roads at the permitted speeds. Brake both wheels simultaneously if you need to stop in an emergency.



6. Take the utmost care and avoid applying the tractor brakes too strongly, especially when towing heavy loads at cruising speed.
7. Any tow truck whose total weight exceeds that of the tractor towing it should be fitted with brakes for a safe driving.



8. When driving downhill, put the tractor in the same gear that would be needed to climb it. Never drive downhill in neutral.
9. Never apply the differential lock when making curves. When activated, this system stops the tractor from going round curves.
10. Always check the head rooms, especially when hauling the tractor. Watch carefully where you drive, especially low down in valleys, on roads and when going past low obstacles.
11. To keep the tractor from rolling over, drive carefully at speeds compatible with safety, especially when working on rough terrain, when crossing ditches and going round tight curves.



12. Be most careful when you have to be working on very steep hills.
13. If the tractor gets stuck in the mud or the tires "bind" to frozen soil, reverse gears to avoid that the unit rolls over.



**OPERATE WITH THE TRACTOR**

1. Before setting the tractor in movement, apply the parking brake, place the Power Take Off lever in neutral ("OFF"), the lift control lever in the lowering position, the remote valves levers in neutral and the transmission levers also in neutral.

2. Do not set the tractor in movement or activate any controls while standing next to the tractor. Always take the driver seat when carrying out any of these operations.

3. Do not directly connect the starter switches in neutral of the transmission and the Power Take Off. See your New Holland Dealer if these switches present any fault. Use connection cables only as indicated. The wrong use might make set the tractor working unexpectedly.

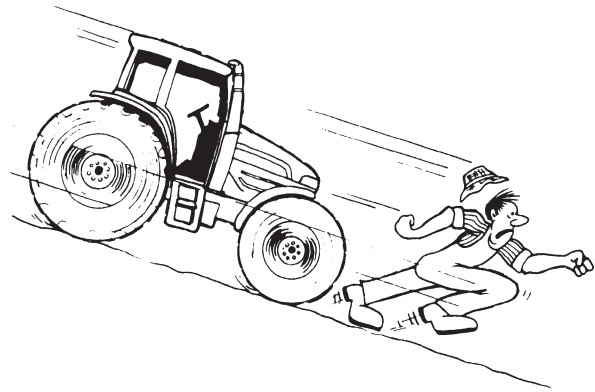


4. Avoid accidental contact with the gearshift levers whenever the engine is running. Such contact might result in an unexpected movement of the tractor.

5. Never get off the tractor while it is moving.

6. If the hydrostatic steering or the engine stop working, cut off the engine immediately before it becomes more difficult to control.

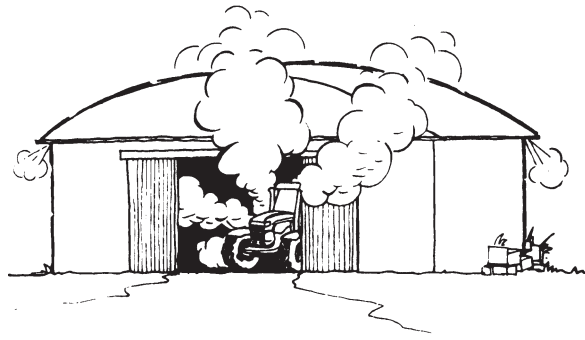
7. Before leaving the tractor, park it on a horizontal surface, apply the parking brakes, lower any implement that may be coupled to the ground turn off the PTO and cut the engine.



8. Never park the tractor on a slope.

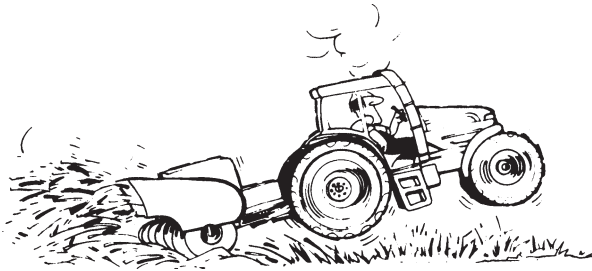
9. The tractor has been designed to ensure minimum noise to the operator which corresponds to or exceeds the applicable standards in this respect. Nonetheless, the noise (sound level pressure) at the place of work may be in excess of 85 dB (A) when working in urban zones or in restricted areas. Thus, it is recommended that all operators make use of the adequate ear protection equipment when working in conditions of high levels of noise.

10. Never leave the tractor engine running in an enclosed, not adequately ventilated area. The exhaust gases are toxic and may cause death



11. Only tow using the tow hook, the swinging draw bar or the hydraulic lift bars with it in the lower position. Only make use of a draw bar lock which is firmly in place Towing from the rear axle or any point higher than this may cause the tractor to roll over.

12. Always select the Constant Depth when coupling implements and when hauling implements. Check whether the hydraulic couplings are duly mounted and that they can safely be turned off, in the case of an accidental disconnection of the implements.



13. If the front end of the tractor tends to lift easily when there are heavy implements coupled to the 3-point hitch, add counter weights to the front end or to the front tires. Never work with the tractor when its front end is too light.

14. Check whether any equipment or accessories connected to the tractor are properly fixed, whether they are approved for use with the tractor, whether they do not overload it and are used and maintained according to each manufacturer's recommendations.

15. Remember, if your tractor is not used adequately within its capacities it can become dangerous for the operator and for third parties. Never overload or work with towed equipment which is unsafe, and that has not been designed for given job or which may be subject to inadequate maintenance.

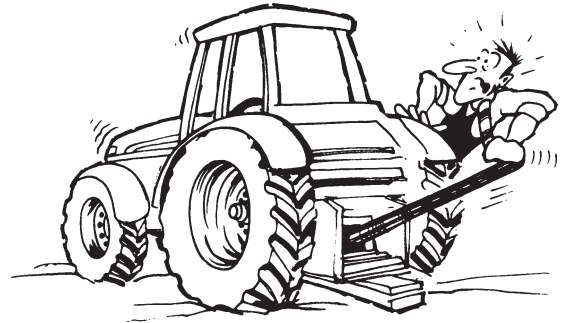
16. Never leave the implements in a raised position whenever the tractor is stopped or without the operator.

17. Never drive equipment close to fire.

18. Always wear a protection mask when spraying toxic chemicals. Follow the instructions on the container of the product being used.

### **WORKING WITH THE POWER TAKE OFF**

1. When working with PTO driven equipment, cut the engine, disengage the PTO and wait for it to stop before leaving the tractor and uncouple the implement.



2. Do not wear loose clothes when working with the PTO or, especially, when standing close to revolving equipment.

3. When working with stationary equipment driven by the PTO, always apply the parking brakes and wedge the rear wheels, in the front and in the back.



4. To avoid injury, do not clean, make adjustments, clear or repair any PTO driven equipment while the engine is running. Check whether the PTO is off.

5. Check whether the PTO guard is permanently in position and place the cap on the PTO shaft when not in use.

**TRACTOR MAINTENANCE**



1. The cooling system works under pressure, which is controlled by the cap in the header tank. Removal of the cap is very dangerous when the system is hot. Always turn the cap slowly up to the first stop and allow the pressure to be escape before completely removing the cap. Never remove the cap located at the top of the radiator, unless the header tank cap has been removed previously.

2. Keep the tractor and equipment, especially brakes and steering, in reliable and satisfactory conditions in order to ensure your safety and to comply with legal requirements.

3. To avoid fire or explosion, never place open flames close to the battery or the system for cold starting. To avoid sparks that may cause explosions, use the booster cables according to instructions.

4. Never attempt to repair the air conditioning system. There is the possibility of serious burns from freezing or injury from coolant escaping. For such servicing special equipment and instruments are needed. See your New Holland Dealer about this subject.

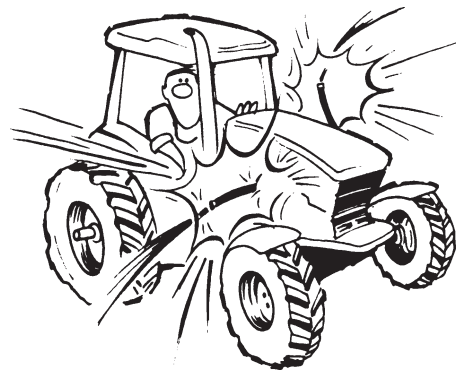
5. Cut off the engine before carrying out any servicing on the tractor.

6. The hydraulic oil and the diesel fuel in the injection system work under very high pressures. The hydraulic oil as well as the diesel fuel under pressure may penetrate the skin, causing serious injury. People who are not adequately skilled for such must never remove or adjust the injection pump, the injectors, sprayers or any other injection system or hydraulic system element. The non-observance of these instructions may bring about serious health problems.

- Do **not** use your hands to check for leaks. Use a piece of cardboard for such.

- Cut off the engine and relieve the pressure before connecting or disconnecting any pipes.

- Tighten all the connections before starting the engine or pressurizing the pipes.



- If these products are injected into the skin, seek medical advice immediately for gangrene.

7. Prolonged and continuous contact with burnt oil from the engine may cause some forms of skin cancer. Avoid prolonged contact with used engine oil. Wash your hands with soap and water immediately.

8. Keep the equipment clean and properly assisted.

9. Destroy all the drained oils and fluids as well as filters observing all the recommendations referring to the protection of the environment.

10. The tractor wheels are very heavy. Work with care in order to ensure that, when they are stored, there is no possibility of them toppling over and causing personal accidents.

**DIESEL**

1. Under no circumstances should gasoline, alcohol or other fuel combinations be mixed with the diesel. Such combinations may generate a higher risk of explosions or fire. Within a closed vessel, such as a fuel deposit, these mixtures are much more explosive than pure gasoline. Never use these mixtures.
2. Never open the fuel tank or refuel your tractor with the engine running or which is very hot.



3. Do not smoke while refueling your tractor or when standing close to fuels. Do not approach any kind of flame.
4. Always keep the hose under control while filling the tank.
5. Do not fill the deposit to its full capacity. Only fill up to the lower part of the filling spout in order to allow for space for fuel expansion.
6. After refueling, immediately wash any spilt fuel.
7. Apply and tighten firmly the fuel tank cap.

8. If the original cap gets lost, replace it for another one of an approved model. A non approved one might not be safe.
9. Never use diesel as a cleaning agent.
10. Program your purchase of fuels so that the diesel of the summer type is not left over to be used in winter.

**CAB OR SAFETY ARCH**

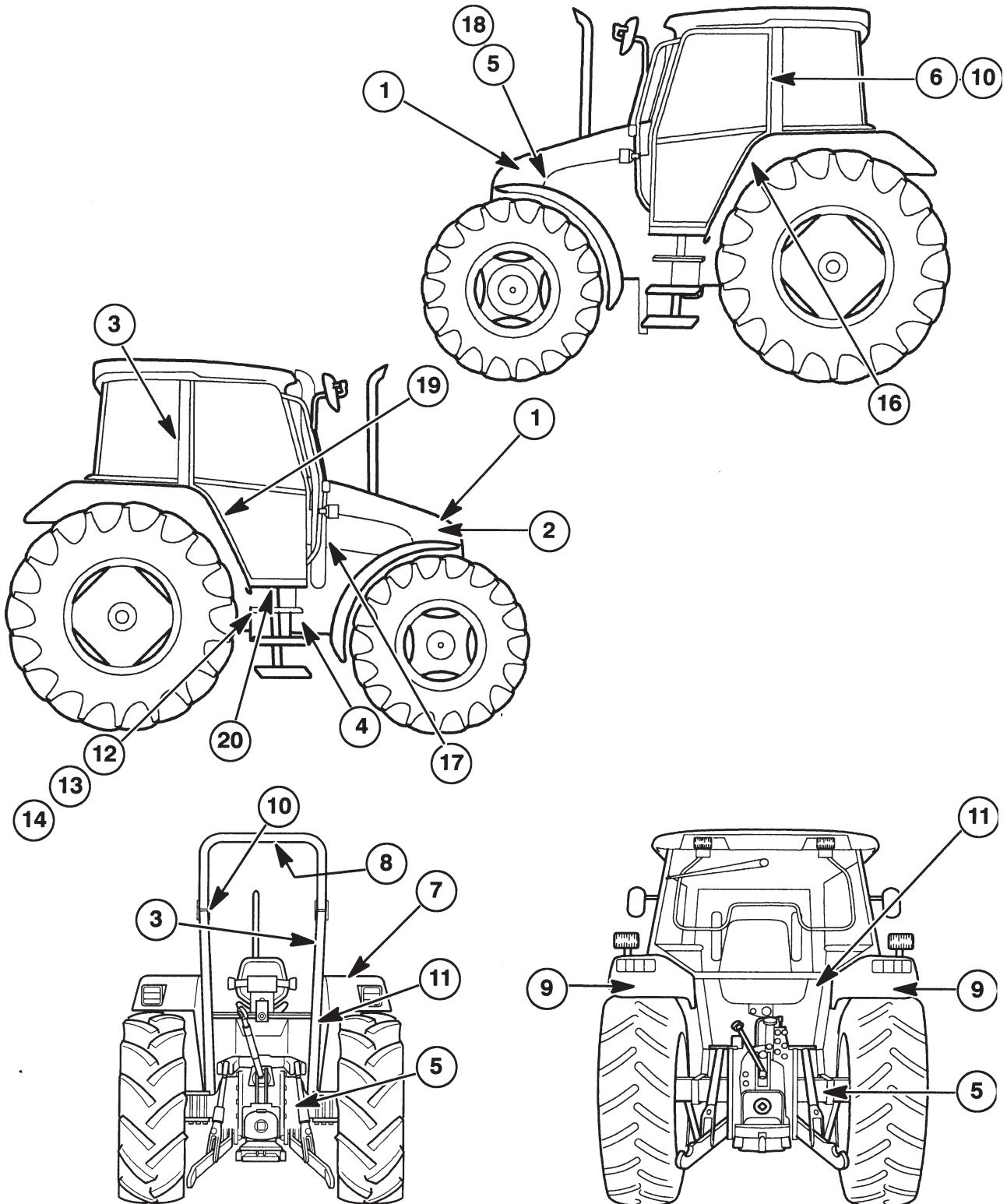
Your tractor is equipped with a cab or ROPS protection arch, which should always be maintained in good conditions of use. Take the necessary precautions when going past gates or working inside small spaces with low headroom.

1. Do not modify, drill, weld or alter the cab or safety arch in any way. By doing so, you become liable before Brazilian Law.
2. Never attempt to straighten or weld any part of the cab or main arch or the supports that may have been damaged in an accident. By doing so the structure might be weakened and place your safety at risk.
3. Never fix any parts of the main structure or connect the cab or main arch with bolts and nuts other than the special, high resistance appropriately specified ones.
4. Never connect chains or ropes to the main structure in order to do any towing.
5. Never run unnecessary risks, even though the cab or safety arch offer you the maximum protection possible.

Whenever you see this symbol  it means: **ATTENTION !**

**BE ALERT ! YOUR SAFETY IS AT STAKE !**

The decals shown in the following pages have been applied to your tractor in the positions shown in the illustrations below. Their intention is to safeguard your safety as well as that of people working with you. Please carry this Manual and walk around your tractor recording the location of the decal as well as their meaning. Review the decals and their instructions described in this Manual. Always keep them readable and clean. In case they are damaged or unreadable, order other ones from your New Holland Dealer.



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