

## **IMPORTANT**

***Carefully read and understand this instruction manual before using the lift truck.***

***It contains all information relating to operation, handling and lift truck equipment,  
as well as important recommendations to be followed.***

***This document also contains precautions for use, as well as information on the servicing and routine maintenance required  
to ensure the lift truck's continued safety of use and reliability.***

**WHENEVER YOU SEE THIS SYMBOL IT MEANS:**



**WARNING ! BE CAREFUL ! YOUR SAFETY OR THE SAFETY OF THE LIFT TRUCK IS AT RISK.**

- This manual has been produced on the basis of the equipment list and the technical characteristics given at the time of its design.
- The level of equipment of the lift truck depends on the options chosen and the country of sale.
- According to the lift truck options and the date of sale, certain items of equipment/functions described herein may not be available.
- Descriptions and figures are non binding.
- MANITOU reserves the right to change its models and their equipment without being required to update this manual.
- The MANITOU network, consisting exclusively of qualified professionals, is at your disposal to answer all your questions.
- This manual is an integral part of the lift truck.
- It is to be kept in its storage space at all times for ease of reference.
- Hand this manual to the new owner if the lift truck is resold.

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## 1 - OPERATING AND SAFETY INSTRUCTIONS

## 2 - DESCRIPTION

## 3 - MAINTENANCE

## 4 - OPTIONAL ADAPTABLE ATTACHMENTS FOR THE RANGE



# **1 - OPERATING AND SAFETY INSTRUCTIONS**



## ASSISTANCE | 23 SIMPLE TIPS

The Manitou Group wishes to assist you in reducing the consumption of the machines to help you reduce your carbon footprint.



Choose a machine with an appropriate power rating for your needs.



Switch off your engine after running at idle for more than 3 minutes.



Optimum engine efficiency is achieved at the maximum torque engine speed.



Preferably use a fan control and reversal system.



Favor "smart" electronically-managed transmissions.



Use the air-conditioning with windows and doors closed.



Preferably use LED headlights.



Adapt the type of tire to your environment.



Ensure that your tires are inflated to the correct pressure.



Check the parking brake adjustment.

### Preferably use manufacturer-recommended attachments



Check the general condition of your trailer.



Adapt your maximum towable load.



Use the attachments that are suitable for your machine.



Check the hydraulic adjustment of your attachments.



Observe the maintenance periods.



Regularly clean the radiator, the air filter, etc.



Lubricate regularly.



Preferably buy through a manufacturer-approved dealer.



Favor OEM parts.



Study the manufacturers' maintenance contracts.



You can follow eco-driving courses.



Demand to know the consumption and emissions of the machines.



Calculate your consumption and emissions at [reduce.manitou.com](http://reduce.manitou.com)

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**IF THE LIFT TRUCK IS NOT TO BE USED FOR A LONG TIME**

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# INSTRUCTIONS TO THE COMPANY MANAGER

## THE SITE

Proper management of lift truck's area of travel will reduce the risk of accidents:

- ground not unnecessarily uneven or obstructed,
- no excessive slopes,
- pedestrian traffic controlled, etc.

## THE OPERATOR

- Only qualified, authorized personnel can use the lift truck. This authorization is given in writing by the competent manager in the establishment for the use of lift trucks and must be carried permanently by the operator.

### ▲ IMPORTANT ▲

*Experience has shown that there are a number of inappropriate ways in which the lift truck might be used. Such foreseeable misuse, of which the main examples are listed below, is strictly forbidden.*

- *The foreseeable abnormal behavior resulting from ordinary negligence, but not from any intentional misuse of the equipment.*
- *The reflex reactions of a person in the event of a malfunction, incident, fault, etc. during operation of the lift truck.*
- *Behavior resulting from application of the "principle of least effort" when performing a task.*

- *For certain machines, the foreseeable behavior of such persons as: apprentices, teenagers, handicapped persons, trainees tempted to drive a lift truck, operators tempted to operate the lift truck to win a bet, in competition or for their own personal experience.*

*The person in charge of the equipment must take these criteria into account when assessing whether or not a person will make a suitable driver.*

## THE LIFT TRUCK

### A - SUITABILITY OF THE LIFT TRUCK FOR THE JOB

- MANITOU has ensured that this lift truck is suitable for use under the standard operating conditions defined in this operator's manual, with a **STATIC TEST COEFFICIENT 1.25** and a **DYNAMIC TEST COEFFICIENT OF 1**, as specified in harmonized standard **EN 1459** for mast trucks.
- Before commissioning, the company manager must make sure that the lift truck is appropriate for the work to be done, and perform certain tests (in accordance with current legislation).

### B - ADAPTATION OF THE LIFT TRUCK TO STANDARD ENVIRONMENTAL CONDITIONS

- Our lift trucks are designed to be used within a temperature range of -18 °C to +43 °C.
- In addition to standard equipment mounted on your lift truck, many options are available, such as: road lighting, brake lights, rotating beacon light, reversing lights, reversing sound alarm, front working light, rear working light, boom head working light, etc. (according to the lift truck model).
- The operator must take into account the operating conditions to specify the lift truck's signaling and lighting equipment. Consult your dealer.
- Take into account the weather and atmospheric conditions of the site in use.
  - Protection against frost (§ 3 - MAINTENANCE: LUBRICANTS AND FUEL).
  - Adaptation of lubricants (ask your dealer for information).
  - Engine filtration (§ 3 - MAINTENANCE: FILTER CARTRIDGES AND BELTS).

### ▲ IMPORTANT ▲

*For operation under average climatic conditions, i.e. between -15 °C and +35 °C, the lubricants are filled in the factory.*

*For operation under more severe climatic conditions, before starting up, it is necessary to drain all the circuits, then ensure correct levels of lubricants using lubricants properly suited to the relevant ambient temperatures.*

*The same applies to the coolant.*

- Take into account the fire risk associated with use in dusty and flammable conditions (e.g. straw, flour, sawdust, organic waste, etc.).
- MANITOU recommends fitting your lift truck with an individual fire extinguisher to neutralize any fire as soon as it starts. Solutions exist, consult your dealer.

### ▲ IMPORTANT ▲

*Your lift truck is designed for outdoor use under normal atmospheric conditions and indoor use in suitably aerated and ventilated premises. For use in very dusty atmospheres (flour, sawdust), solutions are available. Consult your dealer.*

*It is prohibited to use the lift truck in areas where there is a risk of fire or which are potentially explosive (e.g. refineries, fuel or gas depots, stores of flammable products, etc.).*

*For use in these areas, specific equipment is available (ask your dealer for information).*

- Our lift trucks comply with Directive 2004/108/EC concerning electromagnetic compatibility (EMC), and with the corresponding harmonized standard EN 12895. Their correct operation is no longer guaranteed if they are used within areas in which the electromagnetic fields exceed the limit specified by this standard (10 V/m).

- Directive 2002/44/EC requires company managers to not expose their employees to excessive vibration doses. There is no recognized code of measurement for comparing the machines of different manufacturers. The actual doses received cannot therefore be measured under actual operating conditions at the user's premises.
- The following are some tips for minimizing these vibration doses:
  - Select the most suitable lift truck and attachment for the intended use.
  - Adapt the seat adjustment to the operator's weight (according to lift truck model) and maintain it in good condition, as well as the cab suspensions. Inflate the tires in accordance with recommendations.
  - The seat is an essential way of reducing the vibrations transmitted to the operator. In the event of seat replacement, please contact MANITOU.
  - Ensure that the operators adapt their operating speed to suit the conditions on site.
  - As far as possible, arrange the site in such a way as to provide a flat running surface and remove obstacles and harmful potholes.

## C - MODIFICATION OF THE LIFT TRUCK

- For your safety and that of others, you must not change the structure and settings of the various components used in your lift truck (hydraulic pressure, calibrating limiters, engine speed, addition of extra equipment, addition of counterweight, unapproved attachments, alarm systems, etc.) yourself. In this event, the manufacturer cannot be held responsible.

## D - FRENCH ROAD TRAFFIC RULES

(or see current legislation in other countries)

- Only one EC declaration of conformity is issued. It must be kept in a safe place.
- The road traffic rules of lift trucks are subject to the provisions of the highway code, according to the following categories:
  - Construction-type trucks (MT range): public works vehicle not predominantly for use on roads (point 6.9 of Article R311-1 of the French Highway Code). The truck must have a 25 disc displayed on the rear of the vehicle and an operating license plate.
  - Agricultural-type trucks (MLT range) that are non-EC type approved tractors: (point 6.2 of Article R311/1 of the French Highway Code). The truck must be fitted with an operating license plate.
  - Agricultural-type trucks (MLT range) that are EC type approved tractors: agricultural tractor type T1a (point 5.1.1 of Article R311/1 of the French Highway Code). The truck must be registered.

## SPECIAL INSTRUCTION APPLYING TO "EC TRACTOR" TYPE-APPROVED LIFT TRUCKS

- All EC tractor type-approved lift trucks are supplied with an "EC tractor" certificate complying with directive 2003/37/EC, to be retained by the owner, and a page of administrative details together with a CNIT number (national type approval code) for registration at the prefecture.
- The lift truck owner is responsible for carrying out the necessary procedures for obtaining the vehicle registration document within the time limit defined by the regulations.
- The operator must hold a category B driver's license, unless granted an exemption.
- The lift truck must be driven on the public highway in accordance with the instructions given in the manual supplied with the lift truck (Gross weight, Gross combination weight, towing load, axle loads, maximum speeds, etc. according to type/version). The operator must be in possession of the lift truck's registration document.

### **A IMPORTANT A**

*When towing a trailer or agricultural equipment, the traveling speed of the lift truck is limited to 25 km/h.*

*In this case, a "25" disc must be affixed to the rear of the convoy.*

## E - LIFT TRUCK CAB PROTECTION

- All lift trucks comply with the requirements of ISO 3471 (wheel loader code) regarding cab rollover protection (ROPS) and ISO 3449 (Level II) regarding the protection of the cab against falling objects (FOPS).
- "EC TRACTOR" type-approved lift trucks comply, in addition, with Directive 79/622/EC (OECD Code 4) regarding cab rollover protection (ROPS).

### **A IMPORTANT A**

*Structural damage or overturning, a modification, changes or a poorly executed repair can reduce the protective efficiency of the cab, canceling its compliance.*

*Do not perform welding or drilling on the cab structure.*

*Consult your dealer to determine the limits of this structure without canceling its compliance.*

## **INSTRUCTIONS**

- The operator's manual must always be in good condition and kept in the place provided on the lift truck and in the language used by the operator.
- The operator's manual and any plates or stickers which are no longer legible or are damaged, must be replaced immediately.

## **MAINTENANCE**

- Maintenance or repairs other than those detailed in part: 3 - MAINTENANCE must be carried out by qualified personnel (consult your dealer) and in the necessary safety conditions to preserve the health of the operator and any third party.

### **▲ IMPORTANT ▲**

*Your lift truck must be inspected periodically to ensure that it remains in compliance.*

*The frequency of this inspection is defined by current legislation in the country in which the lift truck is used.*

- Example for France "The manager in charge of the establishment using a lift truck must open and maintain a maintenance log for each machine (order of 2 March 2004) and undergo a general periodic inspection every 6 months (order of 1 March 2004)".



# INSTRUCTIONS FOR THE OPERATOR

## INTRODUCTION

### **▲ IMPORTANT ▲**

*The risk of accident while using, servicing or repairing your lift truck can be reduced if you follow the safety instructions and preventive measures detailed in these instructions.*

*Failure to comply with the safety instructions and instructions for the use, repair or servicing of your lift truck may result in serious or even fatal accidents.*

- Only the operations and maneuvers described in these operator's manual must be performed. The manufacturer cannot predict all possible risky situations. Consequently, the safety instructions given in the operator's manual and on the lift truck itself are not exhaustive.
- At any time, as an operator, you must envisage, within reason, the possible risk to yourself, to others or to the lift truck itself when you use it.

### **▲ IMPORTANT ▲**

*In order to reduce or prevent any danger with a MANITOU-approved attachment, follow the instructions in paragraph: 4 - OPTIONAL ADAPTABLE ATTACHMENTS FOR THE RANGE: INTRODUCTION.*

## GENERAL INSTRUCTIONS

### A - OPERATOR'S MANUAL

- Read the operator's manual carefully.
- The operator's manual must always be in good condition and in the place provided for it on the lift truck.
- You must report any plates and stickers which are no longer legible or which are damaged.

### B - AUTHORIZATION FOR USE IN FRANCE

*(or see current legislation in other countries).*

- Only qualified, authorized personnel can use the lift truck. This authorization is given in writing by the appropriate person in the establishment where the lift truck is to be used and must be carried permanently by the operator.
- The operator is not competent to authorize the driving of the lift truck by another person.

### C - MAINTENANCE

- The operator must immediately advise his superior if his lift truck is not in good working order or does not comply with the safety notice.
- The operator is prohibited from carrying out any repairs or adjustments himself, unless he has been trained for this purpose. He must keep the lift truck properly cleaned if this is among his responsibilities.
- The operator is responsible for carrying out daily maintenance (⇒ 3 - MAINTENANCE).
- The operator is responsible for deciding and adjusting the frequency of cleaning needed to prevent the risk of fire ensuing from the build-up of flammable material(s). The operator should pay special attention to all the areas of the lift truck where these high-risk materials are likely to accumulate (e.g. engine compartment, under the boom, above the axles, etc.).

### D - TIRES

- The operator must ensure tires are suitable for the nature of the ground (see contact surface with the ground for the tires in the chapter: 2 - DESCRIPTION: TIRES). Optional solutions are available, please consult your dealer.
  - SAND tires.
  - FARM tires.
  - Snow chains.
- The lift truck's four tires must be the same brand and the same usage category (normal, snow or special), have the same structure (radial or diagonal) and have the same degree of tread wear.
- In the event of tire replacement, use tires authorized by MANITOU that are the same type and dimensions. Using different tires voids the lift truck's type approval and you may be liable.
- If you are replacing just one of the lift truck's tires (e.g. because it is damaged), we recommend choosing a tire with the same degree of wear as the remaining tires so as not to damage the transmission's kinematic chain.

### **▲ IMPORTANT ▲**

*Do not use the lift truck if the tires are incorrectly inflated, damaged or excessively worn, because this could put your own safety or that of others at risk, or cause damage to the lift truck itself.*

*The fitting of foam inflated tires is prohibited and is not guaranteed by the manufacturer unless with prior authorization.*

## E - MODIFICATION OF THE LIFT TRUCK

- For your safety and that of others, you must not change the structure and settings of the various components used in your lift truck (hydraulic pressure, calibrating limiters, engine speed, addition of extra equipment, addition of counterweight, unapproved attachments, alarm systems, etc.) yourself. In this event, the manufacturer cannot be held responsible.

## F - LIFTING PEOPLE

- The use of working equipment and load lifting attachments to lift people is:
  - either forbidden
  - or authorized exceptionally and under certain conditions (⚠ regulations in force in the country in which the lift truck is used).
- The pictogram posted at the operator station reminds you that:
  - Left-hand column
    - It is forbidden to lift people, with any kind of attachment, using a non PLATFORM-fitted lift truck.
  - Right-hand column
    - With a PLATFORM-fitted lift truck, people can only be lifted using platforms designed by MANITOU for the purpose.
- MANITOU sells equipment specifically designed for lifting people (OPTION PLATFORM lift truck, contact your dealer).



### A - BEFORE STARTING THE LIFT TRUCK

- Perform the daily maintenance operations (⇒ 3 - MAINTENANCE).
- Make sure that the driver's cab is clean, particularly the floor and floor mat. Check that no movable object may hinder the operation of the lift truck.
- Make sure the lights, indicators and windscreen wipers are working properly.
- Make sure the rear view mirrors are in good condition, clean and properly adjusted.
- Make sure the horn works.

### B - AVAILABLE IN THE DRIVER'S CAB

- Whatever his experience, the operator is advised to familiarize himself with the position and operation of all the controls and instruments before operating the lift truck.
- Wear clothes suited for driving the lift truck, avoid loose clothes.
- Make sure you have the appropriate protective equipment for the task to be performed.
- Prolonged exposure to high noise levels may cause hearing problems. It is recommended to wear ear muffs to protect against excessive noise.
- Always face the driver's cab access when getting in and out of the lift truck and use the handle(s) provided for this purpose. Do not jump out of the lift truck to get down.
- Always pay attention when using the lift truck. Do not listen to the radio or music using headphones or earphones.
- Never operate the lift truck when hands or feet are wet or soiled with greasy substances.
- For increased comfort, adjust the seat to your requirements and adopt the correct position in the driver's cab.

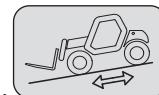
#### **▲ IMPORTANT ▲**

*Under no circumstances must the seat be adjusted while the lift truck is moving.*

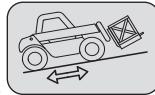
- The operator must always be in his normal position in the driver's cab. It is prohibited to have arms or legs, or generally any part of the body, protruding from the driver's cab of the lift truck.
- The safety belt must be worn and adjusted to the operator's size.
- The control units must never be used for any other than their intended purposes (e.g. climbing onto or down from the lift truck, coat hanger, etc.).
- If the control components are fitted with a forced operation (lever lock) device, it is forbidden to leave the cab without first putting these controls in neutral.
- It is prohibited to carry passengers either on the lift truck or in the driver's cab.

### C - ENVIRONMENT

- Comply with site safety regulations.
- If you have to use the lift truck in a dark area or at night, make sure it is equipped with working lights.
- During handling operations, make sure that no one is in the way of the lift truck and its load.
- Do not allow anybody to come near the working area of the lift truck or pass beneath an elevated load.
- When using the lift truck on a transverse slope, before lifting the boom observe the instructions given in the paragraph: INSTRUCTIONS FOR HANDLING A LOAD: D - TRANSVERSE ATTITUDE OF THE LIFT TRUCK.
- Traveling on a longitudinal slope:
  - Drive and brake gently.



- Moving without load: Forks or attachment facing downhill.



- Moving with load: Forks or attachment facing uphill.

- Take into account the lift truck's dimensions and its load before trying to negotiate a narrow or low passageway.
- Never move onto a load bridge without having first checked:
  - That it is suitably positioned and made fast.
  - That the unit to which it is connected (wagon, truck, etc.) will not shift.
  - That this platform is prescribed for the total weight of the lift truck to be loaded.
  - That this platform is prescribed for the size of the lift truck.
- Never move onto a foot bridge, floor or freight lift, without being certain that they are prescribed for the weight and size of the lift truck to be loaded and without having checked that they are in sound working order.
- Be careful in the area of loading bays, trenches, scaffolding, soft ground and manholes.
- Make sure the ground is stable and firm under the wheels and/or stabilizers before lifting or removing the load. If necessary, add sufficient wedging under the stabilizers.
- Make sure that the scaffolding, loading platform, pilings or ground is capable of bearing the load.
- Never stack loads on uneven ground, they may tip over.

**▲ IMPORTANT ▲**

*If the load or the attachment must remain above a structure for a prolonged period of time, there is the risk that it will bear on the structure as the boom descends due to cooling of the oil in the cylinders.*

*To eliminate this risk:*

- Regularly check the distance between the load or the attachment and the structure and readjust this if necessary.*
- If possible, use the lift truck with the oil temperature as close as possible to ambient temperature.*

- When working near aerial lines, ensure that the safety distance is sufficient between the working area of the lift truck and the aerial line.

**▲ IMPORTANT ▲**

*You must consult your local electrical agency.*

*You could be electrocuted or seriously injured if you operate or park the lift truck too close to power cables.*

*In the event of high winds, do not carry out handling work that jeopardizes the stability of the lift truck and its load, particularly if the load catches the wind badly.*

- Prevent the fire risk associated with use in dusty and flammable conditions (e.g. straw, flour, sawdust, organic waste, etc.).

## D - VISIBILITY

- The safety of people within the lift truck's working area, as well as that of the lift truck itself and the operator are depend on good operator visibility of the lift truck's immediate vicinity in all situations and at all times.
- This lift truck has been designed to allow good operator visibility (direct or indirect by means of rear-view mirrors) of the immediate vicinity of the lift truck during running operations, unladen and boom in the transport position.
- Special precautions must be taken if the size of the load restricts visibility towards the front:
  - moving in reverse,
  - site layout,
  - assisted by a person directing the maneuver (while standing outside the truck's area of travel), making sure to keep this person clearly in view at all times,
  - in any case, avoid reversing over long distances.
- Certain special attachments may require the truck to travel with the boom in the raised position. In such cases, visibility on the right hand side is restricted, and special precautions must be taken:
  - site layout,
  - assisted by a person directing the maneuver (while standing outside the truck's area of travel).
  - replacement of a suspended load by a load on a pallet.
- If visibility of your road is inadequate, ask someone to assist by directing the maneuver (while standing outside the truck's area of travel), making sure to keep this person clearly in view at all times.
- Keep all components affecting visibility in a clean, properly adjusted state and in good working order (e.g. windscreens, windows, windscreen wipers, windscreen washers, driving and work lights, rear-view mirrors).

## E - STARTING THE LIFT TRUCK

### SAFETY INSTRUCTIONS

#### **▲ IMPORTANT ▲**

***The lift truck must only be started up or maneuvered when the operator is sitting in the driver's cab, with his seat belt adjusted and fastened.***

- Never try to start the lift truck by pushing or pulling it. Such an operation may cause severe damage to the transmission. If necessary, towing requires the transmission to be put in neutral (§ 3 - MAINTENANCE).
- If using an emergency battery for start-up, use a battery with the same characteristics and respect battery polarity when connecting it. Connect at first the positive terminals before the negative terminals.

#### **▲ IMPORTANT ▲**

***Failure to respect polarity between batteries can cause serious damage to the electrical circuit.***

***The electrolyte in the battery may produce an explosive gas. Avoid flames and generation of sparks close to the batteries.***

***Never disconnect a battery while it is charging.***

### INSTRUCTIONS

- Check the closing and locking of the hood(s).
- Check that the cab door is closed.
- Check that the forward/reverse selector is in neutral, and that the parking brake is engaged.
- Firmly press the brake pedal and hold in position and hold it down.
- Turn the ignition key to the position I to activate the electrical and preheat system.
- Whenever you switch on the lift truck, perform the automatic check on the longitudinal stability limiter and warning device (§ 2 - DESCRIPTION: INSTRUMENTS AND CONTROLS). Do not use a lift truck that is non-compliant.
- Check the fuel level on the indicator.
- Turn the ignition key fully, the engine should then start. Release the ignition key and let the engine run at idle.
- Do not engage the starter motor for more than 15 seconds and carry out the preheating between unsuccessful attempts.
- Make sure all the signal lights on the control instrument panel are off.
- Check all control instruments when the engine is warm and at regular intervals during use, so as to quickly detect any faults and to be able to correct them without any delay.
- If an instrument does not show the correct display, stop the engine and immediately carry out the necessary operations.

## F - DRIVING THE LIFT TRUCK

### SAFETY INSTRUCTIONS

#### **▲ IMPORTANT ▲**

***Operators' attention is drawn to the risks involved in using the lift truck, in particular:***

***- Risk of losing control.***

***- Risk of losing lateral and frontal stability of the lift truck.***

***The operator must remain in control of the lift truck.***

***In the event of the lift truck overturning, do not try to leave the cabin during the incident.***

***YOUR BEST PROTECTION IS TO STAY FASTENED IN THE CABIN.***

- Observe the company's traffic regulations or, by default, the public highway code.
- Do not carry out operations which exceed the capacities of your lift truck or attachments.
- Always drive the lift truck with the forks or attachment to the transport position, i.e. at 300 mm from the ground, the boom retracted and the carriage sloping backwards.
- Only carry loads which are balanced and properly anchored to avoid any risk of a load falling off.
- Ensure that pallets, cases, etc. are in good order and suitable for the load to be lifted.
- Familiarize yourself with the lift truck on the terrain where it will be used.
- Ensure that the service brakes are working properly.
- The loaded lift truck must not travel at speeds in excess of 12 km/h.
- Drive smoothly at an appropriate speed for the operating conditions (land configuration, load on the lift truck).
- Do not use the hydraulic boom controls when the lift truck is moving.
- Never change the steering mode whilst driving.
- Do not maneuver the lift truck with the boom in the raised position unless under exceptional circumstances and then with extreme caution, at very low speed and using gentle braking. Ensure that visibility is adequate.
- Take bends slowly.
- In all circumstances make sure you are in control of your speed.
- On damp, slippery or uneven terrain, drive slowly.
- Brake gently, never abruptly.
- Only use the lift truck's forward/reverse selector from a stationary position and never do so abruptly.
- Do not drive with your foot on the brake pedal.
- Always remember that hydrostatic type steering is extremely sensitive to movement of the steering wheel, so turn it gently and not jerkily.
- Never leave the engine on when the lift truck is unattended.
- Do not leave the cab when the lift truck has a raised load.
- Look where you are going and always make sure you have good visibility along the route.

- Use the rear-view mirrors frequently.
- Drive round obstacles.
- Never drive on the edge of a ditch or steep slope.
- It is dangerous to use two lift trucks simultaneously to handle heavy or bulky loads, since this operation requires particular precautions to be taken. It must only be used exceptionally and after risk analysis.
- The ignition switch has an emergency stop mechanism in case of an operating anomaly occurring in the case of lift trucks not fitted with a punch-operated cut-out.

#### INSTRUCTIONS

- Always drive the lift truck with the forks or attachment to the transport position, i.e. at 300 mm from the ground, the boom retracted and the carriage sloping backwards.
- For lift trucks with gearboxes, use the recommended gear (☞ 2 - DESCRIPTION: INSTRUMENTS AND CONTROLS).
- Select the steering mode appropriate for the use and/or working conditions (☞ 2 - DESCRIPTION: INSTRUMENTS AND CONTROLS) (depending on lift truck model).
- Release the parking brake.
- Shift the forward/reverse selector to the selected direction of travel and accelerate gradually until the lift truck moves off.

#### **▲ IMPORTANT ▲**

*Starting and moving the lift truck on a slope may be a real hazard.*

*If the lift truck is parked or stopped, adhere scrupulously to the following instructions for moving it:*

*- Press the service brake pedal.*

*- Release the parking brake.*

*- Select the appropriate gear. (depending on lift truck model)*

*- Select forward or reverse direction.*

*- Ensure that there is no one or anything impeding the movement of the lift truck.*

*- Release the service brake pedal and accelerate the engine.*

*The use of the lift truck loaded or with a trailer increases the risk. In this case, remain extremely vigilant.*

#### G - STOPPING THE LIFT TRUCK

##### SAFETY INSTRUCTIONS

- Never leave the ignition key in the lift truck during the operator's absence.
- When the lift truck is stationary, or if the operator has to leave his cab (even for a moment), place the forks or attachment on the ground, apply the parking brake and place the forward/reverse selector in neutral.
- Make sure that the lift truck is not stopped in any position that will interfere with the traffic flow and at less than one meter from the track of a railway.
- In the event of prolonged parking on a site, protect the lift truck from bad weather, particularly from frost (check the level of antifreeze), close and lock all the lift truck accesses (doors, windows, cowls, etc.).

##### INSTRUCTIONS

- Park the lift truck on flat ground or on an incline lower than 15%.
- Set the forward/reverse selector to neutral.
- Apply the parking brake.
- Fully retract the boom.
- Lower the forks or attachment to rest on the ground.
- When using an attachment with a grab or jaws, or a bucket with hydraulic opening, close the attachment fully.
- Before stopping the lift truck after a long working period, leave the engine idling for a few moments, to allow the coolant liquid and oil to lower the temperature of the engine and transmission. Do not forget this precaution, in the event of frequent stops or warm stalling of the engine, or else the temperature of certain parts will rise significantly due to the stopping of the cooling system, with the risk of badly damaging such parts.
- Stop the engine with the ignition switch.
- Remove the ignition key.
- Lock all the accesses to the lift truck (doors, windows, cowls...).
- Activate the battery cut-off in accordance with the recommendations (☞ 2 - DESCRIPTION: INSTRUMENTS AND CONTROLS).

## H - DRIVING THE LIFT TRUCK ON THE PUBLIC HIGHWAY

(or see current legislation in other countries)

### FRENCH ROAD TRAFFIC RULES

- The driving of non EC type-approved tractors on the public highway is subject to the provisions of the highway code relating to special machines, defined in article R311-1 of the highway code, in category B of the Equipment Order of 20 November 1969 that determines the procedures applicable to special machines. The lift truck must be fitted with a license plate.
- The driving of EC type-approved tractors on the public highway is subject to the provisions of the highway code regarding agricultural tractors, defined in article R311-1 of the highway code. The lift truck must be registered.
- The lift truck must be driven on the public highway in accordance with the instructions given in the manual supplied with the lift truck (Gross weight, Gross combination weight, towing load, axle loads, maximum speeds, etc. according to type/version). The operator must be in possession of the lift truck's registration document.
- The operator must hold an HGV license, unless granted an exemption.
- When towing a trailer or agricultural equipment, the travel speed of the lift truck is limited to 25 km/h. In this case, a "25" disc must be affixed to the rear of the convoy.

### SAFETY INSTRUCTIONS

- Operators driving on the public highway must comply with current highway code legislation.
- The lift truck must comply with current road legislation. If necessary, there are optional solutions. Contact your dealer.

### INSTRUCTIONS

- Make sure the revolving light is in place, switch it on and verify its operation.
- Make sure the lights, indicators and windscreens wipers are working properly.
- Switch off the working headlights if the lift truck is fitted with them.
- Select the steering mode "HIGHWAY TRAFFIC" (↳ 2 - DESCRIPTION: INSTRUMENTS AND CONTROLS) (depending on lift truck model).
- Fully retract the boom and set the attachment approximately 300 mm off the ground.
- Place the slope compensation in the central position, i.e. the transverse axis of the axles parallel to the frame (depending on the lift truck model).
- Fully raise the stabilizers and turn the shoes inwards (depending on the model of lift truck).

#### **⚠️ IMPORTANT ⚠️**

*Never coast in neutral (forward/reverse selector or gear lever in neutral or transmission cut-off button pressed) to preserve the lift truck engine brake.*

*Failure to observe this instruction on a slope will lead to excessive speed, which may make the lift truck uncontrollable (steering, brakes) and cause serious mechanical damage.*

### DRIVING THE LIFT TRUCK WITH A FRONT-MOUNTED ATTACHMENT

- You must comply with current regulations in your country, covering the possibility of driving on the public highway with a front-mounted attachment on your lift truck.
- If road legislation in your country authorizes circulation with a front-mounted attachment, you must at least:
  - Protect and report any sharp and/or dangerous edges on the attachment (↳ 4 - OPTIONAL ADAPTABLE ATTACHMENTS FOR THE RANGE).
  - The attachment must not be loaded.
  - Make sure that the attachment does not mask the lighting range of the forward lights.
  - Make sure that current legislation in your country does not require other obligations.

### OPERATING THE LIFT TRUCK WITH A TRAILER

- For using a trailer, observe the regulations in force in your country (maximum travel speed, braking, maximum weight of trailer, etc.).
- Do not forget to connect the trailer's electrical equipment to that of the lift truck.
- The trailer's braking system must comply with current legislation.
- If pulling a trailer with assisted braking, the tractor lift truck must be equipped with a trailer braking mechanism. In this case, do not forget to connect the trailer braking equipment to the lift truck.
- The vertical force on the towing hook must not exceed the maximum authorized by the manufacturer (consult the manufacturer's plate on your lift truck).
- The authorized gross vehicle weight must not exceed the maximum weight authorized by the manufacturer (↳ 2 - DESCRIPTION: SPECIFICATIONS).

**IF NECESSARY, CONSULT YOUR DEALER.**



## INSTRUCTIONS FOR HANDLING A LOAD

### A - CHOICE OF ATTACHMENTS

- Only attachments approved by MANITOU can be used on its lift trucks.
- Make sure the attachment is suitable for the work to be done (⇒ 4 - OPTIONAL ADAPTABLE ATTACHMENTS FOR THE RANGE).
- If the lift truck is equipped with the single side-shift carriage OPTION (TSDL), use only the authorized attachments (⇒ 4 - OPTIONAL ADAPTABLE ATTACHMENTS FOR THE RANGE).
- Make sure the attachment is correctly installed and locked onto the lift truck carriage.
- Make sure that your lift truck attachments work properly.
- Comply with the load chart limits for the lift truck for the attachment used.
- Do not exceed the rated capacity of the attachment.
- Never lift a slung load without the attachment provided for the purpose, as there is a risk of the sling slipping (⇒ INSTRUCTIONS FOR HANDLING A LOAD: H - PICKING UP AND PUTTING DOWN A SUSPENDED LOAD).
- Do not handle loads suspended by straps directly on the forks (e.g.:big bags), as there is a risk of shearing on sharp edges. Use an attachment designed for this purpose.

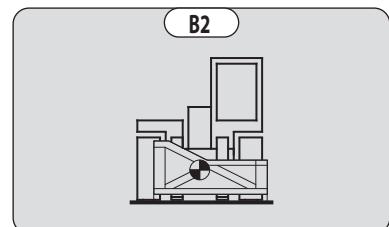
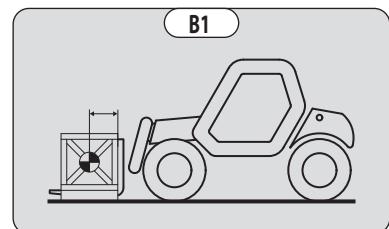
### B - WEIGHT OF LOAD AND CENTER OF GRAVITY

- Before picking up a load, you must know its weight and its center of gravity.
- The longitudinal position of the center of gravity in relation to the heel of the forks (fig. B1) is defined on the load chart concerning your lift truck (⇒ 2 - DESCRIPTION: LOAD CHARTS). For loads with center of gravity exceeding this distance, contact your dealer.
- For irregular loads, determine the transverse center of gravity before any handling (fig. B2) and place it in the longitudinal axis of the lift truck.

#### ⚠️ IMPORTANT ⚠️

*It is forbidden to handle a load heavier than the effective capacity specified on the truck's load chart.*

*For loads with a moving center of gravity (e.g. liquids), take account of the variations in the center of gravity in order to determine the load to be handled and be extra vigilant and careful to limit these variations as far as possible.*



### C - LONGITUDINAL STABILITY LIMITER AND WARNING DEVICE

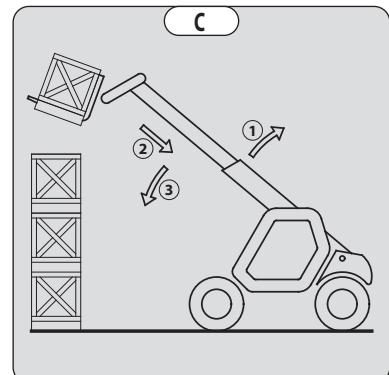
This device gives an indication of the longitudinal stability of the lift truck, and limits hydraulic movements in order to ensure this stability, at least under the following operating conditions:

- when the lift truck is at a standstill,
- when the lift truck is on firm, stable and consolidated ground,
- when the lift truck is performing handling and placing operations.
- Move the boom very carefully when approaching the authorized load limit (⇒ 2 - DESCRIPTION: INSTRUMENTS AND CONTROLS).
- Always watch this device during handling operations.
- If the "AGGRAVATING" hydraulic movements are cut off, perform only de-aggravating hydraulic movements in the following order (fig. C): if necessary, raise the boom (1), retract the boom as far as possible (2) and lower the boom (3) to put down the load.

#### ⚠️ IMPORTANT ⚠️

*The instrument reading may be erroneous when the steering is at full lock or the rear axle is oscillated to its maximum extent.*

*Before lifting a load, make sure that the lift truck is not in either of these situations.*



## D - TRANSVERSE ATTITUDE OF THE LIFT TRUCK

Depending on the model of lift truck

The transverse attitude is the transverse slope of the chassis with respect to the horizontal. Raising the boom reduces the lift truck's lateral stability. The transverse attitude must be set with the boom in down position as follows:

### 1 - LIFT TRUCK WITHOUT LEVELING USED ON TIRES

- Position the lift truck so that the spirit level bubble is between the two lines (☞ 2 - DESCRIPTION: INSTRUMENTS AND CONTROLS).

### 2 - LIFT TRUCK WITH LEVELING USED ON TIRES

- Correct the tilt using the hydraulic control and check the horizontality with the spirit level. The bubble of the level must be between the two lines (☞ 2 - DESCRIPTION: INSTRUMENTS AND CONTROLS).

### 3 - LIFT TRUCK USED ON STABILIZERS

- Put the two stabilizers on the ground and raise the two front wheels of the lift truck (fig. D1).
- Correct the tilt using the stabilizers (fig. D2) and check the horizontality with the spirit level. The bubble of the level must be between the two lines (☞ 2 - DESCRIPTION: INSTRUMENTS AND CONTROLS). In this position, the two front wheels must be off the ground.

## E - PICKING UP A LOAD ON THE GROUND

- Approach the lift truck perpendicular to the load, with the boom retracted and the forks horizontal (fig. E1).
- Adjust the fork spacing and centering relative to the load to ensure stability (fig. E2) (optional solutions exist, consult your dealer).
- Never lift a load with a single fork.

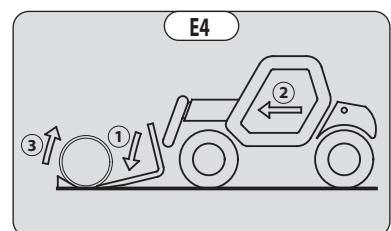
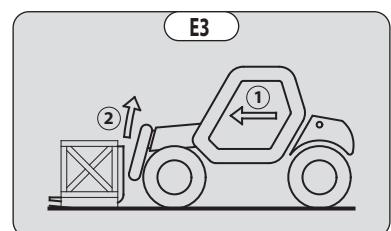
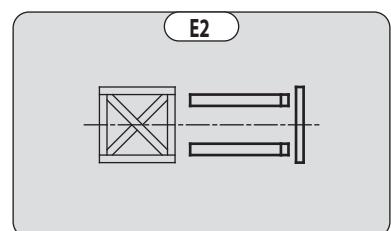
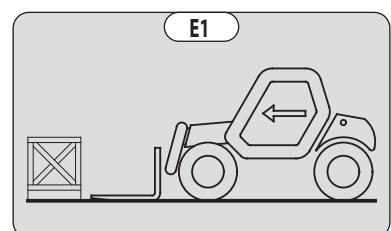
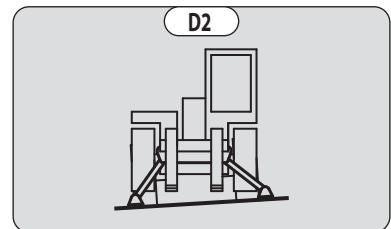
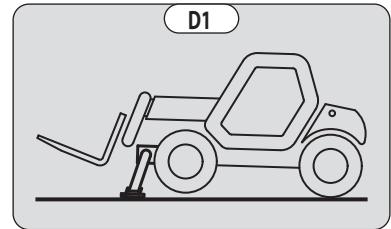
### ⚠️ IMPORTANT ⚠️

*Beware of the risks of trapping or squashing limbs when manually adjusting the forks.*

- Move the lift truck forward slowly (1) and bring the forks up to the stop in front of the load (fig. E3). If necessary, slightly lift the boom (2) while picking up the load.
- Bring the load into the transport position.
- Tilt the load far enough backwards to ensure stability (loss of load on braking or going downhill).

### FOR A NON-PALLETIZED LOAD

- Tilt the carriage (1) forwards and move the lift truck slowly forwards (2), to insert the fork under the load (fig. E4) (chock the load if necessary).
- Continue to move the lift truck forwards (2) tilting the carriage (3) (fig. E4) backwards to place the load on the forks and ensure the load's longitudinal and lateral stability.



## F - PICKING UP AND PUTTING DOWN A HIGH LOAD ON TIRES

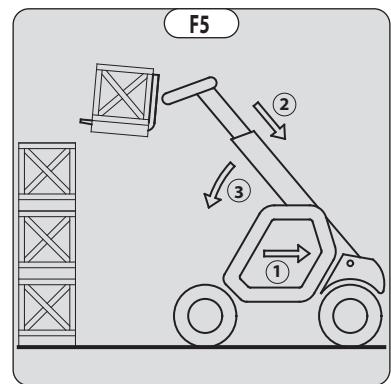
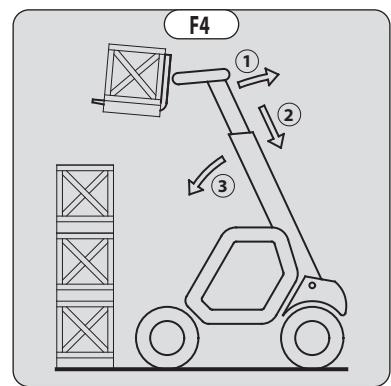
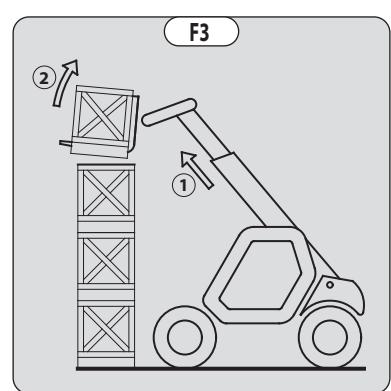
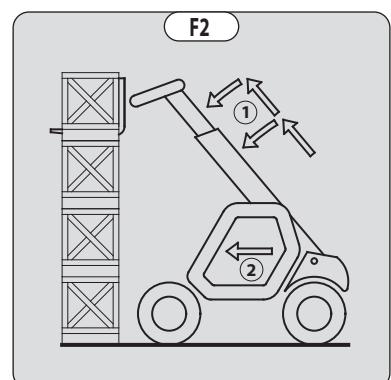
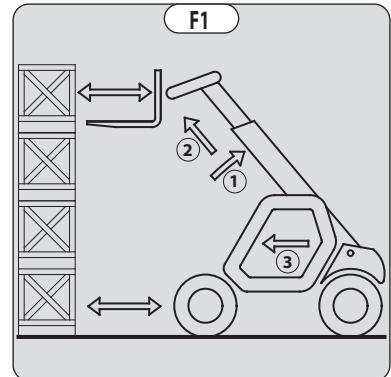
### **A IMPORTANT A**

*In no circumstances should you raise the boom if you have not checked the transverse attitude of the lift truck (☞ INSTRUCTIONS FOR HANDLING A LOAD: D - TRANSVERSE ATTITUDE OF THE LIFT TRUCK).*

REMINDER: Make sure that the following operations can be performed with good visibility (☞ OPERATING INSTRUCTIONS UNLADEN AND LADEN: D - VISIBILITY).

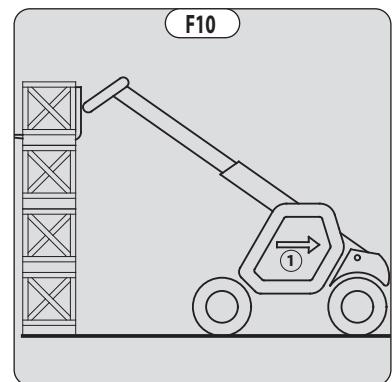
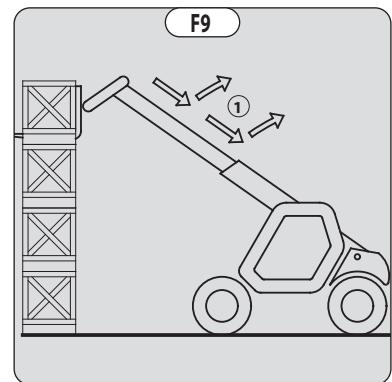
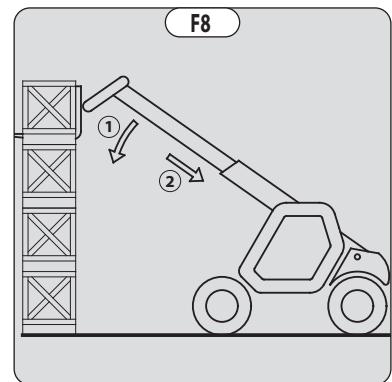
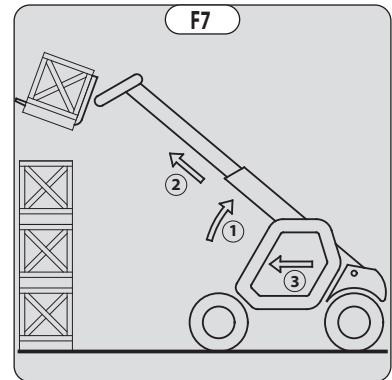
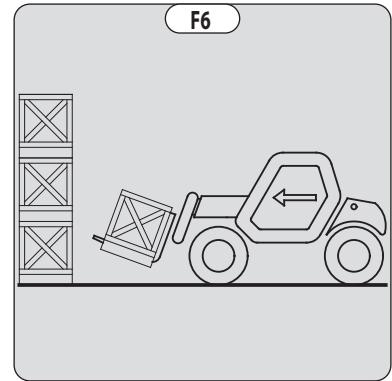
### PICKING UP A HIGH LOAD ON TIRES

- Ensure that the forks will easily pass under the load.
- Raise and extend the boom (1) (2) until the forks are at the level of the load. If necessary, move the lift truck (3) forward (fig. F1), driving very slowly and carefully.
- Always remember to keep the distance necessary for inserting the forks under the load, between the stack and the lift truck (fig. F1) and use the shortest possible boom length.
- Bring the forks to the stop in front of the load by alternately extending and lowering the boom (1) or, if necessary, moving the lift truck forward (2) (fig. F2). Apply the parking brake and place the forward/reverse selector in neutral.
- Slightly raise the load (1) and tilt the carriage (2) backwards to stabilize the load (fig. F3).
- Tilt the load sufficiently backwards to ensure its stability.
- Monitor the longitudinal stability limiter and warning device (☞ INSTRUCTIONS FOR HANDLING A LOAD: C - LONGITUDINAL STABILITY LIMITER AND WARNING DEVICE). If it is overloaded, set the load back down in the place from which it was picked up.
- If possible lower the load without moving the lift truck. Raise the boom (1) to release the load, retract (2) and lower the boom (3) to bring the load into the transport position (fig. F4).
- If this is not possible, reverse the lift truck (1), driving very slowly and carefully to release the load. Retract (2) and lower the boom (3) to bring the load into the transport position (fig. F5).



## PUTTING DOWN A HIGH LOAD ON TIRES

- Approach the load in the transport position in front of the stack (fig. F6).
- Apply the parking brake and place the forward/reverse selector in neutral.
- Raise and extend the boom (1) (2) until the load is above the stack, while monitoring the longitudinal stability limiter and warning device (INSTRUCTIONS FOR HANDLING A LOAD: C - LONGITUDINAL STABILITY LIMITER AND WARNING DEVICE). If necessary, move the lift truck (3) forward (fig. F7), driving very slowly and carefully.
- Place the load in a horizontal position and put it down on the pile by lowering and retracting the boom (1) (2) in order to position the load correctly (fig. F8).
- If possible, release the forks by alternately retracting and raising the boom (1) (fig. F9). Then set the forks into transport position.
- If this is not possible, reverse the lift truck (1), maneuvering very slowly and carefully to release the forks (fig. F10). Then set the forks into transport position.



## G - PICKING UP AND PUTTING DOWN A HIGH LOAD ON STABILIZERS

Depending on the model of lift truck

### **A IMPORTANT A**

*In no circumstances should you raise the boom if you have not checked the transverse attitude of the lift truck (↙ INSTRUCTIONS FOR HANDLING A LOAD: D - TRANSVERSE ATTITUDE OF THE LIFT TRUCK).*

REMINDER: Make sure that the following operations can be performed with good visibility (↙ OPERATING INSTRUCTIONS UNLADEN AND LADEN: D - VISIBILITY).

The stabilizers are used to optimize the lift truck's lifting performance (↙ 2 - DESCRIPTION: INSTRUMENTS AND CONTROLS).

POSITIONING THE STABILIZERS WITH THE FORKS IN TRANSPORT POSITION (UNLADEN AND LADEN)

- Set the forks in transport position in front of the elevation.
- Stay far enough away to allow the boom to be raised.
- Apply the parking brake and place the forward/reverse selector in neutral.
- Put the two stabilizers on the ground and lift the two front wheels of the lift truck (fig. G1), making sure the lift truck has transverse attitude.

RAISING THE STABILIZERS WITH THE FORKS IN TRANSPORT POSITION (UNLADEN AND LADEN)

- Raise both stabilizers fully and at the same time.

LOWERING THE STABILIZERS WITH BOOM UP (UNLADEN AND LADEN)

### **A IMPORTANT A**

*This operation must be exceptional and performed with great care.*

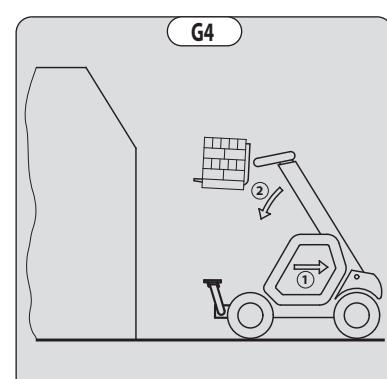
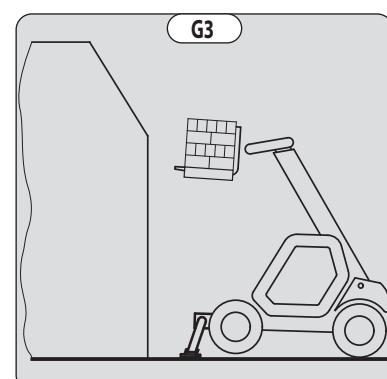
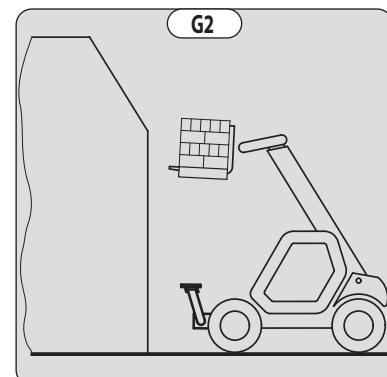
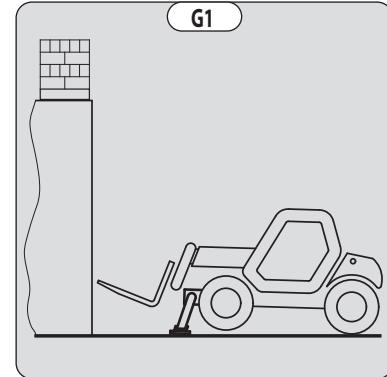
- Raise the boom and retract the telescopes completely.
- Bring the lift truck into position in front of the elevation (fig. G2) moving very slowly and carefully.
- Apply the parking brake and place the forward/reverse selector in neutral.
- Move the stabilizers very slowly and gradually as soon as they are close to the ground or in contact with it.
- Lower the two stabilizers and lift the two front wheels of the lift truck (fig. G3). During this operation, transverse attitude must be permanently maintained: the bubble in the level must be kept between the two lines.

SETTING THE STABILIZERS WITH THE BOOM UP (UNLADEN AND LADEN)

### **A IMPORTANT A**

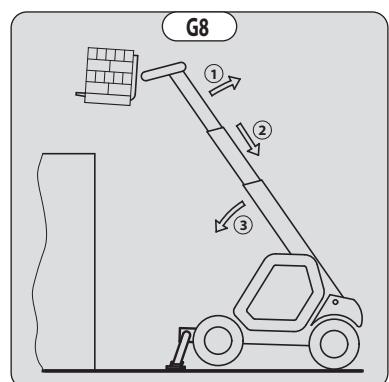
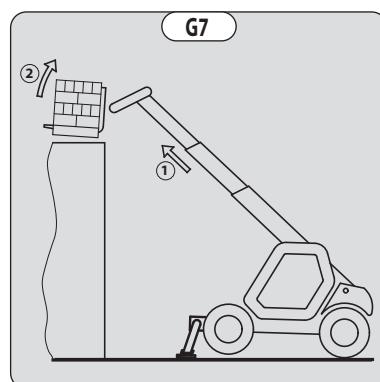
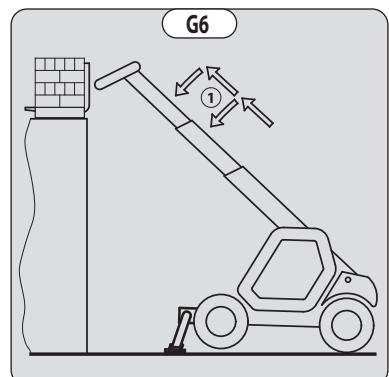
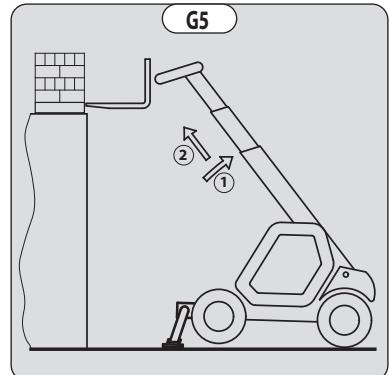
*This operation must be exceptional and performed with great care.*

- Keep the boom raised and retract the telescopes completely (fig. G3).
- Move the stabilizers very slowly and gradually as soon as they are in contact with the ground and when they leave the ground. During this operation, transverse attitude must be permanently maintained: the bubble in the level must be kept between the two lines.
- Raise both stabilizers completely.
- Release the parking brake and reverse the lift truck (1) very slowly and carefully to release it and lower the forks (2) into transport position (fig. G4).



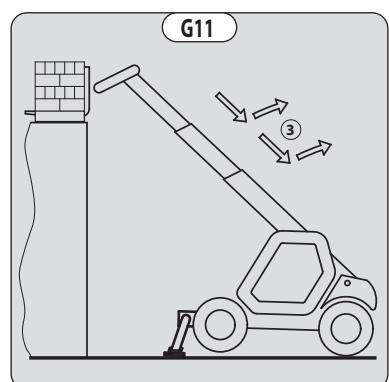
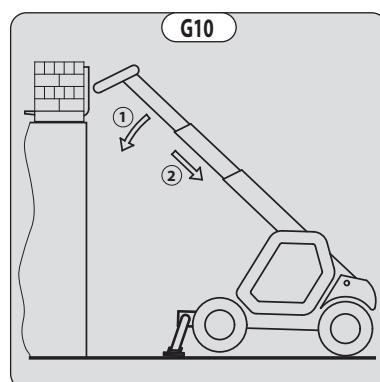
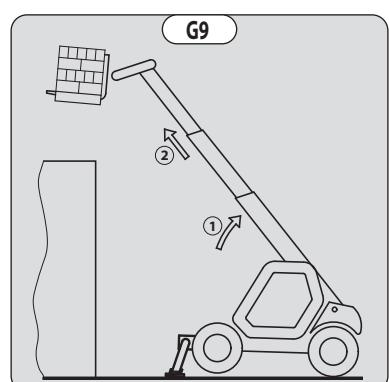
## PICKING UP A HIGH LOAD ON STABILIZERS

- Ensure that the forks will easily pass under the load.
- Check the position of the lift truck with respect to the load and make a test run, if necessary, without taking the load.
- Raise and extend the boom (1) (2) until the forks are at the level of the load (fig. G5).
- Bring the forks to the stop in front of the load by alternately extending and lowering the boom (1) (fig. G6).
- Lift the load slightly (1) and tilt the carriage (2) backwards to stabilize the load (fig. G7).
- Monitor the longitudinal stability limiter and warning device (INSTRUCTIONS FOR HANDLING A LOAD: C - LONGITUDINAL STABILITY LIMITER AND WARNING DEVICE). If it is overloaded, set the load back down in the place from which it was picked up.
- If possible lower the load without moving the lift truck. Raise the boom (1) to release the load, retract (2) and lower the boom (3) to put the load into transport position (fig. F4).



## SETTING DOWN A HIGH LOAD ON STABILIZERS

- Raise and extend the boom (1) (2) until the load is above the elevation (fig. G9), while monitoring the longitudinal stability limiter and warning device (INSTRUCTIONS FOR HANDLING A LOAD: C - LONGITUDINAL STABILITY LIMITER AND WARNING DEVICE).
- Position the load horizontally and release it by lowering and retracting the boom (1) (2) to position the load correctly (fig. G10).
- Free the forks by alternately retracting and raising the boom (3) (fig. G11).
- If possible, put the boom in transport position without moving the lift truck.



## H - PICKING UP AND PUTTING DOWN A SUSPENDED LOAD

### **A IMPORTANT A**

*Failure to follow the above instructions may lead the lift truck to lose stability and overturn.  
MUST be used with a lift truck equipped with an operational hydraulic movement cut-out device.*

#### CONDITIONS OF USE

- The length of the sling or the chain shall be as short as possible to limit swinging of the load.
- Lift the load vertically along its axis, never by pulling sideways or lengthways.

#### HANDLING WITHOUT MOVING THE LIFT TRUCK

- Whether on stabilizers or on tires, the lateral attitude must not exceed 1 % and the longitudinal attitude must not exceed 5 %: the bubble of the level must be held at "0".
- Ensure that the wind speed is not higher than 10 m/s.
- Ensure that there is no one between the load and the lift truck.

#### I - TRAVELING WITH A SUSPENDED LOAD

- Before moving, inspect the terrain in order to avoid excessive slopes and cross-falls, bumps and potholes, or soft ground.
- Ensure that the wind speed is not higher than 36 km/h.
- The lift truck must not travel at more than 0.4 m/s (1.5 km/h, i.e. one quarter walking speed).
- Drive and stop the lift truck gently and smoothly to minimize swinging of the load.
- Carry the load a few centimeters above the ground (max. 30 cm) the shortest possible boom length. Do not exceed the offset indicated on the load chart. If the load begins to swing excessively, do not hesitate to stop and lower the boom to set down the load.
- Before moving the lift truck, check the longitudinal stability limiter and warning device (§ 2 - DESCRIPTION: INSTRUMENTS AND CONTROLS), only the green LEDs and possibly the yellow LEDs should be lit.
- During transport, the lift truck operator must be assisted by a person on the ground (standing a minimum of 3 m from the load), who will limit swinging of the load using a bar or a rope. Ensure that this person is always clearly in view.
- The lateral attitude must not exceed 5 %: the bubble in the level must be kept between the two "MAX" marks.
- The longitudinal attitude must not exceed 15 % with the load facing uphill and 10 % with the load facing downhill.
- The boom angle must not exceed 45°.
- If the first red LED of the longitudinal stability limiter and warning device (§ 2 - DESCRIPTION: INSTRUMENTS AND CONTROLS) comes on while traveling, gently bring the lift truck to a halt and stabilize the load. Retract the telescope to reduce the offset of the load.

## INSTRUCTIONS FOR USE AS A LOADER

For agricultural-type lift trucks (MLT range)

### A - LOADING

#### ▲ IMPORTANT ▲

*In no circumstances should you raise the boom if you have not checked the transverse attitude of the lift truck (◀ INSTRUCTIONS FOR HANDLING A LOAD: D - TRANSVERSE ATTITUDE OF THE LIFT TRUCK).*

REMINDER: Make sure that the following operations can be performed with good visibility (◀ OPERATING INSTRUCTIONS UNLADEN AND LADEN: D - VISIBILITY).

#### FILLING THE BUCKET

- Place the bottom of the bucket in a horizontal position, just in contact with the ground (1) (fig. A1).
- Move forward gradually (2) while simultaneously raising the boom and tilting the bucket backwards (3), for improved filling and breakout (fig. A1).
- Reverse the lift truck (1) very carefully and gently to free the bucket. Lower the boom (2) into the transport position (fig. A2).

#### ▲ IMPORTANT ▲

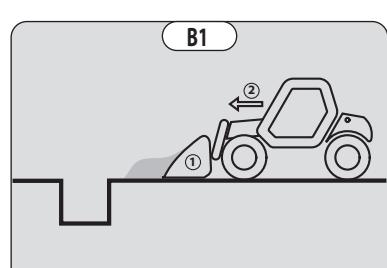
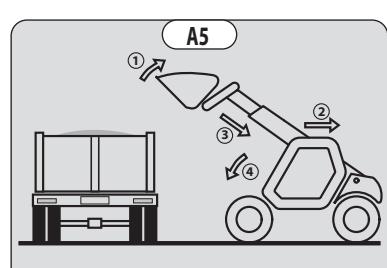
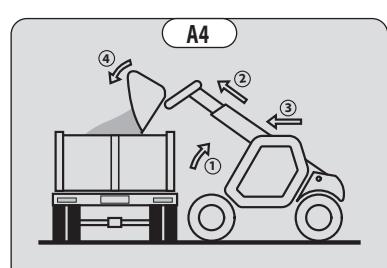
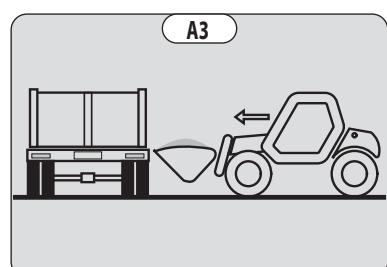
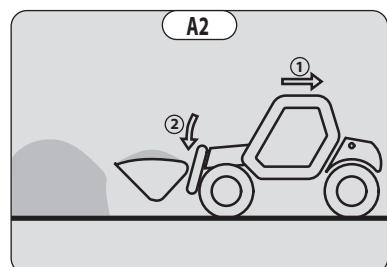
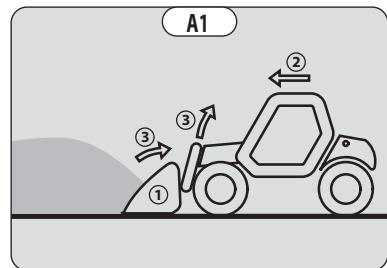
*Tilt the bucket sufficiently back to avoid spilling product and ensure its stability (loss of product under braking).*

#### LOADING A TRAILER

- Approach the side of the trailer in the transport position (fig. A3).
- Raise and extend the boom (1) (2) until the bucket is above the trailer, while monitoring the longitudinal stability limiter and warning device (◀ INSTRUCTIONS FOR HANDLING A LOAD: C - LONGITUDINAL STABILITY LIMITER AND WARNING DEVICE) (fig. A4).
- Drive the lift truck forward (3) very carefully and gently so that the bucket empties its load in the center of the trailer (fig. A4).
- Immobilize the lift truck with the service brake pedal and put the reversing shift lever in neutral.

NOTE: Immobilizing the lift truck with the service brakes means that the transmission should be in neutral. Failure to follow this recommendation may lead to overheating and damage to the brakes.

- Slowly discharge the product (4) (fig. A4).
- Tilt the bucket backwards (1) and reverse the lift truck (2) very carefully and gently (fig. A5).
- Retract (3) and lower the boom (4) into the transport position (fig. A5).



### B - BACKFILLING

- Place the bottom of the bucket in a horizontal position, just in contact with the ground (1) (fig. B1).
- Drive forward gradually (2). Once filled, the bucket will act as a leveling blade (fig. B1).

#### ▲ IMPORTANT ▲

*When driving, beware of trenches as well as recently excavated and/or backfilled ground.*

## PLATFORM OPERATING INSTRUCTIONS

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For lift trucks fitted with a PLATFORM

### A - AUTHORIZATION FOR USE

- Operation of the platform requires further authorization in addition to that of the lift truck.

### B - SUITABILITY OF THE PLATFORM FOR THE JOB

- Our lift trucks fitted with "mobile elevating work platforms" are compliant with the standard **EN 280:2013+A1:2015** for Europe and the standard **AS/NZS 1418.10:2011** for Australia, corresponding to the classification of Group C1 to C3 complying with this standard.
- MANITOU has ensured that this platform is suitable for use under the normal operating conditions provided in this operator's manual, with a **STATIC test coefficient of 1.25** and a **DYNAMIC test coefficient of 1.1** as specified in harmonized European standard **EN 280:2013+A1:2015** for "mobile elevating work platforms".
- Before commissioning, the company manager must make sure that platform is appropriate for the work to be done, and perform certain tests (in accordance with current legislation).

### C - PROVIDED ON THE PLATFORM

- Wear suitable clothing when using the platform, avoid loosely-fitting garments.
- Never operate the platform when hands or feet are wet or soiled with greasy substances.
- Remain alert at all times when using the platform. Do not listen to the radio or music using headphones or earphones.
- For increased comfort, adopt the correct position at the platform's operator station.
- The platform's guard rail exempts the operator from wearing a safety harness under normal operating conditions. As a result, you are responsible for deciding whether to wear a safety harness.

NOTE: Make sure that current legislation in your country does not include the obligation to wear a harness.

- The control units must never be used for any other than their intended purposes (e.g. climbing onto or down from the lift truck, coat hanger, etc.).
- Safety helmets must be worn.
- The operator must always be in the normal operator's position. It is prohibited to have arms or legs, or generally any part of the body, protruding from the basket.
- Ensure that any materials loaded onto the platform (pipes, cables, containers, etc.) cannot fall out. Do not pile these materials to the point where it is necessary to step over them.

### D - USING THE PLATFORM

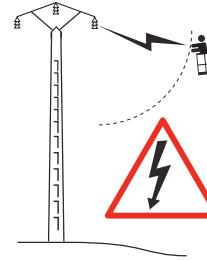
- However experienced they may be, operators must acquaint themselves with the emplacement and operation of all control instruments prior to operating the platform.
- Check before use that the platform has been correctly assembled and locked onto the lift truck.
- Check before operating the platform that the access gate has been properly locked.
- The platform should be operated in an area free of any obstructions or danger when it is lowered to the ground.
- The operator using the platform must be aided on the ground by a person with adequate training.
- You should stay within the limits set out in the platform load chart.
- The lateral constraints are limited (☞ 2 - DESCRIPTION: SPECIFICATIONS).
- It is strictly forbidden to suspend a load from the platform or the lift truck boom without an attachment provided for this (☞ INSTRUCTIONS FOR HANDLING A LOAD: H - PICKING UP AND PUTTING DOWN A SUSPENDED LOAD).
- The platform cannot be used as a crane or a lift for permanently transporting people or materials, nor as jacks or supports.
- The lift truck must not be moved with one (or more) person(s) in the platform.
- It is forbidden to transport people on the platform using the hydraulic controls in the lift truck's driver's cab (except in case of rescue).
- The operator must not climb onto or off the platform when it is not on ground level (boom retracted and in the down position).
- The platform must not be fitted with attachments that increase the unit's wind load.
- Do not use ladders or improvised structures in the platform to gain extra height.
- Do not climb onto the sides of the platform to gain extra height.
- It is forbidden to use the platform on forks. The fork slots are only to be used for storing the platform and not for lifting people under any circumstances.

## E - ENVIRONMENT

### ▲ IMPORTANT ▲

*It is forbidden to use the platform close to electricity cables. Maintain the specified safe distances.*

RATED VOLTAGE	SAFETY DISTANCE (METERS)
50 < U < 1,000	2,30 M
1,000 < U < 30,000	2,50 M
30,000 < U < 45,000	2,60 M
45,000 < U < 63,000	2,80 M
63,000 < U < 90,000	3,00 M
90,000 < U < 150,000	3,40 M
150,000 < U < 225,000	4,00 M
225,000 < U < 400,000	5,30 M
400,000 < U < 750,000	7,90 M



### ▲ IMPORTANT ▲

*It is strictly forbidden to use the platform when the wind speed exceeds 45 km/h.*

- To visually recognize this wind speed, refer to the empirical wind evaluation scale below:

BEAUFORT scale (wind speed at a height of 10 m on a flat site)						
Force	Type of wind	Speed (knots)	Speed (km/h)	Speed (m/s)	Effects on Land	Sea conditions
0	Calm	0 - 1	0 - 1	<0.3	Smoke rises vertically.	Sea is like a mirror.
1	Light air	1 - 3	1 - 5	0.3 - 1.5	Smoke indicates direction of wind.	Ripples with appearance of scale, no foam crests.
2	Light breeze	4 - 6	6 - 11	1.6 - 3.3	Wind felt on face, leaves rustle.	Short wavelets, but pronounced.
3	Gentle breeze	7 - 10	12 - 19	3.4 - 5.4	Leaves and small twigs in constant motion.	Very small waves, crests begin to break.
4	Moderate breeze	11 - 16	20 - 28	5.5 - 7.9	Wind raises dust and loose pieces of paper; small branches are moved.	Small waves, becoming longer, numerous whitecaps.
5	Fresh breeze	17 - 21	29 - 38	8 - 10.7	Small trees in leaf begin to sway.	Wavelets form on inland waters; moderate waves, taking longer form.
6	Strong breeze	22 - 27	39 - 49	10.8 - 13.8	Large branches in motion, whistling heard in overhead wires, umbrella use becomes difficult.	Larger waves forming, whitecaps everywhere, some spray.
7	Near gale	28 - 33	50 - 61	13.9 - 17.1	Whole trees in motion, inconvenience felt when walking against the wind.	Sea heaps up; white foam from breaking waves begins to be blown in streaks along the direction of the wind.
8	Gale	34 - 40	62 - 74	17.2 - 20.7	Wind breaks twigs off trees; impedes progress.	Moderately high waves of greater length; edges of crests begin to break into spindrift.
9	Strong gale	41 - 47	75 - 88	20.8 - 24.4	Wind damages roofs (chimneys, slates, etc.).	High waves, crests of waves begin to topple, streaks of foam; reduced visibility.
10	Storm	48 - 55	89 - 102	24.5 - 28.4	Seldom experienced inland; trees uprooted; considerable structural damage occurs.	Very high waves; white streaks of foam; reduced visibility.
11	Violent storm	56 - 63	103 - 117	28.5 - 32.6	Very rare, widespread damage.	Exceptionally high waves able to hide medium sized ships from view, reduced visibility.
12	Hurricane	64 +	118 +	32.7 +	Devastating damage.	Sea completely white; air filled with foam and spray, very reduced visibility.

## F - MAINTENANCE

### ▲ IMPORTANT ▲

*Your platform must be inspected periodically to ensure that it remains in compliance.*

*The frequency of this inspection is defined by the current legislation in force in the country in which the equipment is used*

*In France, a general periodic inspection every 6 months (Decree of March 1, 2004).*

## INSTRUCTIONS FOR USING THE RADIO-CONTROL

For lift trucks with RC radio control

### HOW TO USE THE RADIO-CONTROL

#### SAFETY INSTRUCTIONS

- This radio-control consists of electronic and mechanical safety elements. It cannot receive commands from another transmitter because the internal encoding is unique to each radio-control.

#### **▲ IMPORTANT ▲**

*If it is used improperly or incorrectly, there is a risk of danger to:*

- The physical and mental health of the user or others.*
- The lift truck and other neighboring items.*
- Everyone working with this radio-control:*
- Must be qualified in line with current regulations and trained accordingly.*
- Must follow this instruction manual as closely as possible.*

- The system is used to control the lift truck remotely via radio waves. Commands are also transmitted if the lift truck is out of sight (behind an obstacle or a building for example), this is why:

- After stopping the truck and removing the key switch (only possible when it is stationary), always place the transmitter in a safe, dry place.
- Before performing any installation, servicing or repair work, always switch off power sources (in particular, electric welding devices and electric head units on hydraulic distributors must be disconnected at each section).
- Never remove or alter the safety devices (such as the hand-guard frame, key, emergency stop button, etc.).

#### **▲ IMPORTANT ▲**

*Never drive the lift truck if it is not continuously and perfectly within view of the operator!*

- Before leaving the transmitter, the operator must make sure that it cannot be used by an unauthorized third person: either by removing the key button from the transmitter or locking it in an inaccessible place.
- The user must ensure that the instruction manual is accessible at all times and that operators have read and understood it.

#### INSTRUCTIONS

- Take up position in a stable place with no risk of slipping.
- Before using the transmitter, make sure there is nobody within the working area.
- Only use the transmitter with its carrying device or installed correctly on the platform.

#### **▲ IMPORTANT ▲**

*When you remove the transmitter, remove the accumulator and key button so that it cannot be used accidentally or deliberately by anyone else.*

#### PROTECTIVE DEVICES

- The lift truck will be immobilized within a maximum of 450 milliseconds (approx. 0.5 second):
  - If the emergency stop button of the transmitter is pressed (50 milliseconds), or that of the lift truck.
  - If the transmission distance of the radio waves is exceeded.
  - If the transmitter is faulty.
  - If an interfering radio signal is received from elsewhere.
  - If the accumulator is removed from its housing in the transmitter.
  - If the battery reaches the end of its autonomy.
  - If the transmitter is switched off by turning the key switch to the off position.
- These protective devices are provided for the safety of personnel and property and must never be modified, removed or bypassed in any way whatsoever!
- The hand-guard frame prevents external action on a joystick (e.g. if the transmitter is dropped, or if the operator leans on a guard-rail).
- An electronic safety device prevents radio transmission from being initiated if the joysticks are not mechanically and electrically at rest and if the internal combustion engine speed selector is not set to idle.

#### **▲ IMPORTANT ▲**

*In an emergency, press the transmitter emergency stop button immediately; then follow the manual's instructions (→ 2 - DESCRIPTION: INSTRUMENTS AND CONTROLS).*



# LIFT TRUCK MAINTENANCE INSTRUCTIONS

## GENERAL INSTRUCTIONS

- Ensure the area is sufficiently ventilated before starting the lift truck.
- Wear clothes suitable for the maintenance of the lift truck, avoid wearing jewelry and loose clothes. Tie back and protect your hair, if necessary.
- Stop the engine and remove the ignition key, when an intervention is necessary.
- Read the operator's manual carefully.
- Carry out all repairs immediately, even if the repairs concerned are minor.
- Repair all leaks immediately, even if the leak concerned is minor.
- Ensure that process materials and of spare parts are disposed in all safely and in an ecological manner.
- Be careful of the risk of burns and splashing (exhaust, radiator, engine, etc.).

## PLACING THE BOOM SAFETY WEDGE

- The lift truck is equipped with a boom safety wedge (⇒ 2 - DESCRIPTION: INSTRUMENTS AND CONTROLS) that must be installed on the lifting cylinder rod when working beneath the boom.

## FITTING THE WEDGE

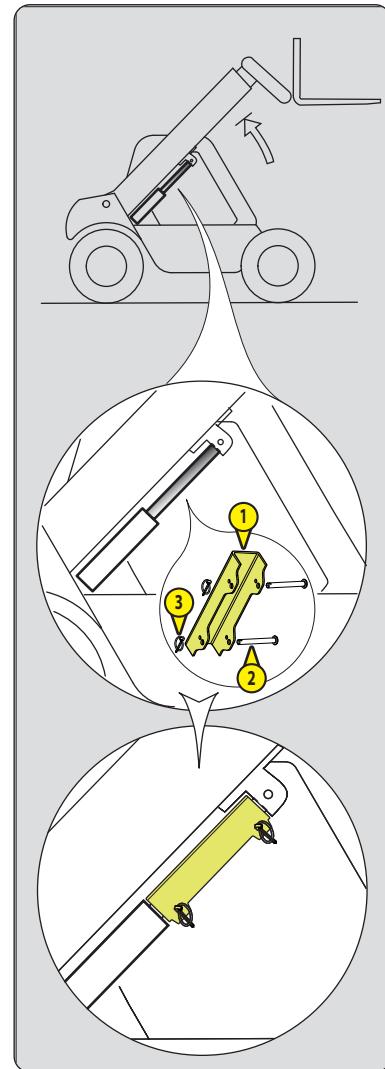
- Fully raise the boom.
- Place the safety wedge 1 on the rod of the lifting cylinder and secure with the rod 2 and the pin 3.
- Slowly lower the boom then stop the hydraulic movements before it comes into contact with the wedge.

## REMOVING THE WEDGE

- Fully raise the boom.
- Remove the pin and the rod.
- Return the safety wedge to the storage location provided on the lift truck.

### **A IMPORTANT A**

*Only use the wedge supplied with the lift truck.*



## MAINTENANCE

- Perform the periodic service (⇒ 3 - MAINTENANCE) to keep your lift truck in good working condition. Failure to perform periodic maintenance may invalidate the contractual warranty.

## MAINTENANCE LOGBOOK

- The maintenance operations carried out in accordance with the recommendations given in Part: 3 - MAINTENANCE and the other inspection, servicing or repair operations or modifications performed on the lift truck or its attachments are recorded in a maintenance logbook. The entry for each operation should include the date of the work, the names of the individuals or companies having performed them, the type of operation and its frequency, if applicable. The part numbers of any lift truck components that are replaced are indicated.

## **LUBRICANT AND FUEL LEVELS**

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- Use the recommended lubricants (never use contaminated lubricants).
- Do not fill the fuel tank when the engine is running.
- Only fill up the fuel tank in areas specified for this purpose.
- Do not fill the fuel tank to the maximum level.
- Do not smoke or approach the lift truck with a flame, when the fuel tank is open or is being filled.

## **HYDRAULICS**

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- Any work on the load handling hydraulic circuit is forbidden except for the operations described in chapter: 3 - MAINTENANCE.
- Do not attempt to loosen unions, hoses or any hydraulic component with the circuit under pressure.

### **▲ IMPORTANT ▲**

*COUNTERBALANCE VALVE: It is dangerous to change the settings and remove the counterbalance valves or safety valves which may be fitted to your lift truck's cylinders.*  
*The HYDRAULIC ACCUMULATORS that may be fitted on your lift truck are pressurized units. Removing these accumulators and their pipework is a dangerous operation and must only be performed by approved personnel (consult your dealer).*

## **ELECTRICITY**

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- Do not short-circuit the starter relay to start the engine. If the forward/reverse selector is not in neutral and the parking brake is not applied, the lift truck may suddenly start to move.
- Do not place metal items on the battery.
- Disconnect the battery before working on the electrical circuit.

## **WELDING**

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- Disconnect the battery before any welding operations on the lift truck.
- When carrying out electric welding work on the lift truck, connect the negative cable from the equipment directly to the part being welded, so as to avoid high tension current passing through the alternator.
- Never carry out welding or work which gives off heat on an assembled tire. The heat would increase the pressure which could cause the tire to explode.
- If the lift truck is equipped with an electronic control unit, disconnect this before starting to weld, to avoid the risk of causing irreparable damage to electronic components.

## **WASHING THE LIFT TRUCK**

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- Clean the lift truck or at least the area concerned before any intervention.
- Remember to close and lock all accesses to the lift truck (doors, windows, cowls...).
- During washing, avoid the articulations and electrical components and connections.
- If necessary, protect against penetration of water, steam or cleaning agents, components susceptible of being damaged, particularly electrical components and connections and the injection pump.
- Clean the lift truck of any fuel, oil or grease trace.

## **TRANSPORTING THE LIFT TRUCK**

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### **▲ IMPORTANT ▲**

*Transporting the lift truck involves real risks for the operator and others involved.*

- Towing, winching, slinging or transporting the lift truck ( ↗ 3 - MAINTENANCE).

## IF THE LIFT TRUCK IS NOT TO BE USED FOR A LONG TIME

### INTRODUCTION

The following recommendations are intended to prevent the lift truck from being damaged when it is withdrawn from service for an extended period.

#### **▲ IMPORTANT ▲**

*Procedures to follow if the lift truck is not to be used for a long time and for starting it up again afterwards must be performed by your dealership.*

*This period of long-term stoppage must not exceed 12 months.*

*After 12 months, repeat the procedures for putting the lift truck back into service and long-term shutdown.*

### PREPARING THE LIFT TRUCK

- Clean the lift truck thoroughly.
- Check and repair any fuel, oil, water or air leaks.
- Replace or repair any worn or damaged parts.
- Wash the painted surfaces of the lift truck in clear and cold water and wipe them.
- Touch up the paintwork if necessary.
- Stop the lift truck (☞ OPERATING INSTRUCTIONS UNLADEN AND LADEN).
- Make sure the boom cylinder rods are all in the retracted position.
- Release the pressure in the hydraulic circuits.

### DEF (Diesel Exhaust Fluid) TANK

Depending on the model of lift truck

- Empty and rinse the DEF tank.
- Replace the "DEF" (Diesel Exhaust Fluid) supply pump filter (☞ 3 - MAINTENANCE).
- Slowly fill the tank with new "DEF" (Diesel Exhaust Fluid) up to the bottom of the filler neck.
- Start up the lift truck to pressurize the circuit and bring it up to working temperature, then shut down the engine.
- If necessary, top up the tank.

### PROTECTING THE ENGINE

- Contact your dealer to obtain the procedure for protecting the inside of the engine (use of protection product).
- Fill the tank with fuel (☞ 3 - MAINTENANCE).
- Drain and replace the coolant (☞ 3 - MAINTENANCE).
- Leave the engine running at idling speed for a few minutes, then switch off.
- Replace the engine oil and oil filter (☞ 3 - MAINTENANCE).
- Run the engine for a short time so that the oil and cooling liquid circulate inside.
- Disconnect the battery and store it in a safe place away from the cold, after charging it to a maximum.
- Block the outlet with waterproof adhesive tape.
- Remove the drive belts and store them in a safe place.
- Disconnect the engine cut-off solenoid on the injection pump and carefully insulate the connection.

### PROTECTING THE LIFT TRUCK

- Set the lift truck on axle stands so that the tires are off the ground.
- Release the parking brake (depending on lift truck model).
- Protect cylinder rods which will not be retracted, from corrosion.
- Wrap the tires.

NOTE: If the lift truck is to be stored outdoors, cover it with a waterproof tarpaulin.

## BRINGING THE LIFT TRUCK BACK INTO SERVICE

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- Remove the waterproof adhesive tape from all the holes.
- Refit and reconnect the battery.
- Remove the protection from the cylinder rods.
- Perform the daily maintenance operations (§ 3 - MAINTENANCE).
- Apply the parking brake and remove the axle stands.
- Drain and clean the fuel tank (§ 3 - MAINTENANCE).
- Fill the fuel tank with clean diesel filtered through the filler port.
- Replace the fuel filter (§ 3 - MAINTENANCE).
- Replace the fuel pre-filter (§ 3 - MAINTENANCE) (depending on the model of lift truck).
- Drain and rinse the DEF tank (depending on the model of lift truck).
- Top up, slowly fill the tank with new "DEF" (Diesel Exhaust Fluid) up to the bottom of the filler neck (depending on the model of lift truck).
- Refit the drive belts and adjust the tension (§ 3 - MAINTENANCE).
- Turn the engine over with the starter, to allow the oil pressure to rise.
- Reconnect the engine cut-off solenoid.
- Lubricate the lift truck completely (§ 3 - MAINTENANCE).

### **▲ IMPORTANT ▲**

*Ensure the area is sufficiently ventilated before starting the lift truck.*

- Start up the lift truck, following the safety instructions and regulations (§ OPERATING INSTRUCTIONS UNLADEN AND LADEN).
- Carry out all the boom hydraulic movements, concentrating on the ends of travel for each cylinder.

## LIFT TRUCK DISPOSAL

### **▲ IMPORTANT ▲**

*Please consult your dealer before disposing of your lift truck.*

### **RECYCLING OF MATERIALS**

#### **METALS**

- Metals are 100% recoverable and recyclable.

#### **PLASTICS**

- Plastic parts are identified with a marking in accordance with current regulations.
- A limited range of materials is used to simplify the recycling process.
- The majority of plastic components are made of "thermoplastic" plastics, that are easily recycled by melting, granulating or grinding.

#### **RUBBER**

- Tires and seals can be ground for use in cement manufacture or to obtain reusable granules.

#### **GLASS**

- Glass items can be removed and collected for processing by glaziers.

### **ENVIRONMENTAL PROTECTION**

By entrusting the maintenance of your lift truck to the MANITOU network, the risk of pollution is limited and the contribution to environmental protection contribution is made.

#### **WORN OR DAMAGED PARTS**

- Do not dump them in the countryside.
- MANITOU and its network have signed-up to a scheme of environmental protection through recycling.

#### **USED OIL**

- The MANITOU network organizes the collection and processing of used oil.
- By handing over your waste oil to MANITOU, the risk of pollution is limited.

#### **USED BATTERIES**

- Do not throw away batteries, as they contain metals that are harmful for the environment.
- Return them to the MANITOU network or any other approved collection point.

NOTE: MANITOU seeks to manufacture lift trucks providing the best performance and limiting polluting emissions.

## 2 - *DESCRIPTION*



## 2 - DESCRIPTION

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1) DÉCLARATION «CE» DE CONFORMITÉ (originale)  
«EC» DECLARATION OF CONFORMITY (original)

2) Constructeur, Manufacturer : **MANITOU BF**

3) Adresse, Address : **430, RUE DE L'AUBINIÈRE - B.P 10249**

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4) Titulaire de dossier technique, Holder of the technical file : **MANITOU BF**

3) Adresse, Address : **430, RUE DE L'AUBINIÈRE - B.P 10249**

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5) Le constructeur déclare que la machine décrite ci-après, *The manufacturer declares that the machine described below :*

**MT 733 EASY 75D ST5 S1**

**52001222/00000**

**N° >MAN00000E00000000<**

**MT 933 EASY 75D ST5 S1**

**52001233/00000**

**N° >MAN00000E00000000<**

**MT 1033 EASY 75D ST5 S1**

**52001237/00000**

**N° >MAN00000E00000000<**

6) Est conforme aux directives suivantes et à leurs transpositions en droit national (si applicables), *Complies with the following directives and their transpositions into national law (if applicable) :*

**2006/42/CE**

7) Pour les machines annexe IV, *For annex IV machines :*

8) Numéro d'attestation, *Certificate number :*

9) Organisme notifié, *Notified body :* -

**2000/14/CE + 2005/88/CE**

10) Procédure appliquée, *Applied procedure :*

9) Organisme notifié, *Notified body :*

11) Niveau de puissance acoustique, *Sound power level :*

12) Mesuré, *Measured :*

dB (A)

13) Garanti, *Guaranteed :*

dB (A)

**2004/108/CE jusqu'au 19/04/2016 et 2014/30/UE à partir du 20/04/2016**

14) Normes harmonisées utilisées, *Harmonised standards used :*

15) Normes ou dispositions techniques utilisées, *Standards or technical provisions used :*

16) Fait à, *Done at :*

17) Date, *Date :*

18) Nom du signataire, *Name of signatory :*

19) Fonction, *Function :*

20) Société, *Company :*

21) Signature, *Signature :*

**bg :** (1) ЕО\* декларация за съответствие (сървични). (2) Производител, (3) Адрес, (4) Притежател на техническото досие, (5) Производителят декларира, че описаната по-долу машина, (6) Е в съответствие със следните директиви и тялото трансформиране в националното законодателство (ако е приложимо), (7) Приложение IV относно машините, (8) Номер на сертификат, (9) Наутифициран орган, (10) Приложена процедура, (11) Ниво на сълата на звука, (12) Измерено, (13) Гарантирано, (14) Използвани хармонизирани стандарти, (15) Използвани стандарти или технически разпоредби, (16) Изработено в, (17) Дата, (18) Име на подписалото лице, (19) Дължност, (20) Фирма, (21) Подпис

**cs :** (1) ES prohlášení o shodě (příloha), (2) Výrobce , (3) Adresa, (4) Dřížel technické dokumentace, (5) Výrobce prohláší , že zařízení popsané níže, (6) Je v souladu s následujícimi směrnicemi a směrnicemi transponovanými do vnitrostátního práva (je-li relevantní), (7) Pro stroje v příloze IV/8 Číslo certifikátu, (9) Nařízení orgán, (10) Použitý postup, (11) Úrovně hluku (12) Naměřená, (13) Zaručená, (14) Použité harmonizované normy , (15) Použité normy nebo technické předpisy(16) Místo (17) Datum (18) Jméno podepsaného, (19) Funkce, (20) Společnost, (21) Podpis

**da :** (1) EG Overensstemmelseserklæring (original), (2) Producent, (3) Adresse, (4) Indehaver af det tekniske dossier, (5) Producenten erklærer, at maskinen, der er beskrevet nedenfor, (6) overholder nedenstavnede direktiver og disse gennemføreret til national ret (hvis det er relevant), (7) For maskiner under bilag IV, (8) Certifikat nummer, (9) Bemyndigede organ, (10) Anvendt procedure, (11) Lydeffektivitet, (12) Målt, (13) Garant, (14) Anvendte harmoniserede standarder, (15) Standarder eller tekniske regler, (16) Udfærdiget i, (17) Dato, (18) Underskriftens navn, (19) Funktion, (20) Firma, (21) Underskrift

**de :** (1) EG-Konformitätserklärung (original), (2) Hersteller, (3) Adresse, (4) Inhaber des technischen Dossiers, (5) Der Hersteller erklärt, dass die nachstehend beschriebene Maschine (6) den folgenden Richtlinien und deren Umsetzung in die nationale Gesetzgebung entspricht (falls anwendbar), (7) Für die Maschinen laut Anhang IV, (8) Bescheinigungsnummer, (9) Benannte Stelle, (10) Angewandtes Verfahren, (11) Schallleistungspegel, (12) Gemessen, (13) Gewährleistet, (14) angewandte harmonisierte Normen, (15) angewandte sonstige technische Normen und Bestimmungen, (16) Ausgestellt in, (17) Datum, (18) Name des Unterzeichnenden, (19) Funktion, (20) Gesellschaft, (21) Unterschrift

**el :** (1) Δήλωση συμόρφωσης CE (πρότυπο), (2) Κατασκευαστής, (3) Λαζαρεύοντας, (4) Κάτοχος του τεχνικού φάκτου, (5) Ο κατασκευαστής δηλώνει ότι το μηχανήμα που παρηγέρεται, (6) Συμμορφώνεται με τις εξής οδηγίες και τις προδρομικές τους στην επαγγελματική, (7) Για το μηχανήμα που παρεργάτησε IV, (8) Αριθμός πιστοποίησης, (9) Διευθυντικός φάρμας, (10) Εφαρμοζόμενη διεύθυνση, (11) Στάδιον προήγαγμας ισχύος, (12) Καραμετρία, (13) Εγγυηση, (14) Ενορμοσύμβαν πρότυπο που χρησιμοποιούνται, (15) Πρότυπο που η κανόνιση που χρησιμοποιείται, (16) Τόμος, (17) Ημερομηνία, (18) Όνομα του υπογραφέας, (19) Ιδιοτέλεση, (20) Εταιρεία, (21) Υπογραφή

**es :** (1) Declaración CE de conformidad (original), (2) Fabricante, (3) Dirección, (4) Titular del expediente técnico, (5) El fabricante declara que la máquina que se describe a continuación, (6) Cumple con las siguientes directivas y sus transposiciones a la legislación nacional (en caso oportuno), (7) Para las máquinas anexo IV, (8) Número de certificación, (9) Organismo notificado, (10) Procedimiento aplicado, (11) Nivel de potencia acústica, (12) Medido, (13) Garantizado, (14) Normas armonizadas utilizadas, (15) Otras normas o especificaciones técnicas utilizadas, (16) Hecho en, (17) Fecha, (18) Nombre del signatario, (19) Cargo, (20) Empresa, (21) Firma

**et :** (1) EU vastuvõetavustusdeklaratsioon (sigüürivara), (2) Tootja, (3) Aadress, (4) Tehnilise dokumentatsiooni vastaja, (5) Tootja kinnitab, et alpool kinnitabud seadus, (6) On vastavuses järgmiste direktiividile ja nende rakjusesse digusesse ülevõtmineks vastuvõetud digusaktsidega (kui on kohaldatav), (7) IV lisas loetletud seadmete puhul, (8) Tunnustuse number, (9) Sertifitseerimisnumbris, (10) Kohaldatav mõetus, (11) Akustiline võimsusisse tase, (12) Mõõdetud, (13) Tagatud, (14) Vastab kehtivatele ühtlustatud standardile, (15) Vastab muudele kehtivatele standarditele ja tehnilistele normidele, (16) Väljaandmine kohal, (17) Väljaandmine aeg, (18) Alkujärgustaja nimi, (19) Amet, (20) Etevõte, (21) Allik

**fi :** (1) EY-vastuvaltuustoimintavakuutus (vakuutus). (2) Valmistaja, (3) Osoite, (4) Teknisten esilätkojen haltija, (5) Valmistaja ilmoittaa, että alla kuvattu laite, (6) Täyttyä seuraavien direktiivien sekä niillä vastavien kansallisten säännösten vastaavuus (tarvittaessa), (7) Laitteen IV laitteen osalta, (8) Todistusnumero, (9) Ilmoituksen laitos, (10) Käytetty menetelytapa, (11) Äänien tehotaso, (12) Mitattu, (13) Taatu, (14) Käytettyt yhdenmukaisuuden standardit, (15) Käytetty tekniset standardit tai säännökset, (16) Palkka, (17) Alku, (18) Allekirjoittaja nimi, (19) Toimi, (20) Yritys, (21) Alkuperä.

**ga :** (1) Dearbhaíonn comhthreachtach a CE a (bunachar), (2) Dúntaír, (3) Seadh, (4) Sealbhóir an chomhaid theilgeoil, (5) Dearbhailonn an deantúr go ndéanann an t-imeall ar a bhíllur cur sios iobis, (6) Colóna sé le an teorach seo a leanas agus lena dtrásl isteach i ndí hásúnta (míci cui), (7) Le haghaidh imní an agusín IV, (8) Uimhir teistusa, (9) Comhthacht a dhúigil fogra dó, (10) Nós imacha a curaadh i bhfeidhme, (11) Leibhéal cumhachta na fuaime, (12) Tomhasta, (13) Rátharth, (14) Caighdeán chomhchúlúilte a úsáideadh, (15) Caighdeán nó foréalaúch teileanála a úsáideadh, (16) Ama chleáinéar ag, (17) Dúta, (18) Airem an tseiltear, (19) Fidhmeannas, (20) Comhlaeth (21) Síniú.

**hr :** (1) EK deklaracija o uključenosti (original), (2) Proizvođač, (3) Adresa, (4) Nositelj tehničke dokumentacije, (5) Proizvođač izjavljuje da stroj opisan u nastavku, (6) Ispravljava slijedeće direktive i njihovom prijenosu u nacionalno zakonodavstvo (ako je primjenjivo), (7) Za dodatak IV o strojevinama, (8) Broj certifikata, (9) Ovlašteno tijelo, (10) Primjenjeni postupak, (11) Razina snage zvuka, (12) Izmereno, (13) Zajamčeno, (14) Primjenjeni standardi o harmonizaciji, (15) Primjenjeni standardi ili tehničke pravne, (16) Uradeno u, (17) Datum, (18) Ime potpisnika, (19) Funkcija, (20) Tvrda, (21) Polje.

**hu :** (1) CE megfelelőseg nyilatkozat (eredeti), (2) Gyártó, (3) Cím, (4) A műszaki dokumentáció birtokosa, (5) A gyártó kijelenti, hogy az alábbi termék, (6) Megfelel az alábbi irányelveknek valamint azok honosított előirányzatain (ha vannek ilyenek), (7) A IV. mellékletével együtt (adott esetben), (8) Bizonyosítási szám, (9) Elérhető szervezet, (10) Alkalmazott eljárás, (11) Akustikus hang szint, (12) Mérő, (13) Garantál, (14) felhasznált harmonizált szabványok, (15) egyéb felhasznált műszaki szabványok, (16) Kelt (hely), (17) Dátum, (18) Aláíró neve, (19) Funkció, (20) Vállalat, (21) Aláírás

**is :** (1) Samningavtöldur ESB (upplæsing), (2) Framleiðandi, (3) Ásetur, (4) Handhafi tekniski skriftrif, (5) Framleiðandi staðfestir að velin sem lýst er heð, (6) Samhæfnið eftirfarandi stöðum og staðfestir heimur með hildunum af þjóðum (ef við a), (7) Fyrir tekniskum laði IV. vísadum, (8) Númer vottörðs, (9) Tilkynnt til, (10) Aðferð belt, (11) Hljóðstærkiur, (12) Mislist, (13) Ábyrgð, (14) Samhæfnið staðar sem notáðar voru, (15) Aðar staðar eða tekniklegar fyrirsíður, (16) Staður, (17) Dagsetning, (18) Nafn undirteðs, (19) Staða, (20) Fyrirtæti, (21) Undirskrift.

**it :** (1) Dichiarazione CE di conformità (originale), (2) Costruttore, (3) Indirizzo, (4) Titolare del fascicolo tecnico, (5) Il costruttore dichiara che la macchina descritta di seguito, (6) È conforme alle direttive seguenti e al relativo raccolpimento nella normativa nazionale (se applicable), (7) Per le macchine Allegato IV, (8) Numero di Allegato, (9) Organismo designato della norma, (10) Procedura applicata, (11) Livello di potenza acustica, (12) Misurato, (13) Garantito, (14) Norme armonizzate applicate, (15) Norme e specifiche tecniche applicate, (16) Luogo, (17) Data, (18) Nome del firmatario, (19) Funzione, (20) Società, (21) Firma

**lt :** (1) EK atitinkamumo deklaracija (original), (2) Gaminėjas, (3) Adresas, (4) Techninės bylos turėtojas, (5) Gaminėjas nurodo, kad matinė, aprašyta žemiau, (6) atitinkančiai laikyti normatyviniai ir nacionaliniai teisės aktus per kelias jų nuostatas (jei taikytina), (7) IV priedas dėl matinė, (8) Sertifikato Nr., (9) Naudotojų įstaiga, (10) Taikytu procedūra, (11) Garso alprimo lygis, (12) Izmertas, (13) Garantijos, (14) Naudoti dariniai standartai (15) Kiti naudoti standartai ir techninės spesifikacijos, (16) Pasirašyta, (17) Data, (18) Pasirašinėto asmens vardas ir pavardė, (19) Pareigas, (20) Bendrovė, (21) Paraiška

**lv :** (1) EK atbilstības deklarācija (originals). (2) Rāzotājs, (3) Adrese, (4) Tehniskā dokumentācijas turētājs, (5) Rāzotāja apliecināja, ka turpmāk aprakstītā mašīna, (6) Atbilst tālāk norādītajiem direktīviem un to iekļaušanai iekļaušanai (ja pieejams), (7) IV pielikuma iekšķīlām, (8) Sertifikāta numurs, (9) Pārņemtās iestāde, (10) Pieņemtās procedūra, (11) Skaitas jaudas līmenis, (12) Izmerīta, (13) Garantēts, (14) Pieņemtās saskaņotie standarti, (15) Pieņemtās tehniskie standarti un noteikumi, (16) Saistītās, (17) Datums, (18) Parakstītāja vārds, (19) Amats, (20) Uzņēmums, (21) Paraksts

**mt :** (1) Deklarazzjoni ta' Konformità tal-IEC (original). (2) Manifattur, (3) Indirizz, (4) Detentur tal-IEC leiknu, (5) Il-manifattur jidzkjars li l-magna deskripta hawn taqt, (6) Hija konformi hija konformi mad-Direttivi seguenti u i-egzist li jipplementswhom li-egzist nazjonali (jez applikabbli), (7) Għeff-mogni li-Annex IV, (8) Numru ta-dar-ċertifikat, (9) Entità nudiifikata, (10) Procedura applikata, (11) Livell ta' qasaw akustiku, (12) Imkelt, (13) Garantit, (14) I-tarbiżi armonizzati użati, (15) standardi teknici u spesifikazzjoni ofra użati, (16) Magħmlu f., (17) Data, (18) Isem il-firmaturu, (19) Kartigu, (20) Kumparja (21) Firma

**nl :** (1) EG-verklaring van overeenstemming (voorspelkele). (2) Fabrikant, (3) Adres, (4) Houder van het technisch dossier, (5) De fabrikant verklaart dat de hieronder beschreven machine, (6) In overeenstemming is met de volgende richtlijnen en hun omzettingen in het nationale recht (indien van toepassing), (7) Voor de machines in bijlage IV, (8) Certificatenummer, (9) Aangemelde instantie, (10) Toepassings procedure, (11) Geluidvermogeninstroom, (12) Gemeten, (13) Gecertificeerd, (14) gehanteerde geharmoniseerde normen, (15) andere gehanteerde technische normen en specificaties, (16) Opgemerkte, (17) Datum, (18) Naam van ondertekende, (19) Functie, (20) Onderneming, (21) Handtekening,

**no :** (1) CE-samsvarserklæring (original). (2) Produsent, (3) Adresse, (4) Innnehaveren av den tekniske dokumentasjonen, (5) Produsenten sier at maskinen beskrevet nedenfor, (6) Opplyser kravene i følgende direktiv og med nasjonale gjennomføringsbestemmelser (hvis aktuell), (7) For maskinene i bilag IV, (8) Allesinummer, (9) Teknisk kontrollorgan, (10) Anvendt prosedyre, (11) Akustisk støy, (12) Målest, (13) Garant, (14) harmoniserte standarder som brukes, (15) Andre standarder og spesifikasjoner som brukes, (16) Utstedt, (17) Dato, (18) Underskriftens navn, (19) Silling, (20) Firma (21) Underskrift

**pl :** (1) Deklaracja zgodności CE (oryginal). (2) Producent, (3) Adres, (4) Posiadacz dokumentacji technicznej, (5) Producent oświadcza, że opisana poniżej maszyna, (6) Jest zgodna z następującymi dyrektywami i odpowiadającym im przepisom prawa krajowego (jeśli dotyczy), (7) Dla maszyn z załącznika IV, (8) Numer certyfikatu, (9) Jednostka certyfikująca, (10) Procedura, (11) Spłoszona, (12) Mierzący, (13) Gwarantowany, (14) zastosowane normy harmonizowane, (15) Zastosowana norma lub przepis techniczny, (16) Sporządzono w, (17) Data, (18) Nazwisko podpisującego, (19) Stanowisko, (20) Firma (21) Podpis

**pt :** (1) Declaração de conformidade CE (original). (2) Fabricante, (3) Morada, (4) Titular do processo técnico, (5) O fabricante afirma que a máquina descrita abajo, (6) Está em conformidade com as seguintes diretrizes e as suas transposições para direito nacional (se for o caso), (7) Para as máquinas no anexo IV, (8) Número de certificado, (9) Entidade notificada, (10) Procedimento aplicado, (11) Nível de potência acústica, (12) Medida, (13) Garantida, (14) normas harmonizadas utilizadas, (15) outras normas e especificações técnicas utilizadas, (16) Elaborado em, (17) Data, (18) Nome do signatário, (19) Cargo, (20) Empresa, (21) Assinatura

**ro :** (1) Declarație de corespondență CE (original). (2) Producător, (3) Adresa, (4) Titular din dosarul tehnic, (5) Producătorul afirmă că aparatul descris mai jos, (6) Este conform cu directivele următoare și cu transpunerea lor în dreptul național (dacă este cazul), (7) Pentru mașinile din anexa IV, (8) Număr de atestare, (9) Organism notificat, (10) Procedură aplicată, (11) Nivel de putere acustică, (12) Măsură, (13) Garantat, (14) standarde armonizate utilizate, (15) alte standarde și specificații tehnice utilizate, (16) Înlocuit la, (17) Data, (18) Numerele persoanelor care semnează, (19) Funcție, (20) Companie, (21) Semnat

**sk :** (1) Vyhlasenie o zhode ES (pôvodné). (2) Výrobca, (3) Adresa, (4) Držiteľ technickej dokumentácie, (5) Výrobca vyhlašuje, že nízlie popísaný stroj, (6) Je v súlade s následujúcimi smernicami a smernicami transponovanými do vnitrostátného práva (v prípade potreby), (7) Pre stroje v prílohe IV, (8) Číslo certifikátu, (9) Nařízený orgán, (10) Použitý postup, (11) Akustickú úroveň hluku, (12) Mierzená, (13) Zaručená, (14) Použité harmonizované normy, (15) Iné použité normy a technické predpisy, (16) Miesto vydania, (17) Dátum vydania, (18) meno podpisanej osoby, (19) Funkcia, (20) Spoločnosť, (21) Podpis

**sl :** (1) ES-izjava o skladnosti (izvirnik). (2) Proizvajalec, (3) Naslov, (4) Ime in tehnična dokumentacija, (5) Proizvajalec izjavlja, da naprava, opisana v nadaljevanju, (6) Ustreza naslednjim direktivam in nacionalni zakonodaji (če je velja), (7) Za stroje v skladu s prilog IV, (8) Številka potrdila, (9) Priglašen organ, (10) Uporabljen postopek, (11) Ravn skupščine moči, (12) Izmerjena, (13) Zajemljena, (14) Uporabljeni tehnični standarti, (15) Drugi uporabljeni tehnični standarti in specifikacije, (16) V, (17) Datum, (18) Ime podpisnika, (19) Funkcija, (20) Podpisje, (21) Podpis

**sv :** (1) EG-förslärd om överensstämmelse (original). (2) Tillverkare, (3) Adress, (4) Ägaren av det tekniska underlaget, (5) Tillverkaren försäkrar att den maskin som beskrivs nedan, (6) Överensstämmor med nedanstående direktiv och införlivandet av dem i nationell rätt (om tillämpligt), (7) För maskinerna i bilaga IV, (8) Nummer för godkännande, (9) Anmält organ, (10) Förslärdande med tillämpliga, (12) Ljudtrycksnivå, (12) Uppmät, (13) Garanterat (14) Harmoniseringade standarder som används, (15) andra tekniska standarder och specifikationer som används, (16) Uppslattat i, (17) Datum, (18) Näm på den som undertecknat, (19) Befattnings, (20) Företag (21) Namnteckning

## SAFETY PLATES AND STICKERS

### ⚠️ IMPORTANT ⚠️

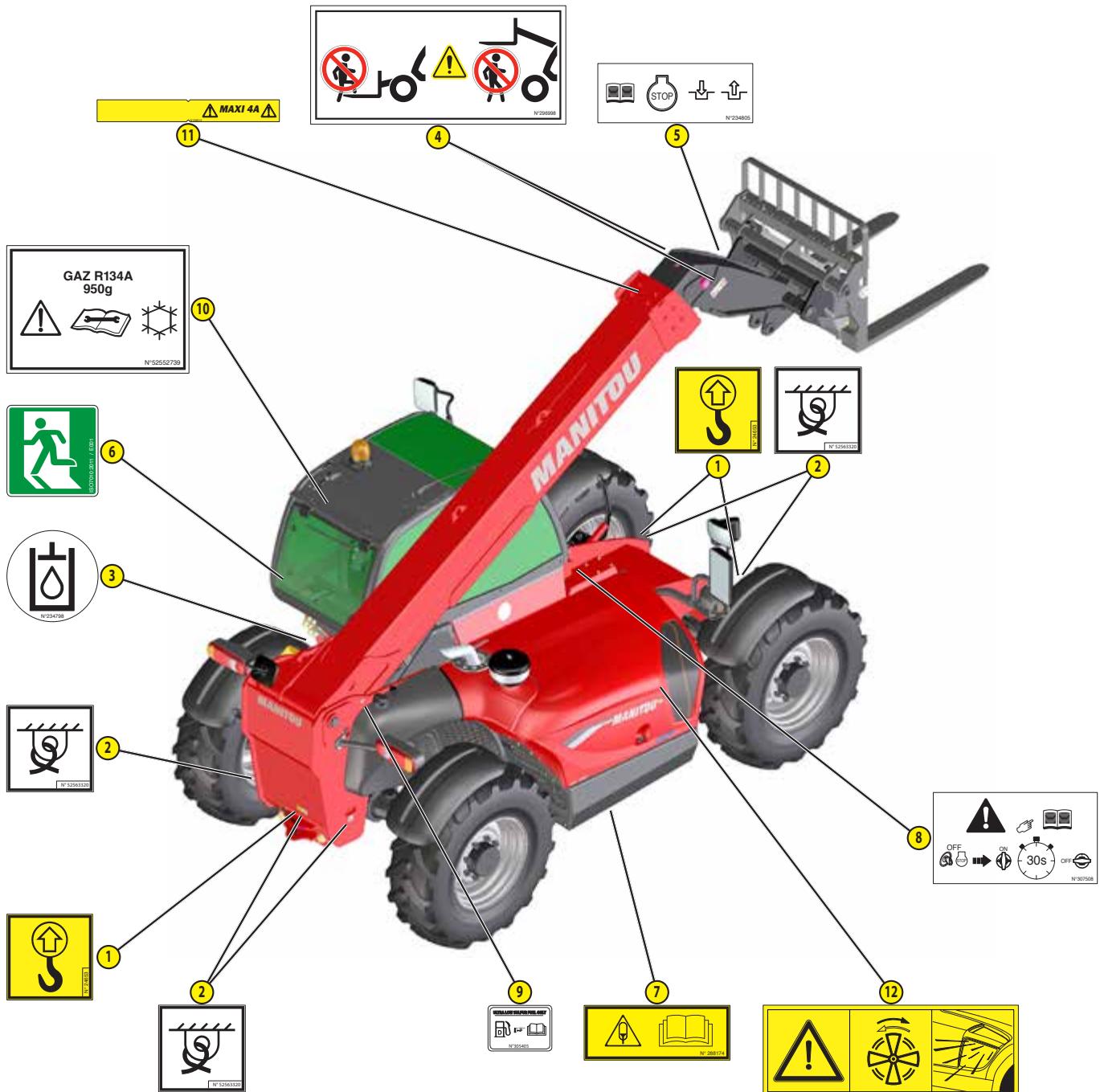
Clean all stickers and safety plates so that they are legible.

Any safety plates and stickers which are illegible or damaged must be replaced.

Check that stickers and safety plates are present after replacing any spare parts.

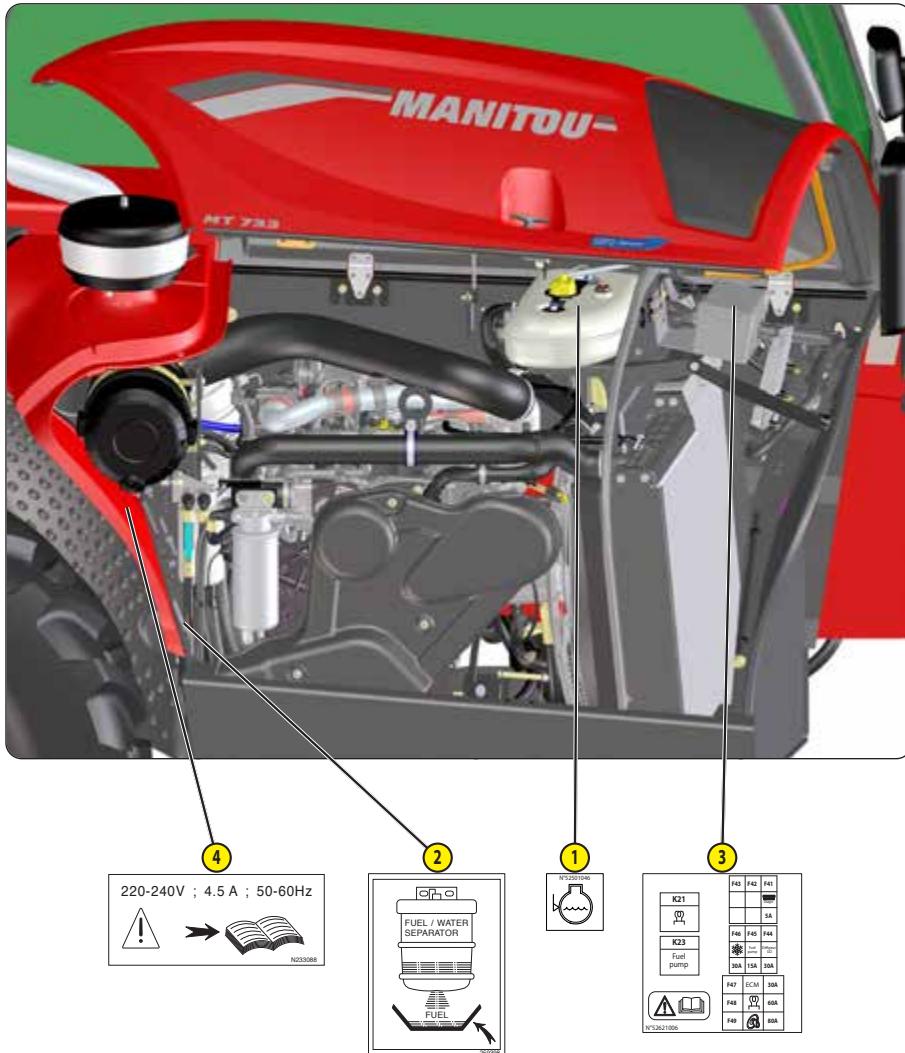
### EXTERNAL PLATES AND STICKERS

REF.	PART No.	DESCRIPTION
1	24653	- Slinging point
2	52563320	- Tie-down point
3	234798	- Hydraulic oil
4	296998	- Safety instruction
5	234805	- Hydraulic coupling instruction (OPTION)
6	52567646	- Emergency output
7	288174	- Accumulator instructions
8	307508	- Battery cut-off instruction
9	305405	- Fuel instruction
10	52552739	- Air conditioning (OPTION)
11	256513	- Boom electrical predisposition (OPTION)
12	250707	- Fan reversal (OPTION)



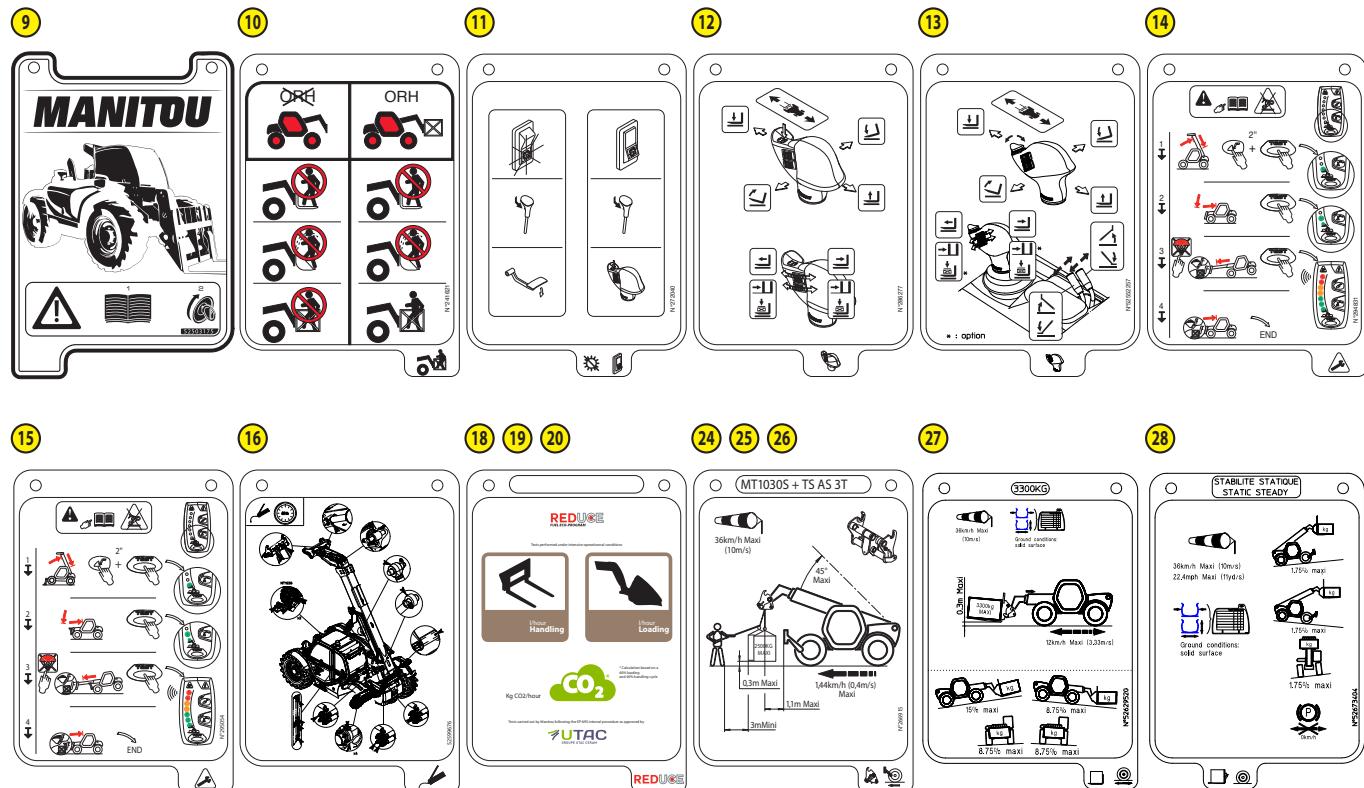
## STICKERS AND PLATES UNDER THE ENGINE HOOD

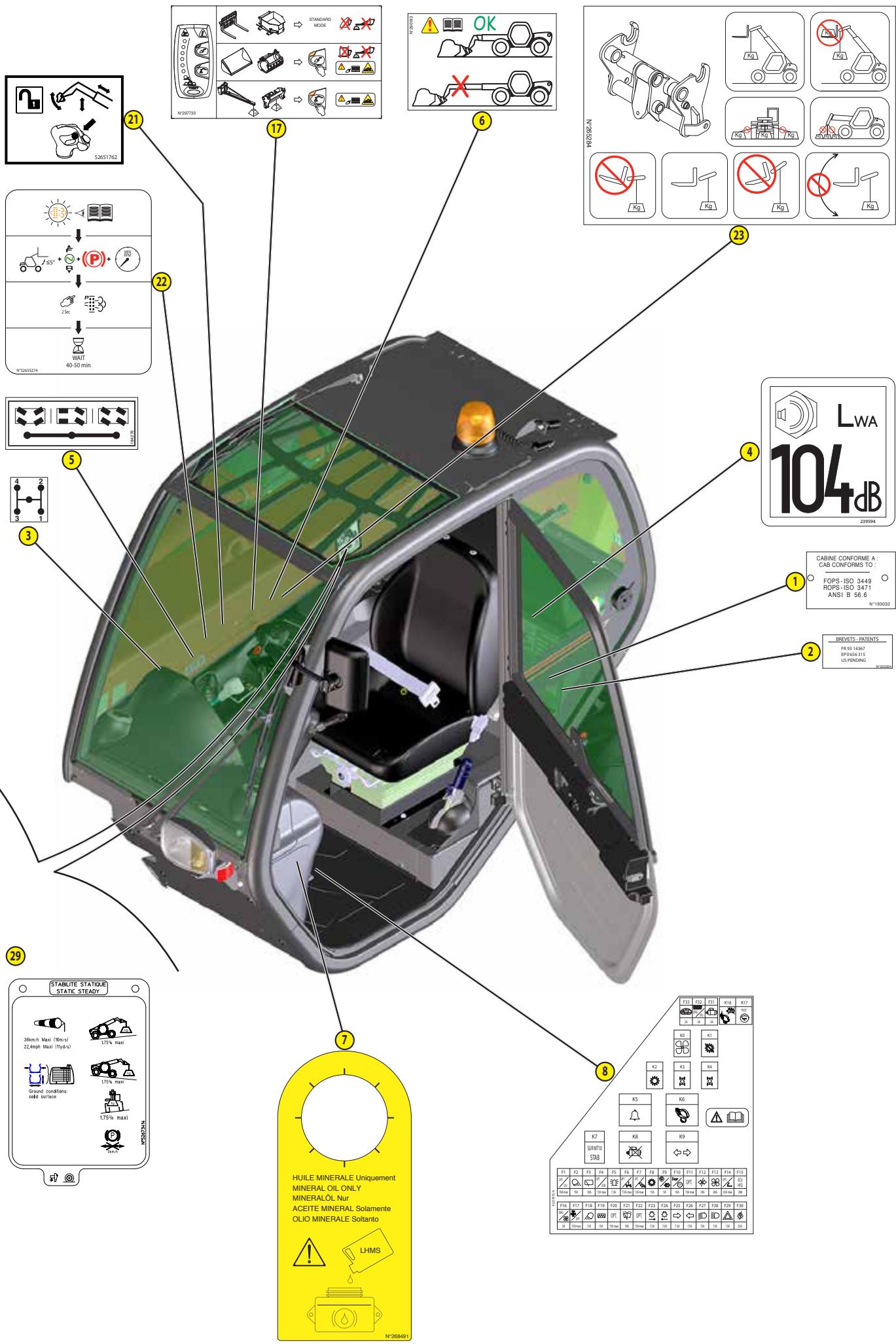
REF.	PART No.	DESCRIPTION
1	52501046	- Anti-freeze
2	259398	- Water/diesel separator
3	52621006	- Engine fuse
4	233088	- Preheat rod (OPTION)



## PLATES AND STICKERS IN THE CAB

REF.	PART No.	DESCRIPTION
1	193032	- Cab compliance
2	223324	- Patents
3	33460	- Gear selection
4	239594	- Sound power 104 dB
5	184276	- Steering selection control
6	290183	- Bucket instruction on telescope
7	268491	- Brake fluid instruction
8	52653778	- Fuses
9	52503175	- Reach chart sheet
10	241621	- Safety instruction
11	272040	- Transmission cut-off switch function
12	286277	- Joystick function MT 733... - MT 933...
13	52552257	- Joystick function MT 1033...
14	294831	- Resetting procedure MT 733... - MT 933...
15	295054	- Resetting procedure MT 1033...
16	52599676	- Lubrication sheet
17	297733	- Operating mode management instruction
18	52527269	- Consumption sheet MT 733...
19		- Consumption sheet MT 933...
20		- Consumption sheet MT 1033...
21	52651762	- Hydraulic controls activation
22	52655274	- Load chart for lifting ring on single carriage
23	265284	- Lifting ring on single carriage (OPTION)
24	52523027	- Load chart for lifting ring on single carriage (OPTION) MT 733...
25	52523028	- Load chart for lifting ring on single carriage (OPTION) MT 933...
26	266915	- Load chart for lifting ring on single carriage (OPTION) MT 1033...
27	52629520	- Pick & Carry 3300kg (ONLY FOR AUSTRALIA) MT 733... - MT 933...
	52672424	- Pick & Carry 3300kg (ONLY FOR AUSTRALIA) MT 1033...
28	52673404	- Static steady (ONLY FOR AUSTRALIA) MT 733... - MT 933...
	52673383	- Static steady (ONLY FOR AUSTRALIA) MT 1033...
29	52673414	- Static steady (ONLY FOR AUSTRALIA) MT 733... - MT 933...
	52673370	- Static steady (ONLY FOR AUSTRALIA) MT 1033...





## IDENTIFICATION OF THE LIFT TRUCK

As our policy is to promote a constant improvement in our products, our range of lift trucks may undergo certain modifications, without any obligation for us to advise our customers.

When you order parts, or when you require any technical information, always specify the following information.

NOTE: For the owner's convenience, it is recommended that a note of these numbers is made in the spaces provided, at the time of the delivery of the lift truck.

For any further technical information regarding your lift truck refer to: CHARACTERISTICS.

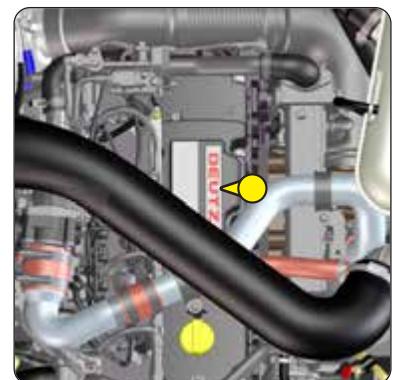
### LIFT TRUCK MANUFACTURER'S PLATE

"Designation" Designation	
"Series" Series	
"Year of manufacture" Year of manufacture	
"Model year" Model year	
"Serial Number / Product Identification Number" Serial number/Product identification number	
"Unladen mass" Unladen weight	
"Power" Power	
"Authorized gross vehicle weight" Authorised gross vehicle weight	
"Rated capacity" Rated capacity	
"Max vertical force (on trailer hook)" Maximum vertical force (on towing hook)	
"Drag strain" Pulling force	



### ENGINE

"MODEL" Model	
"CODE" Code	
"E1" Identification	
"SERNO" Serial number	
"SPEC" Specification	



### GEARBOX

MANITOU Part No.	
Type	
Serial number	



## ANGLE GEAR-BOX

MANITOU Part No.	
Type	
Serial number	



## FRONT AXLE

Type	
Serial number	
MANITOU Part No.	



## REAR AXLE

Type	
Serial number	
MANITOU Part No.	



## CAB

"Constructeur" Manufacturer	
"Type Cabine" Cabin type	
"N° de série" Serial number	



## BOOM

MANITOU Part No.	
Date of manufacture and manufacturer	



## FRAME

Serial number/Product identification number	
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## ATTACHMENT MANUFACTURER'S PLATE

" <b>MODELE</b> " Model	
" <b>N° série</b> " Serial number	
" <b>Année Fabrication</b> " Year of manufacture	
" <b>Masse à vide</b> " Unladen weight	
" <b>Centre de gravité</b> " Centre of gravity	
" <b>Capacité Nominale</b> " Rated capacity	
" <b>Pression service</b> " Working pressure	

