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MT 1440 A 100D ST5 S1
MT 1840 A 100D ST5 S1

OPERATOR'S MANUAL
(ORIGINAL MANUAL)

IMPORTANT

Carefully read and understand this instruction manual before using this machine.

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

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

WHenever you see this symbol, it means:



NOTE! BE CAREFUL! YOUR SAFETY, THAT OF OTHERS, OR THE SAFETY OF THE MACHINE IS AT RISK.

- This manual has been produced based on the equipment list and technical characteristics given at the time of its design.
- The machine's equipment level depends on the options chosen and the country of sale.
- Depending on the machine's options and the date of sale, certain equipment or functions described in this manual may not be present on this machine.
- Descriptions and figures are nonbinding.
- 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 available to answer all your questions.
- This manual is an integral part of the machine.
- It is to be kept in its storage location at all times for ease of reference.
- Give this manual to the new owner if the machine is resold.

1st EDITION

05/11/2020

UPDATE

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1 - OPERATING AND SAFETY INSTRUCTIONS

2 - DESCRIPTION

3 - MAINTENANCE

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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.



Chose 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

1 - OPERATING AND SAFETY INSTRUCTIONS

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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, authorised personnel can use the lift truck. This authorisation 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, are strictly forbidden.

- *The foreseeable abnormal behaviour resulting from ordinary negligence, but which does not result from any wish to put the machinery to any improper use.*
 - *The reflex reactions of a person in the event of a malfunction, incident, fault, etc. during operation of the lift truck.*
 - *Behaviour resulting from application of the "principle of least effort" when performing a task.*
- *For certain machines, the foreseeable behaviour of such persons as: apprentices, teenagers, handicapped persons, trainees tempted to drive a lift truck, operators tempted to operate a truck for the purposes of a bet, a competition or for their own personal experience.*

The person in charge of the equipment must take these criteria into account when assessing the suitability of a person to drive.

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 harmonised 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 signalling and lighting equipment. Contact 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 use in average weather conditions, i.e. between -15°C and +35°C, the lubricants are topped up 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 cooling liquid.

- Preventing fire risks associated with use in dusty and flammable conditions (e.g. straw, flour, sawdust, organic waste, etc.).
- A lift truck operating in an area without fire extinguishing equipment must be equipped with an individual extinguisher. There are solutions, 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.

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 harmonised 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 recognised 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 licence 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 licence 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 licence, 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.

⚠ IMPORTANT ⚠

*When towing a trailer or agricultural equipment, the travelling 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).

⚠ IMPORTANT ⚠

*Structural damage or overturning, a modification, changes or a poorly executed repair can reduce the protective efficiency of the cab, cancelling its compliance.
Do not perform welding or drilling on the cab structure.
Consult your dealer to determine the limits of this structure without cancelling 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

FOREWORD

⚠ IMPORTANT ⚠

The risk of accident while using, servicing or repairing your lift truck can be restricted if you follow the safety instructions and safety measures detailed in these instructions. Failure to respect the safety and operating instructions, or the instructions for repairing or servicing your lift truck may lead to serious, even fatal accident.

- Only the operations and manoeuvres 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 - AUTHORISATION 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 with respect to the use of lift trucks and must be carried permanently by the operator.
- The operator is not competent to authorise 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 risk materials are likely to accumulate.

D - TIRES

- The operator must ensure tires are adapted to the nature of the ground (see area of the contact surface of the tires in the chapter: 2 - DESCRIPTION: TIRES). There are optional solutions, 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 authorised 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.

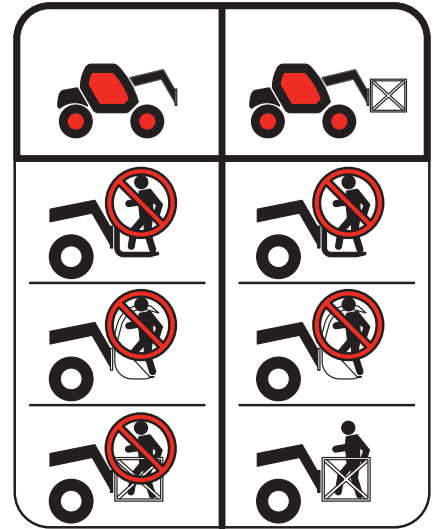
The fitting of foam inflated tires is prohibited and is not guaranteed by the manufacturer, excepting prior authorisation.

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 authorised 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 ⚠

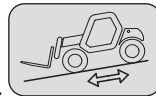
Under no circumstances must the seat be adjusted while the lift truck is moving.

- 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 in any event be used for any other than their intended purposes (e.g. climbing onto or down from the lift truck, portmanteau, 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.

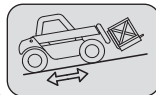
C - ENVIRONMENT

- 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.
- Travelling 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 loading platform without having first checked:
 - That it is suitably positioned and made fast.
 - That the unit to which it is connected (wagon, lorry, 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 at an 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 jeopardises the stability of the lift truck and its load, particularly if the load catches the wind badly.

- Prevent fire risks 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 manoeuvre (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 accessories 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 manoeuvre (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 manoeuvre (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 manoeuvred 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 hauling 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 the 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 ⚠

The 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.
- Familiarise 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 manoeuvre 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) (according to model of lift truck).
- Release the hand 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.

- Engage 1st or 2nd gear (depending on the 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.
- For lift trucks with gearboxes, place the gear lever in neutral.
- 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 access to the lift truck (doors, windows, cowls, etc).

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 licence 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 licence, unless granted an exemption.
- When towing a trailer or agricultural equipment, the travelling 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 windscreen 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: CONTROL AND COMMAND INSTRUMENTS) (according to model of lift truck).
- 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 stabilisers 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 authorised by the manufacturer (consult the manufacturer's plate on your lift truck).
- The authorised gross vehicle weight must not exceed the maximum weight authorised by the manufacturer (↩ 2 - DESCRIPTION: CHARACTERISTICS).

IF NECESSARY, CONSULT YOUR DEALER.

A - CHOICE OF ATTACHMENTS

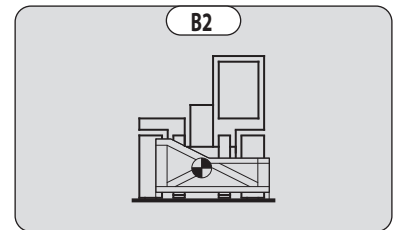
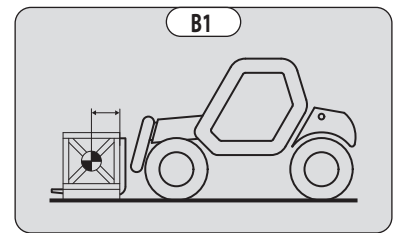
- Only attachments approved by MANITOU can be used on its lift trucks.
- Make sure the attachment is suitable for the work to be done (↖ 4 - OPTIONAL ADAPTABLE ATTACHMENTS FOR THE RANGE).
- If the lift truck is equipped with the single side-shift carriage OPTION (TSDL), use only the authorised attachments (↖ 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 CENTRE OF GRAVITY

- Before picking up a load, you must know its mass and its centre of gravity.
- The longitudinal position of the centre of gravity in relation to the heel of the forks (fig. B1) is defined on the load chart concerning your lift truck (↖ 2 - DESCRIPTION: DIMENSIONS AND LOAD CHARTS). For a higher centre of gravity consult your dealer.
- For irregular loads, determine the transverse centre of gravity before any handling (fig. B2) and place it in the longitudinal axis of the lift truck.

⚠ IMPORTANT ⚠

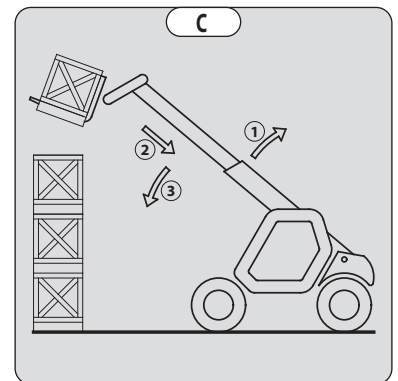
*It is forbidden to move a load heavier than the effective capacity defined on the lift truck load chart.
For loads with a moving centre of gravity (e.g. liquids), take account of the variations in the centre of gravity in order to determine the load to be handled and be extra vigilant and careful to 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 authorised 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 LEVELLING USED ON TIRES

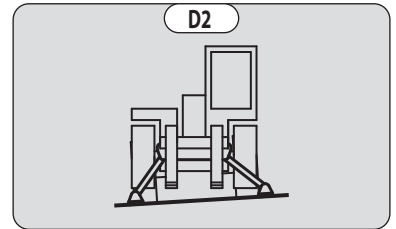
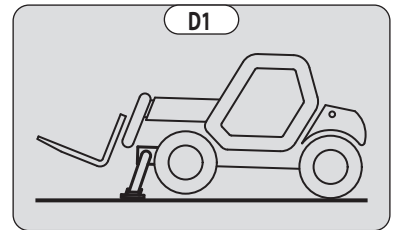
- Position the lift truck so that the spirit level bubble is between the two lines (↖ 2 - DESCRIPTION: INSTRUMENTS AND CONTROLS).

2 - LIFT TRUCK WITH LEVELLING USED ON TIRES

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

3 - LIFT TRUCK USED ON STABILISERS

- Put the two stabilisers on the ground and raise the two front wheels of the lift truck (fig. D1).
- Correct the tilt using the stabilisers (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 centring relative to the load to ensure stability (fig. E2) (optional solutions exist, consult your dealer).
- Never lift a load with a single fork.

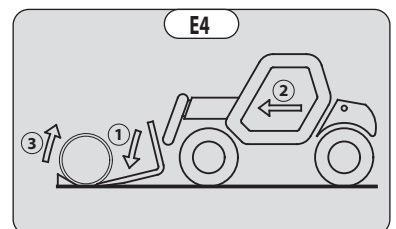
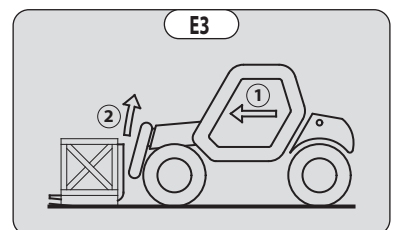
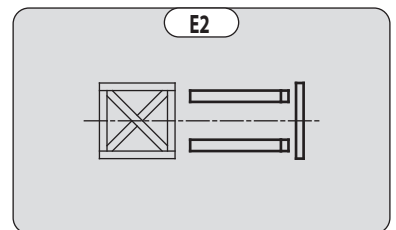
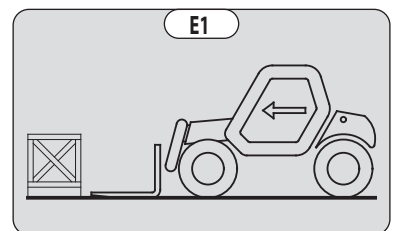
⚠ IMPORTANT ⚠

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-PALLETISED 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

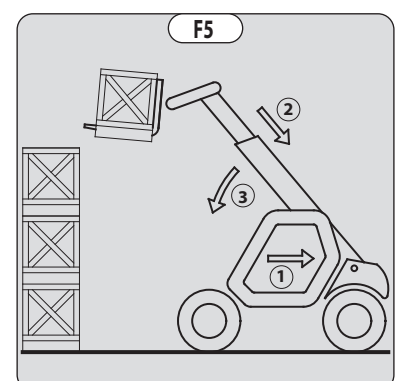
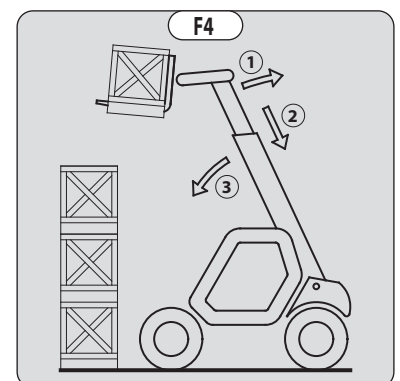
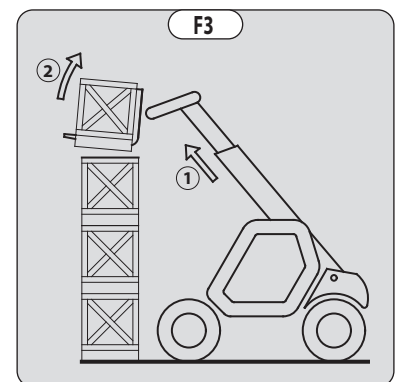
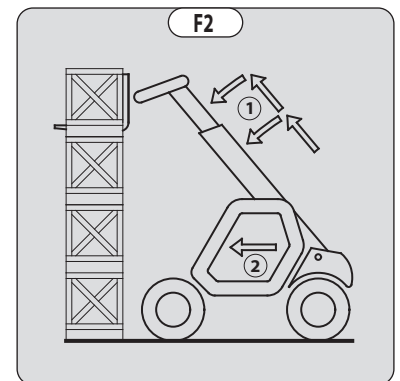
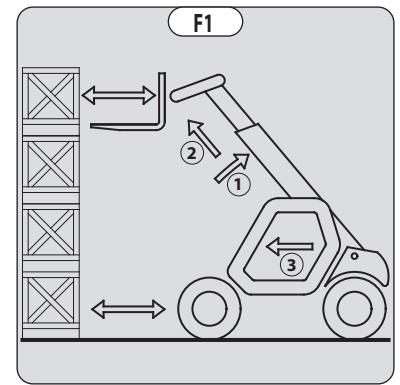
⚠ IMPORTANT ⚠

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).

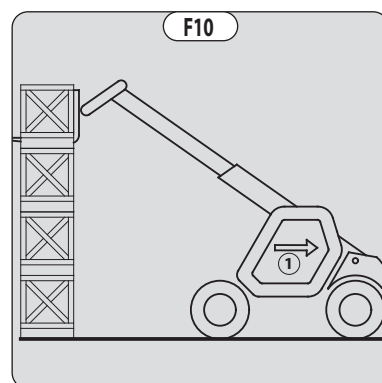
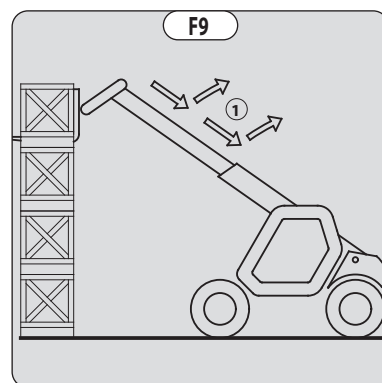
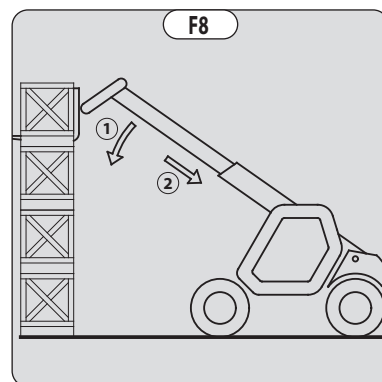
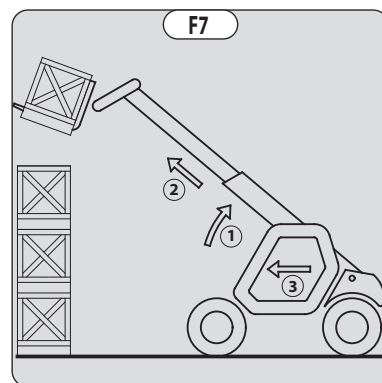
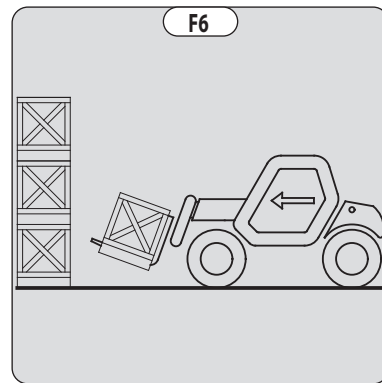
PICKING UP A HIGH LOAD ON TIRES

- Ensure that the forks will easily pass under the load.
- Raise and extend the boom (1) (2) until the forks are level with the load, moving the lift truck (3) forward if necessary (fig. F1), moving 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 stabilise 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, put 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).
- If this is not possible, reverse the lift truck (1), manoeuvring very gently 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 put the forks into transport position.
- If this is not possible, reverse the lift truck (1), manoeuvring very slowly and carefully to release the forks (fig. F10). Then put them into transport position.



G - PICKING UP AND PUTTING DOWN A HIGH LOAD ON STABILISERS

Depending on the model of lift truck

⚠ 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).

The stabilisers are used to optimise the lift truck's lifting performance (← 2 - DESCRIPTION: INSTRUMENTS AND CONTROLS).

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

- Raise both stabilizers fully and at the same time.

LOWERING THE STABILISERS WITH BOOM UP (UNLADEN AND LADEN)

⚠ IMPORTANT ⚠

This operation must be exceptional and performed with great care.

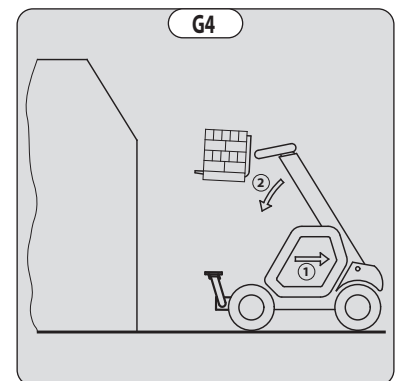
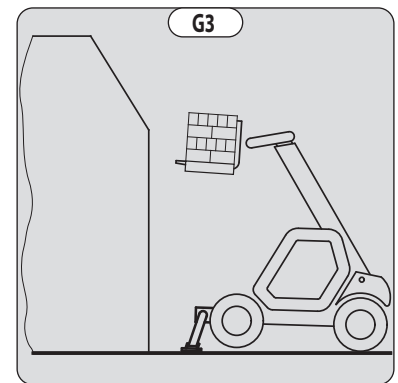
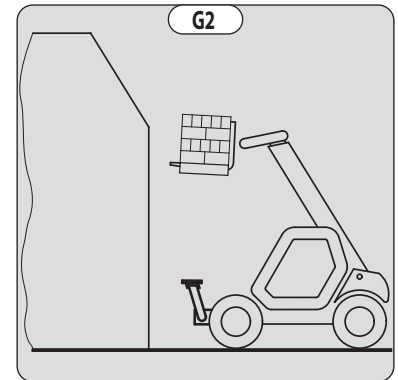
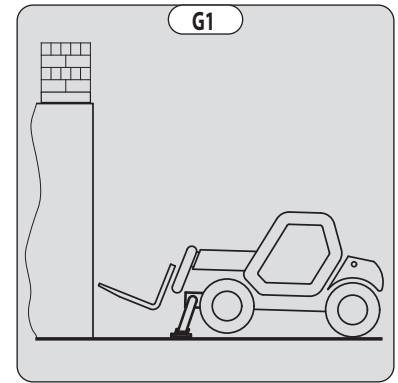
- Raise the boom and retract the telescopes completely.
- Bring the lift truck into position in front of the elevation (fig. G2) moving very slowly and carefully.
- Apply the parking brake and place the forward/reverse selector in neutral.
- Move the stabilizers very slowly and gradually as soon as they are close to the ground or in contact with it.
- Lower the two stabilisers 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 STABILISERS WITH THE BOOM UP (UNLADEN AND LADEN)

⚠ IMPORTANT ⚠

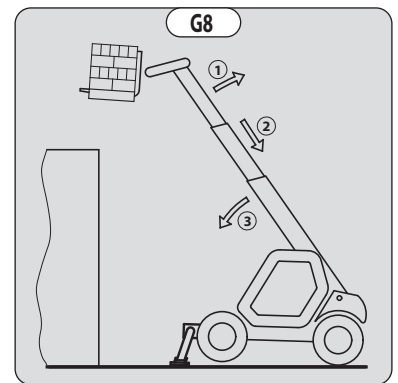
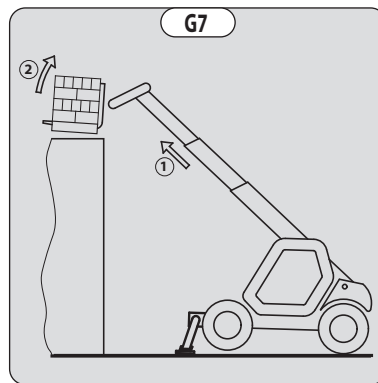
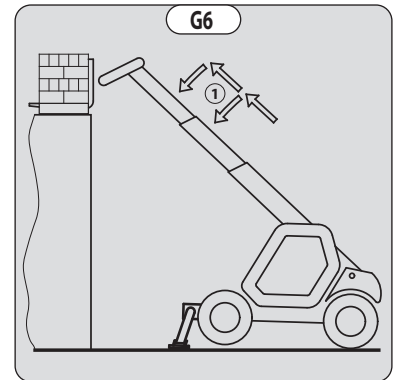
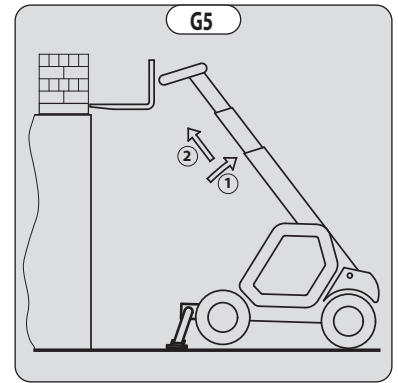
This operation must be exceptional and performed with great care.

- Keep the boom raised and retract the telescopes completely (fig. G3).
- Move the stabilisers very slowly and gradually as soon as they are in contact with the ground and when they leave the ground. During this operation, the 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).



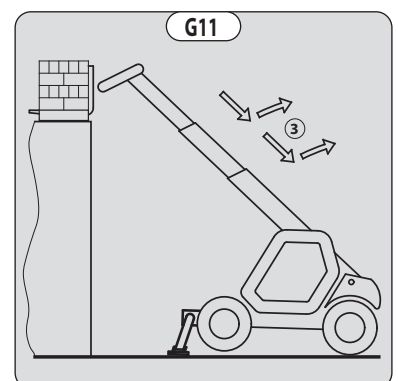
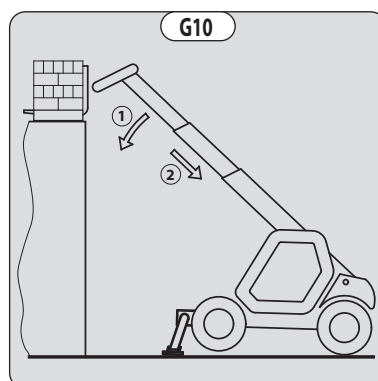
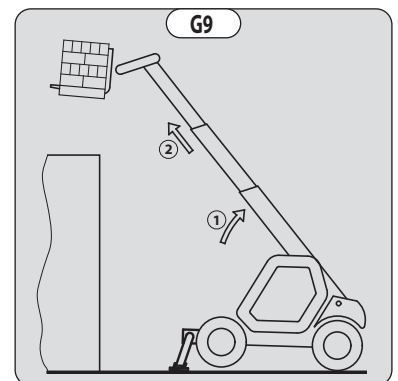
TAKING UP A HIGH LOAD ON STABILISERS

- 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 stabilise 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, put 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 STABILISERS

- 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

IMPORTANT

*Failure to follow the above instructions may lead the lift truck to loose 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 stabilisers 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 kept 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 - TRAVELLING 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 minimise swinging of the load.
- Carry the load a few centimetres 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 travelling, gently stop the lift truck and stabilise 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

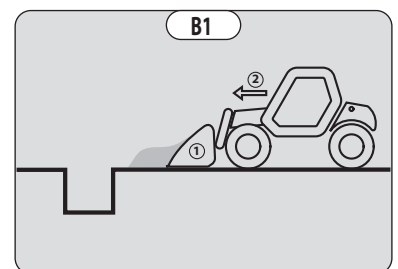
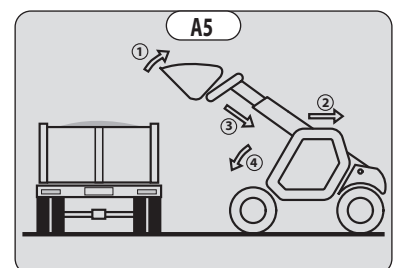
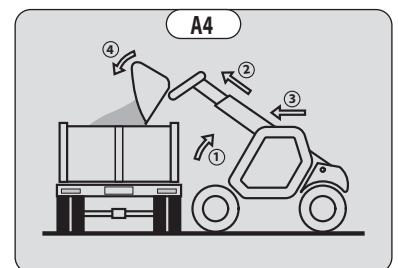
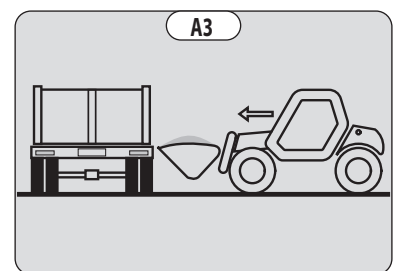
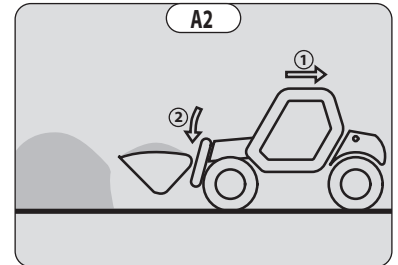
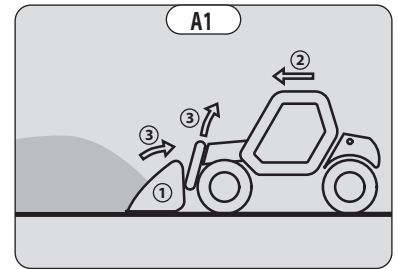
- Approach the side of the trailer in the transport position (fig. A3).
- Raise and extend the boom (1) (2) until the bucket is above the trailer, while monitoring the longitudinal stability limiter and warning device (← INSTRUCTIONS FOR HANDLING A LOAD: C - LONGITUDINAL STABILITY LIMITER AND WARNING DEVICE) (fig. A4).
- Drive the lift truck forward (3) very carefully and gently so that the bucket empties its load in the centre of the trailer (fig. A4).
- Apply the parking brake on and set the reversing lever to neutral.
- 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 levelling blade (fig. B1).

⚠ IMPORTANT ⚠

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



PLATFORM OPERATING INSTRUCTIONS

For lift trucks fitted with a PLATFORM

A - AUTHORISATION FOR USE

- Operation of the platform requires further authorisation 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** 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 harmonised European standard **EN 280:2013+A1** 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 in any event be used for any other than their intended purposes (e.g. climbing onto or down from the lift truck, portmanteau, 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

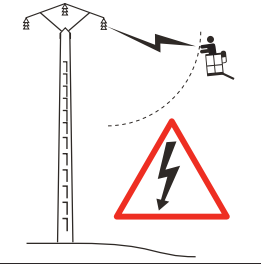
- However experienced they may be, operators must acquaint themselves with the emplacement and operation of all control instruments prior to operating the platform.
- Check before use that the platform has been correctly assembled and locked onto the lift truck.
- Check before operating the platform 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: CHARACTERISTICS).
- 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 (METRES)
50 < U < 1,000	2,30 M
1,000 < U < 30,000	2,50 M
30000 < U < 45000	2,60 M
45000 < U < 63000	2,80 M
63000 < U < 90000	3,00 M
90000 < U < 150000	3,40 M
150000 < U < 225000	4,00 M
225000 < U < 400000	5,30 M
400000 < U < 750000	7,90 M



⚠ IMPORTANT ⚠

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

- To visually recognise 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 periodically inspected to ensure its continued compliance.
The inspection frequency is defined by the legislation applying in the country in which the platform is used.
In France, a general periodic inspection every 6 months (Decree of 1 March 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 neighbouring items.*

All those 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 immobilised 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 manipulator (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 manipulators 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 jewellery 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 rod of the lifting cylinder when working beneath the boom.

FITTING THE WEDGE

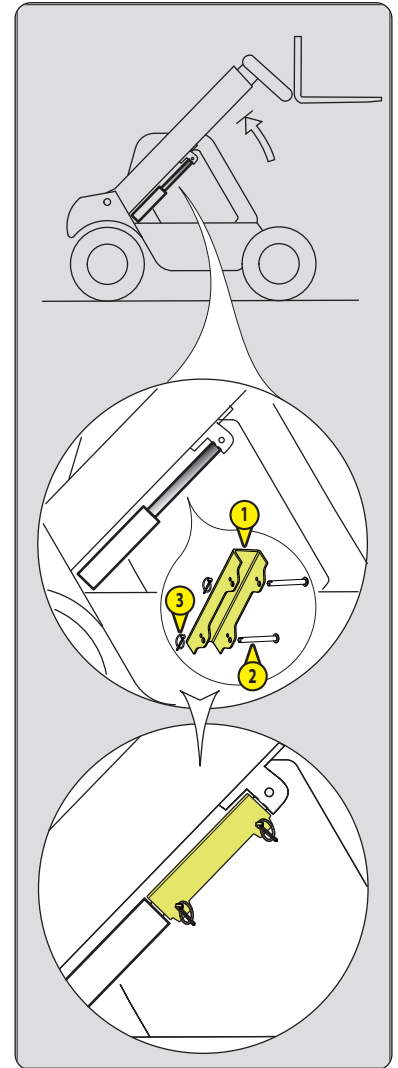
- Fully raise the boom.
- Place the safety wedge 1 on the rod of the lifting cylinder and secure with the rod 2 and the pin 3.
- Slowly lower the boom then stop the hydraulic movements before it comes into contact with the wedge.

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.

⚠ IMPORTANT ⚠

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 the periodic service may cancel the contractual guarantee.

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

- 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

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

⚠ IMPORTANT ⚠

BALANCING VALVE: It is dangerous to change the setting and remove the balancing valves or safety valves which may be fitted to your lift truck cylinders. The HYDRAULIC ACCUMULATORS that may be fitted on your lift truck are pressurised units. Removing these accumulators and their pipework is a dangerous operation and must only be performed by approved personnel (consult your dealer). These operations must only be performed by approved personnel (consult your dealer).

ELECTRICITY

- 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

- 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

- 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

⚠ 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 stoppage.

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

- Drain 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 pressurise 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 the model of lift truck).
- 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

- 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).
- Put the handbrake on 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 organises 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**
44158 - ANCENIS - CEDEX - FRANCE

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

3) Adresse, *Address* : **430, RUE DE L'AUBINIÈRE - B.P 10249**
44158 - ANCENIS - CEDEX - FRANCE

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

MT 1440 A 100D ST5 S1

52001573/00000

N° >MAN00000E00000000<

MT 1840 A 100D ST5 S1

52001575/00000

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)

2014/30/UE DEPUIS 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) *ЕСО декларация за съответствие (оригинал)*, (2) Производител, (3) Адрес, (4) Притежател на техническото досие, (5) Производителът декларира, че описаната по-долу машина, (6) Е в съответствие със следните директиви и тяхното транспониране в националното законодателство (ако е приложимо), (7) Приложение IV относно машините, (8) Номер на сертификата, (9) Нотифициран орган, (10) Приложена процедура, (11) Име на силата на звук, (12) Измерено, (13) Гарантирано, (14) Използвани хармонизирани стандарти, (15) Използвани стандарти или технически разпоредби, (16) Изработено в, (17) Дата, (18) Име на подписаното лице, (19) Длъжност, (20) Фирма, (21) Подпис

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

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

de : (1) *EG-Konformitätsklärung (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) Schalleistungspegel, (12) Gemessen, (13) Gewährleistet, (14) angewandte harmonisierte Normen, (15) angewandte sonstige technische Normen und Bestimmungen, (16) Ausgestellt in, (17) Datum, (18) Name des Unterzeichners, (19) Funktion, (20) Gesellschaft, (21) Unterschrift.

el : (1) *Δήλωση συμμόρφωσης CE (πρωτότυπο)*, (2) Κατασκευαστής, (3) Διεύθυνση, (4) Κάτοχος του τεχνικού φακέλου, (5) Ο κατασκευαστής δηλώνει ότι το μηχάνημα που περιγράφεται παρακάτω, (6) Συμμορφώνεται με τις εθνικές οδηγίες και τις προσαρμογές τους στο εθνικό δίκαιο (κατά περίπτωση), (7) Για το μηχάνημα του παραρτήματος IV, (8) Αριθμός πιστοποίησης, (9) Αξιολογημένος φορέας, (10) Εφαρμοζόμενη διαδικασία, (11) Επίπεδο ηχητικής ισχύος, (12) Καταμετρημένο, (13) Εγγυημένο, (14) Εναρμονισμένα πρότυπα που χρησιμοποιούνται, (15) Πρότυπα ή τεχνικοί κανόνες που χρησιμοποιούνται, (16) Τόπος, (17) Ημερομηνία, (18) Όνομα του υπογράφοντος, (19) Διεύθυνση, (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 vastavastavastatuseklaratsioon (algupärane)*, (2) Tootja, (3) Aadress, (4) Tehnilise dokumentatsiooni valdaja, (5) Tootja kirjutab, et allpool kirjeldatud seade, (6) On vastavuses järgmistele direktiivide ja nende realiseerimise õiguslike ülevõtmiseks vastuvõetud õigusaktidega (kui on kohaldatav), (7) IV lisas loetletud seadmete puhul, (8) Tunnistuse number, (9) Sertifitseerimisasutus, (10) Kohaldatav menetlus, (11) Akustilise võimsuse tase, (12) Mõeldud, (13) Tagatud, (14) Vastab kehvalele ühtlustatud standarditele, (15) Vastab muudele kehtivatele standarditele ja tehnilistele normidele, (16) Väljaandmise koht, (17) Väljaandmise aeg, (18) Allkirjastaja nimi, (19) Amet, (20) Ettevõtte, (21) Allkiri

fi : (1) *EY-vaatimustenmukaisuusvakuutus (alkuperäinen)*, (2) Valmistaja, (3) Osoite, (4) Teknisten asiakirjojen haltaja, (5) Valmistaja ilmoittaa, että alla kuvattu laite, (6) Täyttää seuraavien direktiivien sekä niitä vastaavien kansallisten sääntöjen vaatimukset (tarvittaessa), (7) Liitteen IV laitteiden osalta, (8) Todistusnumero, (9) Ilmoitettu laitos, (10) Käytetty menetelmä, (11) Äänen tehotaso, (12) Mittattu, (13) Taattu, (14) Käytetyt yhdenmukaistetut standardit, (15) Käytetyt tekniset standardit tai säännökset, (16) Paikka, (17) Aika, (18) Allekirjoittajan nimi, (19) Toimi, (20) Yritys, (21) Allekirjoitus.

ga : (1) *Dearbhu comhréireachta « CE » (bunaidin)*, (2) Déantóir, (3) Seoladh, (4) Sealbhoir an chomhad teicniúil, (5) Dearbhalonn an déantóir go ndéanann an t-inneal ar a bhíll cur síos thíos, (6) Cloíonn sé le na teoracha seo a leanas agus lena dtrasul isteach i ndá náisiúnta (má cuil), (7) Le haghaidh innéil an aghuáin IV, (8) Uimhir ceartaíoch, (9) Comhlíocht a d'uglaí fógra dó, (10) Nós imeachta a cuireadh i bhfeidhm, (11) Leibhéal cumhachta na fuaimne, (12) Tomhasa, (13) Réitithe, (14) Caighdeán comhchruinnithe a úsáideadh, (15) Caighdeán nó fóirleacha teicniúla a úsáideadh, (16) Ama dhéanamh ag, (17) Dáta, (18) Ainm an tsíneora, (19) Feidhmeannas, (20) Comhlíocht (21) Síniú.

hr : (1) *EK deklaracija o usklađenosti (original)*, (2) Proizvođač, (3) Adresa, (4) Nositelj tehničke dokumentacije, (5) Proizvođač izjavlja da stroj opisan u nastavku, (6) Ispunjava slijedeće direktive i njihovom prijenosu u nacionalno zakonodavstvo (ako je primjenjivo), (7) Za dodatke IV o strojevima, (8) Broj certifikata, (9) Ovlašteno tijelo, (10) Primjenjeni postupak, (11) Razina snage zvuka, (12) Izmjereno, (13) Zajamčeno, (14) Primjenjeni standardi o harmoniziranju, (15) Primjenjeni standardi ili tehničke priloge, (16) Uradeno u, (17) Datum, (18) Ime potpisnika, (19) Funkcija, (20) Tvrtka, (21) Potpis.

hu : (1) *CE megfelelőségi 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 előírásainak (ha vannak ilyenek), (7) A IV. melléklet gépeihez (adott esetben), (8) Bizonyítási szám, (9) Értékelést szerző szervezet, (10) Alkalmazott eljárás, (11) Akusztikus hang szint, (12) Mért, (13) Garantált, (14) Felhasznált harmonizált szabványok, (15) egyéb felhasznált műszaki szabványok és előírások hivatkozásai, (16) Kelt (hely), (17) Dátum, (18) Aláíró neve, (19) Funkció, (20) Vállalat, (21) Aláírás

is : (1) *Sammunngættun ESB (upprunaleg)*, (2) Framleiðandi, (3) Aðsetur, (4) Handhafi teknískrar, (5) Framleiðandi staðfestir að vélin sem lýst er hér, (6) Samræmist eftirfarandi stöðum og staðfarum þeim me höfðin af þjóðarriti (ef við á), (7) Fyrir tækjahluta IV, viðauka, (8) Númer vottorðs, (9) Tilkynnt lí, (10) Aðdrótt laita, (11) Hjósýrur, (12) Mældist, (13) Ábyrgð, (14) Samhlífir staðir sem notaðir voru, (15) Aðrir staðir eða tæknilegar forsetur, (16) Staður, (17) Dagsetning, (18) Nafn undirritaðs, (19) Staða, (20) Fyrirseti, (21) Underskrift.

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 recepimento nella normativa nazionale (se applicabile), (7) Per le macchine Allegato IV, (8) Numero di Attestazione, (9) Numero destinatario della notifica, (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) *EC atitikties deklaracija (originalas)*, (2) Gamintojas, (3) Adresas, (4) Techninės bylos turėtojas, (5) Gamintojas nurodo, kad mašina, aprašyta žemiau, (6) atitinka toliau nurodytas direktyvas ir į nacionalinius teisės aktus perkeltas jų nuostatas (jei taikytina), (7) IV priedas dėl mašinų, (8) Sertifikuoti Nr., (9) Notifikuoti įstaiga, (10) Taikyta procedūra, (11) Garso stiprumo lygis, (12) Išmatuotas, (13) Garantuoti, (14) Naudojami standartai, (15) Kitų naudojami standartai ir techninės specifikacijos, (16) Pasirašyta, (17) Data, (18) Pasirašiusio asmens vardas ir pavardė, (19) Pareigos, (20) Bendrovė, (21) Parašas

lv : (1) *EK atbilstības deklarācija (oriģināls)*, (2) Ražotāja, (3) Adrese, (4) Tehniskās dokumentācijas turētājs, (5) Ražotājs apliecinā, ka turpmāk aprakstītajā mašīnā, (6) Atbilst Eiropas direktīvajām un to iekļaušanai nacionālajā likumdošanā (ja piemērojama), (7) IV pielikuma iekārtām, (8) Sertifikāta numurs, (9) Piemērotā iestāde, (10) Piemērotā procedūra, (11) Skajas jaudas līmenis, (12) Izmērīts, (13) Garantēti, (14) Piemērojamas saskaņotie standarti, (15) Piemērojamas tehniskie standarti un noteikumi, (16) Sasīdīts, (17) Datums, (18) Parakstītāja vārds, (19) Amats, (20) Uzņēmums, (21) Paraksts

mt : (1) *Dikjarazzjoni ta' Konformità tal-KE (original)*, (2) Manifattur, (3) Indirizz, (4) Detentur tal-fajl tekniku, (5) Il-manifattur jiddeklara li l-magna deskritta hawn taħt, (6) Hija konformi hija konformi mad-Direttivi segwenti u l-bijgjet li jipreżentawhom fl-Eġ nazzjonali (jekk applikabbli), (7) Għall-magni fl-Anness IV, (8) Numru taċ-ċertifikat, (9) Entità notifkatta, (10) Proċedura applikata, (11) Livell ta' għewwa akustiku, (12) Imkejjel, (13) Garantit, (14) I-standardi armonizzati użati, (15) standardi tekniċi u speċifikazzjonijiet oħra użati, (16) Magħmul f, (17) Data, (18) Isem il-firmatarju, (19) Kariga, (20) Kumpanija (21) Firma.

nl : (1) *EG-verklaring van overeenstemming (oorspronkelijke)*, (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) Certificaatnummer, (9) Aangemelde instantie, (10) Toegepaste procedure, (11) Geluidsvermogensniveau, (12) Gemeten, (13) Gegarandeerd, (14) gehanteerde geharmoniseerde normen, (15) andere gehanteerde technische normen en specificaties, (16) Opgemaakt te, (17) Datum, (18) Naam van ondergetekende, (19) Functie, (20) Onderneming, (21) Handtekening.

no : (1) *CE-samsvarerklæring (original)*, (2) Produsent, (3) Adresse, (4) Innehaveren av den tekniske dokumentasjonen, (5) Produsenten sier at maskinen beskrevet nedenfor, (6) Oppfyller kravene i følgende direktiver og med nasjonale gjennomføringsbestemmelser (hvis aktuelt), (7) For maskinene i bilag IV, (8) Attestnummer, (9) Teknisk kontrollorgan, (10) Anvendt prosedyre, (11) Akustisk støy, (12) Målt, (13) Garantert, (14) harmoniserte standarder som brukes, (15) Andre standarder og spesifikasjoner som brukes, (16) Utstedt, (17) Dato, (18) Undertegnendes navn, (19) Stilling, (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 odpowiedzonymi im przepisami prawa krajowego (jeżeli dotyczy), (7) Dla maszyn załącznik IV, (8) Numer certyfikatu, (9) Jednostka certyfikująca, (10) Procedura stosowana, (11) Poziom mocy akustycznej, (12) Zmierzony, (13) Gwarantowany, (14) zastosowane normy zharmonizowane, (15) Zastosowane normy lub przepisy techniczne, (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 abaixo, (6) Está em conformidade com as seguintes diretrizes e as suas transposições para o 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) *Declaratie de conformitate CE (original)*, (2) Producător, (3) Adresa, (4) Titularul din dosarul tehnic, (5) Producătorul afirmă că aparatul descris mai jos, (6) Este conform cu directivele următoare și cu transpunerile lor în dreptul național (dacă este cazul), (7) Pentru mașinile din anexa IV, (8) Număr de atestare, (9) Organism notificat, (10) Procedura aplicată, (11) Nivel de putere acustică, (12) Măsurat, (13) Garantat, (14) standardele armonizate utilizate, (15) alte standarde și specificații tehnice utilizate, (16) Încolțit în, (17) Data, (18) Numele persoanei care semnează, (19) Funcția, (20) Firma, (21) Semnătura

sk : (1) *Vyhlasenie o zhode ES (pôvodné)*, (2) Výrobca, (3) Adresa, (4) Držiteľ technickej dokumentácie, (5) Výrobca vyhlasuje, že nižšie popísaný stroj, (6) Je v súlade s nasledujúcimi smernicami a v smernicami transponovanými do vnitrostátného práva (v prípade potreby), (7) Pre stroje v prílohe IV, (8) Číslo certifikátu, (9) Notifikačný orgán, (10) Použitý postup, (11) Akustická úroveň hluku, (12) Nameraná, (13) Zaručená, (14) Použitě harmonizované normy, (15) Iné použité normy a technické předpisy, (16) Miesto vydania, (17) Dátum vydania, (18) Měno podepsané osoby, (19) Funkcia, (20) Spoločnosť, (21) Podpis

sl : (1) *ES izjava o skladnosti (izvirnik)*, (2) Proizvajalec, (3) Naslov, (4) Imetnik tehnične dokumentacije, (5) Proizvajalec izjavlja, da naprava, opisana v nadaljevanju, (6) Ustreza naslednjim direktivam in nacionalni zakonodaji (če ta velja), (7) Za stroje v prilogi IV, (8) Številka potrdila, (9) Pregledni organ, (10) Uporabljeni postopek, (11) Raven akustične moči, (12) izmerjena, (13) Zajamčena, (14) Uporabljeni izkrajni standardi, (15) Drugi uporabljeni tehnični standardi in specifikacije, (16) V, (17) Datum, (18) Ime podpisnika, (19) Funkcija, (20) Podjetje, (21) Podpis

sv : (1) *EG-färdskrift om överensstämmelse (original)*, (2) Tillverkare, (3) Adress, (4) Ägaren av det tekniska underlaget, (5) Tillverkaren försäkras att den maskin som beskrivs nedan, (6) Överensstämmer med nedanstående direktiv och införförande av dem i nationellt rätt (om tillämpligt), (7) För maskinerna i bilaga IV, (8) Nummer för godkännande, (9) Anmält organ, (10) Förfarande som tillämpats, (11) Ljudstyrkeivå, (12) Uppmätt, (13) Garanterad (14) Harmoniserade standarder som använts, (15) andra tekniska standarder och specifikationer som använts, (16) Upprättat i, (17) Datum, (18) Namn på den som undertecknat, (19) Befattning, (20) Företag (21) Namnteckning

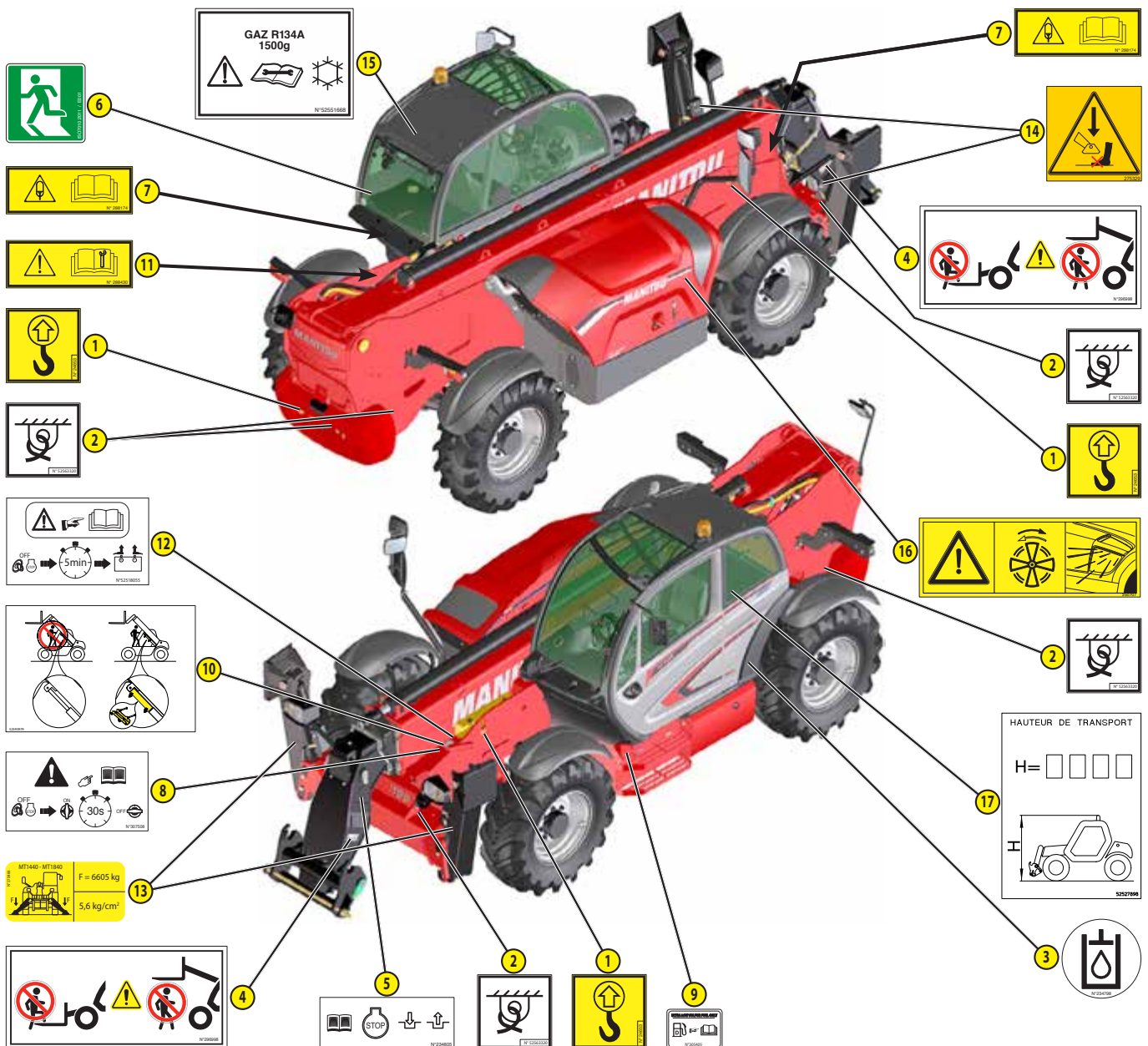
SAFETY PLATES AND STICKERS

⚠ 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.

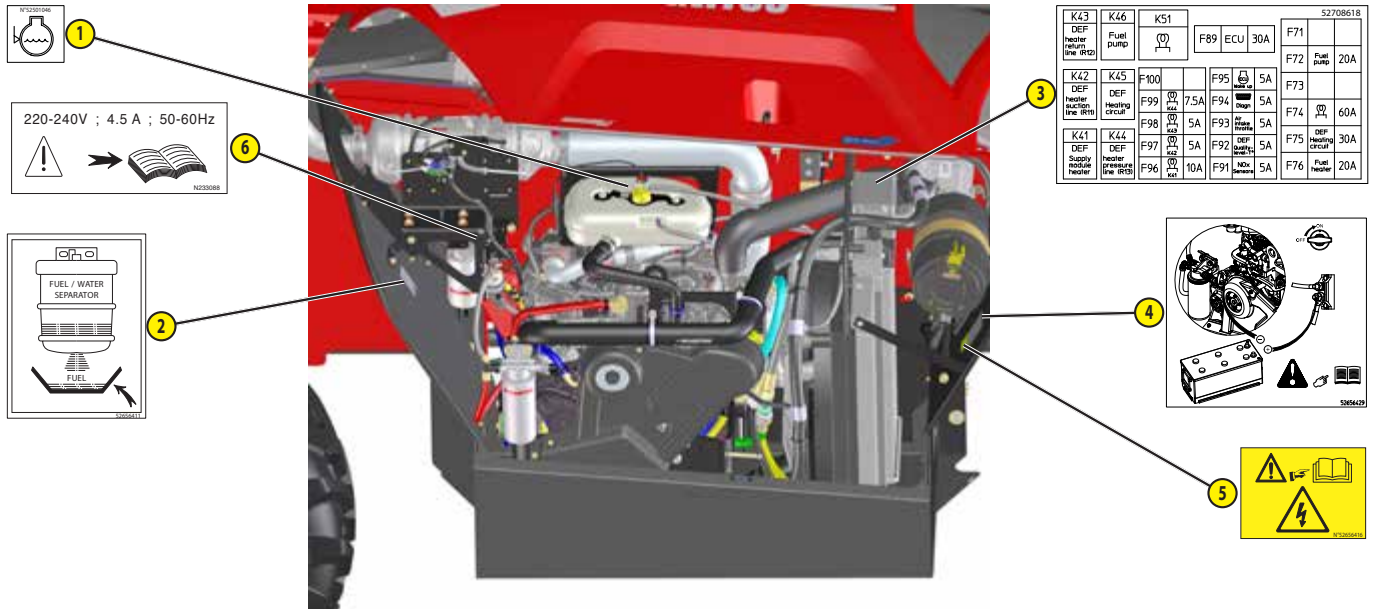
EXTERNAL PLATES AND STICKERS

ITEM	PART NO.	DESCRIPTION
1	24653	- Slings point
2	52563320	- Tie-down point
3	234798	- Hydraulic fluid
4	296998	- Safety instruction
5	234805	- Hydraulic coupling instruction
6	52567646	- Emergency output
7	288174	- Accumulator instructions
8	307508	- Battery cut-off instruction
9	305405	- Fuel instruction
10	52593979	- Boom safety
11	288430	- Repair instruction
12	52518055	- Battery troubleshooting
13	270466	- Load on stabilizers
14	275329	- Stabilizer crush hazard
15	52551668	- Air conditioning (OPTION)
16	250707	- Fan reversal (OPTION)
17	52527898	- Overall height (OPTION)



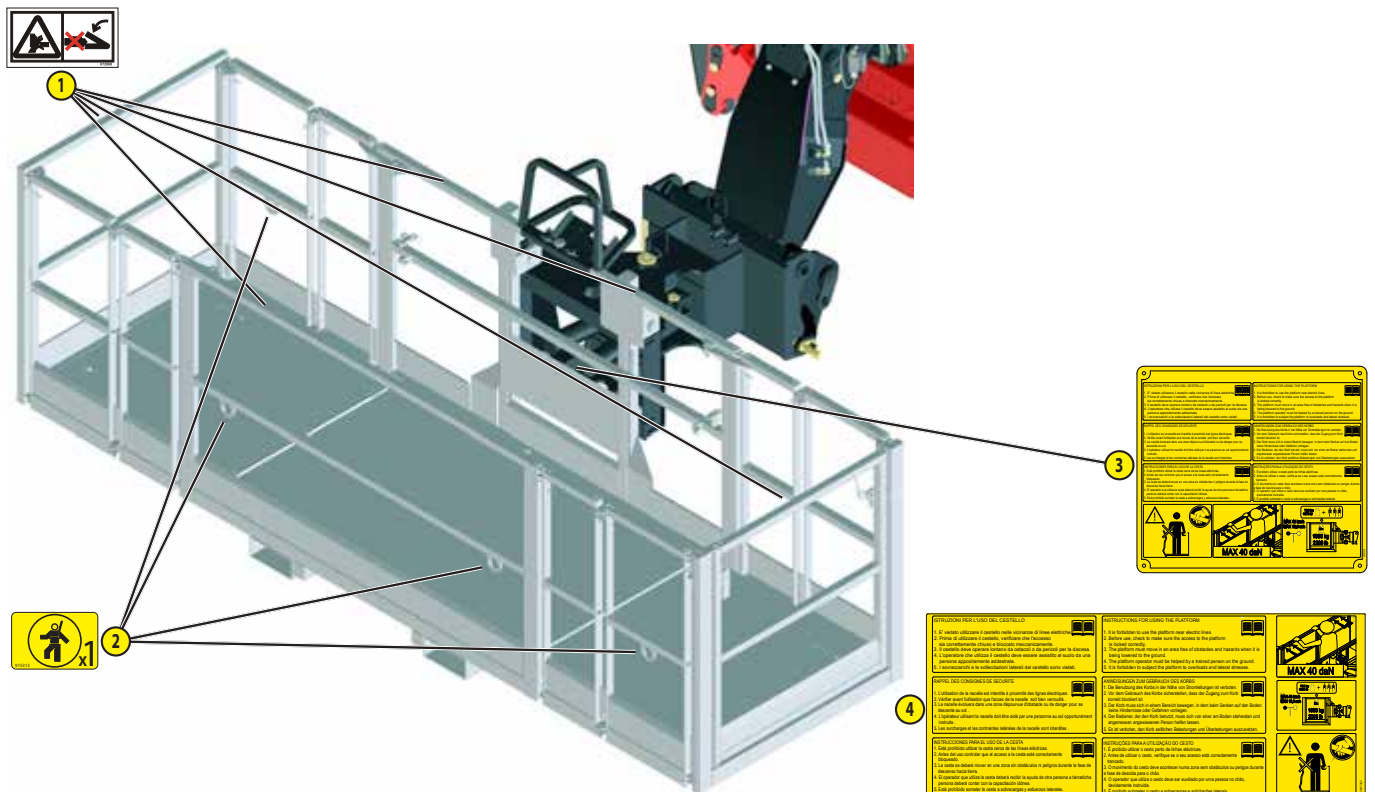
STICKERS AND PLATES UNDER THE ENGINE COVER

ITEM	PART NO.	DESCRIPTION
1	52501046	-Anti-freeze
2	52656411	-Water/diesel separator
3	52708618	-Engine fuse
4	52656429	-Battery troubleshooting
5	52656416	-Electrical hazard
6	233088	-Preheat rod (OPTION)



PLATES AND STICKERS ON THE PLATFORM

ITEM	PART NO.	DESCRIPTION
1	672068	-Crushing of hands
2	915313	-Safety harness
3	53007318	-Platform operating instructions
4	53007363	-Platform operating instructions (stick them in the cab)



ATTENTION

POUR L'UTILISATION DE CHARIOT, IL EST RECOMMANDÉ D'AVOIR LE CACES 9 - norme R372 modifiée

LWA
106 dB

Modèle	Poids
MT1440A	11000 kg
788782	11000 kg
939382	- kg
914730	11600 kg
788791	12245 kg
788790	12245 kg
788789	12335 kg
788783	12250 kg
788784	11800 kg
788787	11640 kg
788788	11740 kg
788785	11640 kg
788786	11740 kg
939001	11260 kg
53012073	11280 kg
939003	11620 kg
939002	11620 kg
52520534	- kg

MANITOU
MANITOU BP 44156 ANGERS CEDEX FRANCE

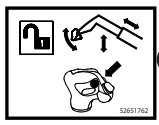
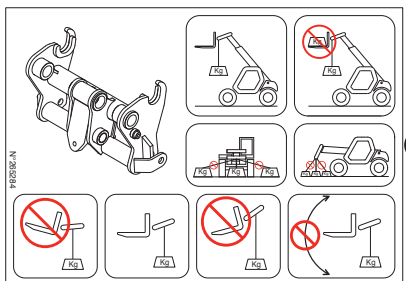
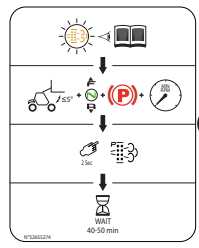
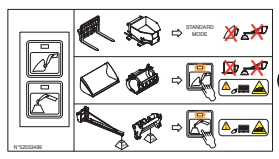
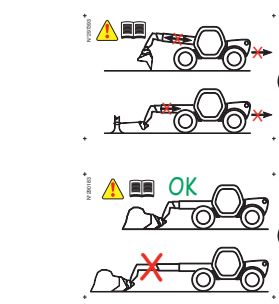
ROPS - ISO3471 - 2008
FCPS - ISO3449 - 2008 LEVEL 2

YEAR:

MODEL: MT1440-MT1440-MT1840

MAX WEIGHT: 14000 kg

N°52521701

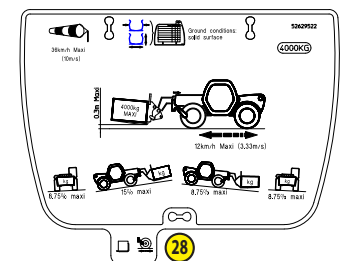
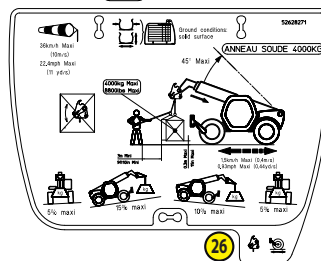
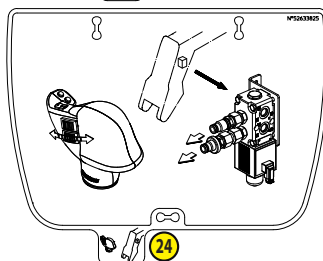
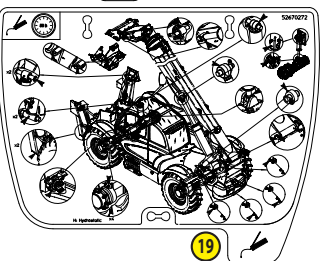
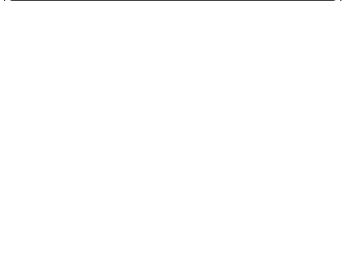
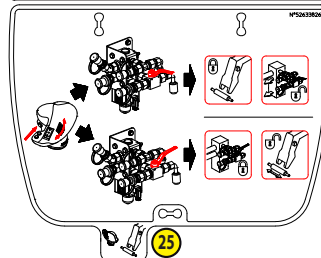
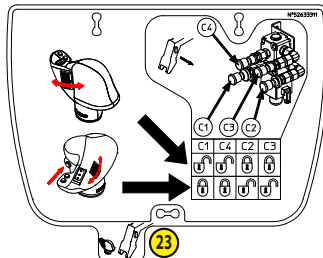
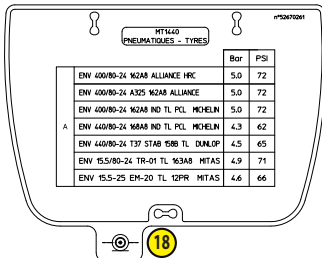
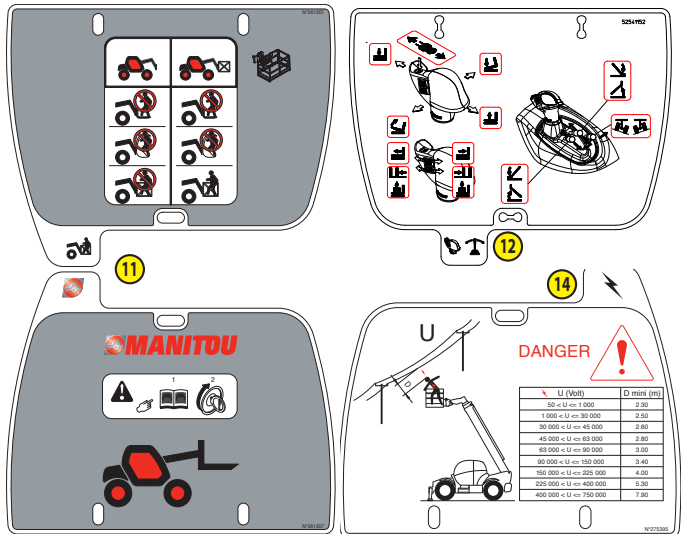
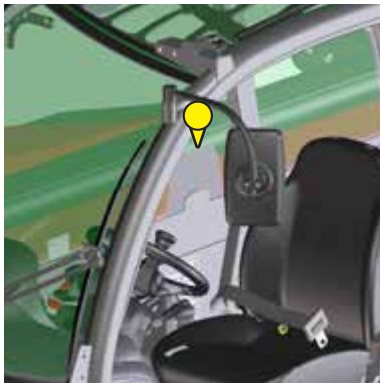


K6		K5		K4		K3		K2		K1		K0	
...



PLATES AND STICKERS IN THE CAB

ITEM	PART NO.	DESCRIPTION
1	52521701	- Cabin compliance
2	261476	- Gear selection
3	239596	- Sound power level 106dB
4	184276	- Steering selection control
5	290183	- Bucket instruction on telescope
6	268491	- Brake fluid instruction
7	52652268	- Fuses
8	52553499	- Operating mode management instruction
9	52651762	- Hydraulic controls activation
10	52655274	- "Stationary lift truck" exhaust regeneration
11	261307	- Reach chart sheet
12	52541152	- Joystick function
13	266893	- Platform SOS
14	275395	- Risk of electrocution
15	297251	- Platform/Handling selection
16	52576486	- Rescue procedure
17	52585487	- Truck/Platform weight MT 1440 ...
	52585489	- Truck/Platform weight MT 1840 ...
18	52670261	- Tyre pressures MT 1440 ...
	52669401	- Tyre pressures MT 1840 ...
19	52670272	- Greasing instructions MT 1440 ...
	52669402	- Greasing instructions MT 1840 ...
20	297393	- Back scraping prohibited MT 1840 ...
21	265284	- Lifting ring on single carriage (OPTION)
22	289625	- Easy attachment connection (OPTION)
23	52633311	- Boom head electrovalve joystick function (OPTION)
24	52633825	- Boom head electrovalve joystick function + hydraulic locking (OPTION)
25	52633826	- Boom head electrovalve joystick function + hydraulic locking (OPTION)
26	52628271	- Load chart for lifting ring on single carriage (OPTION)
27	52695249	- Uses CACES 9 (OPTION depending on country)
28	52629522	- Pick & Carry 4000kg (ONLY FOR AUSTRALIA)



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 these numbers be entered 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: SPECIFICATIONS.

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" Authorized gross vehicle weight	
"Rated capacity" Rated capacity	
"Max vertical force (on trailer hook)" Maximum vertical force (on trailer hook)	
"Drag strain" Pulling force	



ENGINE

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



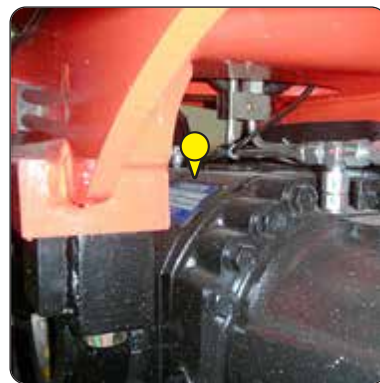
GEARBOX

Type	
Serial number	
MANITOU Part No.	



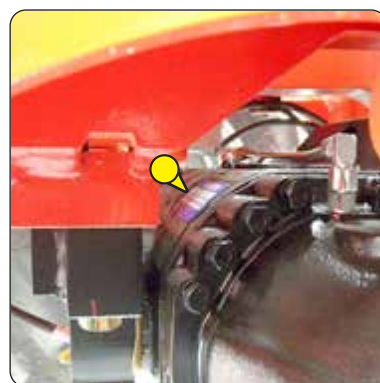
FRONT AXLE

Type	
Serial number	
MANITOU Part No.	



REAR AXLE

Type	
Serial number	
MANITOU Part No.	



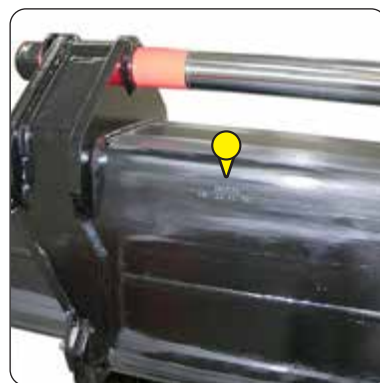
CABIN

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



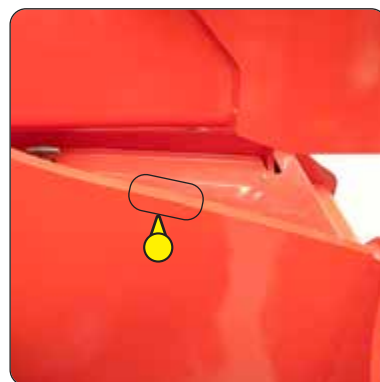
BOOM

MANITOU Part No.	
Date of manufacture and manufacturer	



CHASSIS

Serial number / Product Identification Number	
---	--



ATTACHMENT MANUFACTURER'S PLATE

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



ENGINE		
Type		DEUTZ TCD3.6L4/2501-3540
Fuel		Diesel
Number of cylinders		4 in line
Suction		Supercharged cooled
Injection system		Direct
Ignition sequence		1.3.4.2
Displacement	cm ³	3621
Bore and stroke	mm	98 x 120
Compression ratio		17:2
Nominal speed laden	rpm	2200
Min. rpm unladen	rpm	850
Max. rpm unladen	rpm	2360
Power ISO/TR 14396	hp - kW	101 - 74,4
Power SAE J 1995	hp - kW	101 - 74,4
Maximum torque ISO/TR 14396	Nm	410 at 1600 rpm
Air filtration efficiency	%	99,9
Type of cooling		Coolant
Fan		Suction

TRANSMISSION		
Gearbox		DANA
- Type		Mechanics
- Reversing shift		Electro-hydraulics
- Torque converter		DANA
- Number of forward speeds		4
- Number of reverse speeds		4
Front axle		DANA
- Differential		Without locking
Rear axle		DANA
- Differential		Without locking
Drive wheels		Permanent 4 WD
- 2/4 wheel drive control		No
Front tires		ALLIANCE
- Size		400/80-24 A325 162A8 TOUGH TRAC
- Pressure	bar	5
Rear tyres		ALLIANCE
- Size		400/80-24 A325 162A8 TOUGH TRAC
- Pressure	bar	5

ELECTRIC CIRCUIT		
Battery	STANDARD	12 V - 180 Ah - 900 A EN
Alternator		14V - 95 A
- Type		MAHLE AAK4657
Starter		12 V - 3,2 kW
- Type		MAHLE AZE 4679

BRAKE SYSTEM		
Service brake		Hydraulic power brake
- Type of brake		Oil-immersed multi-disc
- Type of control		Foot-operated for the front and rear axles
Parking brake		Low pressure brake
- Type of brake		Disk on gearbox output
- Type of control		Electro-hydraulics

HYDRAULIC CIRCUIT			
Hydraulic pump		Gears with flow divider on 2nd housing	
- Type		1st housing	2nd housing
- Displacement	cm ³	44	27
- Max. rating capacity unladen	ℓ/min	104	63
- Flow at 1600 rpm	ℓ/min	70	43
Filtration			
- Return	μm	16	16
- Suction	μm	135	135
Maximum working pressure		265	
- Telescoping circuit	bar	190 / 265	
- Lift circuit	bar	210 / 265	
- Tilt circuit	bar	265 / 190	
- Circuit stabilizers	bar	265	
- Frame leveling circuit	bar	265	
- Attachment circuit	bar	265	
- Steering circuit	bar	140	

HYDRAULIC MOVEMENTS			
Longitudinal stability limiter and warning device		Electronics	
Lifting motions (boom retracted)			
- Unladen lifting	s - m/min	16 - 30,7	
- Laden lifting	s - m/min	18 - 27,3	
- Unladen lowering	s - m/min	14 - 35,1	
- Laden lowering	s - m/min	14 - 35,1	
Telescoping motions (boom raised)			
- Unladen extending	s - m/min	19,3 - 10,9	
- Laden extending	s - m/min	20,7 - 11,7	
- Unladen retracting	s - m/min	15 - 15,1	
- Laden retracting	s - m/min	14,8 - 15,3	
Tilting movements			
- Unladen digging	s - °/s	4 - 31,5	
- Unladen dump	s - °/s	4 - 31,5	

SOUND AND VIBRATION			
Sound pressure level in the driver's cab LpA (according to standard NF EN 12053)	dB(A)	79 (cab closed); xx (cab open)	
Sound pressure (according to Directive 2009/76)	dB(A)	xx (cab closed); xx (cab open)	
Guaranteed sound power level in the environment LwA (according to Directive 2000/14/EC modified by Directive 2005/88/EC)	dB(A)	105 (measured); 106 (guaranteed)	
Sound level in motion (according to Directive 2009/63)	dB(A)	xx	
Average weighted acceleration on driver's body (according to standard NF EN 13059)	m/s ²	1	
The average weighted acceleration transmitted to the driver's hand/ arm system (according to standard ISO 5349-2)	m/s ²	< 2,5	
Standard seat vibration	m/s ²	xx (lightweight operator); xx (heavyweight operator)	

FLOATING FORK CARRIAGE

SPECIFICATIONS AND WEIGHTS			
Speed of movement for lift truck in standard configuration on flat ground			
- Front unladen	1	km/h	5,1
	2	km/h	8,1
	3	km/h	15,1
	4	km/h	25
- Rear unladen	1	km/h	5,1
	2	km/h	8,1
	3	km/h	15,1
	4	km/h	25
Standard attachment			TFF 45 MT 1040
- Weight of attachment (without forks)		kg	228
- Weight of forks (each)		kg	71
Rated capacity with standard attachment		kg	4000
Tipping load at maximum reach on stabilizers		kg	1500
Distance from the center of gravity of the load to the base of the forks		mm	500
Standard lifting height		mm	13530
Lift truck weight without attachment		kg	10570
Weight of lift truck with standard attachment			
- Unladen		kg	10940
- At rated load		kg	14940
Weight per axle with standard attachment (transport position)			
- Front unladen		kg	5320
- Rear unladen		kg	5620
- Front rated load		kg	12640
- Rear rated load		kg	2300
Weight per axle with standard attachment (boom extended)			
- Front rated load		kg	11030
- Rear rated load		kg	221020
Contact pressure on the ground of the total surface of each stabilizer at maximum tipping load		kg/cm ²	6,3
Tractive effort on the coupling hook			
- Unladen (sliding)		daN	7200
- At rated load (transmission setting)		daN	9930
Break-out force with bucket (according to standard ISO 8313)		daN	7895

EXTENDIBLE PLATFORM 2M25/4M 1000KG

SPECIFICATIONS AND WEIGHTS			
Speed of movement for lift truck in standard configuration on flat ground			
- Front unladen	1	km/h	5,1
	2	km/h	8,1
	3	km/h	15,1
	4	km/h	25
- Rear unladen	1	km/h	5,1
	2	km/h	8,1
	3	km/h	15,1
	4	km/h	25
Standard attachment		EXTENDIBLE PLATFORM 2M25/4M 1000KG	
- Attachment mass		kg	1030
Rated capacity with standard attachment		kg	1000 (including 3 people)
Tipping load at maximum reach on stabilizers		kg	250
Standard lifting height		mm	15400
Lift truck weight without attachment		kg	10590
Weight of lift truck with standard attachment			
- Unladen		kg	11620
- At rated load		kg	12620
Weight per axle with standard attachment (transport position)			
- Front unladen		kg	6830
- Rear unladen		kg	4790
- Front rated load		kg	8840
- Rear rated load		kg	3780
Weight per axle with standard attachment (boom extended)			
- Front rated load		kg	
- Rear rated load		kg	
Contact pressure on the ground of the total surface of each stabilizer at maximum tipping load		kg/cm ²	5,3
Tractive effort on the coupling hook			
- Unladen (sliding)		daN	7200
- At rated load (transmission setting)		daN	9930
Break-out force with bucket (according to standard ISO 8313)		daN	7916

ENGINE		
Type		DEUTZ TCD3.6L4/2501-3540
Fuel		Diesel
Number of cylinders		4 in line
Suction		Supercharged cooled
Injection system		Direct
Ignition sequence		1.3.4.2
Displacement	cm ³	3621
Bore and stroke	mm	98 x 120
Compression ratio		17:2
Nominal speed laden	rpm	2200
Min. rpm unladen	rpm	850
Max. rpm unladen	rpm	2360
Power ISO/TR 14396	hp - kW	101 - 74,4
Power SAE J 1995	hp - kW	101 - 74,4
Maximum torque ISO/TR 14396	Nm	410 at 1600 rpm
Air filtration efficiency	%	99,9
Type of cooling		Coolant
Fan		Suction

TRANSMISSION		
Gearbox		DANA
- Type		Mechanics
- Reversing shift		Electro-hydraulics
- Torque converter		DANA
- Number of forward speeds		4
- Number of reverse speeds		4
Front axle		DANA
- Differential		Without locking
Rear axle		DANA
- Differential		Without locking
Drive wheels		Permanent 4 WD
- 2/4 wheel drive control		No
Front tires		ALLIANCE
- Size		400/80-24 A325 162A8 TOUGH TRAC
- Pressure	bar	3
Rear tyres		ALLIANCE
- Size		400/80-24 A325 162A8 TOUGH TRAC
- Pressure	bar	3

ELECTRIC CIRCUIT		
Battery	STANDARD	12 V - 180 Ah - 900 A EN
Alternator		14V - 95 A
- Type		MAHLE AAK4657
Starter		12 V - 3,2 kW
- Type		MAHLE AZE 4679

BRAKE SYSTEM		
Service brake		Hydraulic power brake
- Type of brake		Oil-immersed multi-disc
- Type of control		Foot-operated for the front and rear axles
Parking brake		Low pressure brake
- Type of brake		Disk on gearbox output
- Type of control		Electro-hydraulics

HYDRAULIC CIRCUIT			
Hydraulic pump		Gears housing flow divider on 2nd housing	
- Type		1st casing	2nd housing
- Displacement	cm ³	44	27
- Max. rating capacity unladen	ℓ/min	104	63
- Flow at 1600 rpm	ℓ/min	70	43
Filtration			
- Return	μm	16	16
- Suction	μm	135	135
Maximum working pressure		265	
- Telescoping circuit	bar	210 / 265	
- Lifting circuit	bar	210 / 265	
- Tilt circuit	bar	190 / 265	
- Circuit stabilizers	bar	265	
- Frame leveling circuit	bar	265	
- Attachment circuit	bar	265	
- Steering circuit	bar	140	

HYDRAULIC MOVEMENTS			
Longitudinal stability limiter and warning device		Electronics	
Lifting motions (boom retracted)			
- Unladen lifting	s - m/min	21 - 24,3	
- Laden lifting	s - m/min	20 - 25,5	
- Unladen lowering	s - m/min	15 - 34	
- Laden lowering	s - m/min	16 - 31,9	
Telescoping motions (boom raised)			
- Unladen extending	s - m/min	19 - 11,2	
- Laden extending	s - m/min	20 - 11,8	
- Unladen retracting	s - m/min	16 - 14	
- Laden retracting	s - m/min	16 - 14	
Tilting movements			
- Unladen digging	s - °/s	5 - 25,2	
- Unladen dump	s - °/s	4,5 - 28	

SOUND AND VIBRATION			
Sound pressure level in the driver's cab LpA (according to standard NF EN 12053)	dB(A)	79 (cab closed); xx (cab open)	
Sound pressure (according to Directive 2009/76)	dB(A)	xx (cab closed); xx (cab open)	
Guaranteed sound power level in the environment LwA (according to Directive 2000/14/EC modified by Directive 2005/88/EC)	dB(A)	105 (measured); 106 (guaranteed)	
Sound level in motion (according to Directive 2009/63)	dB(A)	xx	
Average weighted acceleration on driver's body (according to standard NF EN 13059)	m/s ²	1	
The average weighted acceleration transmitted to the driver's hand/ arm system (according to standard ISO 5349-2)	m/s ²	< 2,5	
Standard seat vibration	m/s ²	xx (lightweight operator); xx (heavyweight operator)	

FLOATING FORK CARRIAGE

SPECIFICATIONS AND WEIGHTS

Speed of movement for lift truck in standard configuration on flat ground			
- Front unladen	1	km/h	5,1
	2	km/h	8,1
	3	km/h	15,1
	4	km/h	25
- Rear unladen	1	km/h	5,1
	2	km/h	8,1
	3	km/h	15,1
	4	km/h	25
Standard attachment			TFF 45 MT 1040
- Weight of attachment (without forks)		kg	228
- Weight of forks (each)		kg	71
Rated capacity with standard attachment		kg	4000
Tipping load at maximum reach on tires		kg	850
Distance from the center of gravity of the load to the base of the forks		mm	500
Standard lifting height		mm	17550
Lift truck weight without attachment		kg	11500
Weight of lift truck with standard attachment			
- Unladen		kg	11870
- At rated load		kg	15870
Weight per axle with standard attachment (transport position)			
- Front unladen		kg	5550
- Rear unladen		kg	6320
- Front rated load		kg	13050
- Rear rated load		kg	2820
Weight per axle with standard attachment (boom extended)			
- Front rated load		kg	11580
- Rear rated load		kg	690
Contact pressure on the ground of the total surface of each stabilizer at maximum tipping load		kg/cm ²	6,7
Tractive effort on the coupling hook			
- Unladen (sliding)		daN	7200
- At rated load (transmission setting)		daN	7850
Break-out force with bucket (according to standard ISO 8313)		daN	7766

EXTENDIBLE PLATFORM 2M25/4M 1000KG

SPECIFICATIONS AND WEIGHTS

Speed of movement for lift truck in standard configuration on flat ground			
- Front unladen	1	km/h	5,1
	2	km/h	8,1
	3	km/h	15,1
	4	km/h	25
- Rear unladen	1	km/h	5,1
	2	km/h	8,1
	3	km/h	15,1
	4	km/h	25
Standard attachment		EXTENDIBLE PLATFORM 2M25/4M 1000KG	
- Attachment mass		kg	1030
Rated capacity with standard attachment		kg	1000 (including 3 people)
Tipping load at maximum reach on stabilizers		kg	150
Standard lifting height		mm	19250
Lift truck weight without attachment		kg	11620
Weight of lift truck with standard attachment			
- Unladen		kg	12650
- At rated load		kg	13650
Weight per axle with standard attachment (transport position)			
- Front unladen		kg	7030
- Rear unladen		kg	5620
- Front rated load		kg	9200
- Rear rated load		kg	4450
Weight per axle with standard attachment (boom extended)			
- Front rated load		kg	
- Rear rated load		kg	
Contact pressure on the ground of the total surface of each stabilizer at maximum tipping load		kg/cm ²	5,8
Tractive effort on the coupling hook			
- Unladen (sliding)		daN	7200
- At rated load (transmission setting)		daN	7850
Break-out force with bucket (according to standard ISO 8313)		daN	8391

TIRES

MT 1440 A 100D ST5 S1 FLOATING FORK CARRIAGE		PRESSURE (bar)	LOAD PER TIRE (kg)			
			FRONT UNLADEN	FRONT LADEN	REAR UNLADEN	REAR LADEN
ALLIANCE	400/80-24 A325 162A8 TOUGH TRAC	5	2650	6350	2800	1100
MICHELIN	400/80-24 162A8 IND TL PCL	5				
	440/80-24 168A8 IND TL PCL	4,3				

MT 1440 A 100D ST5 S1 EXTENDIBLE PLATFORM 2M25/4M 1000KG		PRESSURE (bar)	LOAD PER TIRE (kg)			
			FRONT UNLADEN	FRONT LADEN	REAR UNLADEN	REAR LADEN
ALLIANCE	400/80-24 A325 162A8 TOUGH TRAC	5	3400	4400	2400	2000
MICHELIN	400/80-24 162A8 IND TL PCL	5				
	440/80-24 168A8 IND TL PCL	4,3				

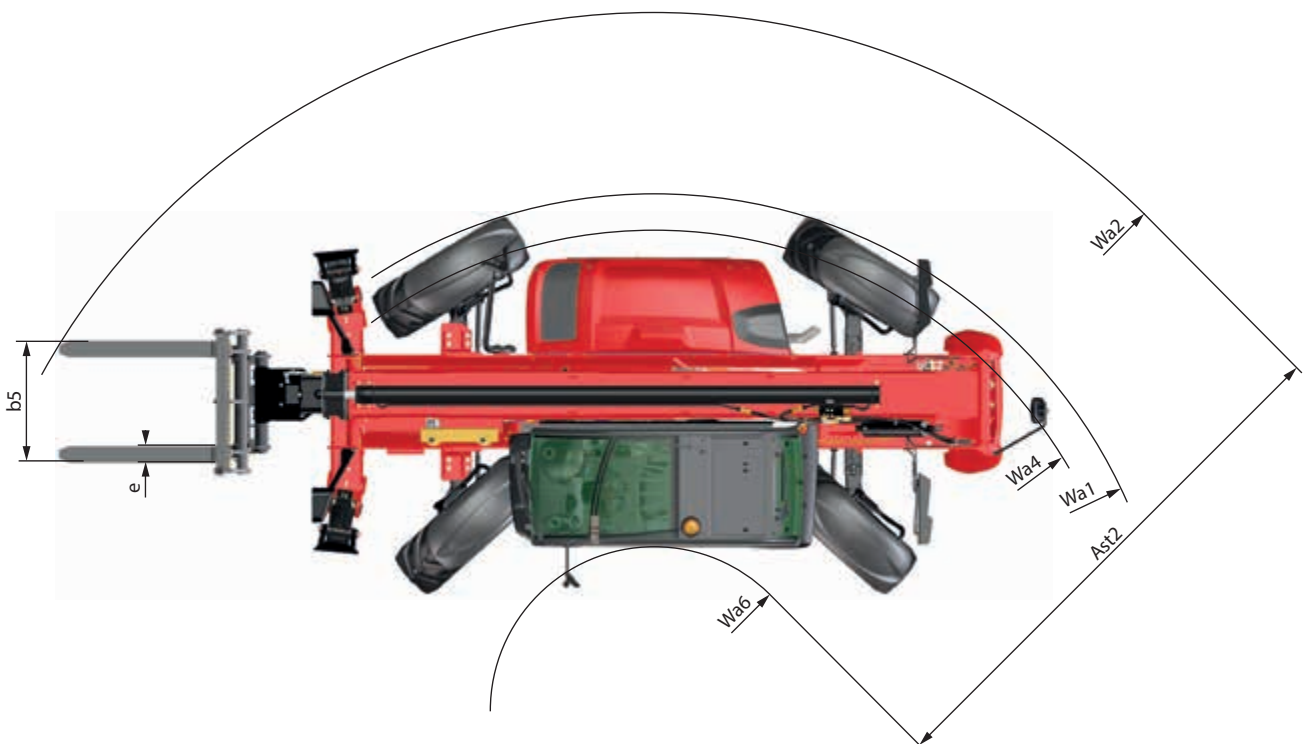
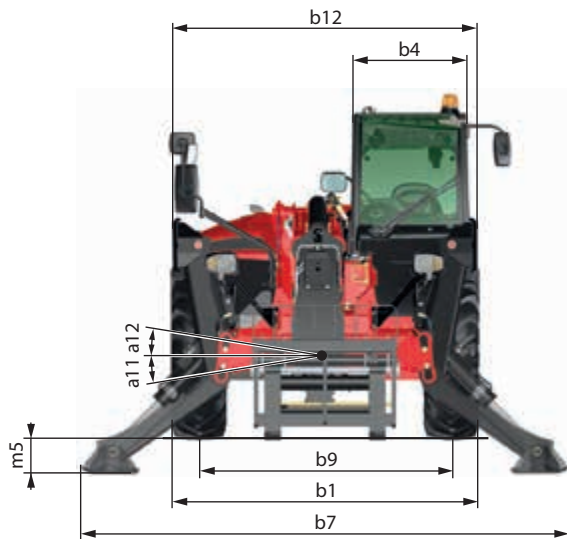
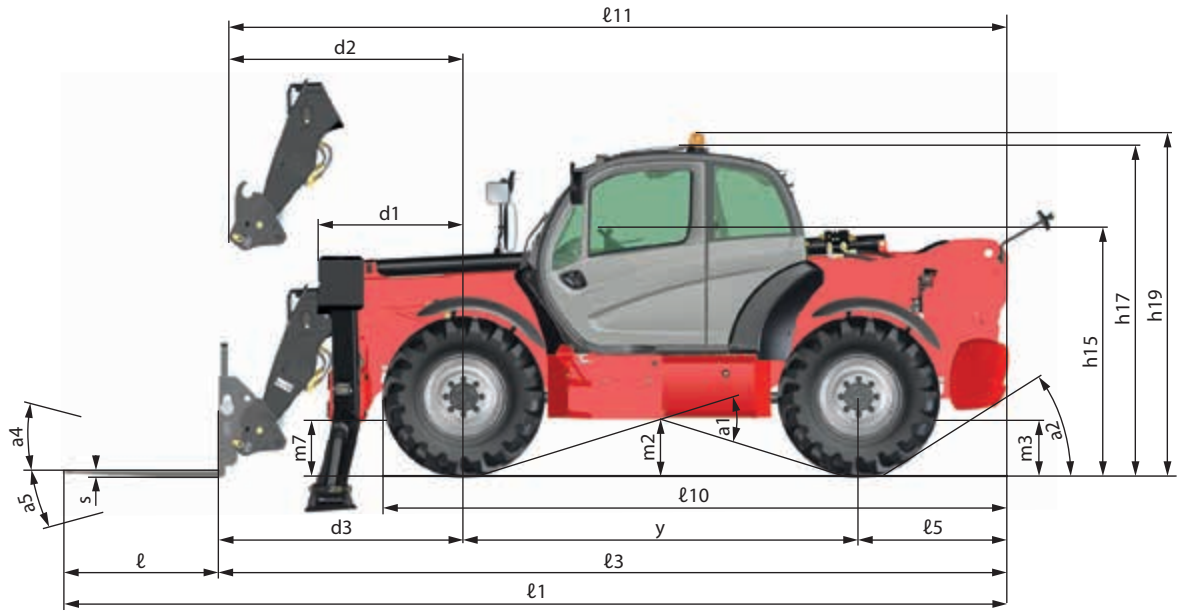
		PRESSURE (bar)	LOAD (kg)	GROUND CONTACT PRESSURE (kg/cm ²)		GROUND CONTACT AREA (cm ²)	
				HARD GROUND	SOFT GROUND	HARD GROUND	SOFT GROUND
				ALLIANCE	400/80-24 A325 162A8 TOUGH TRAC	5	1100
			2000	7,18	2,80	274	702
			2400	7,46	2,93	319	810
			2650	7,64	3,02	347	877
			2800	7,84	3,06	357	914
			3400	7,90	3,17	425	1059
			4400	8,71	3,54	490	1205
			6350	10,29	4,26	617	1490
MICHELIN	400/80-24 162A8 IND TL PCL	5	1100	6,92	0,71	159	1548
			2000	8,51	1,13	235	1764
			2400	9,05	1,25	264	1919
			2650	9,39	1,33	282	2000
			2800	9,59	1,39	292	2011
			3400	10,19	1,51	330	2232
			4400	11,16	1,70	390	2563
	6350	12,76	2,04	498	3115		
	440/80-24 168A8 IND TL PCL	4,3	1100	6,50	0,70	170	1562
			2000	7,75	1,05	258	1910
			2400	8,15	1,16	292	2046
			2650	8,85	1,30	301	2044
			2800	9,00	1,30	311	2091
			3400	9,04	1,41	372	2388
4400			9,77	1,59	446	2729	
6350	11,94	2,01	531	3195			

MT 1840 A 100D ST5 S1 FLOATING FORK CARRIAGE		PRESSURE (bar)	LOAD PER TIRE (kg)			
			FRONT UNLADEN	FRONT LADEN	REAR UNLADEN	REAR LADEN
ALLIANCE	400/80-24 A325 162A8 TOUGH TRAC	5	2750	6450	3100	1400
	440/80-24 A325 168A8 ATG	4,5				
MICHELIN	400/80-24 162A8 IND TL PCL	5				
	440/80-24 168A8 IND TL PCL	4,5				
	440/80 R24 161A8/161B IND TL BIBLOAD HARD SURFACE	4,1				

MT 1840 A 100D ST5 S1 EXTENDIBLE PLATFORM 2M25/4M 1000KG		PRESSURE (bar)	LOAD PER TIRE (kg)			
			FRONT UNLADEN	FRONT LADEN	REAR UNLADEN	REAR LADEN
ALLIANCE	400/80-24 A325 162A8 TOUGH TRAC	5	3500	4600	2800	2250
	440/80-24 A325 168A8 ATG	4,5				
MICHELIN	400/80-24 162A8 IND TL PCL	5				
	440/80-24 168A8 IND TL PCL	4,5				
	440/80 R24 161A8/161B IND TL BIBLOAD HARD SURFACE	4,1				

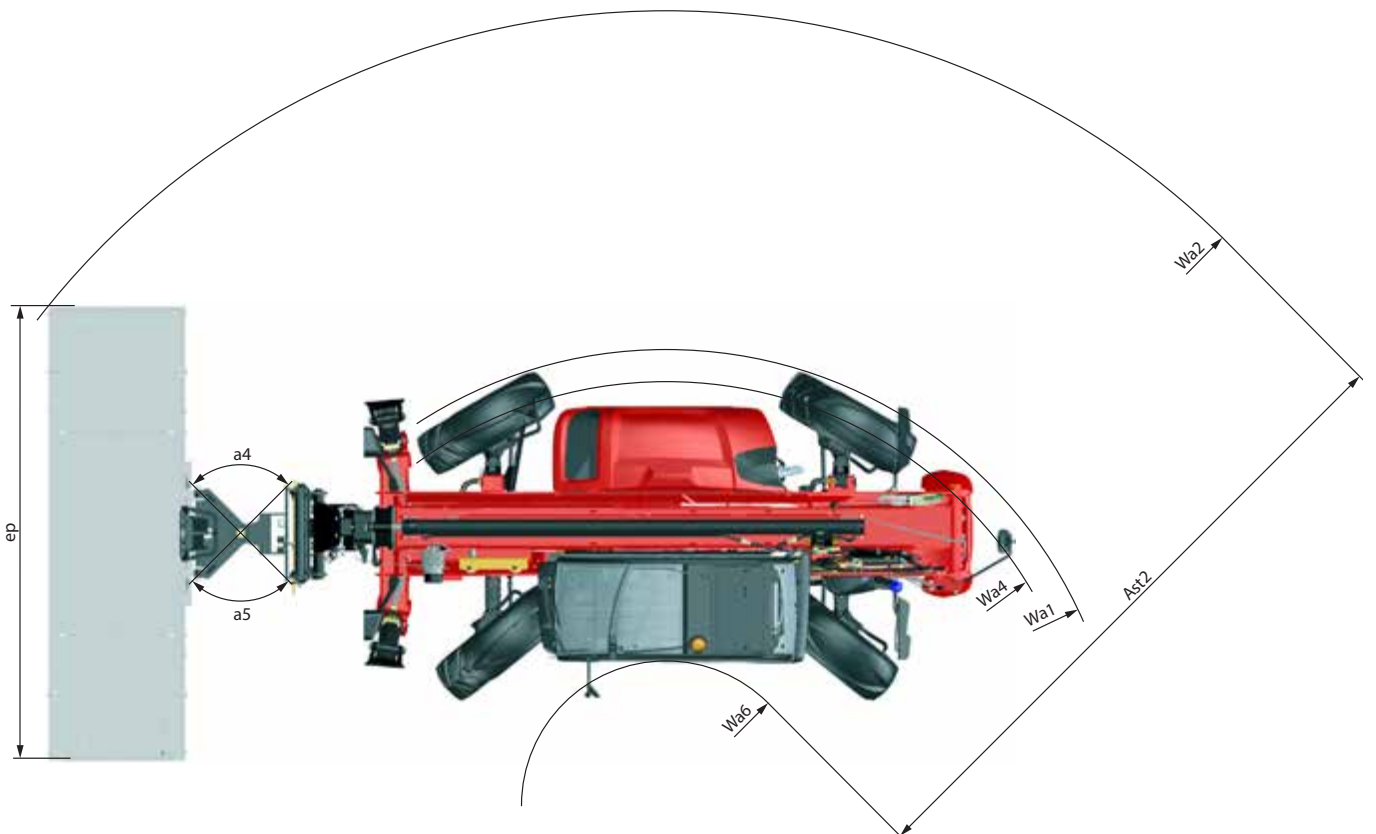
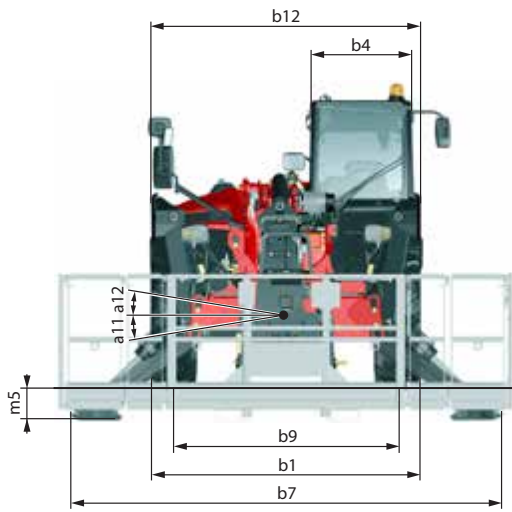
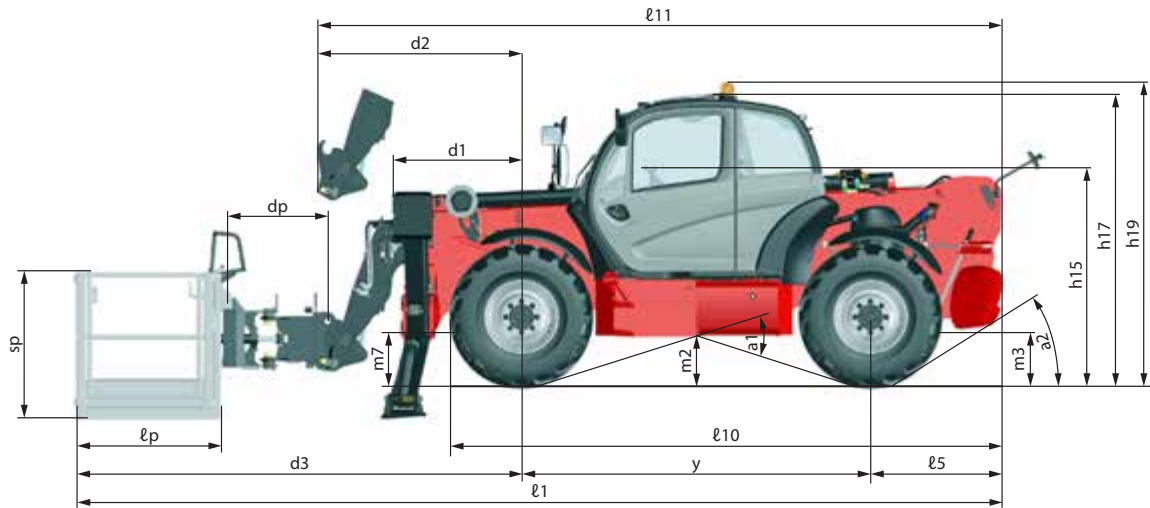
		PRESSURE (bar)	LOAD (kg)	GROUND CONTACT PRESSURE (kg/cm ²)		GROUND CONTACT AREA (cm ²)	
				HARD GROUND	SOFT GROUND	HARD GROUND	SOFT GROUND
				ALLIANCE	400/80-24 A325 162A8 TOUGH TRAC	5	1400
			2250	7,36	2,88	302	769
			2750	7,31	2,81	376	979
			2800	7,84	3,06	357	914
			3100	7,65	3,05	405	1015
			3500	7,98	3,20	431	1073
			4600	8,87	3,61	503	1234
			6450	10,21	4,25	632	1516
	440/80-24 A325 168A8 ATG	4,5	1400	7,69	2,97	182	472
			2250	7,77	3,02	289	741
			2750	7,81	3,06	352	900
			2800	7,85	3,06	357	916
			3100	8,07	3,06	384	1012
			3500	8,26	3,16	418	1089
			4600	8,76	3,44	513	1300
			6450	9,82	3,86	657	1671
	400/80-24 162A8 IND TL PCL	5	1400	7,48	0,85	185	1627
			2250	8,85	1,20	253	1861
			2750	9,52	1,37	289	2007
			2800	9,59	1,39	292	2011
			3100	9,90	1,45	312	2132
			3500	10,29	1,52	336	2265
			4600	11,35	1,73	402	2629
			6450	12,82	2,05	503	3145
	440/80-24 168A8 IND TL PCL	4,5	1400	7,08	0,83	196	1665
			2250	8,00	1,12	279	1995
			2750	8,50	1,26	322	2166
			2800	8,55	1,28	326	2183
			3100	8,82	1,35	350	2285
			3500	9,11	1,43	380	2422
			4600	9,91	1,63	461	2797
			6450	11,01	1,88	585	3428
	440/80 R24 161A8/161B IND TL BIBLOAD HARD SURFACE	4,1	1400				
			2250				
			2750				
			2800				
			3100				
			3500				
			4600				
			6450				

DIMENSIONS MT 1440 A 100D ST5 S1 (FLOATING FORK CARRIAGE)



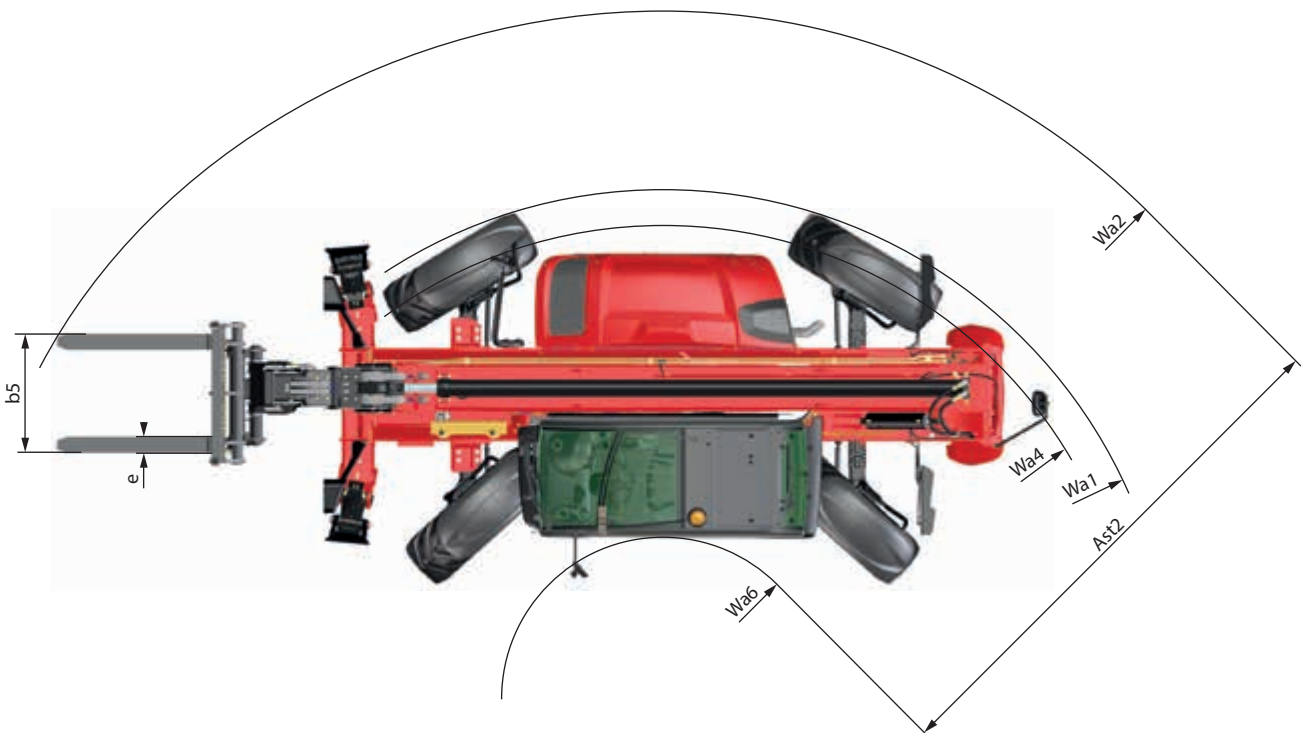
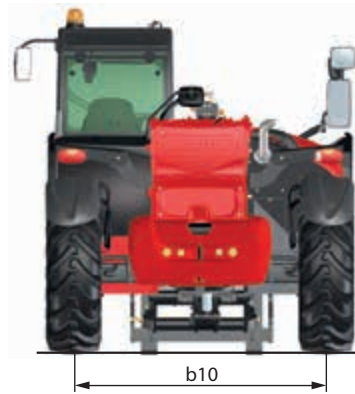
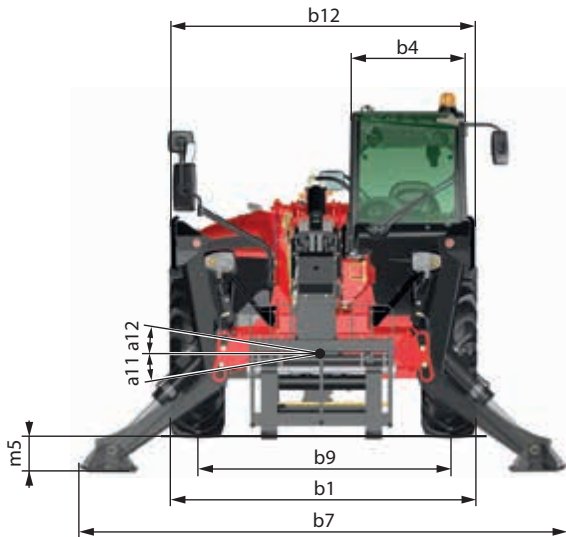
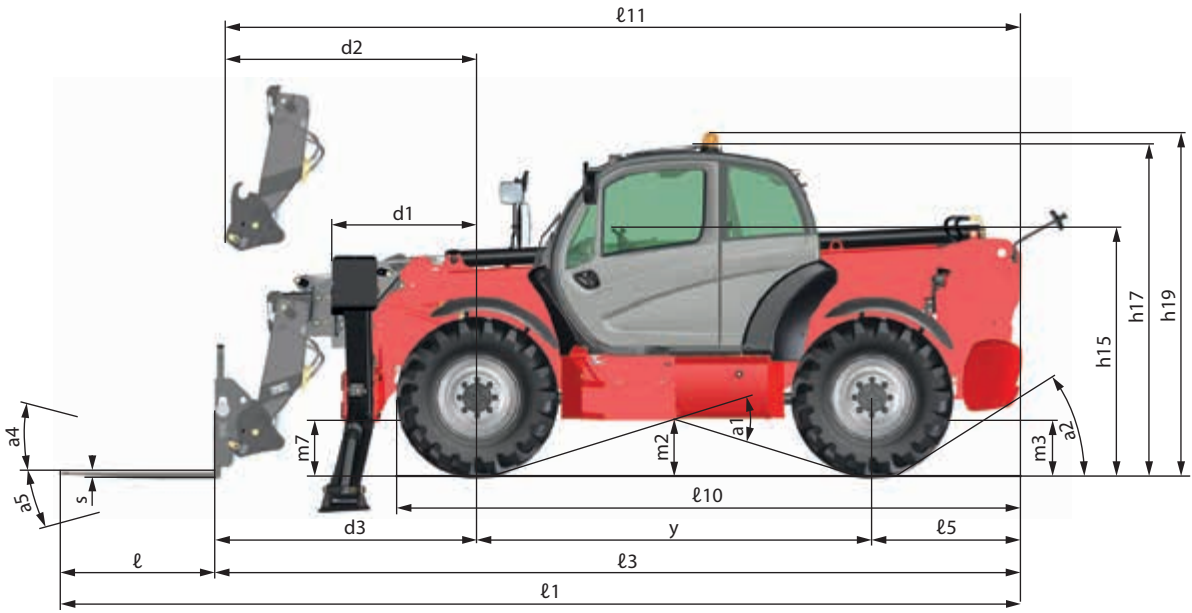
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	ℓ3	mm	6135
	ℓ5	mm	1160
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	ℓ11	mm	6020
MACHINE WIDTH	b1	mm	2364
	b4	mm	892
	b5	mm	1040
	b7	mm	3793
	b9	mm	1960
	b10	mm	1960
	b12	mm	2422
MACHINE HEIGHT	h15	mm	1855
	h17	mm	2452
	h19	mm	2640
DISTANCE	d1	mm	1134
	d2	mm	1790
	d3	mm	1905
AISLE WIDTH	Ast2	mm	4310
ATTACHMENT	ℓ	mm	1200
	s	mm	50
	e	mm	125
TURNING RADIUS	Wa1	mm	3940
	Wa2	mm	5410
	Wa4	mm	3738
	Wa6	mm	1100
GROUND CLEARANCE	m2	mm	367
	m3	mm	380
	m5	mm	355
	m7	mm	384
ANGLE	a1	°	34
	a2	°	33
	a4	°	12
	a5	°	114
	a11	°	9
	a12	°	9
WHEEL BASE	y	mm	3070

DIMENSIONS MT 1440 A 100D ST5 S1 (EXTENDIBLE PLATFORM 2M25/4M 1000KG)



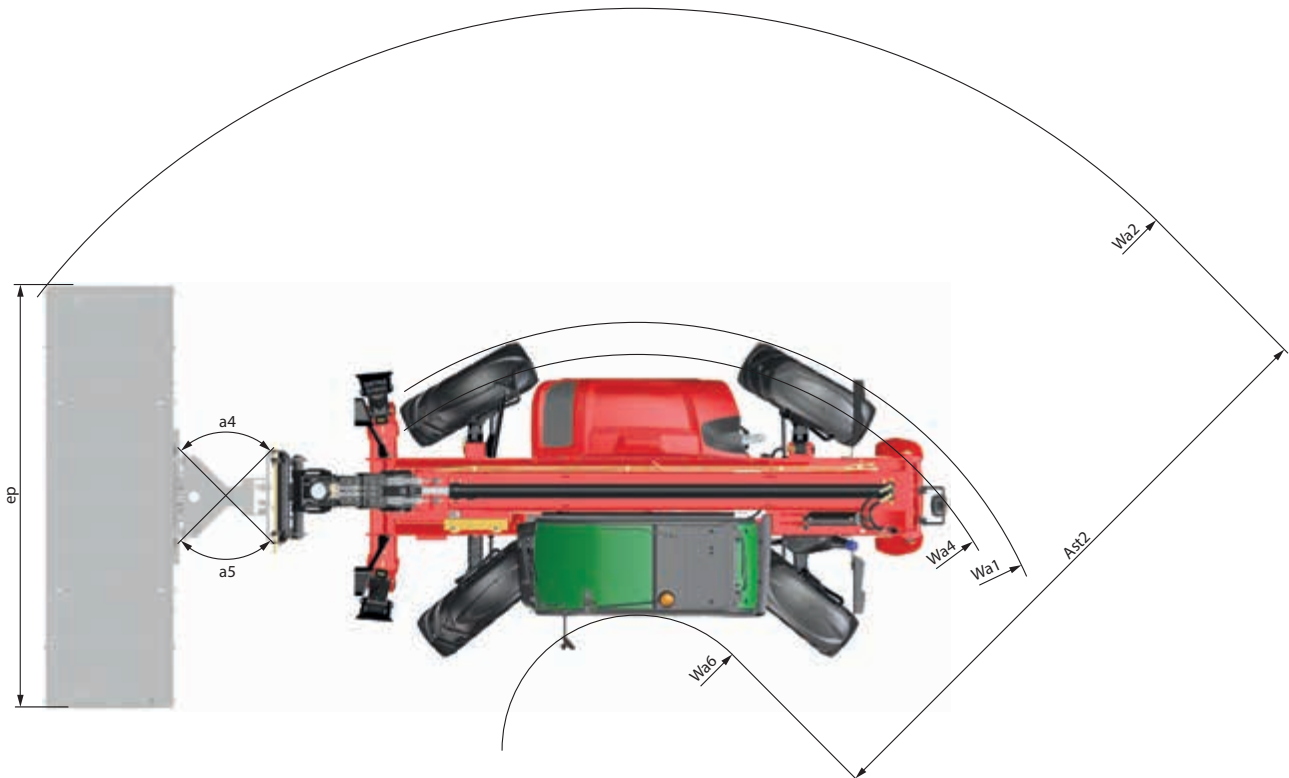
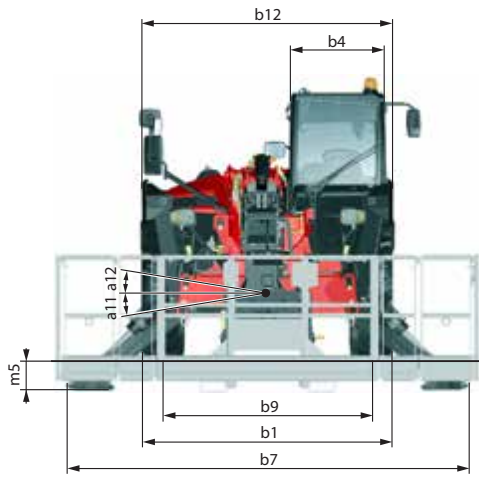
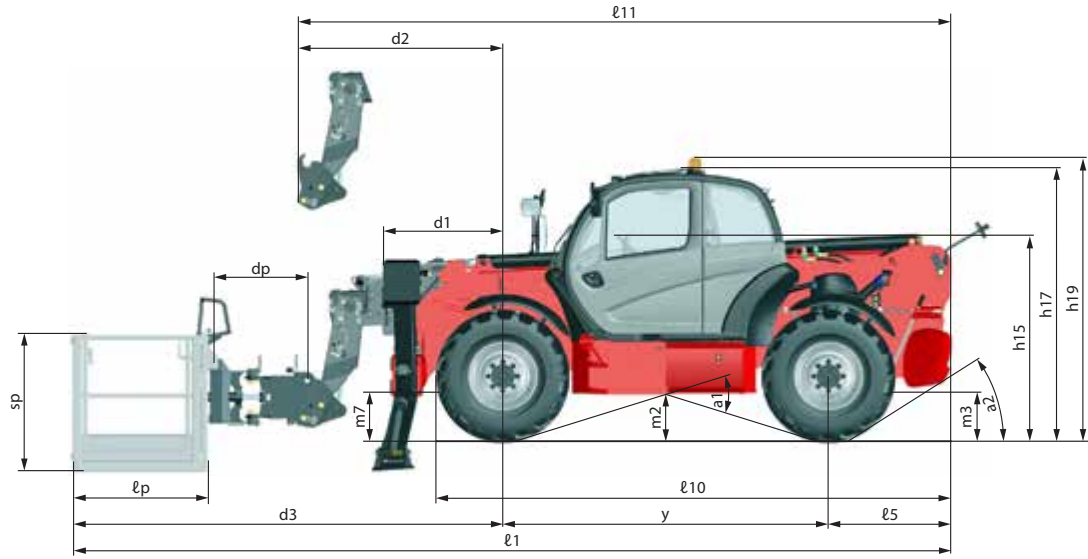
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	ℓ10	mm	4859
	ℓ11	mm	6020
MACHINE WIDTH	b1	mm	2364
	b4	mm	892
	b7	mm	3793
	b9	mm	1960
	b10	mm	1960
	b12	mm	2422
MACHINE HEIGHT	h15	mm	1855
	h17	mm	2452
	h19	mm	2640
DISTANCE	d1	mm	1134
	d2	mm	1790
	d3	mm	3519
AISLE WIDTH	Ast2	mm	6162
PLATFORM	ℓp		1200
	ep		2250-4000
	sp		1312
	dp		887
TURNING RADIUS	Wa1	mm	3940
	Wa2	mm	7262
	Wa4	mm	3738
	Wa6	mm	1100
GROUND CLEARANCE	m2	mm	367
	m3	mm	380
	m5	mm	355
	m7	mm	384
ANGLE	a1	°	34
	a2	°	33
	a4	°	90
	a5	°	90
	a11	°	9
	a12	°	9
WHEEL BASE	y	mm	3070

DIMENSIONS MT 1840 A 100D ST5 S1 (FLOATING FORK CARRIAGE)



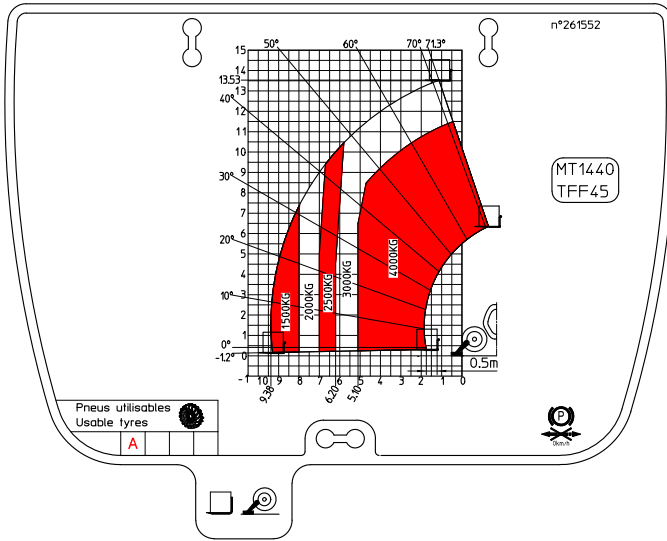
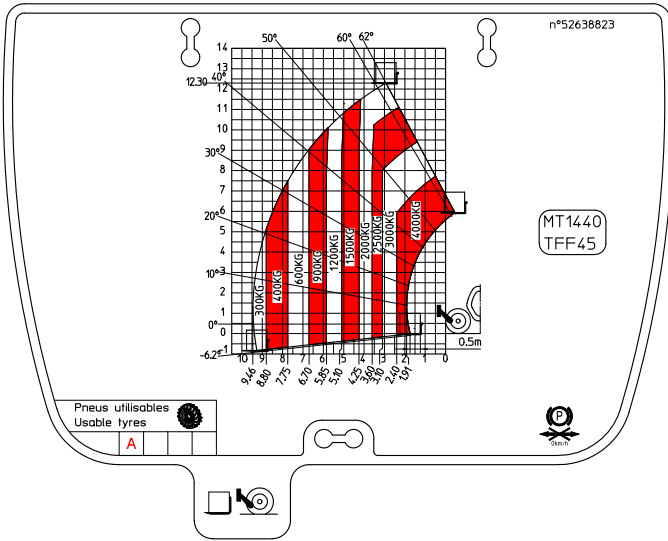
MACHINE LENGTH	ℓ1	mm	7474
	ℓ3	mm	6274
	ℓ5	mm	1160
	ℓ10	mm	4859
	ℓ11	mm	6159
MACHINE WIDTH	b1	mm	2364
	b4	mm	892
	b5	mm	1040
	b7	mm	3793
	b10	mm	1960
	b11	mm	1960
	b12	mm	2422
MACHINE HEIGHT	h15	mm	1855
	h17	mm	2452
	h19	mm	2640
DISTANCE	d1	mm	1134
	d2	mm	1929
	d3	mm	2044
AISLE WIDTH	Ast2	mm	4360
ATTACHMENT	ℓ	mm	1200
	s	mm	50
	e	mm	125
TURNING RADIUS	Wa1	mm	3940
	Wa2	mm	5460
	Wa4	mm	3738
	Wa6	mm	1100
GROUND CLEARANCE	m2	mm	367
	m3	mm	380
	m5	mm	355
	m7	mm	384
ANGLE	a1	°	34
	a2	°	33
	a4	°	16
	a5	°	110
	a11	°	9
	a12	°	9
WHEEL BASE	y	mm	3070

DIMENSIONS MT 1840 A 100D ST5 S1 (EXTENDIBLE PLATFORM 2M25/4M 1000KG)

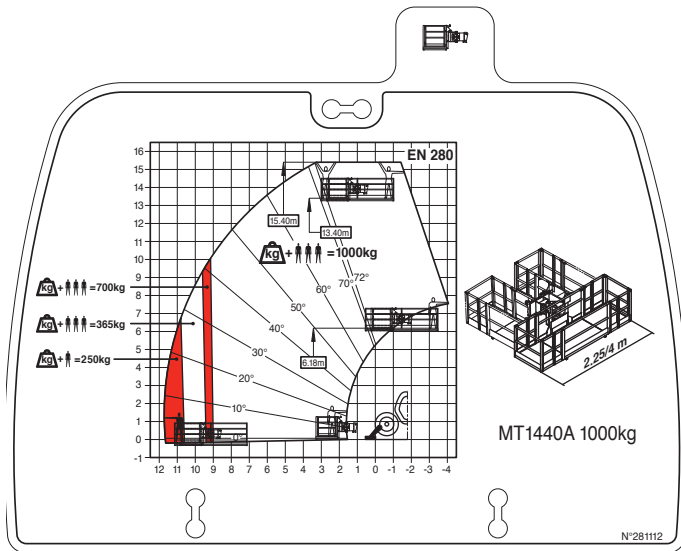


MACHINE LENGTH	ℓ1	mm	8281
	ℓ5	mm	1160
	ℓ10	mm	4859
	ℓ11	mm	6159
MACHINE WIDTH	b1	mm	2364
	b4	mm	892
	b7	mm	3793
	b9	mm	1960
	b10	mm	1960
	b12	mm	2422
MACHINE HEIGHT	h15	mm	1855
	h17	mm	2452
	h19	mm	2640
DISTANCE	d1	mm	1134
	d2	mm	1929
	d3	mm	4051
AISLE WIDTH	Ast2	mm	6212
PLATFORM	ℓp		1200
	ep		2250-4000
	sp		1312
	dp		887
TURNING RADIUS	Wa1	mm	3940
	Wa2	mm	7312
	Wa4	mm	3738
	Wa6	mm	1100
GROUND CLEARANCE	m2	mm	367
	m3	mm	380
	m5	mm	355
	m7	mm	384
ANGLE	a1	°	34
	a2	°	33
	a4	°	90
	a5	°	90
	a11	°	9
	a12	°	9
WHEEL BASE	y	mm	3070

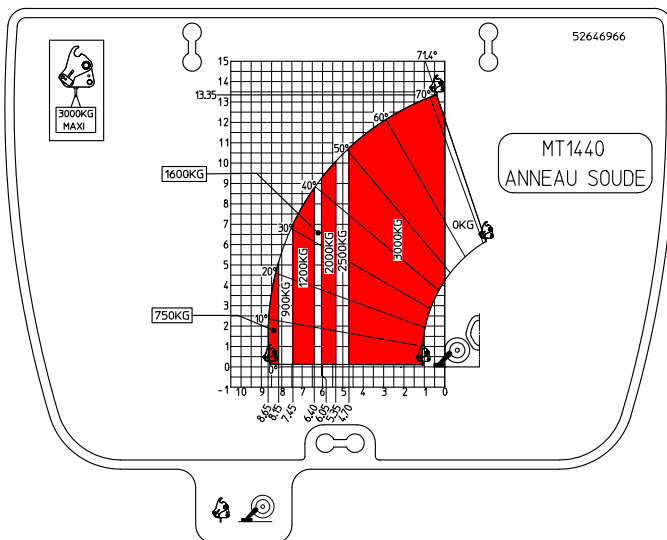
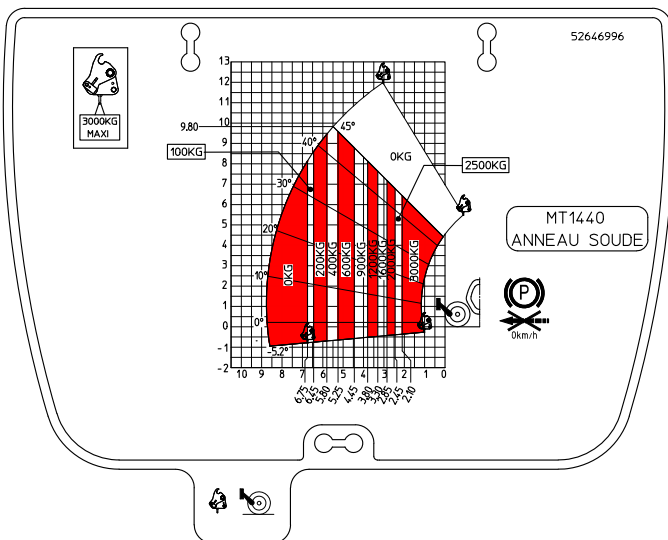
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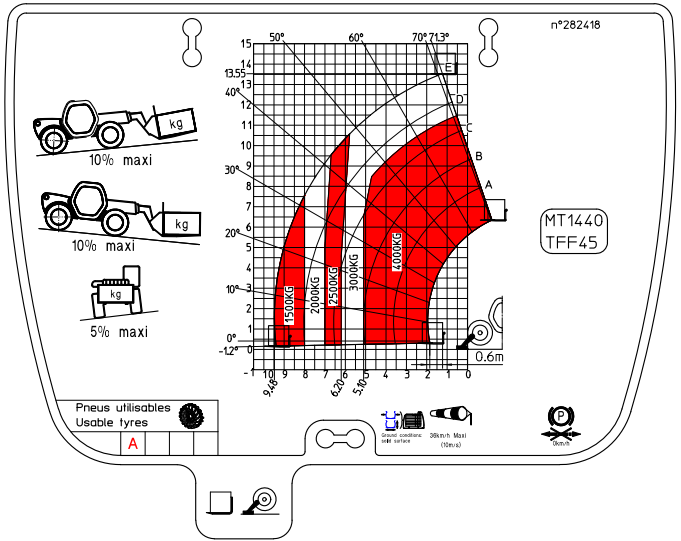
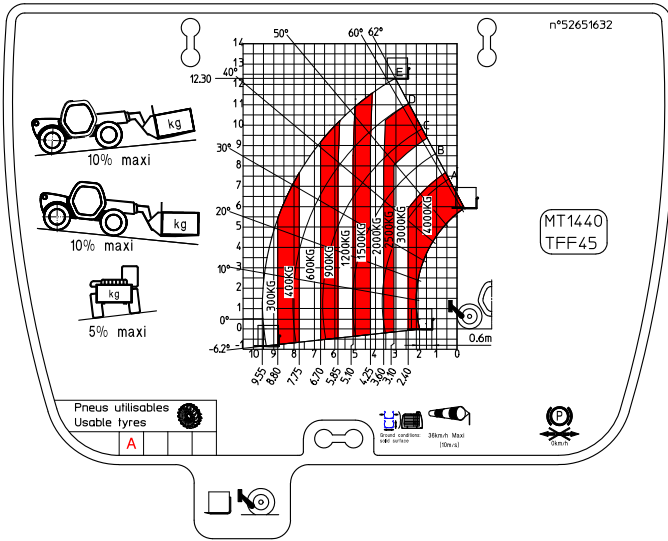
EXTENDIBLE PLATFORM 2M25/4M 1000KG



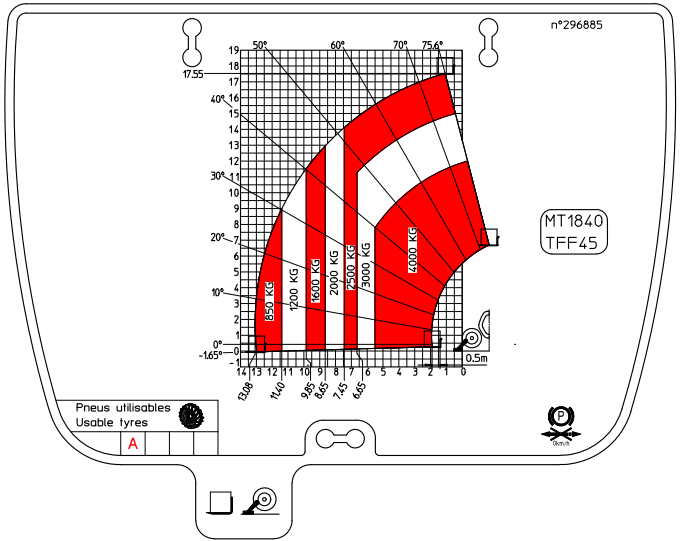
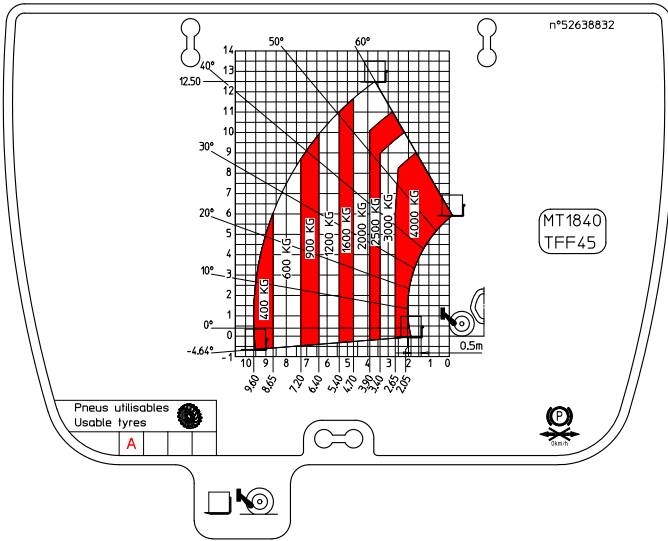
LIFTING RING ON SINGLE CARRIAGE (OPTION)



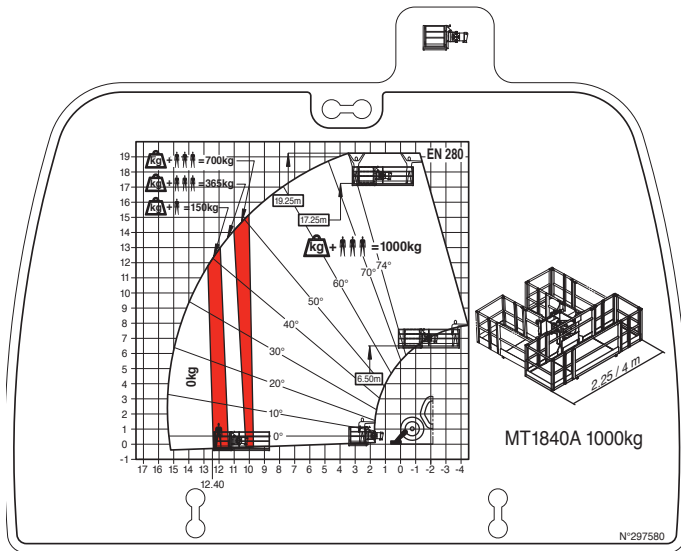
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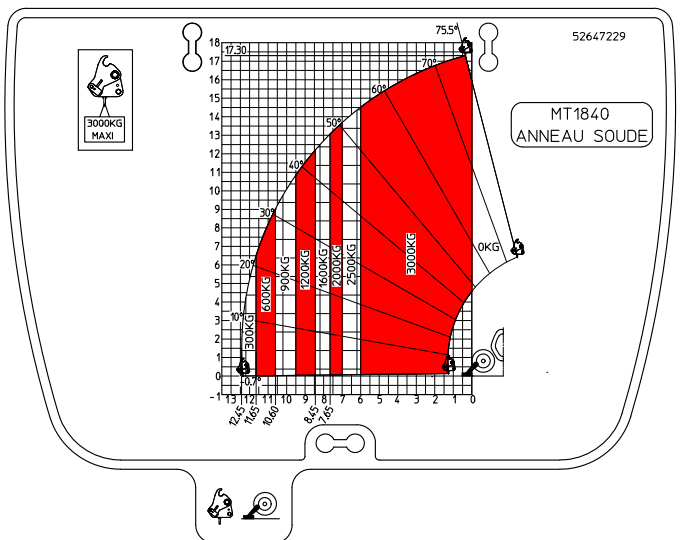
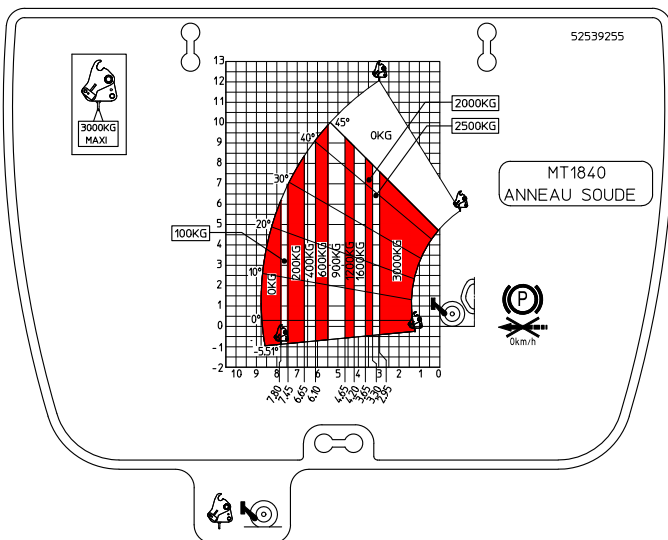
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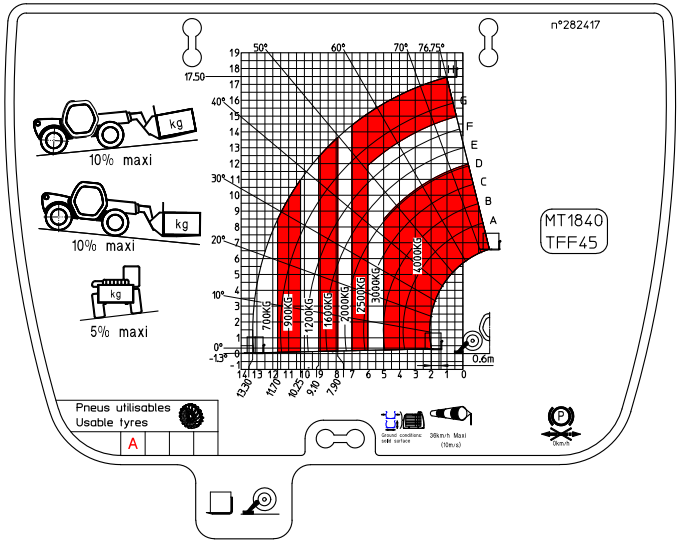
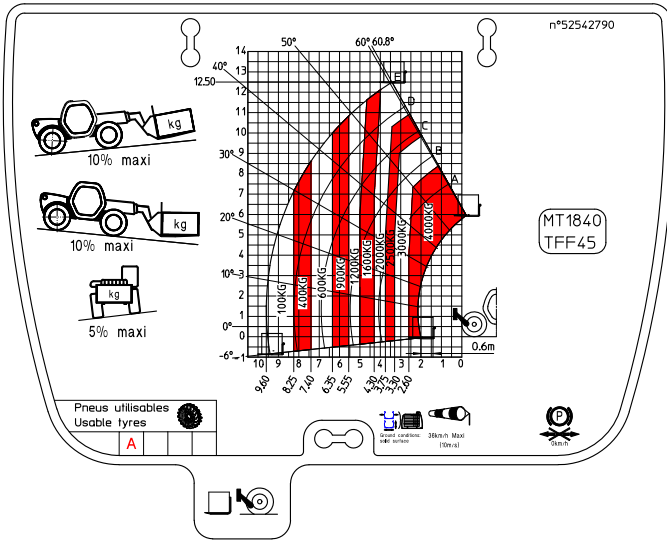
EXTENDIBLE PLATFORM 2M25/4M 1000KG



LIFTING RING ON SINGLE CARRIAGE (OPTION)



STANDARD



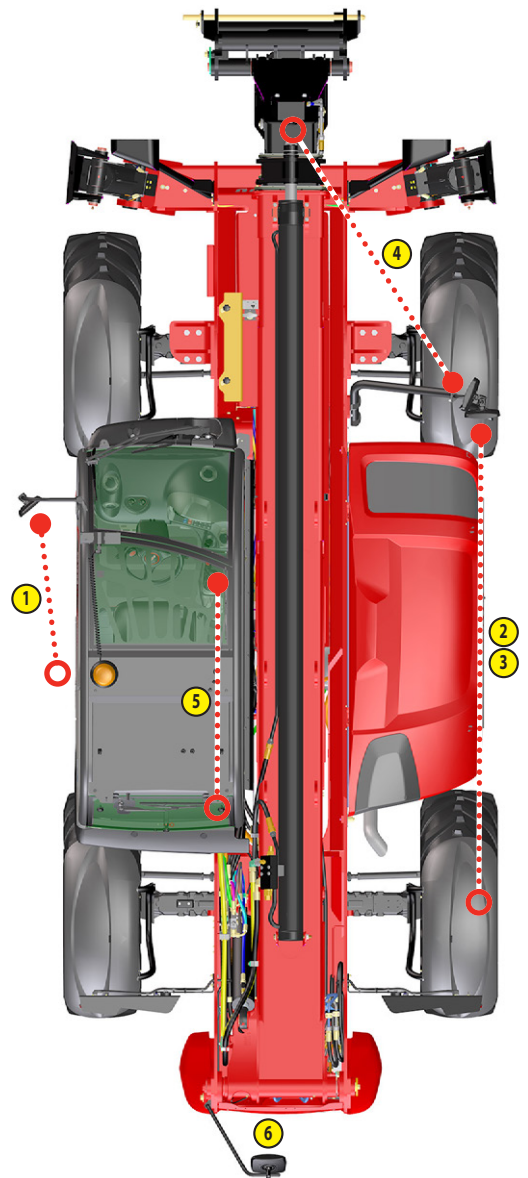
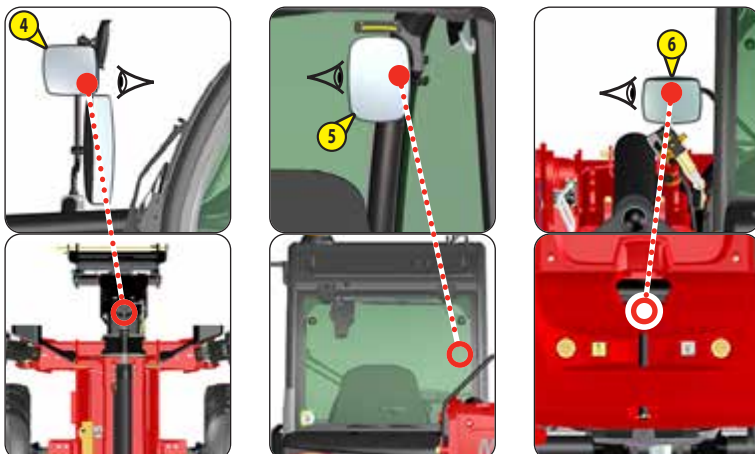
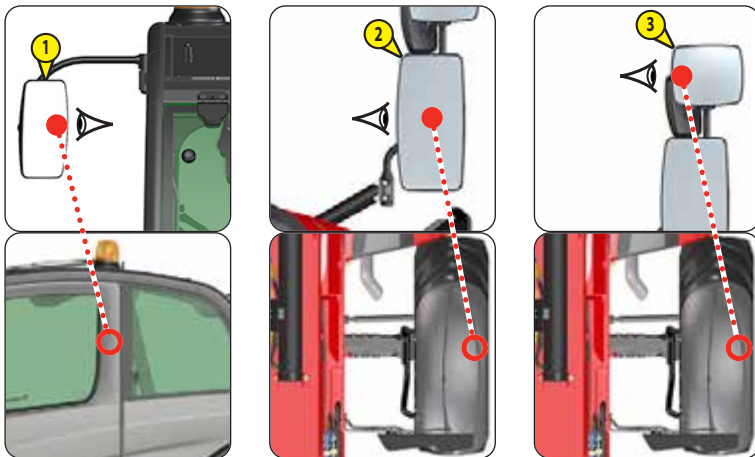
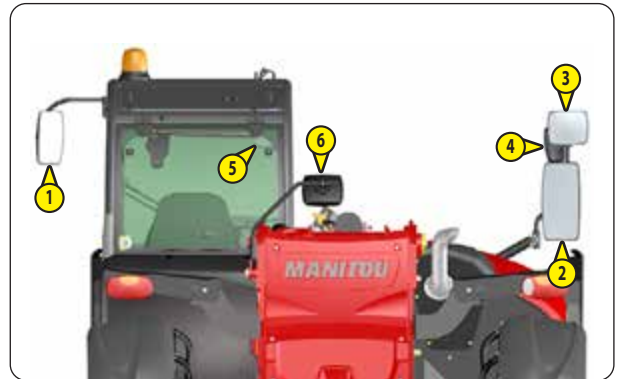
We use European standard EN15830 relating to operator visibility.

- Adhere to the instructions for optimizing operator visibility in the immediate vicinity (≤ 1 - OPERATING AND SAFETY INSTRUCTIONS: OPERATOR INSTRUCTIONS: OPERATING INSTRUCTIONS WITH AND WITHOUT LOAD: D - VISIBILITY).

DESCRIPTION AND ADJUSTMENT OF REAR-VIEW MIRRORS

- 1 - LEFT REAR-VIEW MIRROR
- 2 - MAIN RIGHT REAR-VIEW MIRROR
- 3 - SECONDARY RIGHT REAR-VIEW MIRROR
- 4 - RIGHT REAR-VIEW MIRROR
- 5 - INSIDE REAR-VIEW MIRROR (OPTION)
- 6 - REAR-VIEW MIRROR

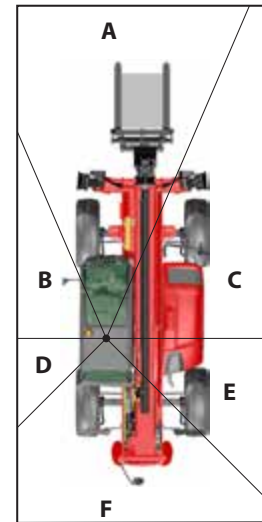
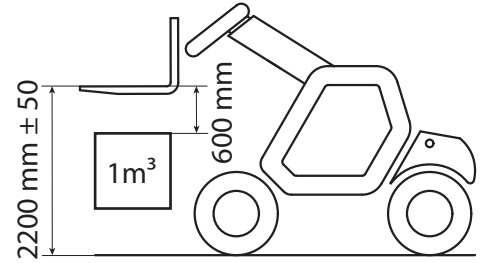
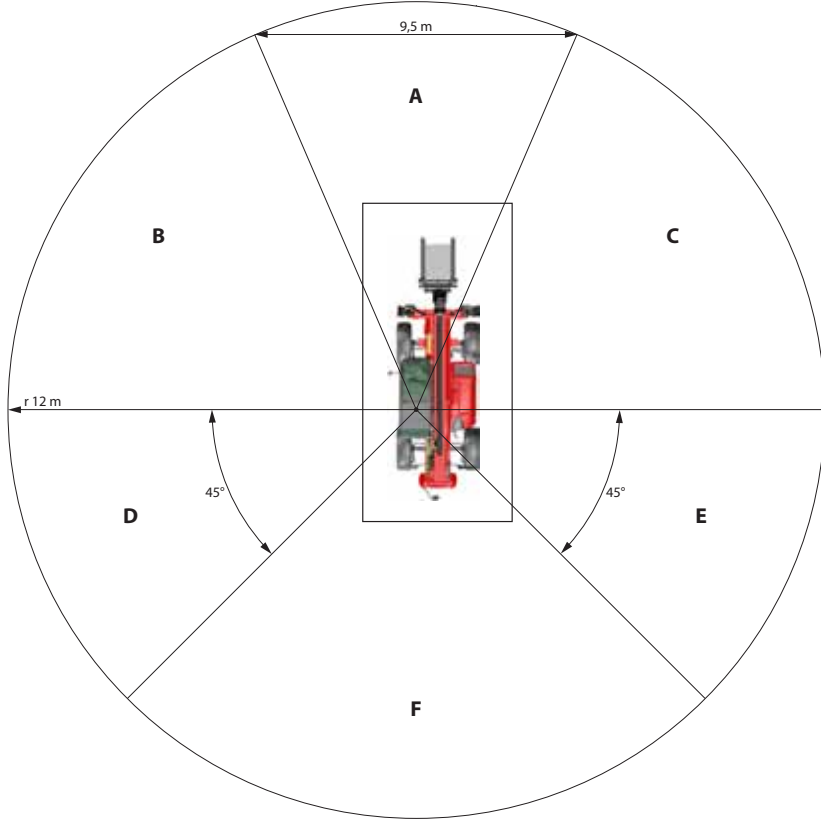
- Place the lift truck on level ground with the engine stopped, and the boom retracted and lowered as far as possible.
- Note the position of the reference points ●...○ in the illustrations, to see and correctly adjust the rear-view mirrors.



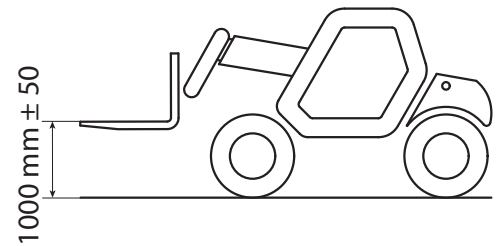
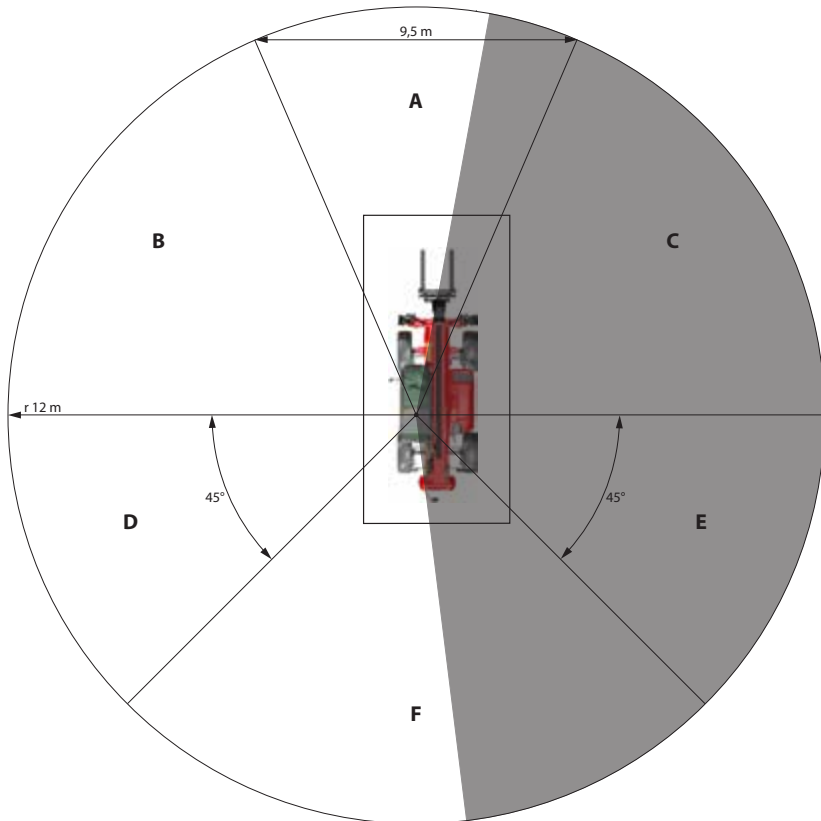
DIRECT AND/OR INDIRECT VISIBILITY BLIND SPOT ZONES

The two diagrams below indicate the blind spots in the visibility test circle (12m radius) and the rectangular zone 1m from the lift truck's perimeter according to tests conducted in compliance with standard EN15830.

SUSPENDED LOAD HANDLING (Test conducted in compliance with point 6.3.3 of standard EN 15830)



TRAILER LOADING (Test conducted in compliance with point 6.3.4 of standard EN15830)



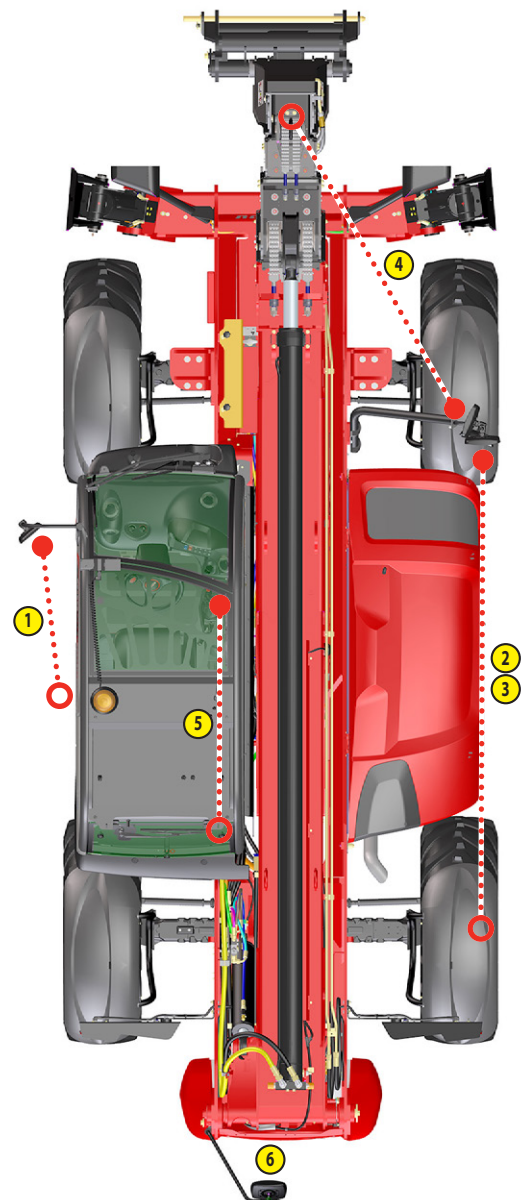
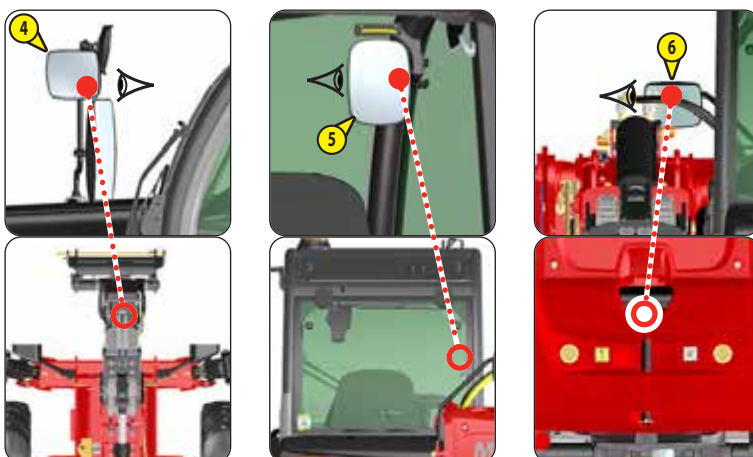
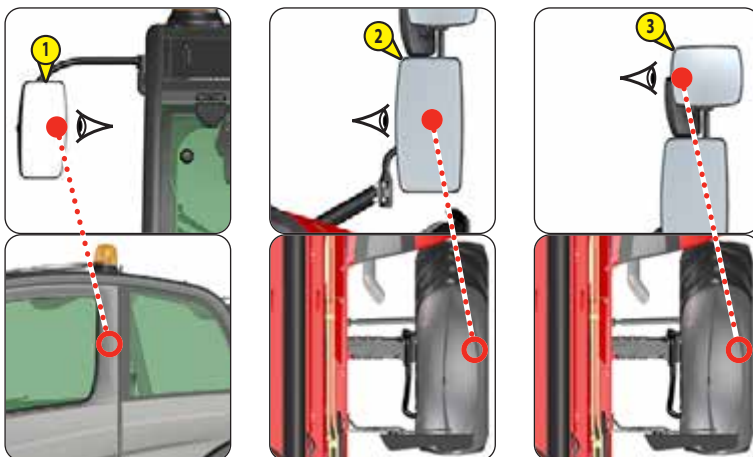
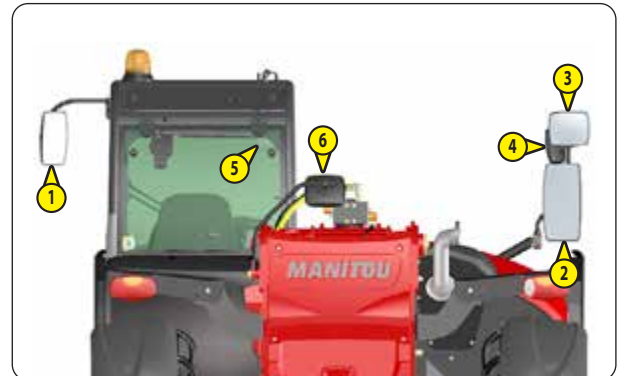
We use European standard EN15830 relating to operator visibility.

- Adhere to the instructions for optimizing operator visibility in the immediate vicinity (≤ 1 - OPERATING AND SAFETY INSTRUCTIONS: OPERATOR INSTRUCTIONS: OPERATING INSTRUCTIONS WITH AND WITHOUT LOAD: D - VISIBILITY).

DESCRIPTION AND ADJUSTMENT OF REAR-VIEW MIRRORS

- 1 - LEFT REAR-VIEW MIRROR
- 2 - MAIN RIGHT REAR-VIEW MIRROR
- 3 - SECONDARY RIGHT REAR-VIEW MIRROR
- 4 - RIGHT REAR-VIEW MIRROR
- 5 - INSIDE REAR-VIEW MIRROR (OPTION)
- 6 - REAR-VIEW MIRROR

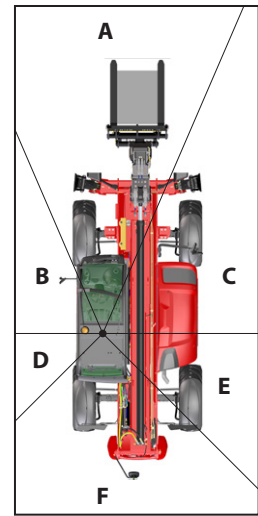
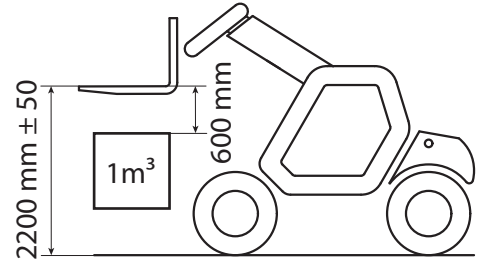
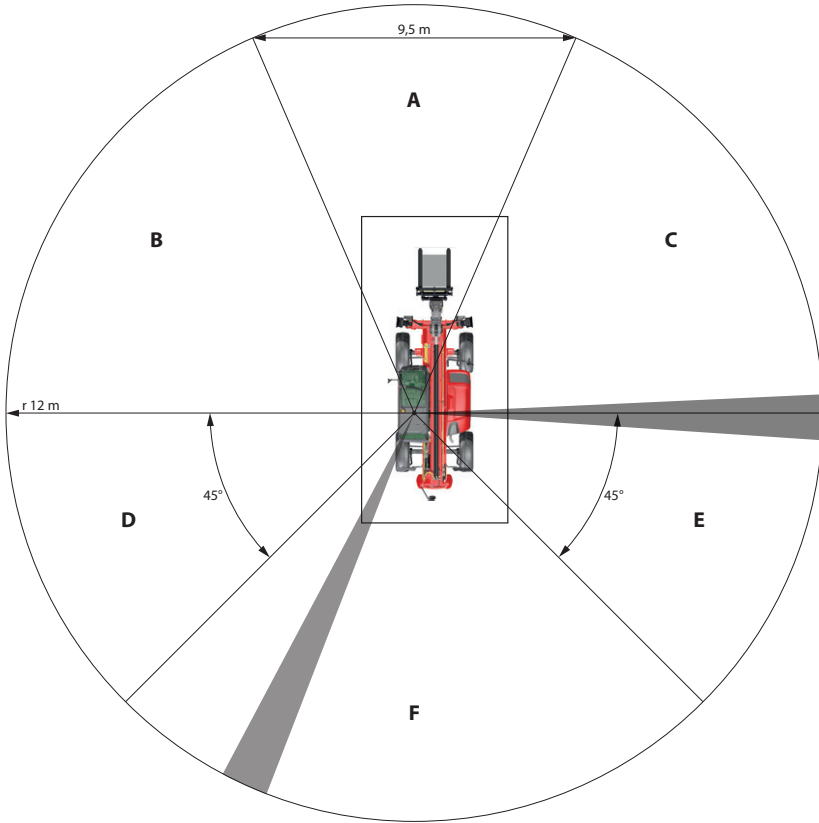
- Place the lift truck on level ground with the engine stopped, and the boom retracted and lowered as far as possible.
- Note the position of the reference points ●...○ in the illustrations, to see and correctly adjust the rear-view mirrors.



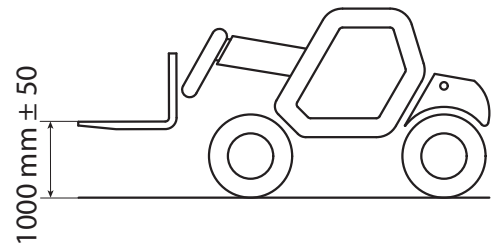
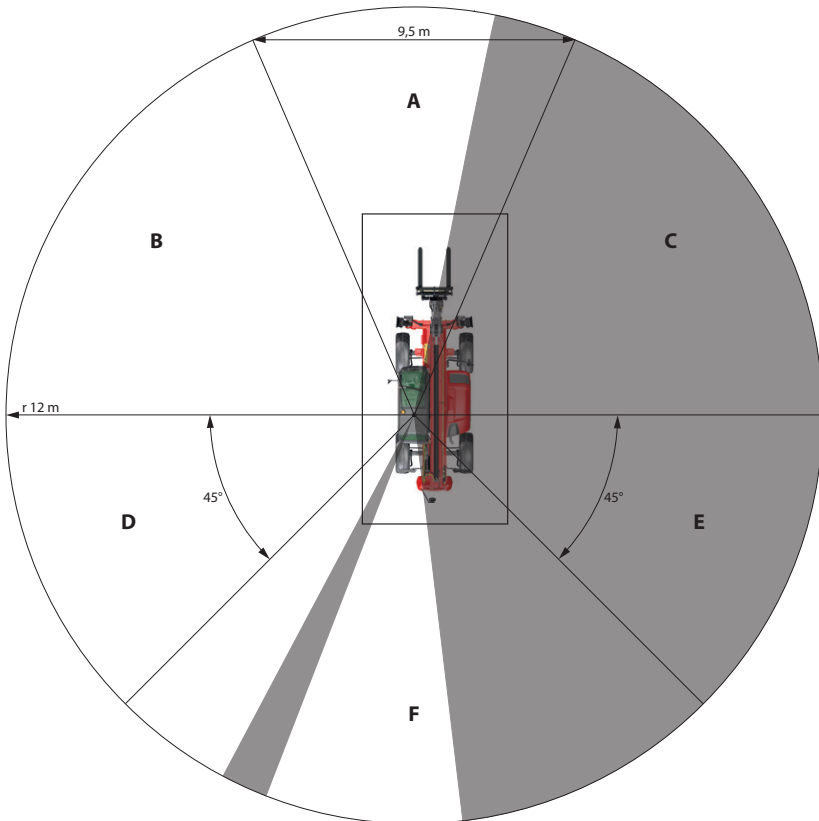
DIRECT AND/OR INDIRECT VISIBILITY BLIND SPOT ZONES

The two diagrams below indicate the blind spots in the visibility test circle (12m radius) and the rectangular zone 1m from the lift truck's perimeter according to tests conducted in compliance with standard EN15830.

SUSPENDED LOAD HANDLING (Test conducted in compliance with point 6.3.3 of standard EN 15830)



TRAILER LOADING (Test conducted in compliance with point 6.3.4 of standard EN15830)

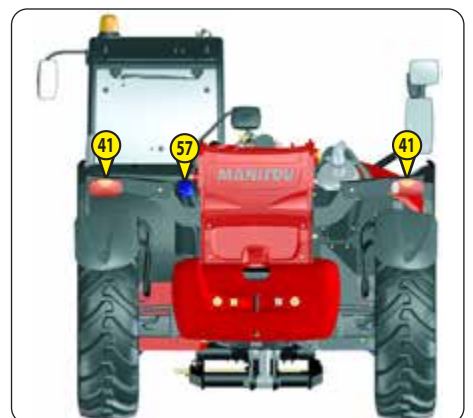
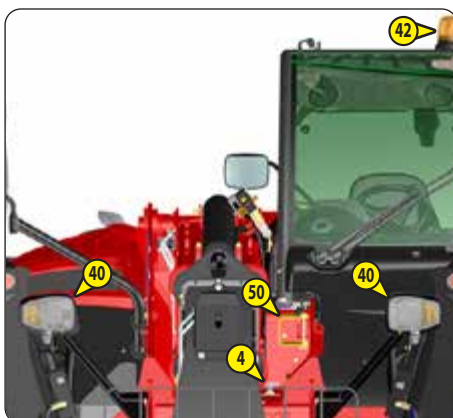
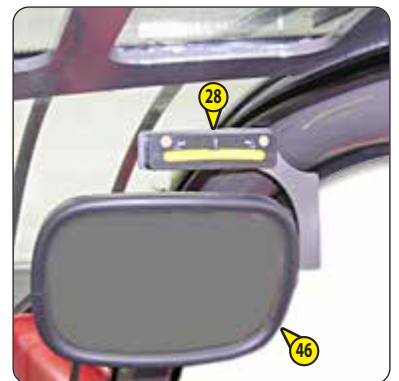
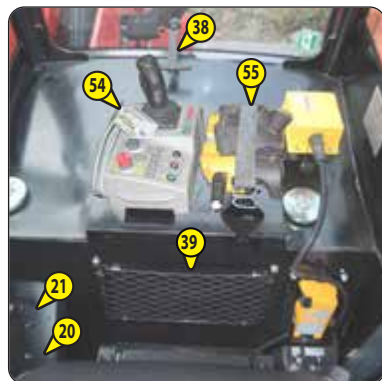
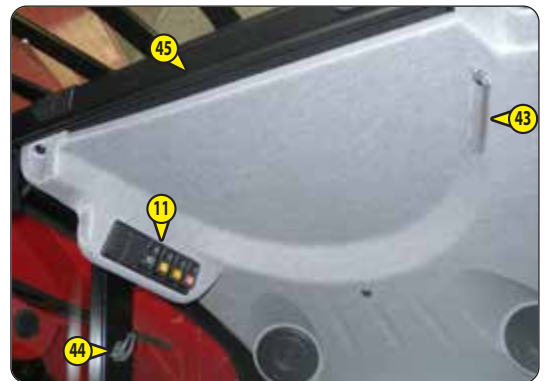
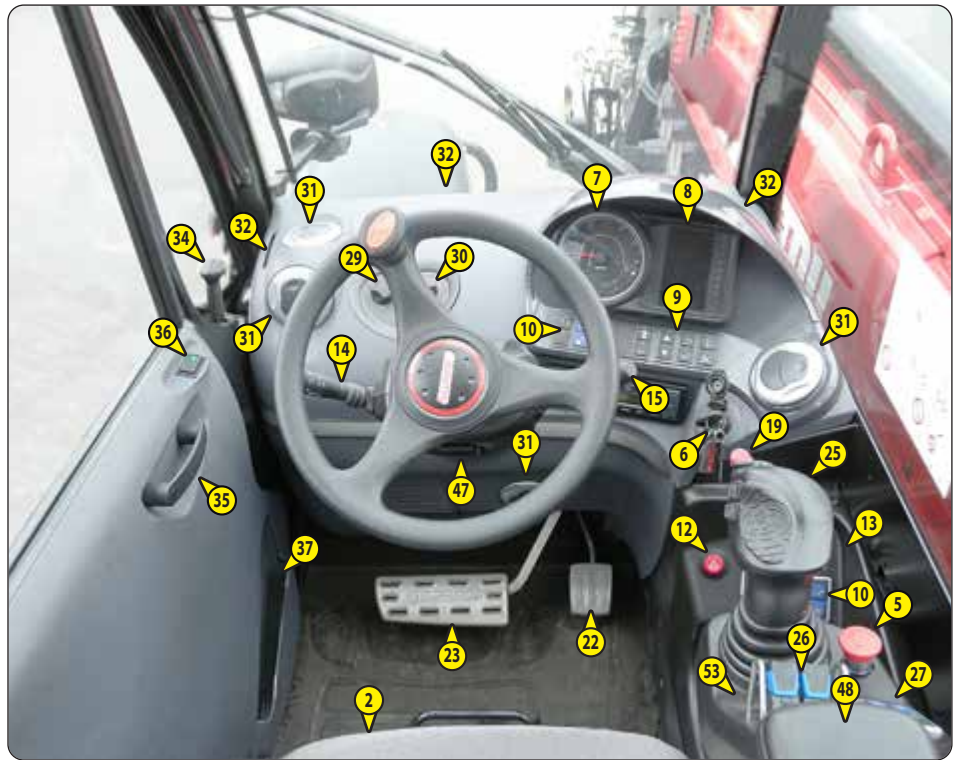


INSTRUMENTS AND CONTROLS

DESCRIPTION

NOTE: All the terms such as: RIGHT, LEFT, FRONT, REAR are as seen by an observer occupying the driver's seat and looking straight ahead.

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1 - DRIVER'S CAB ACCESS

- Face the driver's cab access to get in and out, and always use the three support points provided for this purpose.
 - 1 - Left handle.
 - 2 - Right handle.
 - 3 - Step.



2 - DRIVER'S SEAT

DRIVER'S SEAT (STANDARD)

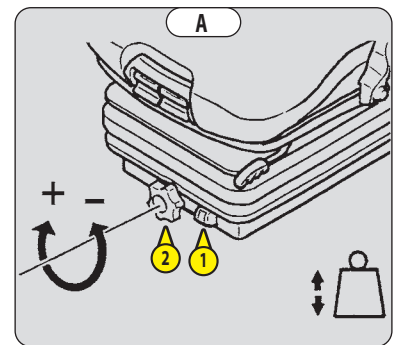
DESIGNED FOR MAXIMUM COMFORT, THIS SEAT CAN BE ADJUSTED AS FOLLOWS.

WEIGHT ADJUSTMENT (FIG. A)

It is recommended to adjust the weight when the driver is not in the seat.

- Refer to graduation 1 of the seat.
- Turn handle 2 according to the driver's weight.

NOTE: To avoid health problems, it is recommended that the weight adjustment should be checked and adjusted before starting the lift truck.



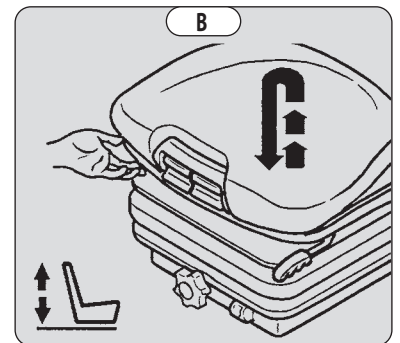
SEAT HEIGHT ADJUSTMENT (FIG. B)

- Raise the seat to the desired position, until you hear the ratchet click. If you raise the seat above the last notch (stop), the seat drops down to the lowest position.

SEAT BACKREST ANGLE ADJUSTMENT (FIG. C)

The backrest angle of the seat may be adjusted to suit the individual.

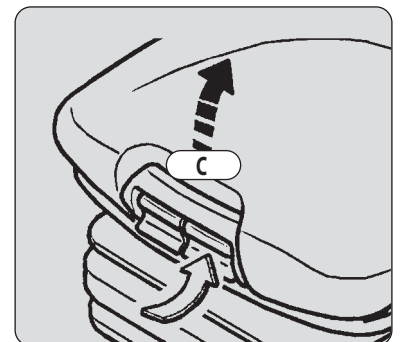
- Press the left-hand button while pushing on the seat or relaxing pressure on the seat to find a comfortable position.



SEAT DEPTH ADJUSTMENT (FIG. D)

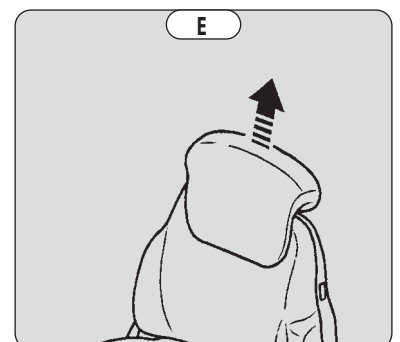
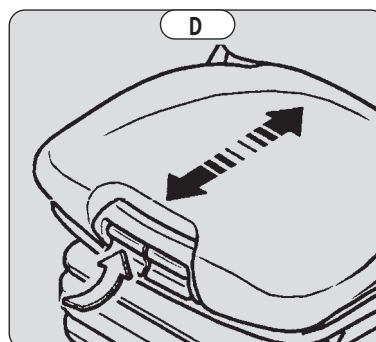
The seat depth can be individually adjusted.

- Press the right-hand button while raising or lowering the seat to find the desired position.



HEADREST (FIG. E)

- The height of the headrest can be adjusted by pulling it upwards (the notches will click) up to the stop.
- The headrest can be removed by applying sufficient pressure to pull it off the stop.



LUMBAR ADJUSTMENT (FIG. F)

This increases the comfort of the seat and the driver's freedom of movement.

- Turn the handle either left or right to adjust the height and depth of the lumbar support.

BACKREST ANGLE ADJUSTMENT (FIG. G)

⚠ IMPORTANT ⚠

If you do not support the backrest when making adjustments, it swings completely forwards.

- Support the backrest, pull the lever and tilt the backrest to the desired position.

LONGITUDINAL ADJUSTMENT (FIG. H)

- Adjust the locking lever until you reach the position required. Once locked, you can no longer move the seat into another position.

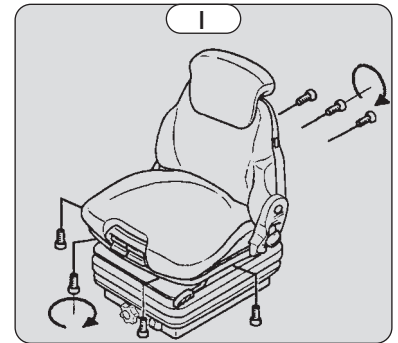
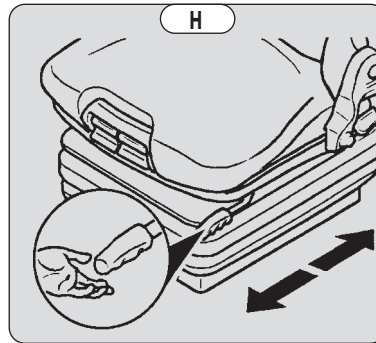
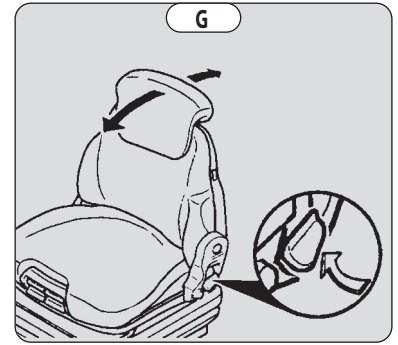
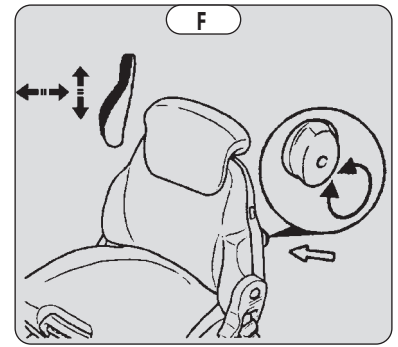
MAINTENANCE (FIG. I)

⚠ IMPORTANT ⚠

A moving backrest increases the risk of an accident!

Dirt may adversely affect the correct functioning of the seat. For this reason, make sure your seat is always clean.

- To clean or change the cushions, simply remove them from the seat frame.
- Avoid wetting the cushion fabric when cleaning it. Firstly check the resistance of the fabric on a small hidden area before using any fabric or plastic cleaner.



LOW FREQUENCY DRIVER'S PNEUMATIC SEAT (OPTION)

DESIGNED FOR MAXIMUM COMFORT, THIS SEAT CAN BE ADJUSTED AS FOLLOWS.

SEAT HEIGHT ADJUSTMENT

- Sit down correctly in the seat.
- Switch on lift truck ignition.
- Pull or push lever 1 according to the desired height, making sure that the green indicator lamp 2 remains visible.
- If indicator lamp 2 is red, re-adjust the height.

NOTE: The seat is designed so as not to require adjustment according to the driver's weight.

LONGITUDINAL ADJUSTMENT

- Pull lever 3 upwards.
- Slide the seat to the desired position.
- Release the lever and be sure it returns to the lock position.

BACKREST ANGLE ADJUSTMENT

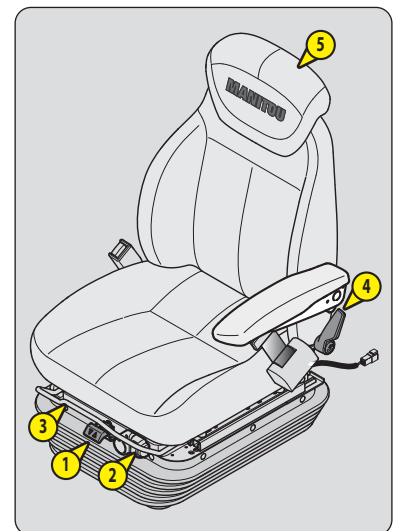
- Hold the backrest, push the lever 4 backwards and tilt the backrest to the desired position.

⚠ IMPORTANT ⚠

If you do not support the backrest when making adjustments, it swings completely forwards.

HEADREST

- The height of the headrest 5 can be adjusted by pulling it upwards (the notches will click) up to the stop
- The headrest can be removed by applying sufficient pressure to pull it off the stop.



3 - SEAT BELT

⚠ IMPORTANT ⚠

*Under no circumstances must the lift truck be used if the seat belt is defective (fixing, locking, cuts, tears, etc.).
Immediately repair or replace the seat belt.*

- Sit correctly on the seat.
- Check that seat belt is not twisted.
- Place the seat belt at hip level.
- Attach the seat belt and check that it locks.
- Adjust the seat belt to your body shape without compressing your pelvis and without excessive slack.

4 - BATTERY CUT-OFF

For quickly disconnecting the battery when working on the electric circuit or when soldering, for example.

⚠ IMPORTANT ⚠

*Operate the battery cut-off for a minimum of 30 seconds after having switched off the ignition with the ignition key.
Switch off the ignition with the key, wait 30 seconds, then operate the battery cut-off.
Wait 5 minutes before disconnecting the battery, this is required in order to purge the Diesel Exhaust Fluid (DEF) system.*



5 - EMERGENCY STOP

In the event of danger, it enables the engine to be shut down, thereby cutting-off all hydraulic movements.

⚠ IMPORTANT ⚠

*Be ready for hydraulic movements suddenly stopping when you press this button.
Caution when travelling, sudden stopping of the lift truck by engagement of the parking brake.
If possible stop the lift truck before using the emergency stop button.*

- Turn the knob to deactivate it before restarting the lift truck.



6 - IGNITION SWITCH

This switch has 5 positions:

- P - Not used.
- O - Ignition cut-off and engine stop.
- I - Ignition + preheat.
- II - Not used.
- III - Start-up and returns to position I as soon as the key is released.

7 - DASHBOARD "HARMONY"

1 - INSTRUMENTS AND INDICATORS


2 - INFORMATION SCREEN




1 - INSTRUMENTS AND INDICATORS

A - TACHOMETER


B - ENGINE WATER TEMPERATURE

If the indicator lamp  comes on when the lift truck is running, this means that the coolant temperature is high. Stop the engine immediately and look for the cause of the cooling circuit malfunction.

C - FUEL LEVEL

Indicator lamp  indicates that you are in reserve and that your running time is limited.

D - LEVEL "DEF" (Diesel Exhaust Fluid)

The indicator lamp  comes on if the level is below 15%.

 **HIGH BEAM INDICATOR LAMP**

 **LOW BEAM INDICATOR LAMP**

 **TURN SIGNAL INDICATOR LAMP**

 **PARKING BRAKE INDICATOR LAMP**

This indicator lamp comes on when the parking brake is applied.

 **BATTERY CHARGE WARNING INDICATOR LAMP**

If the indicator and the buzzer come on when the lift truck is running, stop the engine immediately and determine the cause (electric circuit, alternator belt, alternator, etc.).

 **STEERING SYSTEM OIL PRESSURE WARNING INDICATOR LAMP**

If the lamp comes on when the lift truck is running, stop the engine immediately and determine the cause (possible leak, etc.).

 **WATER IN FUEL PRE-FILTER WARNING INDICATOR LAMP**

The indicator lamp will come on when there is water in the fuel pre-filter. Stop the lift truck and carry out the necessary repairs.

 **BRAKE FLUID LEVEL WARNING INDICATOR LAMP**

If the indicator lamp and buzzer come on when the lift truck is running, stop the engine immediately and determine the cause (brake fluid level, possible leak, etc.). If the brake fluid level is abnormal, consult your dealer.

 **ENGINE OIL PRESSURE WARNING INDICATOR LAMP**

If the indicator lamp comes on when the lift truck is in operation, stop the engine immediately and look for the cause (oil level in engine crankcase).

NOTE: After starting the engine, the indicator lamp remains on for a few seconds then goes out when the correct engine oil pressure is reached. The full engine power is then available.





ENGINE PREHEAT INDICATOR LAMP

Preheat is necessary. When the lift truck is switched on, the indicator lamp comes on for 2 seconds and goes off as soon as preheat is ended. Start the lift truck's engine.



GEARBOX OIL PRESSURE WARNING INDICATOR LAMP

This light comes on when there is an abnormal drop in gearbox pressure. Stop the forklift truck and look for the cause (low oil level in the gearbox, internal leak in the gearbox, etc.).



GEARBOX OIL TEMPERATURE WARNING INDICATOR LAMP

This light comes on when the temperature of the gear box oil is abnormally high. In this case, place the forward/reverse selector in neutral and leave the engine to idle for a few minutes. If the light remains on, stop the forklift truck and contact your dealer.

NOTE: Abnormal heating of the oil may be linked to incorrect use of the gear box ratios ($\langle \rangle$ GEAR LEVER).



HYDRAULIC RETURN FILTER CLOGGING FAULT INDICATOR LAMP

The indicator lamp and buzzer come on when the hydraulic return oil filter cartridge is clogged. If this indicator lamp comes on and stays on, the cartridge needs replacing. Stop the lift truck and carry out the necessary repairs ($\langle \rangle$ 3 - MAINTENANCE: FILTER CARTRIDGES AND BELTS).

NOTE: This light may come on when lift truck is started, and it should go off when the hydraulic fluid reaches its operating temperature.



ENGINE WATER LEVEL WARNING INDICATOR LAMP

If the indicator lamp and buzzer come on when the lift truck is in operation, stop the engine immediately and determine the cause (coolant level, possible leak, radiator, etc.).



ENGINE STOPPED WARNING INDICATOR LAMP

If the indicator lights up or flashes when the lift truck is in operation, stop the engine immediately and consult your dealer.



AIR FILTER CLOGGING WARNING INDICATOR LAMP

The lamp and the buzzer come on when the air filter cartridge is clogged up. Stop the engine and carry out the necessary repairs ($\langle \rangle$ 3 - MAINTENANCE: FILTER CARTRIDGES AND BELTS).







ENGINE FAULT INDICATOR LAMP

If the indicator lamp comes on or flashes while the lift truck is in operation, a diagnostic fault has been detected. The lift truck will operate in reduced mode. Consult your dealer as soon as possible.



FAULT INDICATOR LAMP "SCR" (selective catalytic reduction)

The indicator comes on if the system is above the efficiency threshold or if a diesel exhaust fluid quality problem is detected.

Flashing  Indicator light +  + audible signal	-Level of "DEF" (diesel exhaust fluid) under 10%
 +  + audible signal	-Consult your dealer as soon as possible.



CRYSTALLIZATION OR SULPHURIZATION LEVEL

If the indicator lamp flashes while the lift truck is in operation, perform a "STATIONARY LIFT TRUCK" EXHAUST REGENERATION ($\langle \rangle$ 3 - MAINTENANCE: OCCASIONAL MAINTENANCE).

The indicator lamp also comes on when the count (700h => 0h) before next regeneration has elapsed.

2 - INFORMATION SCREEN

 **BOOM ANGLE**

 **MAINTENANCE REQUIRED**

 **MAINTENANCE REQUIRED + ERROR CODE NUMBER**

 **HYDRAULIC MOVEMENT NEUTRALIZATION**

 **DISABLING "AGGRAVATING" HYDRAULIC MOVEMENT CUT-OFF**

 **STABILIZER POSITION INDICATORS**

 **GEAR RATIO**

 **WHEEL STEERING INDICATOR**

 **CLOCK**

 **DRIVING**

 **WORK (OPTION)**

 **EXTERNAL TEMPERATURE**

 **HOUR METER**

 **SPEEDOMETER**







 **HYDRAULIC FLOW RATE ADJUSTMENT (OPTION)**

    **POP UP**

- Blue POP UP: information message.
- Grey POP UP: operating message.
- Orange POP UP: warning message.
- Red POP UP: fault message, consult your dealer.

 **INFORMATION SCREEN**

- Hold down the  or  button to choose.

-  Total hour meter.
-  Partial hour meter.
-  Instantaneous fuel consumption.
-  Average fuel consumption.
-  Fuel autonomy.
-  Tachometer.



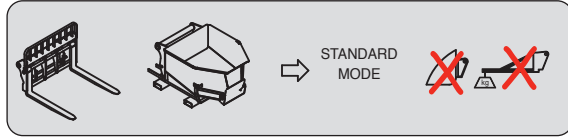
8 - LONGITUDINAL STABILITY LIMITER AND WARNING DEVICE

⚠ IMPORTANT ⚠

The operator must respect the lift truck's load chart, and the operating mode according to the attachment.

This device warns the operator of the forklift truck's longitudinal stability limits. However, lateral stability can reduce the load chart in the upper part, and this reduction is not detected by the device.

Depending on the type of work required, the longitudinal stability limiter and warning device allows the operator to operate the lift truck in complete safety.



"HANDLING" MODE

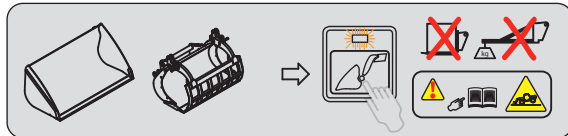


USE ON FORKS

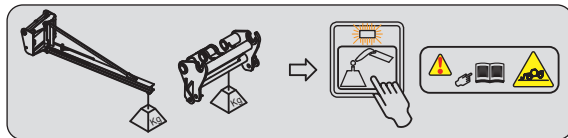
- By default, the device is in "HANDLING MODE" each time the lift truck is started.
- Protection against tilting forwards during aggravating movements is guaranteed, except when the boom is retracted.

STATUS OF THE DEVICE			
HALTED	SLOW SPEED 1 to 5 km/h	SPEED > 5 km/h	BOOM RETRACTED (★)
A4-A5 : Very slow intermittent sound alarm. A6 : Slow intermittent sound alarm. A7 : Fast intermittent sound alarm. A8 : Very fast intermittent sound alarm.	A7 : Fast intermittent sound alarm. A8 : Very fast intermittent sound alarm.	-No sound alarm.	-No sound alarm. -Indicator light on.

(★) FOR AUSTRALIA: Boom in retracted position and angle <math><10^\circ</math> below the lowest boom position.



"BUCKET" MODE (NOT USED)



"SUSPENDED LOAD" MODE

USE WITH LIFTING DEVICE (offering a higher margin of safety)

- Place the lift truck in the transport position.
- Press the button; the "SUSPENDED LOAD" MODE is confirmed by an audible signal and by the indicator lamp coming on. Hydraulic tilting movements are neutralized, as well as the lifting movement when the longitudinal stability limit is reached (indicator lamp A8 on).
- Press this button again or switch off the ignition with the ignition key to return to "HANDLING" MODE.
- Protection against tilting forwards during aggravating movements is guaranteed, except when the boom is retracted.

STATUS OF THE DEVICE			
HALTED	SLOW SPEED 1 to 5 km/h	SPEED > 5 km/h	BOOM RETRACTED (★)
	A4-A5 : Very slow intermittent sound alarm. A6 : Slow intermittent sound alarm. A7 : Fast intermittent sound alarm. A8 : Very fast intermittent sound alarm.		-No sound alarm. -Indicator light on.

(★) FOR AUSTRALIA: Boom in retracted position and angle <math><10^\circ</math> below the lowest boom position.

A - VISUAL ALARMS

- A1 - A2 - A3: There is a significant reserve of longitudinal stability.
- A4 - A5: The lift truck is nearing the limit of longitudinal stability. Maneuver with care.
- A6: The lift truck is close to the longitudinal stability limit. Maneuver with care.
- A7: The lift truck is very close to the longitudinal stability limit. Move with extreme care.
- A8: The lift truck is at the authorized limit of longitudinal stability.
- A9: The "AGGRAVATING" hydraulic movement cut-off is disabled.

B - HYDRAULIC MOVEMENT CUT-OFF

"HANDLING" MODE

- A8: All "AGGRAVATING" hydraulic movements are cut off. Only perform de-aggravating hydraulic movements in the following order: retract and raise the boom.


"SUSPENDED LOAD" MODE



- A8: All "AGGRAVATING" and boom raising hydraulic movements are cut off. Only the boom retraction hydraulic movement is available.

C - DISABLING "AGGRAVATING" HYDRAULIC MOVEMENT CUT-OFF

⚠ IMPORTANT ⚠

Remain very vigilant during this operation. The only information available to the operator is the lift truck's dynamic stability.

In certain cases, in order to get out of a difficult situation, the operator can bypass this safety device. The  button temporarily disables the cutting-off of "AGGRAVATING" hydraulic movements.

- Hold down the  button, the indicator lamp will light (60 second time delay), and the  pictogram will appear on the information screen. Simultaneously perform the necessary "AGGRAVATING" hydraulic movement with extreme care.

D - STRAIN GAUGE

⚠ IMPORTANT ⚠



Disassembly or calibration of the strain gauge is prohibited, this must only be done by specially trained personnel, consult your dealer.



9 - INFORMATION SCREEN CONTROL BUTTONS





INFORMATION MENU

- Press the button to display the "INFORMATION" menu
- Press the button  to select from the menus and sub-menus.
- Press knob  to confirm.

TROUBLESHOOTING	>	FAULT
MAINTENANCE	>	MAINTENANCE RESET
GENERAL	>	IDENTIFICATION
	>	SOFTWARE VERSION



PREFERENCES MENU

- Press the button to display the "PREFERENCES" menu
- Press the button  to select from the menus and sub-menus.
- Press knob  to confirm.

SYSTEM	>	DATE AND TIME
	>	LANGUAGES
	>	UNITS
	>	SCREEN
	>	POP UPS
	>	DIGICODE
HYDRAULICS	>	STABILITY TEST
	>	STABILITY REBALANCING
	>	EASY CONNECT SYSTEM
	>	CONFIGURATION
ENGINE SPECIFICATION	>	REGENERATION
	>	ECO STOP (OPTION)
	>	FAN DRIVE FAN REVERSAL (OPTION)
EXPERT	>	STABILITY CALIBRATION
	>	BOOM ANGLE CALIBRATION
	>	INCLINOMETER CALIBRATION
	>	DISTRIBUTOR CALIBRATION

(menu reserved for your dealer)
 (menu reserved for your dealer)
 (menu reserved for your dealer)
 (menu reserved for your dealer)



BACK

- Press the button to return to the previous stage.



CONFIRMATION

- Press the button to move on to the next step.



MOVE UP

- Press the button to change menu.



MOVE DOWN

- Press the button to change menu.



10 - PUSH BUTTON PANEL

BUTTON FUNCTIONS


- Red button: Safety.
- Orange button: Transmission/Engine.
- Blue button: Hydraulics.
- Black button: Other.

BUTTON DIAGNOSTICS

- If all buttons are unlit, there is a power supply problem. Contact your dealer.
- If the buttons blink simultaneously, power problem, contact your dealer.



HYDRAULIC MOVEMENT NEUTRALIZATION

When driving on the road, it is highly recommended (mandatory in Germany) that you disconnect all hydraulic movement. The indicator lamp and  image on the information screen indicate use.




ROTATING BEACON

The indicator lamp indicates it is in use.




AUTOMATIC PARKING BRAKE

The function is used to engage the parking brake when the lift truck is stopped and to release the parking brake when the lift truck movement conditions are met.

- Press the  button to activate. The indicator lamp will show it is in use.
- Press the button again to deactivate.



"MANUAL MODE" AUTOMATIC PARKING BRAKE

- Press the  button to activate. The indicator lamp will show it is in use.
- Press the button again to deactivate.



"BUCKET" MODE (NOT USED)



"SUSPENDED LOAD" MODE

 LONGITUDINAL STABILITY LIMITER AND WARNING DEVICE



BOOM SUSPENSION (OPTION)

 DESCRIPTION AND USE OF THE OPTIONS



FORCED BOOM SUSPENSION (OPTION)

 DESCRIPTION AND USE OF THE OPTIONS



ECO STOP (OPTION)

 DESCRIPTION AND USE OF THE OPTIONS





TILT CIRCUIT LOCKING

- Press the button to shut off the tilt circuit hydraulic movements. The indicator lamp indicates it is in use.



ATTACHMENT CIRCUIT LOCKING

- Press the button to shut off the attachment circuit hydraulic movements. The indicator lamp indicates it is in use.



FORCED OPERATION OF ATTACHMENT CIRCUIT (OPTION)

◀ DESCRIPTION AND USE OF THE OPTIONS



FAN REVERSAL (OPTION)

◀ DESCRIPTION AND USE OF THE OPTIONS



NOT USED



EXHAUST REGENERATION

◀ 3 - MAINTENANCE: OCCASIONAL MAINTENANCE



NOT USED



DISABLING "AGGRAVATING" HYDRAULIC MOVEMENT CUT-OFF

◀ LONGITUDINAL STABILITY LIMITER AND WARNING DEVICE



11 - SWITCHES

NOTE: The location of the switches may vary depending on the options.



WORKLIGHTS ON BOOM (OPTION)



FRONT WORK LIGHTS (OPTION)



FRONT AND REAR WORK LIGHTS (OPTION)



ROOF WINDSCREEN WIPER



SIDE WINDSHIELD WIPER (OPTION)



REAR WINDSCREEN DEFROST (OPTION)



REAR FOG LIGHTS



GREEN ROTATING BEACON (OPTION)



DOUBLE-ACTING REAR HYDRAULIC PREDISPOSITION (OPTION)

◀ DESCRIPTION AND USE OF THE OPTIONS



12 - HAZARD WARNING LIGHTS

13 - USB RECHARGING SOCKET



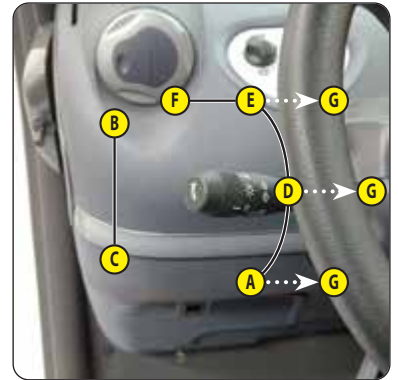
14 - LIGHTING, HORN AND INDICATOR SWITCH

The switch controls the visual and sound alarms.

- A - All lights are off, the turn signals work.
- B - The right hand indicator lights flash.
- C - The left hand indicator lights flash.
- D - Sidelights and rear lights on.
- E - The dipped headlights and the rear lights are on.
- F - The main beam headlights and the rear lights are on.
- G - Headlight signaling.

Pressing the end of the switch sounds the horn.

NOTE: Positions D - E - F - G can be used without switching on the ignition.



15 - FRONT AND REAR WINDSHIELD WIPER SWITCH

FRONT WINDSHIELD WIPER

- A - Front windshield wiper off.
- B - Front windshield wiper low speed setting.
- C - Front windscreen wiper high speed setting.
- D - Front windshield wiper intermittent operation.
- E - Front windshield wiper pulse driven.

REAR WINDSHIELD WIPER

- F - Rear windshield wiper off.
- G - Rear windshield wiper on.
- H - Rear windscreen washer by pressing.

NOTE: These functions will only work with the engine switched on.



16 - 12V SOCKET

For 12 V appliance and max. amperage 20A.



17 - FUSES AND RELAYS IN THE CAB

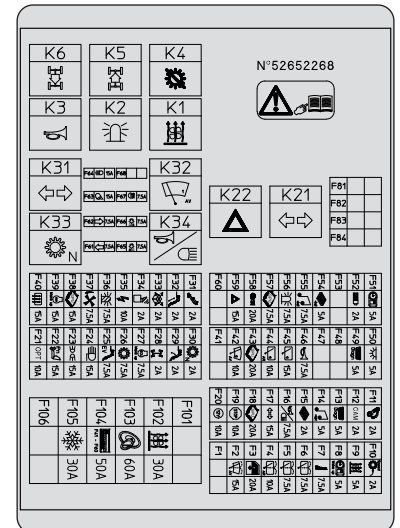
A sticker on the inside of the access panel provides a quick indication of the use of the fuse plate's components described below.

- Remove access panel 1 to gain access to the fuses and relays. Replace a blown fuse with a new fuse of the same quality and rating. Never use a repaired fuse.

F1		Unused.
F2	15 A	Front windscreen wiper + washer. Relay (K32).
F3	20 A	Window wind up.
F4	10 A	Rear windscreen wiper + windscreen washer.
F5	7,5 A	Side windscreen wiper + washer (OPTION).
F6	7,5 A	Roof windscreen wiper + washer.
F7	7,5 A	Rear axle blocking valve.
F8	5 A	Screen wake.
F9	5 A	Relay (K1).
F10	2 A	Gear lever cut-off + speed sensor.
F11	2 A	JSM joystick.
F12	2 A	Camera (OPTION).
F13	5 A	Diagnostics plug.
F14	5 A	Car radio (OPTION).
F15	2 A	Immobilizer (OPTION).
F16	7,5 A	Relay (K34).
F17	15 A	Flashing light unit (K21) + relay (K31).
F18	20 A	Main ECU SPU 40-26.
F19	10 A	Brake lights.
F20	10 A	12 V plug.

F21	10 A	Dual effect rear hydraulic predisposition (OPTION).
F22	15 A	Pneumatic seat (OPTION).
F23	15 A	Front worklights (OPTION). Rear worklights (OPTION).
F24	15 A	Worklights on boom (OPTION).
F25	7,5 A	Boom head solenoid valve (OPTION).
F26	7,5 A	Relay (K4).
F27	7,5 A	Engine ECU wake-up. Diagnostics plug.
F28	2 A	Wheel alignment. Negative brake.
F29	2 A	Boom angular sensor.
F30	2 A	Relay (K33).
F31	2 A	Stabilizer pressure sensors + elevated position.
F32	2 A	Boom sensors.
F33	2 A	Inclinometer.
F34	2 A	Radio control
F35		Unused.
F36	7,5 A	Green rotating beacon light (OPTION).
F37	7,5 A	Fan reversal (OPTION).
F38	15 A	Auxiliary ECU SPU 40-26 or SPU 25-15.
F39	15 A	Engine ECU wake-up.
F40	15 A	Rear windscreen defrost (OPTION).

F41		Unused.
F42	10 A	Front windscreen wiper automatic return.
F43	20 A	Main ECU SPU 40-26.
F44	10 A	Rear windshield wiper automatic return.
F45	15 A	Roof windscreen wiper automatic return. Side windscreen wiper automatic return (OPTION).
F46	7,5 A	Horn.
F47		Unused.
F48		Unused.
F49	5 A	Diagnostics plug.
F50	5 A	Roof light.
F51	5 A	"HARMONY" dashboard
F52	2 A	Radio control battery charger (OPTION).
F53		Unused.
F54	5 A	Immobilizer (OPTION).
F55	7,5 A	Car radio (OPTION).
F56	7,5 A	Relay (K2).
F57	7,5 A	Auxiliary ECU SPU 40-26 or SPU 25-15.



F58	20 A	Lighting, horn and indicator switch.
F59	15 A	Relay (K31).
F60		Unused.

F61	7.5 A	Left-hand indicator light.
F62	7.5 A	Right-hand indicator light.
F63	15 A	Dipped beam headlights.
F64	15 A	Main beam headlights.
F65	7.5 A	Left sidelights.
F66	7.5 A	Right sidelights.
F67	7.5 A	Rear fog lights.
F68		Unused.

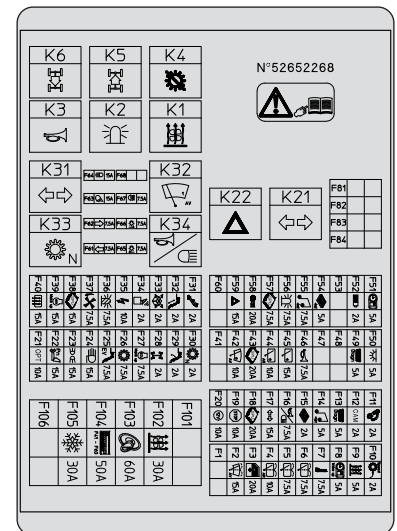
F81		Unused.
F82		Unused.
F83		Unused.
F84		Unused.

F101		Unused.
F102	30A	Relay (K1).
F103	60A	Ignition switch.
F104	50A	Module fuses 4 (F41 - F60).
F105	30A	Air conditioning (OPTION).
F106		Unused.

K1	Ventilation/heating.
K2	Rotating beacon.
K3	Alarm control.
K4	Transmission cut-off.
K5	Forward gear.
K6	Reverse gear.

K21	Flashing unit.
K22	Hazard warning lights.

K31	Flashing light unit power supply.
K32	Front windscreen wiper speed 1 intermittence.
K33	Engine neutral.
K34	Backup lights and backup alarm.



18 - FUSES AND RELAYS UNDER THE ENGINE COVER

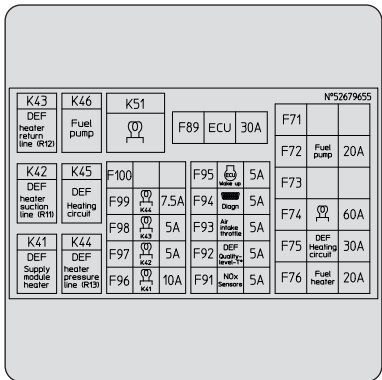
- Open the engine bonnet, remove cover 1 to gain access to the fuses and relays.
 Replace a blown fuse with a new fuse of the same quality and rating. Never use a repaired fuse.

F89	30A	Engine command module.
F90	2A	Immobilizer (OPTION).

F71		Unused.
F72	20A	Relay power supply (K46).
F73		Unused.
F74	60A	Relay power supply (K41).
F75	30A	Relay power supply (K45).
F76	20A	Fuel preheater (OPTION).
F91	5A	Sensor power supply NOx.
F92		Unused.
F93	5A	Air intake valve power supply.
F94	5A	Engine diagnostics plug power supply.
F95	5A	Engine ECU wake-up. Fuel preheater (OPTION).
F96	5A	Supply pump "DEF".
F97	5A	Suction line preheat "DEF".
F98	5A	Return line preheat "DEF".
F99	7,5A	Pressure line preheat "DEF".
F100		Unused.

K41	Supply pump heating "DEF".
K42	Suction line preheat "DEF".
K43	Return line preheat "DEF".
K44	Pressure line preheat "DEF".
K45	Lines preheat "DEF".
K46	Fuel pump.
K51	Preheat glow-plugs.

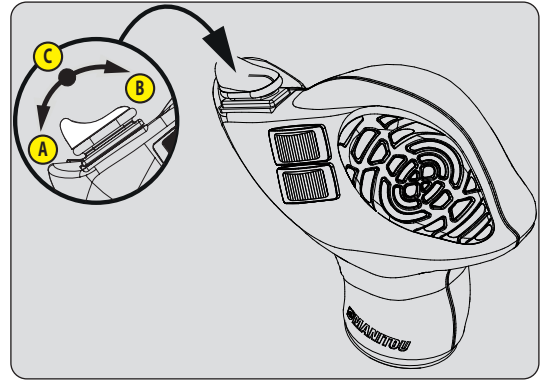
K24	Fuel preheater (OPTION).
K25	Fuel preheater (OPTION).



19 - FORWARD/NEUTRAL/REVERSE GEAR SELECTION

When changing the direction of travel, the lift truck should be traveling at slow speed and not accelerating.


- FORWARD: Push the switch forward (position A).
- REVERSE: Push the switch backward (position B). Reversing lights and a backup alarm indicate that the lift truck is traveling in reverse.
- NEUTRAL: The switch must be in the neutral position (position C) to start the lift truck.



SAFETY FOR MOVING THE LIFT TRUCK

The operator must observe the following sequence to move the truck forwards or backwards:

- 1 - sit down correctly in the driver's seat,
- 2 - release the hand brake,
- 3 - engage forward or reverse gear.

NOTE: The alternate display of the forward or reverse section arrow  on the information screen requires the selector to be set to neutral.

To stop the forklift truck without switching off the ignition, the following sequence must be followed:

- 1 - set the forward/reverse selector to neutral,
- 2 - apply the parking brake,
- 3 - get out of the lift truck.

NOTE: A pulsing sound signal and a message on the screen inform the driver if they leave the driver's seat without setting the parking brake.

20 - GEAR LEVER AND TRANSMISSION CUT-OFF

In order to change gear, it is necessary to cut off the transmission by pressing button 1 on the lever.

CONDITION OF USE OF GEARBOX RATIOS

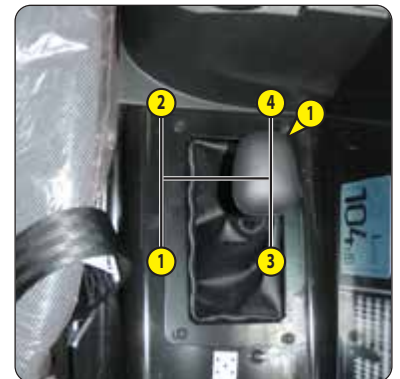
On lift trucks such as these, that are equipped with torque converters, it is not necessary to systematically set off in first gear and work up through the gears.

⚠ IMPORTANT ⚠

The gearbox ratio selection should be made carefully depending on the work to be performed.

A poor choice may result in the extremely rapid rise of the gearbox oil temperature through excessive slipping of the converter, which could lead to serious gearbox damage (it is essential to stop and change the working conditions if the gearbox oil temperature indicator lamp comes on).

This poor choice may also result in the forklift truck's performance deteriorating in forward gear: When the forward force increases, the forward speed in the r ratio (for example, in 3rd gear) may be lower than the forward speed that could be obtained with the gear below (in 2nd instead of 3rd).



In general, we would advise you to use the following gears according to the nature of the work being carried out.


- ON THE ROAD: Set off in 3rd gear and change up to 4th if the conditions and state of the road permit it. In hilly areas, set off in 2nd gear and change up to 3rd if the conditions and state of the road permit it.
- WITH A TRAILER ON THE ROAD: Set off in 2nd gear and change up to 3rd if the conditions and state of the road permit it.
- WHEN HANDLING: Use 3rd gear. In confined spaces use 2nd gear.
- LOADING (picking-up with bucket, manure fork, etc.): Use 2nd gear.
- EARTH MOVING: Use 1st gear.

21 - STEERING SELECTION

⚠ IMPORTANT ⚠

*Before selecting one of the three steering possibilities, align the 4 wheels in relation to the lift truck axis.
Never change the steering mode whilst driving.*



The green indicator lights on the information screen  come on to indicate the alignment of the wheels relative to the lift truck.

A - STEERING SELECTION LEVER

- A1 - Front steering wheels (road mode).
- A2 - Front and rear steering wheels in opposite directions (short steering).
- A3 - Front and rear steering wheels in the same direction (crab steering).

WHEEL ALIGNMENT CONTROL

⚠ IMPORTANT ⚠

Check the alignment of the front and rear wheels each time the lift truck is started.

Regularly check the alignment of the wheels when using the lift truck.


The wheels must be aligned and the lift truck must be in front steering wheels mode when used on public roads.


A green light illuminates on the dashboard when the wheels are aligned.

Contact your dealer if you have any questions.

- Select "short steering" (position A2).



- Turn the steering wheel and bring the rear wheels into alignment until the indicator lamps light on the rear wheels. 
- Select "road driving" (position A1).

- Turn the steering wheel and bring the rear wheels into alignment until the  indicator lamps light on the front wheels.
- Then select the desired direction mode.

22 - ACCELERATOR PEDAL

23 - SERVICE BRAKE PEDAL

The pedal applies on the front and rear wheels by an hydraulic brake system, and allows the lift truck to be slowed down and stopped.



24 - FUNCTION FILES

These files contain the description of the hydraulic controls and the load charts for the attachments used on the lift truck.



25 - HYDRAULIC BOOM CONTROLS

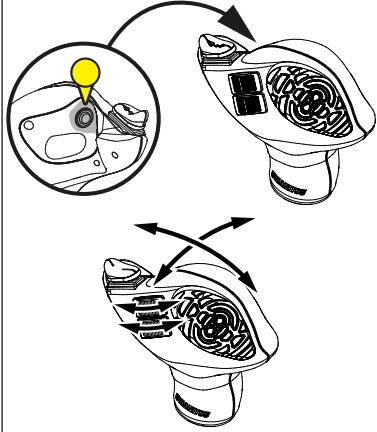
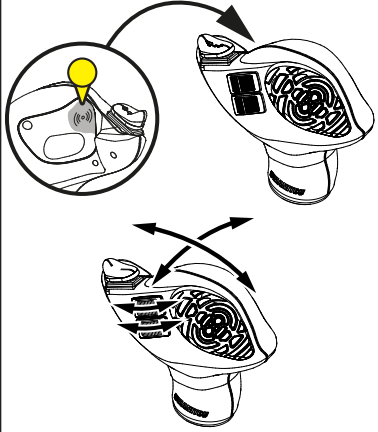
⚠ IMPORTANT ⚠

*Do not try to modify the hydraulic pressure of the system. If it malfunctions contact your dealer.
ANY MODIFICATION INVALIDATES THE WARRANTY AND YOU WILL BE CRIMINALLY LIABLE IN THE EVENT OF AN ACCIDENT.
 Use the hydraulic controls gently without jerking, to avoid incidents caused by shaking the lift truck.*

NOTE: When driving on the road, it is highly recommended (mandatory in Germany) that you cut off all the hydraulic movements (< PUSH BUTTON PANEL).

HYDRAULIC CONTROLS ACTIVATION

This safety device prevents accidental operation of the hydraulic lifting, tilting, telescoping and attachment controls.

USING THE BUTTON	USING THE CAPACITIVE SENSOR
	
<p>-Place your hand on the lever, activate the hydraulic controls by pressing the button and perform the hydraulic movement.</p>	<p>-Place your hand on the lever, activate the hydraulic controls by contact on the capacitive sensor and perform the hydraulic movement.</p>
<p>-Hydraulic controls activation is maintained on a timer while the lift truck is being used. -If necessary, reactivate the hydraulic controls.</p>	

A1 - LIFTING

NOTE: When using the platform in transport position, the boom lifting angle is limited to 17°.

A2 - LOWERING

B1 - CROWD

B2 - DUMP

C1 - TELESCOPE EXTENSION

NOTE: When using the platform in transport position, telescoping is limited to a length of 1.80 m.

C2 - TELESCOPE RETRACTION

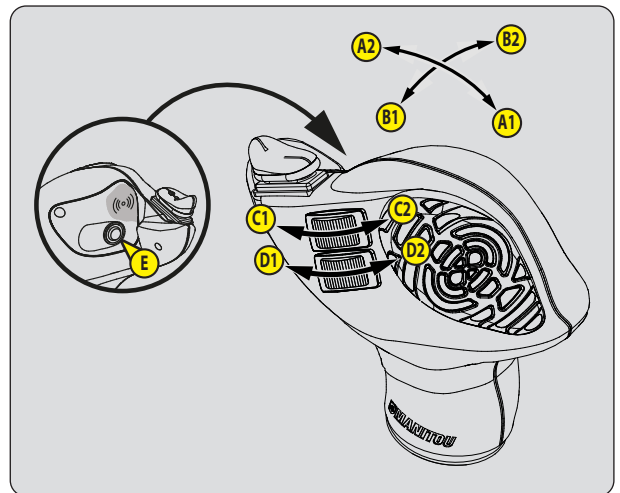
NOTE: When completely retracting the telescopes, insistently operate the control so as to allow all the telescopes to retract fully.

D1 - PLATFORM OR ATTACHMENT ROTATION TO THE LEFT

D2 - PLATFORM OR ATTACHMENT ROTATION TO THE RIGHT

E - BOOM HEAD SOLENOID VALVE (OPTION)

< DESCRIPTION AND USE OF THE OPTIONS



26 - HYDRAULIC STABILIZER CONTROLS

A1 - LEFT STABILIZER LIFTING

A2 - LEFT STABILIZER LOWERING

B1 - RIGHT STABILIZER LIFTING

B2 - RIGHT STABILIZER LOWERING

NOTE: The stabilizers can only be raised if the telescopes are retracted and the lifting angle of the boom is less than 62°.



27 - HYDRAULIC FRAME LEVELING CONTROLS



FRAME LEVELLING ON LEFT



FRAME LEVELLING ON RIGHT

NOTE: The tilt correction may only be performed if the lifting angle for the boom is less than 34°.



28 - LEVEL INDICATOR

A - SPIRIT LEVEL (EXCEPT FOR AUSTRALIA)

Confirms if the lift truck is horizontal.

B - TILTING INDICATOR

(OPTION) MT 1440/1840 EASY 75D ...

(STANDARD) MT 1440/1840 100D ...

If the two indicators are aligned, the chassis is parallel with the front axle.

C - LEVEL INDICATORS (ONLY FOR AUSTRALIA)

C1 : Lateral level indicator

C2 : Longitudinal level indicator.



29 - HEATER CONTROL

A - FAN CONTROL

This 4-speed control allows the air to be ventilated through the air vents.

B - TEMPERATURE CONTROL

Adjusts the temperature inside the cab.

- B1 - The fan pumps in the air at ambient temperature.
- B2 - The fan pumps in warm air.

The intermediate positions allow the temperature to be adjusted.



30 - AIR CONDITIONING CONTROLS (AIR CONDITIONING OPTION)

⚠ IMPORTANT ⚠

The air conditioning only works if the lift truck has been started.

When using your air conditioning, it is essential to work with the cab closed.

In winter: So as to ensure that the air conditioning unit is correctly operated and completely efficient, start up the compressor once a week, even for a short period of time, in order to lubricate the internal seals.

In cold weather: Warm the engine before switching on the compressor, in order to allow the coolant that has collected in the liquid state at the lowest point of the compressor's circuit to turn into gas under the effect of the heat given off by the engine, as the compressor is liable to be damaged by coolant in the liquid state.

If it seems to you that the air conditioning is not working properly, have it inspected by your dealer.

Never try to repair any faults yourself.

A - FAN CONTROL

This 3-speed control allows the air to be ventilated through the air vents.

B - TEMPERATURE CONTROL

Adjusts the temperature inside the cab.

- B1 - The fan pumps in cold air.
- B2 - The fan pumps in warm air.

The intermediate positions allow the temperature to be adjusted.



C - AIR CONDITIONING CONTROL

This control with a pilot light allows the air conditioning unit to be switched on.

HEATING MODE

- The controls must be adjusted in the following way:
 - C - Control with pilot light off.
 - B - At the desired temperature.
 - A - At the desired speed: 1, 2 or 3.

AIR CONDITIONING MODE

- The controls must be adjusted in the following way:
 - C - Control with pilot light on.
 - B - At the desired temperature.
 - A - At the desired speed: 1, 2 or 3.

DEFROST MODE

- The controls must be adjusted in the following way:
 - C - Control with pilot light on.
 - B - At the desired temperature.
 - A - At speed 2 or 3.
- For optimum effectiveness, close the heating vents.

31 - HEATING VENTS

These swiveling heating vents, which can be shut off, allow you to direct and adjust the flow inside the cab.

32 - DEMIST VENTS

These vents allow the windscreen and side windows to be demisted. For optimum effectiveness, close the heating vents.

33 - DOOR OPENING HANDLE

Two keys are provided with the lift truck to enable the cab to be locked.

- Pull on the handle to open the door.



34 - DOOR OPEN LEVER

35 - DOOR CLOSE HANDLE

36 - WINDOW WINDER SWITCH

37 - SIDE STORAGE SPACE



38 - HANDLE FOR REAR WINDOW OPENING

EMERGENCY EXIT

- Use the rear window as an emergency exit, in the event that it is impossible to leave the cab by the door or by opening the windshield.



39 - DOCUMENT STORAGE NET

Make sure that the operator's manual is in the right place, i.e. in the document holder net.

NOTE: An OPTIONAL waterproof document-holder is available.



40 - FRONT HEADLIGHTS

- A - Front left-hand indicator light.
- B - Front left-hand dipped headlight.
- C - Front left-hand headlight.
- D - Front left-hand sidelight.
- E - Front right-hand indicator light.
- F - Front right-hand low beam headlight.
- G - Front right-hand high beam headlight.
- H - Right front sidelight.

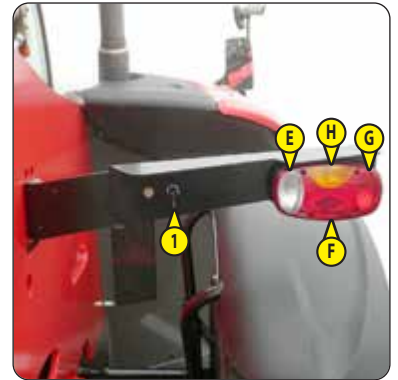
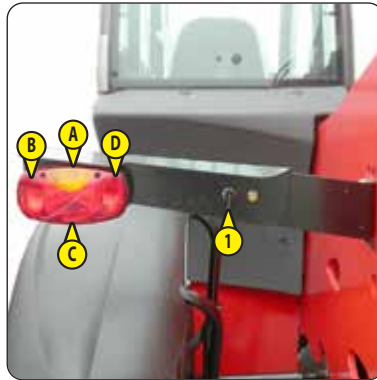


41 - REAR LIGHTS

- A - Rear left-hand indicator light.
- B - Rear left-hand stop light.
- C - Rear left-hand headlight.
- D - Rear fog light.
- E - Rear reversing light.
- F - Rear right hand headlight.
- G - Rear right-hand stop light.
- H - Rear right-hand indicator light.

⚠ IMPORTANT ⚠

When driving on the road, turn back the rear lights using the bolts 1.



42 - ROTATING BEACON

The magnetic rotating beacon light must be clearly visible on the roof of the cab and plugged into socket 1.



43 - ROOF LIGHT

44 - COAT HOOK

45 - SUN VISOR (OPTION)



46 - INSIDE REAR-VIEW MIRROR (OPTION)



47 - STEERING WHEEL ADJUSTMENT LEVER (OPTION)

This handle enables the angle and height of the steering wheel to be adjusted.

- Pull the knob backwards.
- Adjust the steering wheel to the desired position.
- Push the knob back to lock the steering wheel in position.



48 - ARM-REST

⚠ IMPORTANT ⚠

Make sure that the armrest's position is as ergonomic as possible to improve comfortable operation or handling hydraulics.



49 - STORAGE COMPARTMENT



50 - BOOM SAFETY WEDGE




⚠ IMPORTANT ⚠

Only use the wedge supplied with the lift truck.

The lift truck is equipped with a boom safety wedge which must be installed on the rod of the lifting cylinder when working beneath the boom (⚠ 1 - OPERATING AND SAFETY INSTRUCTIONS).



51 - TRUCK/PLATFORM SELECTOR SWITCH

-  Handling or platform mode operation from driver's cab controls.
-  Platform operation mode from control console.
-  Radio control (OPTION).
 - Operation via the radio-control controls.



52 - RESCUE SWITCH

◀ OPERATION OF THE PLATFORM

53 - DEAD-MAN BUTTON IN RESCUE MODE

◀ OPERATION OF THE PLATFORM



54 - CONTROL CONSOLE

⚠ IMPORTANT ⚠

When the control console is not in use, always disconnect it and store it in the space provided behind the driver's seat. Before using the control console, you must check that each function performs the expected action on the lift truck. If any faults are noted during testing or at any other time, immediately shut-down the lift truck and prevent it from being used. Inform the manager responsible for the lift truck in order to have the fault repaired as quickly as possible. Safety inspections must be carried out at least once a day, before starting work and at each change of operator.

◀ USING THE PLATFORM for operation of the control console.



55 - RADIO-CONTROL (OPTION)

A - RADIO CONTROL TRANSMITTER (OPTION)

B - RADIO CONTROL RECEIVER (OPTION)

⚠ IMPORTANT ⚠

The transmitter and the receiver must not be used without an antenna at the risk of damaging them.

When the radio-control transmitter is not in use, always disconnect it, switch it off and remove the key switch. Store the radio-control transmitter in the space provided behind the driver's seat.

Before using the radio-control, you must carry out the following safety checks. If any faults are noted during testing or at any other time, immediately shut-down the lift truck and prevent it from being used. Inform the manager responsible for the lift truck in order to have the fault repaired as quickly as possible.

Safety inspections must be carried out at least once a day, before starting work and at each change of operator.



VISUAL INSPECTION

- Are the hand-guard frame protection devices installed and in good condition?
- Are any parts cracked or broken?
- Are the joystick bellows and switch sealing boots free of perforations and cracks?

RADIO-CONTROL SAFETY INSPECTION AND START-UP

- Check that each function of the transmitter joysticks corresponds to the expected action on the lift truck.
- Check and test the "Emergency stop" function, press the emergency stop button on the transmitter, the engine must stop.

⚠ IMPORTANT ⚠

Never work with a lift truck that does not have a properly working "Emergency stop" function. Failure to follow these instructions may result in injury or material damage. Any measures that contribute to altering the above instructions may result in the loss of your operating authorisation and the equipment guarantee.

⚠ USING THE RADIO CONTROL FOR HANDLING for operation of the radio control.

C - RADIO CONTROL ACCUMULATOR (OPTION)

⚠ IMPORTANT ⚠

Always use a recharged battery and check that the other battery is on the charger before using the radio-control (leaving a battery in the charger with the green light flashing will not damage either the charger or the battery).

The radio-control is supplied with two interchangeable batteries in order to always have a charged battery available.

CHANGING THE BATTERY

Make sure that there is not dirt in the transmitter battery housing, as well as on the 4 contacts, as this could cause a faulty electrical connection.

The transmitter's electronics constantly monitor the battery voltage. When it reaches certain level, an intermittent sound signal will be emitted by the transmitter approximately 10 minutes before radio transmission is switched off. Beyond that time, the transmitter will switch off, immobilising the lift truck.

- Turn the transmitter's key switch to the stop position, remove the discharged battery by pushing it in horizontally by its tab, then lifting it slightly and allowing it to be pushed out of the battery compartment by the springs of the contacts.
- Take the charged battery (battery charger green light flashing), and place it in the transmitter battery compartment, checking that it is properly positioned.
- You can then restart the radio-control transmitter.



CHARGING A BATTERY

⚠ IMPORTANT ⚠

Explosion hazard! Only use the OEM chargers and batteries supplied with the lift truck. Failure to comply may result in an explosion. The chemical products and items released by the battery may cause injury.

Rechargeable batteries are special waste products and must be treated as such! Give them to a specialist company for disposal. Never throw batteries in the dust bin or in the environment!

In order to prolong battery life, it is recommended to only charge them when they can be considered to be empty, i.e., when the transmitter sound device emits its intermittent signal.

The battery charger comprises a charge processor which controls the charging process. The following battery parameters are taken into account:

- charging current
 - charging time
 - voltage
 - state of charge
 - short-circuit monitoring on contacts.
- Insert the discharged battery by pushing it in by its tab, and pushing slightly before allowing it to come back out, pushed by the springs of the battery compartment contacts.
 - The battery charger's green lamp will then remain continuously on while charging is in progress.
 - After approximately 4 hours, charging will be complete and the charger's green lamp will begin to flash.

56 - FUEL TANK

As far as possible, keep the fuel tank well filled in order to minimise condensation due to the atmospheric conditions.

⚠ IMPORTANT ⚠

*Never smoke or approach with a flame during filling operations or when the tank is open.
Never refill while engine is running.*

- Check the fuel gauge on the dashboard.
- If necessary, add diesel (↖ 3 - MAINTENANCE: LUBRICANTS AND FUEL).
- Open the access panel for hydraulic oil filling.
- Remove the cap 1 using the ignition key.
- Fill the fuel tank with clean diesel filtered through the filler port 2.
- Refit the cap.
- Visually check that there is no leakage in the tank and pipes.

NOTE: There is an OPTION for a fill screen.



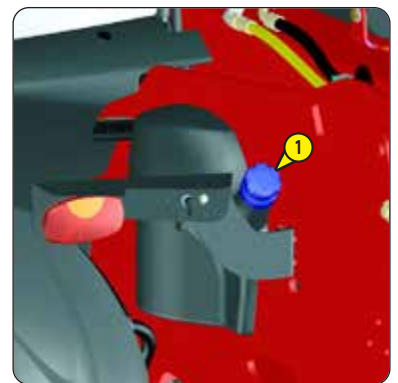
57 - TANK "DEF" (Diesel Exhaust Fluid)

Place the lift truck on level ground with the engine stopped.

⚠ IMPORTANT ⚠

*Diesel exhaust fluid is corrosive: protect the bodywork and wear personal protective equipment (gloves and goggles).
The Diesel Exhaust Fluid level is important. Operating with a low or empty DEF tank level may affect engine performance.*

- If necessary, add diesel exhaust fluid (↖ 3 - MAINTENANCE: LUBRICANTS AND FUEL).
- Remove the cap 1.
- Slowly fill the tank to the bottom of the filler neck.
- Always maintain a good level to avoid alternation of the product.
- Refit the cap.



QUALITY "DEF" (Diesel Exhaust Fluid)

The diesel exhaust fluid quality can be measured using a refractometer. The diesel exhaust fluid must comply with standard ISO 22241-1 with a urea concentration of 32.5%.

Refractometer (MANITOU part number: 959709)

STORAGE "DEF" (Diesel Exhaust Fluid)

Up to 4 months without using the lift truck, check the quality of the diesel exhaust fluid with a refractometer.

Beyond 4 months, replace the diesel exhaust fluid. Empty and rinse the tank.

NOTE: For a prolonged shutdown of the lift truck, ↖ 1 - OPERATING AND SAFETY INSTRUCTIONS: IF THE LIFT TRUCK IS NOT TO BE USED FOR A LONG TIME.

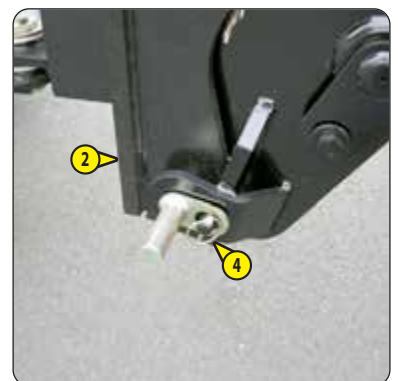
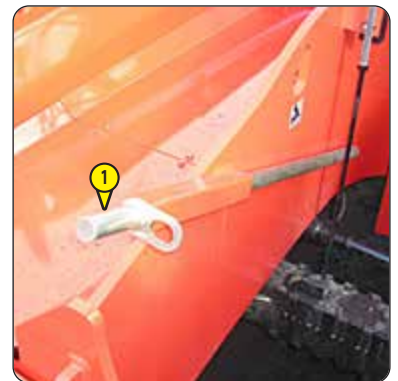
NOTE: A locking tank cap is available as an OPTION.

OPERATION OF THE PLATFORM

1 - ATTACHING THE PLATFORM TO THE LIFT TRUCK	2-68
2 - HYDRAULIC CONNECTION OF THE PLATFORM TO THE LIFT TRUCK	2-69
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1 - ATTACHING THE PLATFORM TO THE LIFT TRUCK

- Check that the locking pin 1 and the clip are in position in the bracket.
- Place the lift truck with the boom lowered in front of and parallel to the platform and tilt the table forwards.
- Bring the carriage under the platform fixing bolts, slightly raise the boom, incline the carriage backwards in order to position the platform.
- Raise the platform off the ground to facilitate locking.
- Take the locking pin 1 on the bracket and lock the attachment 2. If necessary, relieve the platform presence detection mechanism 3 to assist the insertion of the locking pin. Do not forget to insert the pin 4.
- Raise the platform mounting prop 5.

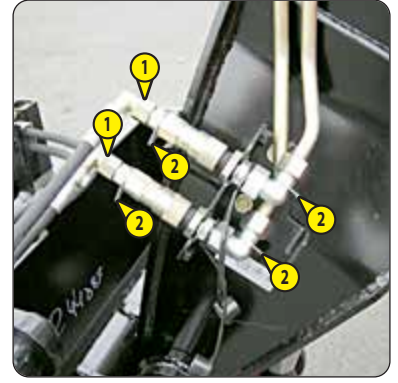


2 - HYDRAULIC CONNECTION OF THE PLATFORM TO THE LIFT TRUCK

⚠ IMPORTANT ⚠

Make sure that the rapid connectors are clean and protect the holes which are not used, with the caps provided.

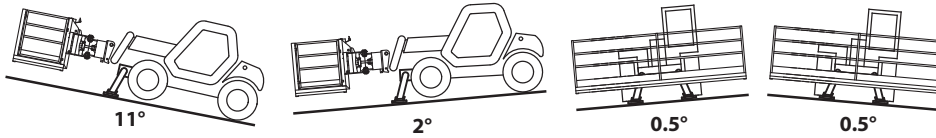
- Stop the engine and keep the ignition on the lift truck.
- Release the pressure from the hydraulic platform slewing circuit.
- Connect the platform rotation hydraulic hoses 1 to the boom head as dictated by the fool proofing devices 2.



3 - LEVELLING THE LIFT TRUCK AND THE PLATFORM

LEVELLING THE LIFT TRUCK


LONGITUDINAL AND TRANSVERSE SLOPES ACCEPTABLE



⚠ IMPORTANT ⚠

Place the lift truck in its working area, in accordance with the operating and safety instructions given in the lift truck operator's manual.

If the ground is not stabilized, securely wedge the stabilizers.

- Start up the forklift truck.
- Place the platform approximately 30 cm from the ground.
- Move the platform to where it is to be used.
- Place the forward/reverse selector in neutral.
- Leave the engine running idle.
- Level the lift truck using the buttons  (⏪ HYDRAULIC CONTROLS)
- Check horizontality with the spirit level 1.
- Check that the chassis is parallel with the front axle on the levelling indicator 2.
- Place the two stabilizers on the ground so that the lift truck's front wheels are not touching the ground (⏪ HYDRAULIC CONTROLS).



LEVELLING THE PLATFORM

- Before operating the platform, check and correct the forward/backward inclination of the platform and position the floor approximately 30 cm above the ground.

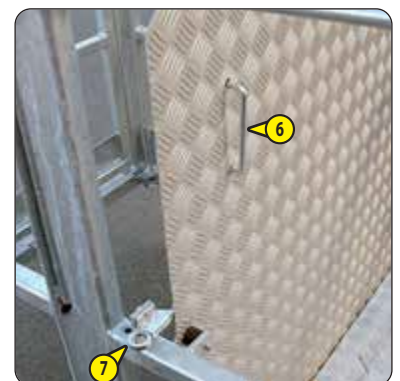
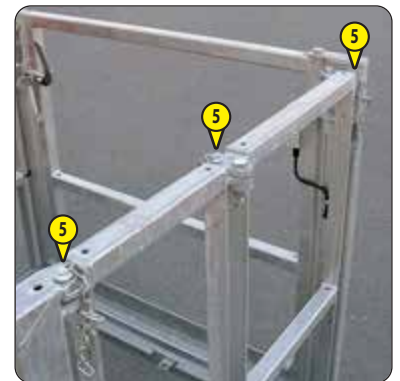
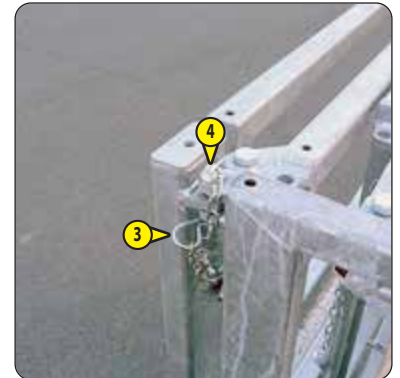
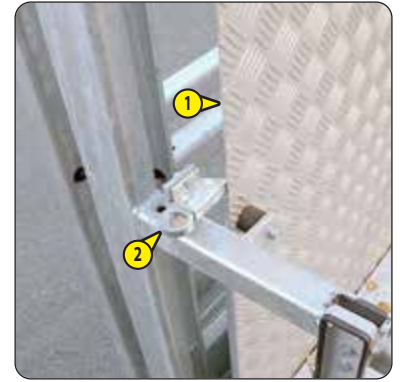
4 - DEPLOYING THE EXTENDIBLE PLATFORM

UNFOLDING

⚠ IMPORTANT ⚠

To avoid the flooring pieces 1 falling, check that they are properly secured by the locking bolts 2.

- Remove the pin 3 and withdraw the locking pin 4 (2 pins on each side of the platform).
- Fold out the mobile sides and lock them with the pins and clips 5 (6 pins and clips on each side of the platform).
- Hold the decking with the handle 6, pull the bolt 7 and lower the flooring into the working position.
- Check that the floor locking bolt 8 is properly engaged.
- Perform the same operations on the other extension.
- The platform is now ready for use.



FOLDING

- Proceed in reverse order to unfolding.


⚠ IMPORTANT ⚠

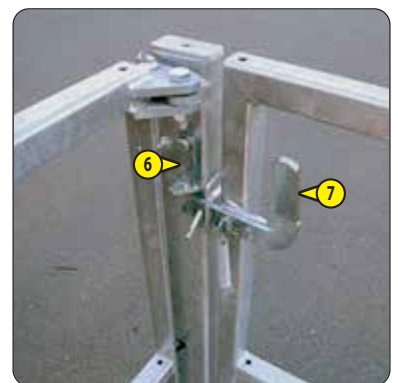
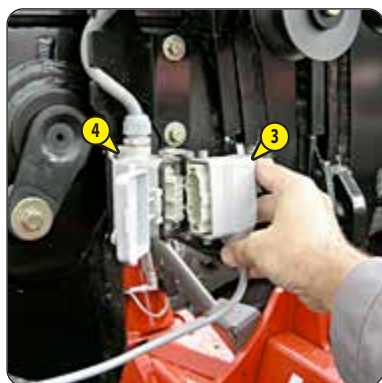
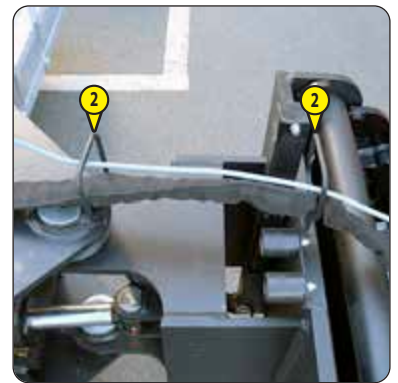
It is recommended to fold the platform when moving the lift truck. Beware of the risk of pinching the fingers when folding back the extensions.

5 - USING THE CONTROL PANEL

⚠ IMPORTANT ⚠

A supervisor MUST be present on the ground while the platform is in use

- Set the TRUCK/PLATFORM 1 selector switch to  , which will shut down the engine.
- Take the control console from the cab and mount it on the platform.
- Pass the cable through the rings 2.
- Connect the cable 3 from the console to the plug 4 at boom head.
- Connect the safety cable 5 to the control console. All the lamps will light and a beep will sound for 1 second to confirm that the console is switched on.
- Open the gate by lifting the latch 6, pushing and holding the lever 7, then pushing the gate towards the inside of the platform.
- Climb into the platform.
- Close the gate while holding the latch 6 and release the lever.
- Read and follow the safety instructions displayed in the platform.
- Attach the safety harness(es) to the rings 8 provided.
- Before starting the engine, ensure that the emergency stop switches 9 and 10 are disabled.
- The control console is now ready for operation.



DESCRIPTION OF THE CONTROL CONSOLE



ENGINE START-UP



ENGINE SHUT-DOWN



HORN

Operates the lift truck's horn when needed.

A - HYDRAULIC MOVEMENT SELECTOR

Press the trigger lever 1 to increase the engine speed before performing the hydraulic movement.



BOOM MOVEMENTS

- Lever backward to lift.
- Lever forwards to lower.
- Lever to the right to extend.
- Lever to the left to retract.



LATERAL MOVEMENT OF PLATFORM (OPTION)

- Lever backwards to move sideways to the right.
- Lever forwards to move sideways to the left.


ROTATION OF THE PLATFORM

- Lever to the right to rotate to the right.
- Lever to the left to rotate to the left.

TILTING THE PLATFORM

⚠ IMPORTANT ⚠

This combination makes it possible to readjust the platform level, without having to lower the platform to the ground again. During the use of this combination, the hydraulic movement is very slow for readjusting the level and to ensure the operator's safety.

- Simultaneously keep button 2 of lever 1 and the horn pressed .
- Lever forwards for forward tilting.
- Lever backwards for tilting backward.



FUEL LEVEL

A continuously lit orange indicator lamp and a slow intermittent beeping sound indicate that the diesel level is low.



PLATFORM PRESENCE

A flashing red indicator lamp and a continuous beeping sound indicate that the platform is not properly attached. Check the locking pin.



GATE

A flashing red indicator lamp and a continuous beeping sound indicate a fault on the gate. Check that it is properly closed.



TILT

A continuously lit red indicator lamp and a continuous beeping sound indicate that the longitudinal and/or transverse tilt of the lift truck is too great (ground subsidence) and the following movements are neutralised:

- Raising and extending the boom.

All other movements remain available. You must return the platform to the transport position and correct the fault by using the hydraulic controls in the cab.



LIFT TRUCK OVERLOAD

The continuously lit red indicator lamp and the pictogram  of the warning device and the longitudinal stability limiter indicate that the lift truck is at the limit of its maximum permitted load. All "AGGRAVATING" movements are neutralised:

- Lowering and retracting the boom.

All other movements remain available.



PLATFORM OVERLOAD

The continuously lit red indicator lamp and the pictogram  of the warning device and the longitudinal stability limiter, accompanied by a continuous sound signal, indicate an overload on the platform. All "AGGRAVATING" movements are neutralised:

- Lowering and retracting the boom.

All other movements remain available.



FAULT

FAULTY LINK

The flashing red indicator lamp and a fast intermittent beeping sound indicate that the link with the control console is cut. Check the connection of the control console and restart the engine. If the symptoms persist, consult your dealer.

LIFT TRUCK FAULT

The flashing red indicator lamp and a slow intermittent beeping sound indicate a major fault on the lift truck. Immediately lower the platform to the ground, stop the engine and consult your dealer.

ENGINE SHUT-DOWN

A continuously lit red lamp immediately stop the engine. You must use the manual breakdown procedure to lower the platform to the ground. Once this is done, consult your dealer.

B - EMERGENCY STOP

⚠ IMPORTANT ⚠

Be ready for hydraulic movements suddenly stopping when you press this button. It is only to be used for emergency stops or functional testing.

In case of danger, the emergency stop button stops the engine and thus stops all hydraulic movements. After the emergency stop, the button is turned to release it.


NOTE: Operate the horn to reinitialise the control console before restarting the lift truck.

6 - REMOVING THE PLATFORM

⚠ IMPORTANT ⚠

Be sure to store the platform in a place where it will not obstruct the work of others.

Perform the previous operations (A - B - C - D - E) in reverse order, in accordance with the following instructions:

- Return the control console or remote-control to the lift truck cab.
- Place the safety cable in its housing.
- Set the TRUCK/PLATFORM 1 selector switch to .
- Store the platform flat on the ground with the support leg 2 in place.



7 - RESCUE PROCEDURE

⚠ IMPORTANT ⚠

After turning the key to rescue mode, THE IGNITION MUST BE SWITCHED OFF BEFORE RESTARTING THE LIFT TRUCK.

This operation will confirm that the lift truck is in rescue mode.

When the rescue procedure is used following a pressure switch fault on the stabilizers, the boom must be first be retracted before lowering the platform.

THE PERSON ON THE GROUND MUST TAKE-OVER THE PLATFORM CONTROLS AS INDICATED BELOW:

- Remove the lead seal from the rescue key 1, insert it in the rescue switch 2 and



turn the key to

- This will allow the engine to be restarted with the platform's emergency stop button engaged, and to recover the following hydraulic movements using the lift truck's controls.

- Retraction of the boom.
- Raising and lowering of the boom.
- Orientation of the pod.

- Press the dead-man button 3 and hold it down while performing hydraulic movements.

NOTE: The speed of the hydraulic movement is limited during this operation.

⚠ IMPORTANT ⚠

Once the rescue procedure is completed, turn the key in the other direction, remove it, then contact your dealer to re-seal it in position and delete the fault code on the instrument control panel.



8 - MANUAL REPAIR PROCEDURE

IN THE EVENT OF A BREAKDOWN OR FAULT THAT PREVENTS RESTARTING HYDRAULIC MOVEMENTS FROM THE LIFT TRUCK CONTROLS, THE PLATFORM CAN BE LOWERED TO THE GROUND MANUALLY AS FOLLOWS: FOLLOW THE INSTRUCTIONS BELOW:

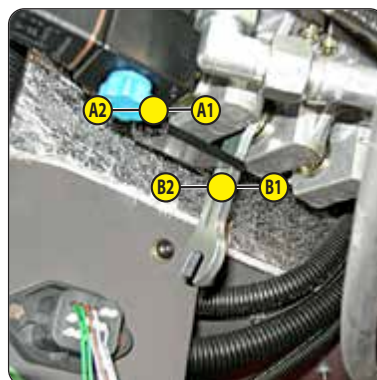
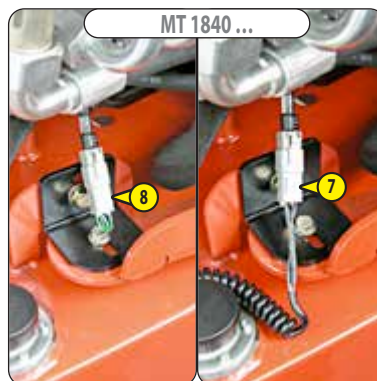
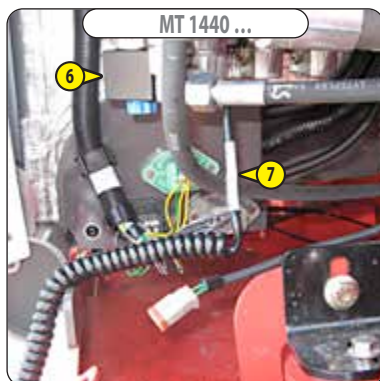
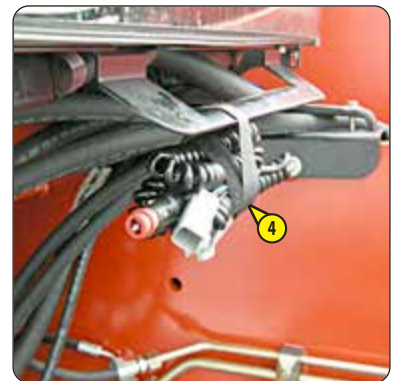
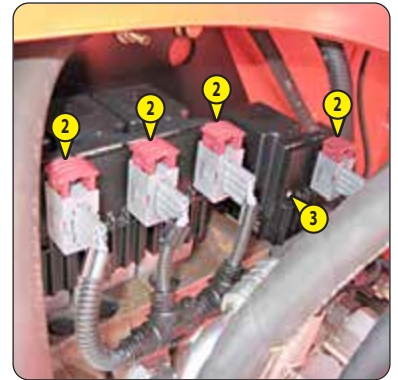
- Switch on lift truck ignition.
- Remove the protective casing 1.
- Disconnect the electrical connections 2 to each distributor head, by pulling the lock upwards. The green indicator lamp 3 must go out on each distributor head.
- Take the breakdown repair kit 4 comprising an extension lead and an open-end wrench.

MT 1440 ...

- Disconnect the socket 5 from the valve of the distributor inlet component 6, and connect the extension lead 7 in its place.

MT 1840 ...

- Disconnect the shunt 8 from the valve of the distributor inlet component, and connect the extension lead 7 in its place.
- Then plug the extension lead into the cigarette lighter or the rotating beacon light plug.
- Use the open-ended wrench 9 to free the hand-pump lever, and install it on the pump.
- Using the same wrench, select and block the position of the slide on the distributor's manual controls.
 - A1: Telescope retraction.
 - A2: Telescope extension.
 - B1: Boom lowering.
 - B2: Boom raising.
- Select the hydraulic movement to be actuated and operate the hand pump until the platform is in the transport position (platform 30 cm above the ground with the boom retracted).
- At the end of the procedure, retrieve the wrench from the distributor and stow away the lever and the hand pump.
- Reconnect the electrical connections 2, the inlet component valve and put away the breakdown kit 4.
- Refit the protective casing 1.




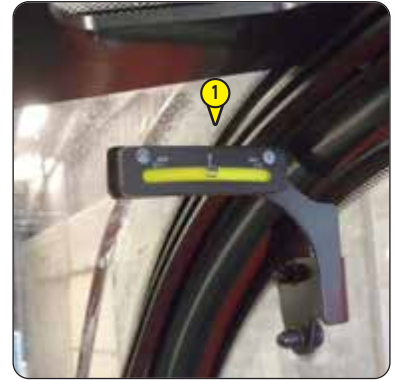
USING THE RADIO-CONTROL FOR HANDLING (OPTION)

⚠ IMPORTANT ⚠

THE RADIO CONTROL CANNOT BE USED WITH THE PLATFORM.

Place the lift truck in its working area, in accordance with the operating and safety instructions given in the lift truck operator's manual.

- Set the forward/reverse selector to neutral.
- Leave the engine running idle.
- Level the lift truck in the transverse direction using the frame leveling and/or the stabilizers and check the horizontality of the spirit level 1.
- Set the TRUCK/PLATFORM 2 selector switch to , which will shut down the engine.
- Take the radio-control transmitter from behind the driver's seat and wear it correctly.
- Connect the handling plug 3 to the radio-control transmitter.
- Before starting the engine, ensure that the emergency stop switches 4 and 5 are disabled.
- The remote control is now ready to operate.



STARTING THE ENGINE

- Turn the key switch A in the right direction without forcing it. It can only be pulled back out in position "0".
- Turn to position "I". Two self-test audible signals and the green indicator lamp B flashing indicate correct operation of the radio control.

IMPORTANT: Wait for the end of the two audible self-test signals before initializing the radio control.

- Initialise the radio control by pressing button C, the horn on the lift truck sounds at the same time.
- Start the engine with switch D. Once started, the rotating beacon light remains continuously lit.



OVERLOAD OF LIFT TRUCK

An intermittently sounding horn (1 second/5 seconds, etc.), indicates that the lift truck is at its maximum permitted load and all "AGGRAVATING" movements are inhibited:

- Lowering and retracting the boom.

All other movements remain available.

DESCRIPTION OF THE RADIO-CONTROL

A - KEY BUTTON

B - GREEN LAMP

A flashing green lamp indicates that the radio-control is operating correctly.

A very rapidly flashing green lamp indicates one of the following:


- that the link between the transmitter and receiver has been interrupted (the engine stops automatically),
- an emergency stop,
- a transmitter fault.

C - INITIALISATION BUTTON

Initialise the radio control after switching on or after an emergency stop.

D - ENGINE STARTER BUTTON

E - ENGINE SPEED SELECTOR

 Min rpm, the selector must be in this position to start the engine.

 Fast.

F - HYDRAULIC MOVEMENT SELECTOR

G, H - HYDRAULIC MOVEMENT CONTROLS

LIFTING THE LOAD

- With selector F in position I, move lever H to the left to raise.
- With selector F in position I, move lever H backwards to lower.

TILTING THE CARRIAGE

- With selector F in position I, move lever H to the left to excavate.
- With selector F in position I, move lever H to the right to tip.

TELESCOPING

- With selector F in position I, move lever G forwards to extend.
- With selector F in position I, move lever G backwards to retract.

ATTACHMENT

- With selector F in position I, move lever G to the right or left to operate the attachment.

ATTACHMENT CIRCUIT IN CONTINUOUS MODE

- With selector F in position I, set the desired hydraulic flow rate by holding lever G to the right or left.
- Press the initialisation button C for 3 seconds to validate continuous mode and the hydraulic flow rate.
- Move lever G to the right or the left, or press initialisation button C, or switch off the engine to stop continuous mode.

HEAD TELESCOPE ELECTROVALVE OPTION

- With selector F in position II, moving lever G to the right or left to control another hydraulic function.

I - EMERGENCY STOP

⚠ IMPORTANT ⚠

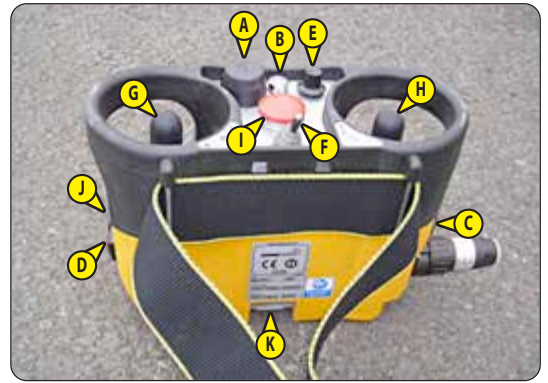
Be ready for hydraulic movements suddenly stopping when you press this button. It is only to be used for emergency stops or functional testing.

In case of danger, the emergency stop button stops the engine and thus stops all hydraulic movements. Pull the button to disable and reinitialise radio-control before restarting the lift truck.

J - ENGINE STOP BUTTON

K - ACCUMULATOR

◀ INSTRUMENTS AND CONTROLS for replacing the accumulator.



TOWING DEVICE

⚠ IMPORTANT ⚠

Do not tow a trailer or an attachment that is not in perfect working condition.

Using a trailer in poor condition may affect the lift truck's steering and braking, and hence the safety of the assembly.

If a third party helps in coupling or uncoupling the trailer, this person must be permanently visible to the driver and wait until the lift truck has stopped, the handbrake is on and the I.C. engine is switched off before performing the operation.

Located at the rear of the lift truck, this device is used to attach a trailer. Its capacity is limited for each lift truck by the Authorized Gross Vehicle Weight, tractive force and maximum vertical force on the coupling point. This information is given on the manufacturer's plate fixed to each lift truck (⇐ IDENTIFICATION OF THE LIFT TRUCK).

- To use a trailer, see current regulations in your country (maximum running speed, braking, maximum weight of trailer, etc.).
- Verify the trailer's condition before using it (tire condition and pressures, electrical connection, hydraulic hose, brake system, etc.).

1 - TOWING PIN

⚠ IMPORTANT ⚠

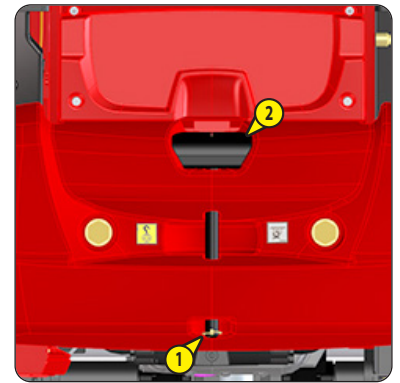
Be careful not to get your fingers caught or crushed during this operation.

Do not forget to put the cotter pin back in place.

When uncoupling, make sure that the trailer is supported independently.

COUPLING AND UNCOUPLING THE TRAILER

- To couple the trailer, position the lift truck as close as possible to the trailer ring.
- Switch off the engine.
- Remove the pin 1, lift the towing pin 2 and place or remove the trailer ring.



2 - REAR-VIEW MIRROR

The rear-view mirror allows the lift truck to approach the trailer ring more precisely.



3 - ADJUSTABLE PROTRUDING HOOK (OPTION)

⚠ IMPORTANT ⚠

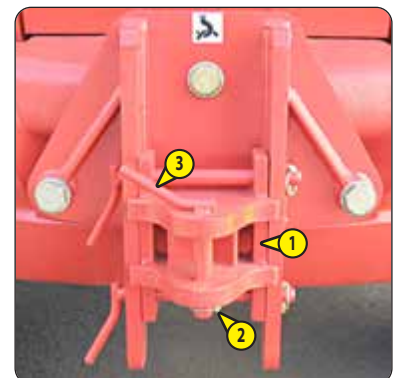
Be careful not to get your fingers caught or crushed during this operation.

Do not forget to put the cotter pin back in place.

When uncoupling, make sure that the trailer is supported independently.

COUPLING AND UNCOUPLING THE TRAILER

- To couple the trailer, position the lift truck as close as possible to the trailer ring.
- Switch off the engine.
- Set the coupling fitting 1 according to the height of the trailer ring.
- Remove the pin 2, lift the towing pin 3 and place or remove the trailer ring.



4 - REAR ELECTRIC SOCKET (OPTION)

- Connect the male plug to the female socket 1 on the lift truck and make sure the lights of the trailer or the light bar are working properly.



DESCRIPTION AND USE OF THE OPTIONS

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2 - WATERPROOF DOCUMENT HOLDER	2-81
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1 - WINDSCREEN GRILL

DESCRIPTION

The windscreen grill provides additional protection for the operator from any external elements spattered on the windscreen.

This grill must be removable from inside the cab to enable an emergency exit.

EMERGENCY EXIT

- After breaking the windscreen with the emergency hammer, push (with force) on the windscreen grill at A to remove it.



2 - WATERPROOF DOCUMENT HOLDER



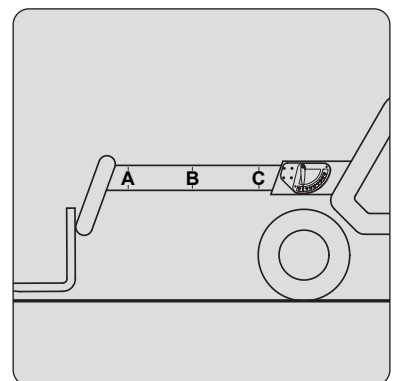
3 - ANGULAR SECTOR ON BOOM

The angular sector displays the boom angle, and thus improves the reading of the load charts.

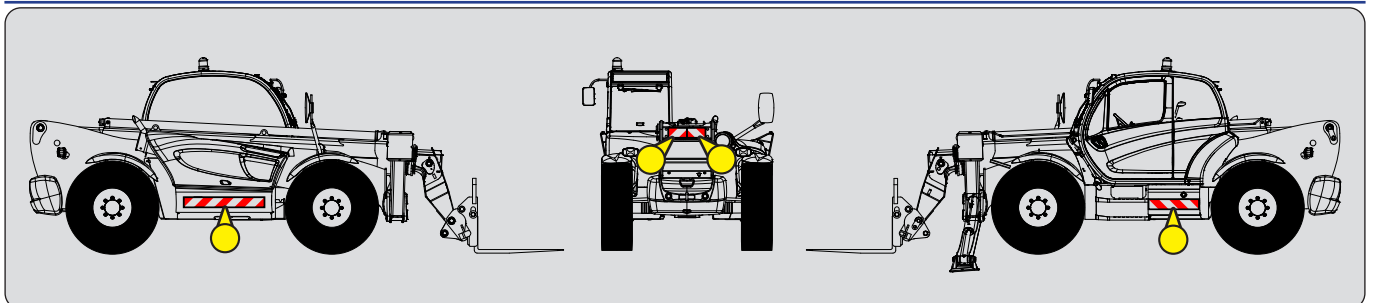


4 - MARKS ON BOOM

The marking indicates the outreach of the boom and therefore improves reading of the load charts.



5 - REFLECTIVE STRIPES



6 - LICENSE PLATE LIGHT



7 - FUEL PREHEATER

The paraffin particles found naturally in diesel crystallise at low temperatures. The fuel preheater limits their accumulation in the filter.



8 - PREHEAT ROD

Enables the engine to be kept warm during prolonged periods of stoppage and thus improves engine starting.

ENVIRONMENTAL CONDITIONS FOR USE:

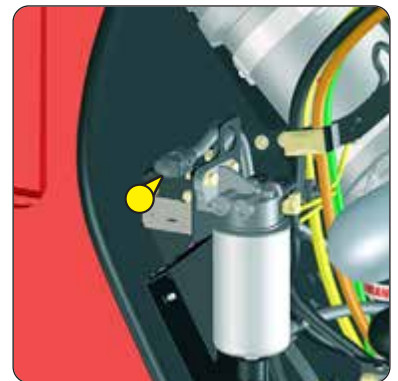
- Maximum ambient temperature for using preheating: + 25 °C.

CONDITIONS FOR CONNECTION AND USE OF PREHEATING:

- The preheating system should not be used for an external ambient temperature higher than + 25 °C.
- It is essential that the power supply to the preheating system:
 - Is effected with a cable that conforms to the installation standards in force and contains a protective earth conductor.
 - Contains an appropriate sectioning system.
 - Include an appropriate short-circuit protection system (fuses or circuit breaker) and a ground-fault circuit interruptor, sensitive to 30 mA.
- Only connect to and disconnect from the power supply while the unit is switched off and the engine is stopped.



Make sure that the electrical extension is still correctly stored in its place in the document holder net.



9 - GREEN ROTATING BEACON LIGHT

The magnetic green rotating beacon light must be clearly visible on the roof of the cab and plugged in to socket 1.

- It indicates that the operator has fastened the seat belt.
- Do not use the green rotating beacon light on public roads.



10 - KEYPAD "EasyMANAGER"

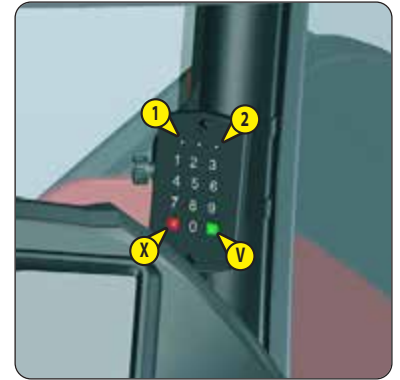
A code must be created for the operator via the "EasyMANAGER" portal. For more information, contact your dealer.

OPERATION

BY ID CODE

- Switch on lift truck ignition, LED 1 comes on.
- Enter your ID code and confirm by pressing the "V" key.
- LED 2 comes on to confirm the operator's identification.
- Immediately start the lift truck, otherwise the identification process is canceled and LED 2 turns red.

NOTE: In case of an input error, LED 2 lights up red, press the "X" key, and wait 10 seconds before entering the correct identification code.



BY ID CARD



- Switch on lift truck ignition, LED 1 comes on.
- Present your ID card; an audible beep confirms that the card has been read.
- LED 2 comes on to confirm the operator's identification.
- Immediately start the lift truck, otherwise the identification process is canceled and LED 2 turns red.

11 - "ECO STOP" ENGINE


This function can take charge of engine shutdown to reduce consumption. It can be used if all of the following conditions are met within a timeframe defined by the operator.

- Engine on.
- Engine speed less than 1,000 rpm.
- No driver presence.
- No manual override in progress.
- No "stationary lift truck" exhaust regeneration".
- Parking brake applied.
- Engine coolant temperature higher than 40 °C.

TIME DELAY ADJUSTMENT

- Press the button  to display the "PREFERENCES" menu.
- Press the button  to select from the menus and sub-menus.

ENGINE SPECIFICATION | > | ECO STOP

- Select the time delay (between 1 and 20 minutes) and press knob  to confirm.

OPERATION

- Press the  button to activate. The indicator light will come on, showing that it is in use.

⚠ IMPORTANT ⚠

The "ECO STOP" function does not replace stopping the lift truck, at the end of a construction site or day, you must stop the lift truck (← 1 - SAFETY INSTRUCTIONS: OPERATOR INSTRUCTIONS: OPERATING INSTRUCTIONS WITH AND WITHOUT LOAD: G - STOPPING THE LIFT TRUCK).

12 - FAN REVERSAL

Cleans the radiator core and the grille of the engine cover by reversing the air flow.

⚠ IMPORTANT ⚠



*The self-cleaning fan is operational from an engine coolant temperature of 40 °C.
When in use, beware of the risk of projection into the eyes.*




AUTOMATIC FAN REVERSAL

- The indicator lamp is on, the fan operates in self-cleaning mode for a few seconds once every 3 minutes.
- The default cycle time is 3 minutes.

SETTING THE CYCLE TIME

- Press the button  to display the "PREFERENCES" menu.
- Press the button  to select from the menus and sub-menus.

ENGINE SPECIFICATION > FAN DRIVE FAN REVERSAL (OPTION)

- Select the cycle time and press the  button to confirm.



FORCED SELF-CLEANING FAN

- Press the button to force a cleaning cycle. The indicator lamp will light when it is in use.
- Wait for the cycle time between each request.

13 - REAR CAMERA

The rear camera can operate in manual or automatic mode:

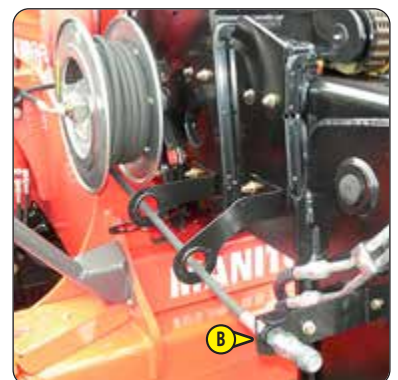
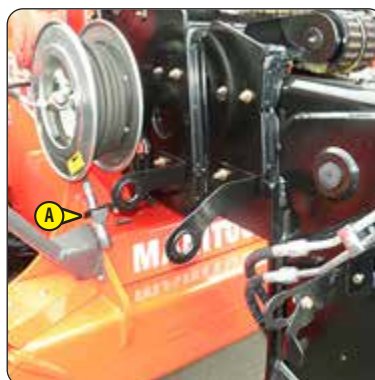
- Turn the monitor on by clicking on "POWER".
- On the menu screen, go to the options tab "OPT".
- Select "CAM 1", then choose the required operating mode.



14 - EXTERIOR DRAIN-BACK

Allows the connection of an attachment for which drain-back is required.

- A - Fixed position, drain back not connected.
- B - Mobile position, leak return connected.










15 - ATTACHMENT CIRCUIT MANUAL OVERRIDE





⚠ IMPORTANT ⚠

This OPTION should only be used with an attachment that requires a continuous hydraulic movement such as: sweeper, feed wagon, mixer, sprayer, etc. It is strictly prohibited in handling and for all other attachments (winch, crane, crane jib with winch, hook, etc.).

USING AND STORING MANUAL OVERRIDE

- Press the button  to select the work mode .
- Long press button ;  will appear on the information screen.
- Press buttons   to set the desired flow rate.
- Press button  to confirm and store.

ACTIVATING THE STORED MANUAL OVERRIDE


- Press the  button to activate manual override.
- Confirm by pressing the  button a second time or pressing button .
- Press the  button again to deactivate.

16 - BOOM SUSPENSION

Boom suspension absorbs the shocks to the lift truck on uneven ground (ex. handling straw in a field).

⚠ IMPORTANT ⚠

When you make a hydraulic downward or tilting movement, boom suspension is temporarily disabled and the button's indicator light  goes off. Boom suspension is active from 5 km/h.

- Press the  button to activate. The indicator light will come on, showing that it is in use.
- Press the button again to deactivate.
- When the engine is off, boom suspension is automatically deactivated.

NOTE: Forced boom suspension  allows it to be used at less than 5 km/h.




17 - ATTACHMENT EASY HYDRAULIC CONNECTION

For easy connection and disconnection of hydraulic attachments.

PUSH BUTTON OPERATION

- Switch on lift truck ignition.
- Press for two seconds on pushbutton 1 to release the attachment circuit hydraulic pressure.
- Connect or disconnect the quick couplers of the hydraulic attachment (◀ 4 - ADAPTABLE ATTACHMENTS AS AN OPTION ON THE RANGE: PICKING UP THE ATTACHMENTS).

PREFERENCES MENU BUTTON OPERATION

- Switch on lift truck ignition.
 - Press the button  to display the "PREFERENCES" menu.
 - Press the button  to select from the menus and sub-menus.
- | | | |
|------------|---|---------------------|
| HYDRAULICS | > | EASY CONNECT SYSTEM |
|------------|---|---------------------|
- Press knob  to confirm.
 - Connect or disconnect the quick couplers of the hydraulic attachment (◀ 4 - ADAPTABLE ATTACHMENTS AS AN OPTION ON THE RANGE: PICKING UP THE ATTACHMENTS).



18 - ATTACHMENT HYDRAULIC LOCKING

Enables the attachment to be locked onto the carriage and a hydraulic attachment to be used by the same circuit.

⚠ IMPORTANT ⚠

Once the attachment is locked, return valve 1 to position B to prevent accidental release of the attachment.
OR

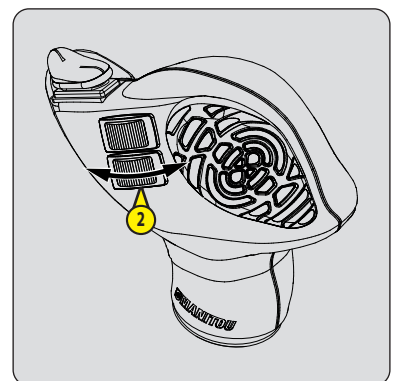
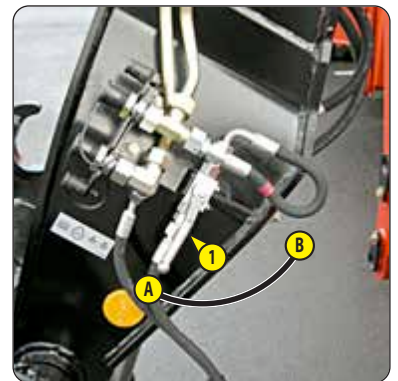
Press the button  to shut off the attachment circuit hydraulic movements. The indicator lamp indicates it is in use.

ATTACHMENT LOCKING CONTROL

- Set valve 1 to position A.
- Push switch 2 forward to lock the attachment and backward to release it.
- Set valve 1 to position B.

HYDRAULIC ATTACHMENT CONTROL

- Set valve 1 to position B.
- Push switch 2 forward or backward.



19 - BOOM HEAD SOLENOID VALVE

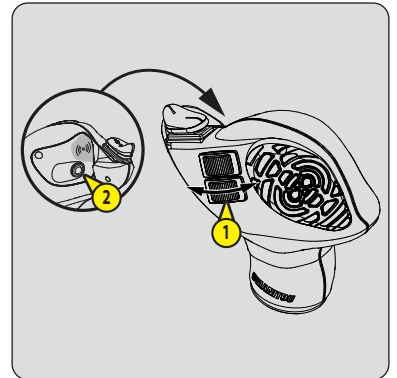
Enables use of two hydraulic functions on the attachment circuit.

ATTACHMENT LINE L1 CONTROL

- Push switch 1 forward or backward.

ATTACHMENT LINE L2 CONTROL

- Hold down button 2 and operate button 1 forwards or backwards.



20 - BOOM HEAD SOLENOID VALVE + ATTACHMENT HYDRAULIC LOCKING

The addition of these two options on the attachment line allows two hydraulic functions to be used and locks the attachment onto the carriage.

⚠ IMPORTANT ⚠

Once the attachment is locked, return valve 1 to position A to prevent accidental release of the attachment.

ATTACHMENT LINE L1 CONTROL

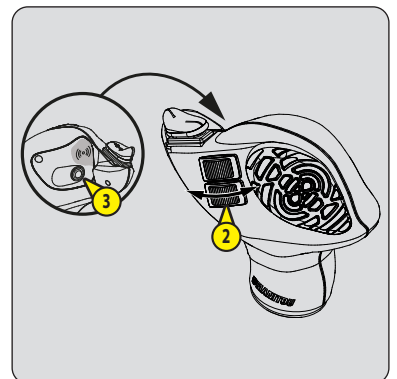
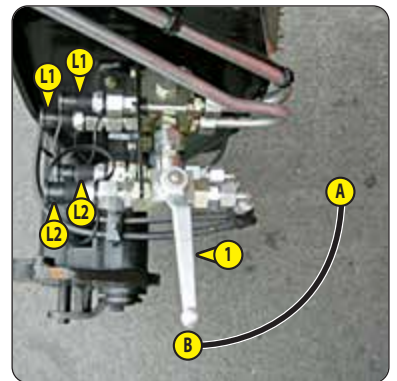
- Set valve 1 to position A.
- Push switch 2 forward or backward.

ATTACHMENT LINE L2 CONTROL

- Set valve 1 to position A.
- Hold down button 3 and operate button 2 forwards or backwards.

ATTACHMENT LOCKING CONTROL

- Set valve 1 to position B.
- Hold down button 3 and push button 2 forward to lock the attachment and backward to release it.



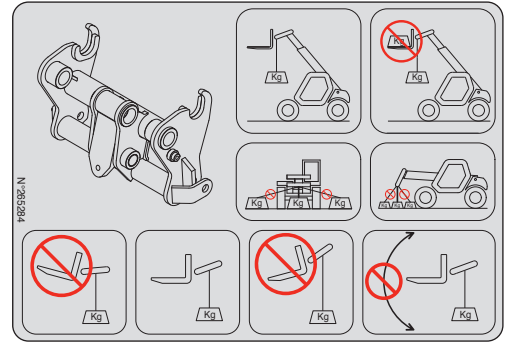
21 - LIFTING RING ON SINGLE CARRIAGE

CONDITIONS OF USE

⚠ IMPORTANT ⚠

Follow the instructions given in the instruction manual (← 1 - OPERATING AND SAFETY INSTRUCTIONS: INSTRUCTIONS FOR HANDLING LOADS).

- The lifting ring must be used WITHOUT FORKS AND ATTACHMENTS, but the angle of inclination of the carriage must be same as when the forks are used in the horizontal position.
- Check the maximum permitted angle, which is 45°.
- Do not change the angle of the carriage while using the lifting ring.
- The lifting hook, the chains and slings shall have a minimum capacity of 3000 kg with a safety coefficient of 4 in relation to breakage.



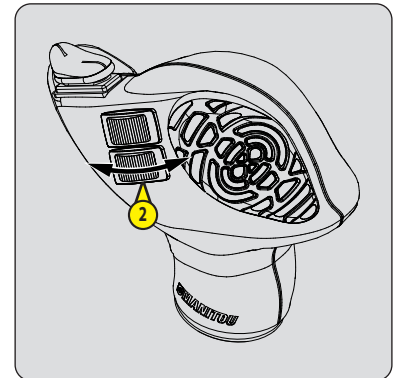
⚠ IMPORTANT ⚠

The load charts are calculated for use with forks or attachments (← LOAD CHARTS).

22 - DOUBLE-ACTING REAR HYDRAULIC PREDISPOSITION

Enables the use of a hydraulic attachment at the rear of the lift truck (e.g. a trailer with hydraulic tipping).

- Press down on switch 1 (indicator lamp on) to power the hydraulic control at the rear of the lift truck.
- Push switch 2 forward or backward.



3 - MAINTENANCE

3 - MAINTENANCE

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ORIGINAL MANITOU SPARE PARTS AND EQUIPMENT

OUR LIFT TRUCKS MUST BE SERVICED USING ORIGINAL MANITOU PARTS.

BY ALLOWING THE USE OF NON ORIGINAL MANITOU PARTS, YOU RISK:

⚠ IMPORTANT ⚠

THE USE OF NON-OEM PARTS OR COMPONENTS NOT APPROVED BY THE MANUFACTURER, MEANS YOU LOSE THE BENEFIT OF THE CONTRACTUAL GUARANTEE.

- Legally - to incur liability in the event of an accident.
- Technically - to cause operating malfunctions or shorten the life of the lift truck.

BY USING ORIGINAL MANITOU PARTS FOR MAINTENANCE OPERATIONS, YOU BENEFIT FROM OUR KNOW-HOW

Through its network, MANITOU provides the user with,

- Know-how and competence.
- The guarantee of high-quality work.
- Original replacement parts.
- Help with preventive maintenance.
- Efficient help with diagnosis.
- Improvements due to experience feedback.
- Operator training.
- Only the MANITOU network has detailed knowledge of the design of the lift truck and therefore the best technical ability to provide maintenance.

⚠ IMPORTANT ⚠

ORIGINAL REPLACEMENT PARTS ARE DISTRIBUTED EXCLUSIVELY BY MANITOU AND ITS DEALER NETWORK.

The dealer network list is available on the MANITOU web site: www.manitou.com

FORKLIFT TRUCK MAINTENANCE

DAILY AND WEEKLY MAINTENANCE



THE OPERATOR IS AUTHORISED TO CARRY OUT THIS MAINTENANCE.

These maintenance operations enable the operator to maintain the lift truck in a clean and safe condition.

MANDATORY FIRST 500 HOURS OR 6 MONTHS OF SERVICE



THIS SERVICE MUST BE CARRIED OUT AFTER THE FIRST 500 HOURS OF SERVICE OR WITHIN THE 6 MONTHS FOLLOWING PUTTING THE MACHINE INTO SERVICE (WHICHEVER OCCURS FIRST).

PERIODIC MAINTENANCE



THE PERIODIC MAINTENANCE MUST BE CARRIED OUT BY AN APPROVED PROFESSIONAL FROM THE MANITOU NETWORK.

MAINTENANCE SCHEDULE

This schedule enables the operator to keep up with the periodic maintenance of the lift truck by notifying the total number of hours of operation and the date of the service performed by the professional approved by the MANITOU network.

OCCASIONAL MAINTENANCE AND OPERATION

These maintenance tasks and operations are to be performed as required for the safety and upkeep of the lift truck.

DAILY AND WEEKLY MAINTENANCE

🕒 10H - DAILY MAINTENANCE OR EVERY 10 HOURS OF SERVICE

- CHECK	Lift truck environment	3-14
- CHECK	Engine oil level.....	3-14
- CHECK	Coolant level.....	3-14
- CHECK	Fuel pre-filter	3-15
- CHECK	Longitudinal stability limiter and warning device.....	3-15
- CHECK	Platform environment.....	3-15

🕒 50H - WEEKLY MAINTENANCE OR EVERY 50 HOURS OF SERVICE

- CHECK	Gear box oil level.....	3-16
- CHECK	Tire pressure.....	3-16
- CHECK	Wheel nut torque	3-16
- CHECK	Front axle differential seal	3-16
- CHECK	Rear axle differential seal	3-16
- CHECK	Front wheel reducer seals	3-16
- CHECK	Rear wheel reducer seals	3-16
- CHECK	Brake fluid level.....	3-17
- CHECK	Boom pad slide pathways	3-17
- CHECK	Hydraulic fluid level.....	3-18
- CHECK	Windshield washer liquid level	3-18
- CLEAN	Radiator cores	3-18
- CLEAN	Dry air filter cartridge	3-19
- CLEAN	Condenser harness (Air conditioning OPTION)	3-19
- LUBRICATE	General lubrication	3-20

MANDATORY FIRST 500 HOURS OR 6 MONTHS OF SERVICE

FIRST 500 HOURS BEFORE THE FIRST 6 MONTHS

- If the lift truck has reached the first 500 hours of service before the first 6 months have expired, perform both the mandatory service and periodic 500 H service (◀ ➡ ① 500H - PERIODIC SERVICE - EVERY 500 HOURS OF SERVICE OR 1 YEAR).

FIRST 6 MONTHS BEFORE THE FIRST 500 HOURS

- If the lift truck has not completed 500 hours of service in the first 6 months, just carry out the mandatory service.

➡ MANDATORY SERVICE

- CHECK	Gear box oil level	3-16
- CHECK	Tire pressure	3-16
- CHECK	Wheel nut torque	3-16
- CHECK	Front axle differential seal	3-16
- CHECK	Rear axle differential seal	3-16
- CHECK	Front wheel reducer seals	3-16
- CHECK	Rear wheel reducer seals	3-16
- CHECK	Brake fluid level	3-17
- CHECK	Boom pad slide pathways	3-17
- CHECK	Hydraulic fluid level	3-18
- CHECK	Windshield washer liquid level	3-18
- CLEAN	Radiator cores	3-18
- CLEAN	Dry air filter cartridge	3-19
- CLEAN	Condenser harness (Air conditioning OPTION)	3-19
- LUBRICATE	General lubrication	3-20
- CHECK	Tension of boom outer chains	3-22
- CLEAN	Boom outer chains	3-22
- CHECK	Countdown before "stationary lift truck" exhaust regeneration	3-24
- CHECK	Alternator belt tension	3-24
- CHECK	Compressor belt tension (Air conditioning option)	3-24
- CHECK	Hydraulic fluid	3-25
- CHECK	Fork wear *	3-25
		* Consult your dealer.
- CHECK	Boom outer chain wear	3-28
- CHECK	Seat belt	3-29
- CHECK	Engine silent blocks *	3-34
- CHECK	Gearbox silent blocks *	3-34
- CHECK	Gear box controls *	3-34
- CHECK	Brake system pressure *	3-34
- CHECK	Boom pad wear *	3-34
- CHECK	Condition of wiring harnesses and cables *	3-34
- CHECK	Lights and signals *	3-34
- CHECK	Warning indicators *	3-34
- CHECK	Condition of the rear view mirrors *	3-34
- CHECK	Cabin structure *	3-34
- CHECK	Chassis structure *	3-34
- CHECK	Attachment mounting system *	3-34
- CHECK	Condition of attachments *	3-34
		* Consult your dealer.

PERIODIC MAINTENANCE

MAINTENANCE SCHEDULE

SCHEDULE	250 H	OR		500 H or 1 YEAR	750 H	1000 H or 2 YEARS
		FIRST 6 MONTHS	FIRST 500 HOURS			
PERIODIC MAINTENANCE	①	MANDATORY SERVICE	MANDATORY SERVICE + ②	① + ②	①	① + ② + ③
MACHINE COUNTER						
DATE OF SERVICING						

SCHEDULE	1250 H	1500 H or 3 YEARS	1750 H	2000 H or 4 YEARS	2250 H	2500 H or 5 YEARS	2750 H
PERIODIC MAINTENANCE	①	① + ②	①	① + ② + ③ + ④	①	① + ②	①
MACHINE COUNTER							
DATE OF SERVICING							

SCHEDULE	3000 H or 6 YEARS	3250 H	3500 H or 7 YEARS	3750 H	4000 H or 8 YEARS	4250 H	4500 H or 9 YEARS
PERIODIC MAINTENANCE	① + ② + ③	①	① + ②	①	① + ② + ③ + ④ + ⑤	①	① + ②
MACHINE COUNTER							
DATE OF SERVICING							

SCHEDULE	4750 H	5000 H or 10 YEARS	5250 H	5500 H or 11 YEARS	5750 H	6000 H or 12 YEARS	6250 H
PERIODIC MAINTENANCE	①	① + ② + ③	①	① + ②	①	① + ② + ③ + ④	①
MACHINE COUNTER							
DATE OF SERVICING							

① 250H - PERIODIC MAINTENANCE - EVERY 250 HOURS OF SERVICE

- CHECK Tension of boom outer chains 3-22
- CLEAN Boom outer chains 3-22

➔ ② 500H - PERIODIC MAINTENANCE - EVERY 500 HOURS OF SERVICE OR 1 YEAR

- CHECK	Countdown before "stationary lift truck" exhaust regeneration.....	3-24
- CHECK	Alternator belt tension.....	3-24
- CHECK	Compressor belt tension (Air conditioning option).....	3-24
- CHECK	Hydraulic fluid.....	3-25
- CHECK	Fork wear *.....	3-25
		* Consult your dealer.
- REPLACE	Engine oil.....	3-25
- REPLACE	Engine oil filter.....	3-25
- REPLACE	Front axle differential oil.....	3-26
- REPLACE	Rear axle differential oil.....	3-26
- REPLACE	Hydraulic return oil filter cartridge.....	3-27
- REPLACE	Cabin ventilation filters.....	3-27

➔ ③ 1000H - PERIODIC MAINTENANCE - EVERY 1,000 HOURS OF SERVICE OR EVERY 2 YEARS

ALSO CARRY OUT THE PERIODIC MAINTENANCE FOR 500 HOURS OF SERVICE.

- CHECK	Boom outer chain wear.....	3-28
- CHECK	Seat belt.....	3-29
- CLEAN	Fuel tank.....	3-29
- REPLACE	Fuel tank breather.....	3-29
- REPLACE	Coolant.....	3-30
- REPLACE	Dry air filter cartridge.....	3-31
- REPLACE	Fuel pre-filter.....	3-31
- REPLACE	Fuel filter.....	3-31
- REPLACE	"DEF" (Diesel Exhaust Fluid) supply pump filter.....	3-32
- REPLACE	Tank filling strainer "DEF" (diesel exhaust fluid).....	3-32
- REPLACE	Alternator belt.....	3-33
- REPLACE	Gearbox oil.....	3-33
- REPLACE	Gear box oil filter.....	3-33
- REPLACE	Front wheel reducer oil.....	3-34
- REPLACE	Rear wheel reducer oil.....	3-34
- CHECK	Engine silent blocks *.....	3-34
- CHECK	Gearbox silent blocks *.....	3-34
- CHECK	Gear box controls *.....	3-34
- CHECK	Brake system pressure *.....	3-34
- CHECK	Boom pad wear *.....	3-34
- CHECK	Condition of wiring harnesses and cables *.....	3-34
- CHECK	Lights and signals *.....	3-34
- CHECK	Warning indicators *.....	3-34
- CHECK	Condition of the rear view mirrors *.....	3-34
- CHECK	Cabin structure *.....	3-34
- CHECK	Chassis structure *.....	3-34
- CHECK	Attachment mounting system *.....	3-34
- CHECK	Condition of attachments *.....	3-34
- REPLACE	Brake fluid *.....	3-34
- BLEED	Braking system *.....	3-34
- ADJUST	Brake *.....	3-34

*** Consult your dealer.**

➔ ④ 2000H - PERIODIC MAINTENANCE - EVERY 2000 HOURS OF SERVICE OR EVERY 4 YEARS

ALSO PERFORM THE 500-HOUR AND 1000-HOUR PERIODIC MAINTENANCE PROCEDURES.

- CHECK	Wheel nut tightening torque	3-36
- CLEAN	Air conditioning (OPTION) *	3-36
		* Consult your dealer.
- REPLACE	Dry air filter safety cartridge	3-36
- REPLACE	Hydraulic fluid	3-37
- REPLACE	Breather for the hydraulic fluid tank	3-37
- CLEAN	Hydraulic fluid tank suction strainer	3-37
- REPLACE	Brake accumulator unit filter	3-37
- REPLACE	Distributor control head filter	3-37
- REPLACE	Fan reversal filter (OPTION)	3-37
- CHECK	Radiator *	3-39
- CHECK	Water pump and thermostat *	3-39
- CHECK	Alternator and starter *	3-39
- CHECK	Turbocharger *	3-39
- CHECK	Transmission pressures *	3-39
- CHECK	Steering *	3-39
- CHECK	Steering swivel joints *	3-39
- CHECK	Brake pad and brake disk wear *	3-39
- CHECK	Condition of boom assembly *	3-39
- CHECK	Bearings and bushings of the boom *	3-39
- CHECK	Condition of hoses and flexible pipes *	3-39
- CHECK	Condition of cylinders (leakage, rods) *	3-39
- CHECK	Hydraulic circuit pressures *	3-39
- CHECK	Chassis bearings and bushings*	3-39
- CLEAN	Hydraulic pump tubular filter *	3-39
		* Consult your dealer.

➔ ⑤ 4000H - PERIODIC MAINTENANCE - EVERY 4000 HOURS OF SERVICE OR EVERY 8 YEARS

- CHECK	Boom inner chain wear	3-40
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OCCASIONAL MAINTENANCE AND OPERATION

➔ OCCASIONAL MAINTENANCE

- CLEAN	"Stationary lift truck" exhaust regeneration	3-42
- REPLACE	Wheels	3-42
- REPLACE	Battery	3-43
- ADJUST	Front headlights	3-43
- RESET	Longitudinal stability limiter and warning device	3-44

➔ OCCASIONAL OPERATION

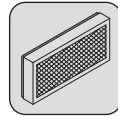
- TOW OR WINCH	Lift truck	3-46
- SLING	Lift truck	3-46
- TRANSPORT	Lift truck	3-47

FILTER CARTRIDGES AND BELTS

➔ 2 500H - PERIODIC MAINTENANCE - EVERY 500 HOURS OF SERVICE OR 1 YEAR



ENGINE OIL FILTER
Part No.: 943326



EXTERIOR CAB VENTILATION FILTER
Part No.: 261971



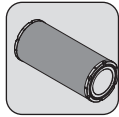
HYDRAULIC RETURN OIL FILTER CARTRIDGE
Part No.: 311821



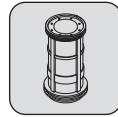
INTERIOR CAB VENTILATION FILTER
Part No.: 958671

➔ 3 1000H - PERIODIC MAINTENANCE - EVERY 1,000 HOURS OF SERVICE OR EVERY 2 YEARS

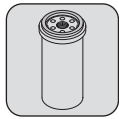
ALSO ADD THE FILTER CARTRIDGES FROM THE PERIODIC MAINTENANCE FOR 500 HOURS OF SERVICE.



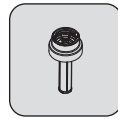
DRY AIR FILTER CARTRIDGE
Part No.: 52654712



"DEF"(Diesel Exhaust Fluid) FEED PUMP FILTER
Part No.: 942244



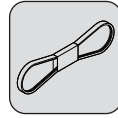
FUEL FILTER
Part No.: 799967



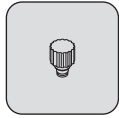
REPLACE Tank filling strainer "DEF" (diesel exhaust fluid)
Part No.: 52689785



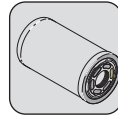
FUEL PRE-FILTER
Part No.: 964573



ALTERNATOR BELT
Part No.: 944377



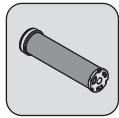
FUEL TANK BREATHER
Part No.: 266219



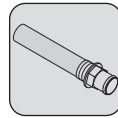
GEARBOX OIL FILTER
Part No.: 745878

➔ 4 2000H - PERIODIC MAINTENANCE - EVERY 2000 HOURS OF SERVICE OR EVERY 4 YEARS

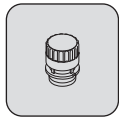
ALSO ADD FILTER ELEMENTS FOR PERIODIC MAINTENANCE AT 500 HOURS AND 1,000 HOURS OF SERVICE.



SAFETY DRY AIR FILTER CARTRIDGE
Part No.: 52654714



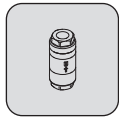
SUCTION STRAINER FOR HYDRAULIC FLUID TANK
Part No.: 52522593



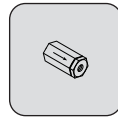
BREATHER FOR THE HYDRAULIC FLUID TANK
Part No.: 261487



BRAKE ACCUMULATOR UNIT FILTER
Part No.: 746308

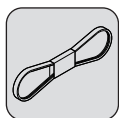


FAN REVERSAL
Part No.: 52518130



DISTRIBUTOR CONTROL HEAD FILTER
Part No.: 266242

➔ OCCASIONAL MAINTENANCE



COMPRESSOR BELT
(AIR CONDITIONING OPTION)
Part No.: 216125

LUBRICANTS AND FUEL

⚠ IMPORTANT ⚠

USE THE RECOMMENDED LUBRICANTS AND FUEL:

- For topping up, oils may not be miscible.
- For oil changes, MANITOU oils are perfectly appropriate.

DIAGNOSTIC ANALYSIS OF OILS

If a service or maintenance contract has been set up with the dealer, a diagnostic analysis of engine, transmission and axle oils may be requested depending on the rate of use.

(*) REQUIRED FUEL SPECIFICATION

Use a high-quality fuel to obtain optimal performance of the engine.

- Type of diesel fuel EN590 (sulfur content < 10 ppm)
- Type of diesel fuel ASTM D975 (sulfur content < 15 ppm)

(**) SPECIFICATION "DEF" (Diesel Exhaust Fluid)

- Aqueous urea solution at 32.5% (ISO22241)
- Solidification at -11 °C and 10% expansion
- Non-flammable product
- Thermal degradation (>60 °C)
- Storage between -5 °C and 30 °C

⚠ IMPORTANT ⚠

Corrosive to metals, requires wearing personal protection (gloves and goggles).

RECOMMENDATION

ENGINE		RECOMMENDATION											
DESCRIPTION	CAPACITY	-40 °C	-30	-20	-10	0	+10	+20	+30	+40	+50 °C		
ENGINE	10 ℓ												
COOLING CIRCUIT	17 ℓ												
FUEL TANK	140 ℓ												
TANK "DEF" (diesel exhaust fluid)	13,2 ℓ												
TRANSMISSION		RECOMMENDATION											
DESCRIPTION	CAPACITY	-40 °C	-30	-20	-10	0	+10	+20	+30	+40	+50 °C		
GEAR BOX	21,1 ℓ												
FRONT AXLE		RECOMMENDATION											
DESCRIPTION	CAPACITY	-40 °C	-30	-20	-10	0	+10	+20	+30	+40	+50 °C		
FRONT AXLE DIFFERENTIAL	7,2 ℓ												
FRONT WHEEL REDUCING GEAR	2 x 0,75 ℓ												
FRONT WHEEL REDUCING GEAR PIVOTS													
FRONT AXLE OSCILLATION													

REAR AXLE											
DESCRIPTION	CAPACITY	RECOMMENDATION									
REAR AXLE DIFFERENTIAL	7,2 ℓ	SPECIAL MANITOU OIL FOR IMMersed BRAKES									
		-40 °C	-30	-20	-10	0	+10	+20	+30	+40	+50 °C
REAR WHEEL REDUCING GEAR	2 x 0,75 ℓ	MANITOU SAE80W90 MECHANICAL TRANSMISSION OIL									
		-40 °C	-30	-20	-10	0	+10	+20	+30	+40	+50 °C
REAR WHEEL REDUCING GEAR PIVOTS		MANITOU BLACK MULTI-PURPOSE LUBRICANT									
		-40 °C	-30	-20	-10	0	+10	+20	+30	+40	+50 °C
REAR AXLE OSCILLATION		MANITOU BLUE MULTI-PURPOSE LUBRICANT									

BRAKES											
DESCRIPTION	CAPACITY	RECOMMENDATION									
BRAKE SYSTEM	1 ℓ	MANITOU MINERAL BRAKE FLUID									

BOOM											
DESCRIPTION	CAPACITY	RECOMMENDATION									
		-40 °C	-30	-20	-10	0	+10	+20	+30	+40	+50 °C
BOOM PAD SLIDE PATHWAYS		MANITOU BLACK MULTI-PURPOSE LUBRICANT									
		-40 °C	-30	-20	-10	0	+10	+20	+30	+40	+50 °C
GREASING OF THE BOOM		MANITOU BLUE MULTI-PURPOSE LUBRICANT									
		-40 °C	-30	-20	-10	0	+10	+20	+30	+40	+50 °C
BOOM CHAINS MT 1840 ...		MANITOU SPECIAL CHAINS LUBRICANT									

HYDRAULICS											
DESCRIPTION	CAPACITY	RECOMMENDATION									
		-40 °C	-30	-20	-10	0	+10	+20	+30	+40	+50 °C
HYDRAULIC FLUID TANK	115 ℓ	ISO VG 100									
		ISO VG 68									
		MANITOU ISO VG 46 HYDRAULIC FLUID									
		ISO VG 37									
		ISO VG 68									

CABIN											
DESCRIPTION	CAPACITY	RECOMMENDATION									
WINDSHIELD WASHER TANK	8 ℓ	WINDSHIELD WASHER FLUID									
COMPRESSOR (AIR CONDITIONING OPTION)	0,24 ℓ	R12 MINERAL OIL									

CHASSIS											
DESCRIPTION	CAPACITY	RECOMMENDATION									
		-40 °C	-30	-20	-10	0	+10	+20	+30	+40	+50 °C
STABILIZERS FRAME LEVELING		MANITOU BLUE MULTI-PURPOSE LUBRICANT									

ATTACHMENT											
DESCRIPTION	CAPACITY	RECOMMENDATION									
		-40 °C	-30	-20	-10	0	+10	+20	+30	+40	+50 °C
PLATFORM		MANITOU BLUE MULTI-PURPOSE LUBRICANT									

PACKAGING

OIL								
PRODUCT	PACKAGING / REFERENCE							
	Aerosol	0,24 ℓ	1 ℓ	2 ℓ	5 ℓ	20 ℓ	55 ℓ	209 ℓ
- MANITOU EVOLOGY OIL 10W40 API CJ4					895837	895838	895839	895840
- MANITOU DX III G AUTOMATIC TRANSMISSION OIL			958186		947972	947973	947974	947975
- MANITOU ISO VG 46 HYDRAULIC FLUID					545500	582297	546108	546109
- MANITOU MINERAL BRAKE FLUID			490408					4500078
- SPECIAL MANITOU OIL FOR IMMERSSED BRAKES					545976	582391		894257
- MANITOU SAE80W90 MECHANICAL TRANSMISSION OIL				499237	720184	546330	546221	546220
- R12 MINERAL OIL	961249	961248						

GREASE							
PRODUCT	PACKAGING / REFERENCE						
	400 mℓ	400 gr	1 kg	5 kg	20 kg	50 kg	
- MANITOU BLACK MULTI-PURPOSE LUBRICANT		947766	161590				499235
- MANITOU BLUE MULTI-PURPOSE LUBRICANT		161589		554974	958177		958176
- MANITOU SPECIAL CHAINS LUBRICANT	554271						

LIQUID							
PRODUCT	PACKAGING / REFERENCE						
	1 ℓ	2 ℓ	5 ℓ	20 ℓ	55 ℓ	210 ℓ	
- COOLANT -35 °C			894967	894968			894969
- WINDSHIELD WASHER FLUID	490402		486424				
- DEF (diesel exhaust fluid)			958575		958576		

CHECK

Lift truck environment

Carry out a general inspection around the lift truck:

- Fluid leaks or stains on the ground.
- Additional objects on the lift truck and in the cabin.
- Mounting and locking of the attachment.
- Mounting and adjustment of rear-view mirrors.
- Condition of the tyres to detect cuts, blisters, wear, etc.

⚠ IMPORTANT ⚠

Follow the operator instructions (↩ 1 - OPERATING AND SAFETY INSTRUCTIONS: OPERATOR INSTRUCTIONS).

CLEANLINESS OF THE FORKLIFT

- Cleanliness of lights and rear-view mirror.
- Excess dirt or build-up of material (e.g. straw, flour, sawdust, organic waste, etc.).
- On a daily basis, according to the conditions of use and the environment, the operator should ensure that the forklift truck is kept in a clean condition.
- Particular attention should be paid to accumulations of flammable materials (e.g. straw, flour, sawdust, organic waste, etc.) and fuel or lubricant leaks, as these significantly increase the risk of fire outbreaks.
- A regular inspection of the whole lift truck, especially the engine housing and the central part of the frame, is necessary to see how frequently it needs to be cleaned to prevent these potential accumulations of material or leakages.

CHECK

Engine oil level

Place the lift truck on level ground with the engine stopped, and let the oil settle in the sump.

- Open the engine cover.
- Pull out dipstick 1.
- Clean the dipstick and check the correct level between the two notches.
- If necessary, add oil (↩ LUBRICANTS AND FUEL) through the filler port 2.
- Visually check that there is no leakage or seepage.



CHECK

Coolant level

Place the lift truck on level ground with the engine stopped, and allow the engine to cool.

⚠ IMPORTANT ⚠

To avoid any risk of spraying or scalding, wait until the engine has cooled down before removing the cooling system filler plug.

In the event of an emergency, it is possible to use water as the coolant, but then proceed to drain the coolant circuit as quickly as possible.

- Open the engine cover.
- The liquid must be at the MAX. level on the expansion tank 1.
- If necessary, add coolant (↩ LUBRICANTS AND FUEL) through the filler hole 2.
- Visually check that there is no leakage or seepage.



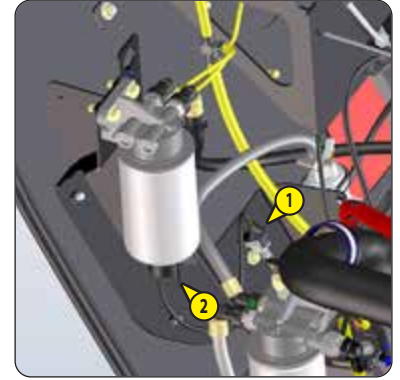
CHECK

Fuel pre-filter

⚠ IMPORTANT ⚠

Carefully clean the outside of the pre-filter and its holder, to prevent dust from getting into the system.



- Open the engine cover.
- Disconnect electrical wiring harness 1 from the fuel pre-filter.
- Place a hose on the drain plug 2 and the other end in a container.
- Unscrew the drain plug 2 by two turns.
- Allow the diesel fuel to flow out until it is free from impurities and water.
- Retighten drain plug 2 and reconnect the wiring harness 1.





CHECK

Longitudinal stability limiter and warning device

Place the lift truck on flat, level ground with the wheels straight.

- Press the  button to show the "PREFERENCES" menu.
- Press the  button to select in the menu and sub-menus.



- Press the  button to confirm.
- Follow the steps described on the information screen (OK = press button ).

⚠ IMPORTANT ⚠

If an error code is displayed, recalibrating the longitudinal stability limiter and warning device may resolve the problem (⚠ OCCASIONAL MAINTENANCE).

CHECK

Platform environment

Carry out a general inspection around the platform:

- Check the integrity of the platform structure
- Check the integrity of the safety harness attachment points.
- Check the attachment and locking of the platform.
- Check the platform's electrical and hydraulic connections and the condition of the cables and hoses.

⚠ IMPORTANT ⚠

Before using the platform, check the hydraulic controls and the platform safety device are operating correctly (⚠ 2 - DESCRIPTION: OPERATION OF THE PLATFORM).

50H - WEEKLY MAINTENANCE OR EVERY 50 HOURS OF SERVICE

CHECK

Gear box oil level

Park the lift truck on level ground with the boom raised and the engine stopped.

⚠ IMPORTANT ⚠

Raise the boom and place the boom safety wedge on the rod of the lifting cylinder (↖ 1 - INSTRUCTIONS AND SAFETY RECOMMENDATIONS: LIFT TRUCK MAINTENANCE INSTRUCTIONS).

- Remove dipstick 1 by unscrewing it.
- Wipe the dipstick and check the correct level against the MAX mark.
- If necessary, add oil (↖ LUBRICANTS AND FUEL) through the same hole.
- Retighten the gauge 1.
- Visually check that there is no leakage or seepage.



CHECK

Tire pressure

CHECK

Wheel nut torque

⚠ IMPORTANT ⚠

Check that the air hose is correctly connected to the tire valve before inflating and keep all persons at a distance during inflation. Inflate to the recommended tire pressures.

- Check the torque load of the wheel nuts. Non-compliance with this instruction can lead to deterioration and breakage of the wheel lugs and distortion of the wheels.
- Check and restore tire pressure, if necessary (↖ 2 - DESCRIPTION: TIRES).

NOTE: An OPTIONAL wheel tool kit is available.

CHECK

Front axle differential seal

CHECK

Rear axle differential seal

Place the lift truck on level ground with the engine stopped.

- Visually check that there is no leakage or seepage.
- If there is any leakage or seepage, check the level:
 - Remove the level plug 1, the oil should be flush with the edge of the hole.
 - If necessary, add oil (↖ LUBRICANTS AND FUEL) through the filler hole 2.
 - Refit and tighten the level plug (tightening torque 34 - 49 N.m).



CHECK

Front wheel reducer seals

CHECK

Rear wheel reducer seals

Place the lift truck on level ground with the engine stopped.

- Visually check that there is no leakage or seepage.
- If there is any leakage or seepage, check the level:
 - Place level plug 1 in a horizontal position.
 - Remove the level plug; the oil should be flush with the edge of the opening.
 - If necessary, add oil (↖ LUBRICANTS AND FUEL) by the same hole.
 - Refit and tighten the level plug (tightening torque 34 - 49 N.m).



CHECK

Brake fluid level

Place the lift truck on level ground.

⚠ IMPORTANT ⚠

If the brake fluid level is abnormal, consult your dealer.

- Open the protective casing 1 with the ignition key.
- Check tank 2. The correct level should be at the MAX. level on the tank.
- Visually check that there is no leakage or seepage.
- If necessary, add oil (↩ LUBRICANTS AND FUEL).
- Remove the cap 3.
- Add oil through filler port.
- Refit the cap.



CHECK

Boom pad slide pathways

To preserve optimum operation, the pad slide pathways should be correctly lubricated:

⚠ IMPORTANT ⚠

MANDATORY GREASING OF THE BOOM AFTER:
*Cleaning the boom, especially after using high pressure cleaner.
The forklift has been unused for a long period of time.*

- Fully extend the boom.
- Check the condition of the surface of the pad slide pathways, surface run in (steel whitened) without traces of corrosion.
- If necessary lubricate the pad slide pathways (↩ LUBRICANTS AND FUEL).
- Telescope the boom several times in order to spread the lubricant evenly.
- Remove the surplus lubricant.



⚠ IMPORTANT ⚠

*If the lift truck is used in an abrasive environment (dust, sand, coal) use lubricating varnish (MANITOU Part No.: 483536).
Consult your dealer.*

CHECK

Hydraulic fluid level

Place the lift truck on level ground with the engine stopped, and the boom retracted and lowered as far as possible.

⚠ IMPORTANT ⚠

Use a clean funnel and clean the underside of the oil drum before filling.

- Check dipstick 1, the correct level must be at the level of the red dot.
- If necessary, add oil (☞ LUBRICANTS AND FUEL).
- Remove the protective casing 2.
- Remove the cap 3.
- Add oil through filler port.
- Refit the cap.
- Visually check that there is no leakage or seepage.
- Refit the protective casing.



CHECK

Windshield washer liquid level

Place the lift truck on level ground.

- Open the protective casing 1 with the ignition key.
- Visually check the level in the tank.
- If necessary, add windshield washer fluid (☞ LUBRICANTS AND FUEL).
- Remove the cap 2.
- Add windshield washer liquid through filler port.
- Refit the cap.



CLEAN

Radiator cores

⚠ IMPORTANT ⚠

In a polluting atmosphere, clean the radiator cores every day.

Do not use a water jet or high pressure steam as this could damage the fins.

- Open the engine cover.
- If necessary, clean the intake grille on the engine bonnet.
- Using a soft cloth, clean the radiator cores in order to remove as much dirt as possible.
- Clean the radiator using a compressed air jet aimed from the engine towards the radiator, in the opposite direction to the cooling air flow.



Prefiltration elements are available for use in very dusty conditions (FILTER CARTRIDGES AND BELTS). The cartridge checking and cleaning interval must also be reduced.

⚠ IMPORTANT ⚠

- If the clogging indicator lamp comes on, this operation should be performed as soon as possible (maximum 1 hour).*
- Never operate the lift truck with the air filter removed or damaged.*
- Maintain a safety distance of 30 mm between the jet of air and the cartridge to avoid tearing or piercing the cartridge.*
- The cartridge must not be blown through close to the air filter casing.*
- Never clean the cartridge by tapping it on a hard surface.*
- Protect your eyes during this operation.*
- Never wash a dry air filter cartridge.*
- Never clean the safety cartridge located inside the filter cartridge. Change it for a new one if it is clogged or damaged.*

- For the dismantling and refitting of the cartridge (1000H: REPLACE Air filter cartridge).
- Clean the filter cartridge using a compressed air jet (max. pressure 3 bars) directed from the top to the bottom and from the inside towards the outside at a minimum distance of 30 mm from the cartridge wall.
- Cleaning is completed when there is no more dust on the cartridge.
- Clean the cartridge seal surface with a damp, clean lint-free cloth and grease with a silicone lubricant (MANITOU part no.: 479292).
- Visually inspect the external condition of the air filter and its mounts. Check also the condition of the hoses and their attachments.

CLEAN

Condenser harness (Air conditioning OPTION)

⚠ IMPORTANT ⚠

In a polluting atmosphere, clean the radiator harness daily. Do not use a water jet or high-pressure steam as this could damage the condenser fins.

- Visually check whether the condenser is clean and clean it if necessary.
- Clean the condenser using a compressed air jet aimed in the same direction as the air flow.
- Clean with the fans running for best results.



To be carried out weekly, if the lift truck has been operated for less than 50 hours during the week.

⚠ IMPORTANT ⚠

In the event of prolonged use in an extremely dusty or oxidising atmosphere, reduce this interval to 10 hours of service or every day.

Clean, then lubricate the following points with grease (← LUBRICANTS AND FUEL) and remove the surplus.

BOOM

- 1 - Lubricators of the boom pin (2 lubricators).
- 2 - Lubricators of the carriage pin (2 lubricators).
- 3 - Lubricator of the tilting cylinder foot pin (1 lubricator).
- 4 - Lubricator of the tilting cylinder head pin (1 lubricator).
- 5 - Lubricator of the lifting cylinder foot pin (1 lubricator).
- 6 - Lubricator of the lifting cylinder head pin (1 lubricator).
- 7 - Lubricator of the compensation cylinder foot axle (1 lubricator).
- 8 - Lubricator of the compensation cylinder head axle (1 lubricator).
- 9 - Lubricator of the chain pulley shaft of telescope 2 at the boom head (1 lubricator). MT 1840 ...
- 10 - Lubricator of the chain pulley shaft of telescope 1 at the boom head (1 lubricator). MT 1840 ...
- 11 - Lubricator of the chain pulley shaft of telescope 1 at the boom foot (1 lubricator). MT 1840 ...
- 12 - Lubricator of the hose pulley shaft at the boom foot (1 lubricator). MT 1840 ...

FRONT AND REAR WHEEL REDUCTION GEAR PIVOTS

- 13 - Lubricators of the wheel reduction gear pivot pins (8 lubricators).

AXLE OSCILLATION

- 14 - Front axle oscillation lubricators (2 lubricators).
- 15 - Rear axle oscillation lubricators (2 lubricators).

FRAME LEVELING

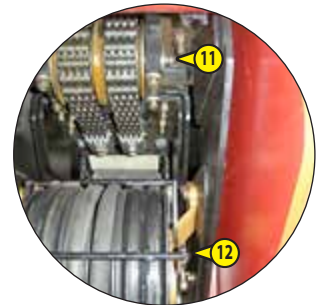
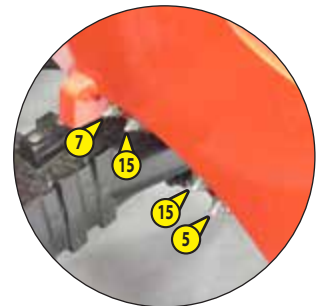
- 16 - Lubricator of the tilting corrector cylinder foot pin (1 lubricator).
- 17 - Lubricator of the tilting corrector cylinder head pin (1 lubricator).

STABILIZERS

- 18 - Lubricators of the stabilizer cylinder foot pin (2 lubricators).
- 19 - Lubricators of the stabilizer cylinder head pin (2 lubricators).
- 20 - Lubricators of the stabilizer shafts (2 lubricators).

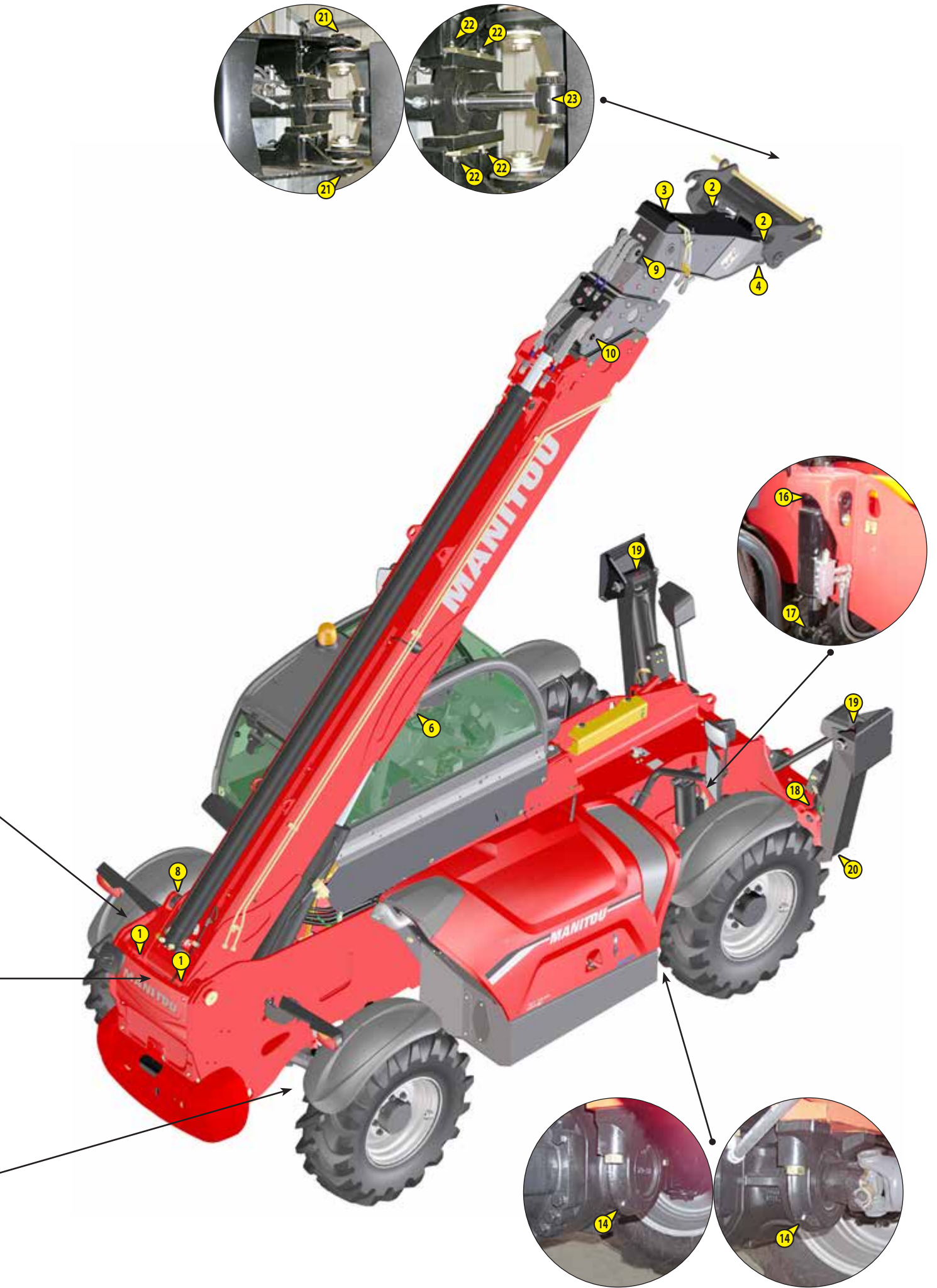
PLATFORM

- 21 - Lubricators of the platform rotation axes (2 lubricators).
- 22 - Lubricators of the platform rotation cylinder body axes (4 lubricators).
- 23 - Lubricators of the platform rotation cylinder head axes (2 lubricators).



OPTION





➔ 1 250H - PERIODIC MAINTENANCE - EVERY 250 HOURS OF SERVICE

CHECK

Tension of boom outer chains

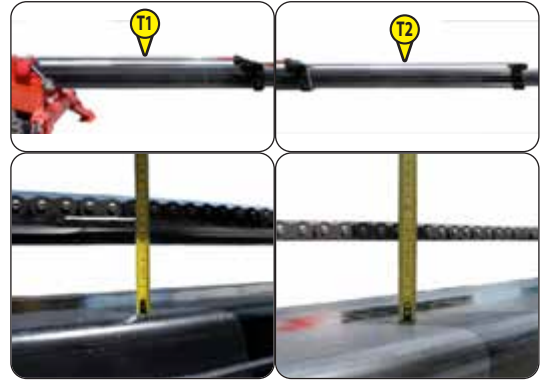
MT 1840 ...

Set the lift truck on its stabilizers, with the boom horizontal.

⚠ IMPORTANT ⚠

These checks are important for the proper operation of the boom. If there is a fault, consult your dealer.

- Fully extend the telescopes, then retract the boom 200 mm.
- At the centre of both telescopes (T1) and (T2), use a ruler to measure the perpendicular distance between the top of the telescope and the underside of the chain, this distance must be identical for both chains.
 - Telescope (T1): between 117 mm and 97 mm
 - Telescope (T2): between 85 mm and 65 mm



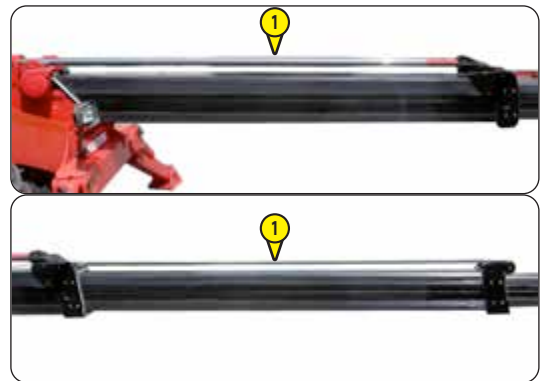
CLEAN

Boom outer chains

MT 1840 ...

Set the lift truck on its stabilizers, with the boom horizontal.



- Fully extend the telescopes.
- Protect the underside of the telescopes.
- Wipe the outer boom chains 1 with a clean, lint-free cloth, then examine them closely for any signs of wear.
- Vigorously brush the chains to get rid of any foreign matter, with a hard nylon brush and clean diesel fuel.
- Rinse the chains by means of a paint brush impregnated with clean diesel fuel and dry them with a compressed air jet.
- Lightly lubricate the chains (↔ LUBRICANTS AND FUEL), and perform a number of telescoping movements to check the behaviour of the chains.




CHECK

Countdown before "stationary lift truck" exhaust regeneration

Depending on the countdown before the next regeneration, you can evaluate and, if necessary, perform a regeneration during the periodic 500-hour service (< 3 - MAINTENANCE: OCCASIONAL MAINTENANCE).

- Press the  button to show the "PREFERENCES" menu.
- Press the  button to select in the menu and sub-menus.

ENGINE SPECIFICATION > REGENERATION

- Press the button  to display the countdown before next regeneration screen (700h => 0h).

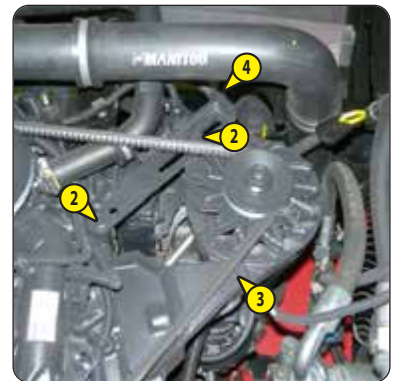
CHECK

Alternator belt tension

⚠ IMPORTANT ⚠

If the compressor belt has to be changed, check the tension again after the first 20 hours of operation.

- Open the engine cover.
- Remove the protective casing 1.
- Check the belt for signs of wear and cracks, and change if necessary (< FILTER CARTRIDGES AND BELTS).
- Check the belt tension between the crankshaft and alternator pulleys.
- Under a normal pressure exerted with the thumb (45 N), the clearance should be approximately 10 mm.
- Adjust if necessary.
- Loosen the screws 2 and 3 by two to three thread turns.
- Tighten the screw 4 to tighten the belt to the tension required.
- Retighten the screws 2 (tightening torque 30 N.m) and the screw 3 (tightening torque 42 N.m).
- Refit the protective casing 1.



CHECK

Compressor belt tension (Air conditioning option)

⚠ IMPORTANT ⚠

If the belt has to be changed, check the tension again after the first 20 hours of operation.

- Open the engine cover.
- Remove the protective casing 1.
- Check the belt for signs of wear and cracks, and change if necessary (< FILTER CARTRIDGES AND BELTS).
- Check the belt tension between the pulleys of the crankshaft and the compressor.
- Under a normal pressure exerted with the thumb (45 N), the clearance should be approximately 10 mm.
- Adjust if necessary.
- Loosen screws 2 by two to three turns.
- Swivel the compressor assembly so as to obtain the belt tension required.
- Retighten screws 2 (tightening torque 22 N.m).
- Refit the protective casing 1.



CHECK

Hydraulic fluid

MANITOU offers a hydraulic fluid analysis kit which might make it possible to delay the recommended deadline in the periodic maintenance schedule (2,000 hours). In this case we recommend an analysis of the hydraulic fluid every 500 hours of service.

The oil analysis kit also makes it possible to confirm the oil quality so as to obtain a deadline of 2,000 hours for specific uses causing constraints on the hydraulic circuit: extreme environmental conditions, use of the attachments with a very high hydraulic flow rate (such as a sweeper, or a concrete mixer).

- Order an oil analysis kit from your dealer.
- Upon receiving the kit, take a sample of oil and follow the instructions shown on the kit.
- According to the results, keep the analysis report or replace the hydraulic fluid.

Oil analysis kit (MANITOU Part No.: 958162)



CHECK

Fork wear*

* Consult your dealer.

REPLACE

Engine oil

REPLACE

Engine oil filter

Place the lift truck on level ground, let the engine run at idle for a few minutes, then stop the engine.

⚠ IMPORTANT ⚠

Dispose of the used oil in an ecological manner.

Tighten the oil filter by hand pressure only and lock the filter in place by a quarter turn.

DRAINING THE OIL

- Open the engine cover.
- Remove access panel 1.

NOTE: When removing access panels and hatches, clean the surrounding environment and remove any accumulations of flammable materials.

- Place a container under the drain hole and unscrew the drain plug 2.
- Take drain hose 3.
- Place the end of the drain hose in the container and screw the hose fully to the drain connector 2.
- Remove the filler plug 4 to ensure correct drainage.



REPLACEMENT OF THE FILTER

- Unscrew and discard the engine oil filter 5, together with its seal.
- Clean the filter bracket with a clean, lint-free cloth.
- Lightly oil the seal before refitting the new oil filter (⇐ FILTER CARTRIDGES AND BELTS) on its bracket (tightening torque 15 - 17 N.m).

FILLING WITH OIL

- Remove, clean and refit drain hose 3.
- Refit and tighten the drain plug 2.
- Fill up with oil (⇐ LUBRICANTS AND FUEL) through filler hole 4.
- Wait a few minutes to allow the oil to flow into the sump.
- Start the engine and let it run for a few minutes.
- Check for possible leaks from the drain plug and the oil filter.
- Stop the engine, wait a few minutes and check the correct level between the two marks on the dipstick 6.
- Top up the level, if necessary.
- Refit the access cover 1.



REPLACE

Front axle differential oil

REPLACE

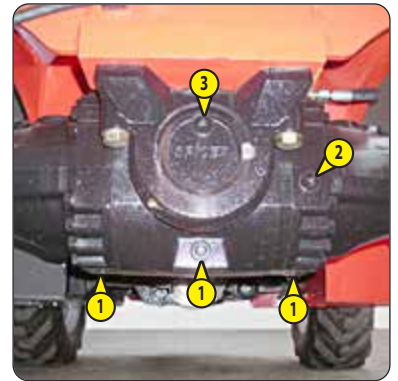
Rear axle differential oil

Place the lift truck on level ground with the engine stopped and the still warm differential oil.

⚠ IMPORTANT ⚠

Dispose of the used oil in an ecological manner.

- Place a container under drain plugs 1 and unscrew them.
- Remove level plug 2 and filling plug 3 to ensure that the oil is drained properly.
- Refit and tighten the drain plugs 1 (tightening torque 34 - 49 N.m).
- Fill up with oil (⇐ LUBRICANTS AND FUEL) through filler hole 3.
- The level is correct when the oil level is flush with the edge of opening 2.
- Check for any possible leaks at the drain plugs.
- Refit and tighten level plug 2 (tightening torque 34 - 49 N.m) and filling plug 3 (tightening torque 34 - 49 N.m).
- Repeat this operation for the rear axle differential.



REPLACE

Hydraulic return oil filter cartridge

Stop the engine and release the pressure from the systems by operating the hydraulic controls.

⚠ IMPORTANT ⚠

Thoroughly clean the outside of the filter and its surroundings before any operation to prevent any risk of polluting the hydraulic system.

- Remove the protective casing 1.
- Remove the filler plug 2 and unscrew cover 3 by two or three thread turns.
- Wait a few moments while the oil flows into the tank.
- Remove the cover and slowly take out the filter cartridge assembly 4.
- Place the assembly in a clean container.
- Pinch the head 5 and separate it from the tank 6.
- Replace the cartridge 7 with a new one (↔ FILTER CARTRIDGES AND BELTS).
- Put back the assembly then retighten the cover.
- Refit the filler plug 2.
- Refit the protective casing 1.



REPLACE

Cabin ventilation filters

EXTERNAL CAB VENTILATION FILTER

- Remove protective casing 1 using the ignition key.
- Remove the cab ventilation filter 2 and replace it with a new one (↔ FILTER CARTRIDGES AND BELTS).
- Refit the protective casing.



INTERNAL CAB VENTILATION FILTER

- Remove the protective grid 3.
- Remove the cab ventilation filter 4 and replace it with a new one (↔ FILTER CARTRIDGES AND BELTS).
- Refit the protective grid.



🔧 1000H - PERIODIC MAINTENANCE - EVERY 1,000 HOURS OF SERVICE OR EVERY 2 YEARS

ALSO CARRY OUT THE PERIODIC MAINTENANCE FOR 500 HOURS OF SERVICE.

CHECK

Boom outer chain wear

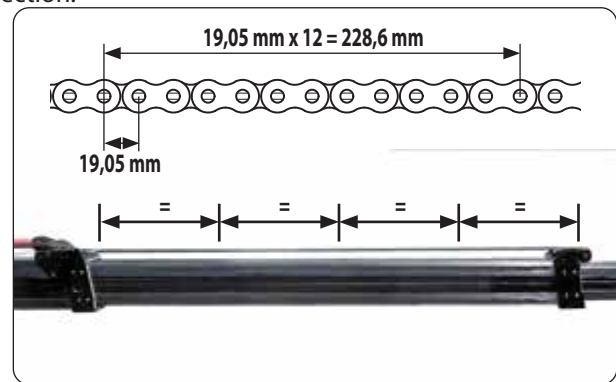
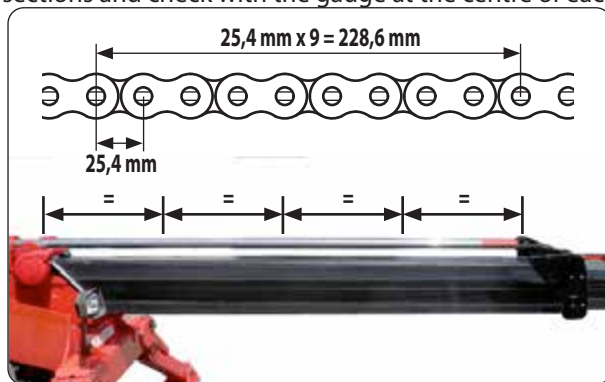
MT 1840 ...

- Chain wear occurs at a number of locations:
 - On the joints, which leads to elongation of the chain.
 - On the edge of link plates through contact with the pulleys.
 - On the sides of the plates and the protruding pins through contact with the pulley flanges.
 - On the alignment of the flats of the extended pins.

CHAIN ELONGATION

We recommend that you perform this operation using the chain checking gauge (MANITOU Part No.: 161583).

- Set the lift truck on its stabilizers, with the boom horizontal.
- Fully extend the telescopes and continue operating the control for a few moments to properly tension the chains.
- As the chain is likely to wear unevenly over its length, divide the chain into 4 equal sections and check with the gauge at the centre of each section.

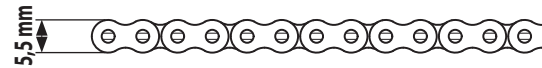


⚠ IMPORTANT ⚠

If the maximum dimension ($228,6 \text{ mm} + 2\% = 233,2 \text{ mm}$) is exceeded, replace the pair of chains (contact your dealer).

PLATE EDGE WEAR

As for chain elongation, perform a check in the middle of each equal section using a calliper gauge.

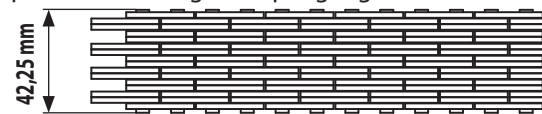


⚠ IMPORTANT ⚠

If the minimum dimension ($24 \text{ mm} - 2\% = 23,5 \text{ mm}$ et $15,5 \text{ mm} - 2\% = 15,2 \text{ mm}$) is exceeded, replace the pair of chains (contact your dealer).

EXTENDED PIN WEAR

As for chain elongation, perform a check in the middle of each equal section using a calliper gauge.



⚠ IMPORTANT ⚠

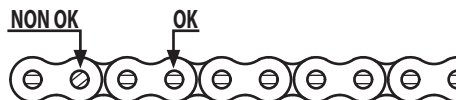
If the minimum dimension ($53,6 \text{ mm} - 2\% = 52,5 \text{ mm}$ et $42,25 \text{ mm} - 2\% = 41,4 \text{ mm}$) is exceeded, replace the pair of chains (contact your dealer).

- In addition to wear, the high pressures between the side of the plates and the pulleys may force out material, causing the articulations to jam. Replace the pair of chains in this case also.

ALIGNMENT OF EXTENDED PIN FLATS

Check the chains over their entire length.

- High friction between the plates and the extended pins may cause the pins to turn within the outer plates and thus come out of their housing.



⚠ IMPORTANT ⚠

If the flats are not aligned in the longitudinal direction of the chain, replace the pair of chains (contact your dealer).

⚠ IMPORTANT ⚠

*Under no circumstances must the lift truck be used if the seat belt is defective (fixing, locking, cuts, tears, etc.).
Immediately repair or replace the seat belt.*

SEAT BELT WITH TWO ANCHORING POINTS

- Check the following points:
 - Fixing of the anchoring points on the seat.
 - Cleanness of the strap and the locking mechanism.
 - Triggering of the locking mechanism.
 - Condition of the strap (cuts, curled edges).

REELED SEAT BELT WITH TWO ANCHORING POINTS

- Check the points listed above together with the following points:
 - The correct winding of the belt.
 - Condition of the reel guards.
 - Roller locking mechanism when the strap is given a sharp tug.

NOTE: Replace the seat belt after an accident.

CLEAN

Fuel tank

REPLACE

Fuel tank breather

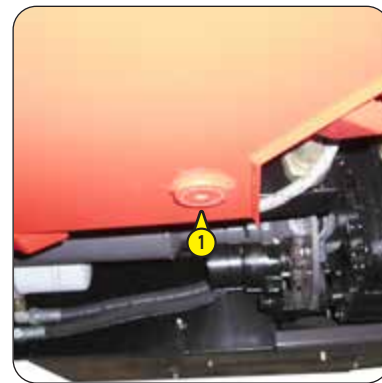
Place the lift truck on level ground with the engine stopped.

⚠ IMPORTANT ⚠

While carrying out these operations, do not smoke or work near a flame.

Never try to carry out a weld or any other operation by yourself, this could provoke an explosion or a fire.

- Inspect the parts of the fuel circuit and the tank liable to leak, both visually and by touch.
- In the event of a leak, contact your dealer.
- Place a container under drain plug 1 and unscrew the plug.
- Remove the filler plug 2 to ensure correct drainage.
- Rinse with ten liters of clean diesel through filler hole 3.
- Refit and tighten the drain plug 1 (tightening torque 72 - 88 N.m).
- Open storage compartment 4.
- Unscrew the breather 5 and replace with a new one (⚡ FILTER CARTRIDGES AND BELTS) (tightening torque 3 - 7 N.m).
- Fill the fuel tank with clean diesel filtered through the filler port.
- Refit the filler plug.



REPLACE

Coolant

These operations are to be carried out as necessary or every 2 years at the beginning of winter. Place the lift truck on level ground with the engine stopped and cold.

⚠ IMPORTANT ⚠

The engine does not contain any anti-corrosion elements and must be filled throughout the year with a mixture containing 25% ethylene glycol-based antifreeze.

DRAINING THE LIQUID

- Open the engine cover.
- Remove access panel 1.

NOTE: When removing access panels and hatches, clean the surrounding environment and remove any accumulations of flammable materials.

- Place a container under radiator drain plug 2 and unscrew the plug.
- Remove filler plug 3 from the expansion tank and fully open the heating control to ensure correct drainage.
- Let the cooling circuit drain entirely while ensuring that the ports do not get clogged.
- Check the condition of the hoses as well as the fastening devices and change the hoses if necessary.
- Rinse the circuit with clean water and use a cleaning agent if necessary.

FILLING WITH COOLANT

- Refit and tighten the radiator drain plug 2.
- Slowly fill the circuit with coolant (⚠ LUBRICANTS AND FUEL) up to the MAX level of the expansion tank 4 through the filler hole.
- Refit the filler plug 3.
- Run the engine at idle for a few minutes.
- Check for any possible leaks.
- Refit access panel 1.
- Check the level and refill if necessary.



REPLACE

Dry air filter cartridge

Prefiltration elements are available for use in very dusty conditions (◀ FILTER CARTRIDGES AND BELTS). Also, the checking and cleaning periodicity of the cartridge must be reduced (up to 250 hours in a very dusty atmosphere and with pre-filtration).

⚠ IMPORTANT ⚠

*Change the cartridge in a clean location, with the engine stopped.
Never operate the lift truck with a cartridge removed or damaged.*

- Open the engine cover.
- Remove the cover 1.
- Gently remove the cartridge 2 to reduce dust falling as far as possible.
- Leave the safety cartridge in place.
- Carefully clean the following parts with a damp, clean lint-free cloth.
 - The inside of the filter and cover.
 - The inside of the filter inlet hose.
 - The gasket surfaces in the filter and in the cover.
- Check pipes and connections between the air filter and the engine and the connection and state of the clogging indicator on the filter.
- Before fitting check the condition of the new cartridge (◀ FILTER CARTRIDGES AND BELTS).
- Insert the cartridge in the filter axis and push the cartridge pressing against the outer edge and not in the center.
- Reassemble the cover, guiding the valve downward.



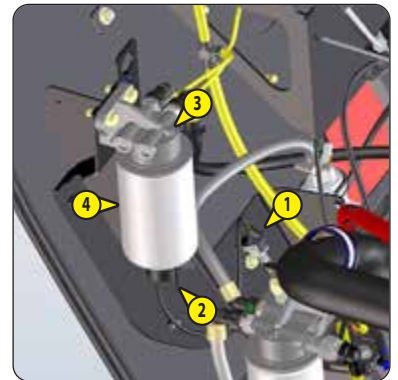
REPLACE

Fuel pre-filter

⚠ IMPORTANT ⚠

*Carefully clean the outside of the pre-filter and its holder, to prevent dust from getting into the system.
Tighten the fuel filter by hand only and lock in place by a quarter turn.*

- Switch off the lift truck's ignition.
- Open the engine cover.
- Disconnect electrical wiring harness 1 from the fuel pre-filter.
- Place a hose on the drain plug 2 and the other end in a container.
- Unscrew the drain plug 2 by two turns.
- Open bleed screw 3 to ensure proper emptying.
- Retighten bleed screw 3 once the pre-filter is emptied.
- Loosen pre-filter 4 and discard it, together with its seal.
- Clean the inside of the pre-filter head using a brush immersed in clean diesel oil.
- Refit a pre-filter and a new seal lubricated with clean diesel beforehand (◀ FILTER CARTRIDGES AND BELTS).
- Reconnect electrical wiring harness 1 on the fuel pre-filter.
- Replace the fuel filter.



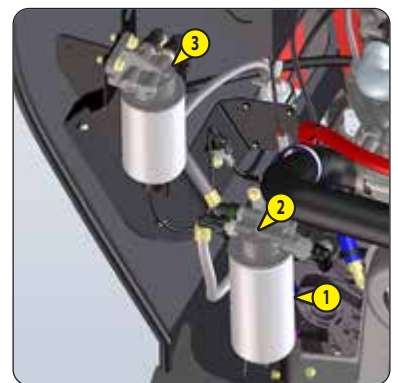
REPLACE

Fuel filter

⚠ IMPORTANT ⚠

Carefully clean the outside of the filter and its holder, to prevent dust from getting into the system.

- Unscrew and discard the fuel filter 1.
- Clean the inside of the filter head using a brush immersed in clean diesel oil.
- Refit a filter and a new seal lubricated with clean diesel beforehand (◀ FILTER CARTRIDGES AND BELTS).
- Tighten the filter, making sure that the seal is correctly positioned (tightening torque 10 - 12 N.m).
- Open the bleed screw 3 of the fuel pre-filter and the bleed screw 2 of the fuel filter.
- Switch on the lift truck's ignition, and close the bleed screw as soon as the diesel flows with no air.



REPLACE

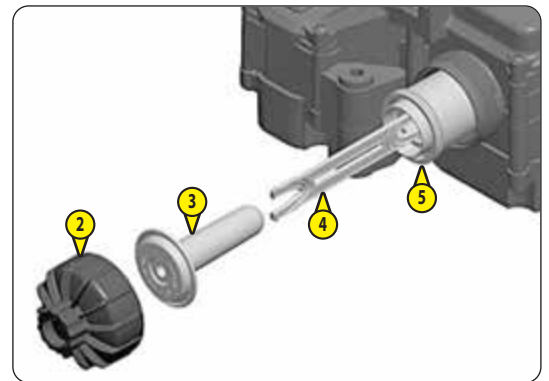
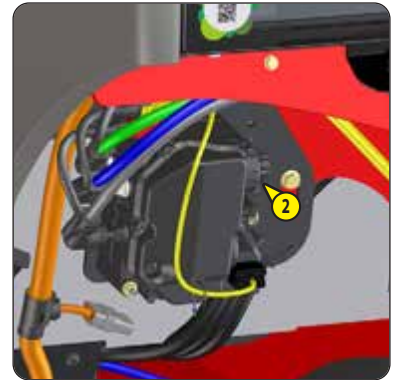
"DEF" (Diesel Exhaust Fluid) supply pump filter

Place the lift truck on level ground with the engine stopped.

⚠ IMPORTANT ⚠

*Diesel exhaust fluid is corrosive: protect the bodywork and wear personal protective equipment (gloves and goggles).
Carefully clean the outside of the fuel filter, to prevent dust from getting into the system.*

- Switch off the lift truck's ignition and wait for the pump to stop.
- Remove the protective casing 1.
- Unscrew the pump cover 2, remove the compensation element 3 and discard.
- Insert the extraction tool 4 (provided with the new filter) into the filter 5 until a click is heard or felt.
- Pull the tool to extract and discard the assembly.
- Lightly oil the cover joint with clean engine oil.
- Replace with a new filter and compensation element (⇐ FILTER CARTRIDGES AND BELTS) in the pump and screw the cover 1 (torque 23 N.m).



REPLACE

Tank filling strainer "DEF" (diesel exhaust fluid)

- Remove the filler plug 1.
- Unlock strainer 2 and replace with a new one (⇐ FILTER CARTRIDGES AND BELTS).
- Remove the filler plug 1.



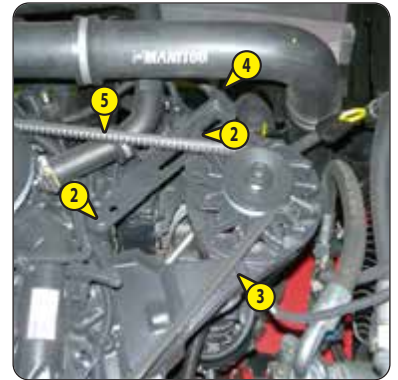
REPLACE

Alternator belt

⚠ IMPORTANT ⚠

Check the belt tension again after the first 20 hours of operation.

- Open the engine cover.
- Remove the protective casing 1.
- Loosen the screws 2 and 3 by two to three thread turns.
- Loosen the screw 4 to swivel the alternator assembly so as to free the belt 5.
- Remove the belt and replace with a new one (↩ FILTER CARTRIDGES AND BELTS).
- Adjust the belt tension between the crankshaft and alternator pulleys.
- Tighten the screw 4 to tighten the belt to the tension required.
- Under a normal pressure exerted with the thumb (45 N), the clearance should be approximately 10 mm.
- Retighten the screws 2 (tightening torque 30 N.m) and the screw 3 (tightening torque 42 N.m).
- Refit the protective casing 1.



REPLACE

Gearbox oil

REPLACE

Gear box oil filter

Place the lift truck on level ground with the engine stopped and the gearbox oil still warm.

⚠ IMPORTANT ⚠

Raise the boom and place the boom safety wedge on the rod of the lifting cylinder (↩ 1 - INSTRUCTIONS AND SAFETY RECOMMENDATIONS: LIFT TRUCK MAINTENANCE INSTRUCTIONS).

Dispose of the used oil in an ecological manner.

Tighten the oil filter by hand pressure only and lock the filter in place by a quarter turn.

DRAINING THE OIL

- Place a container under drain plug 1 and unscrew the plug.
- Remove gauge 2 to ensure proper emptying.

REPLACEMENT OF THE FILTER

- Unscrew and discard gearbox oil filter 3, together with its seal.
- Clean the filter bracket with a clean, lint-free cloth.
- Lightly grease the seal before refitting the new oil filter (↩ FILTER CARTRIDGES AND BELTS) on its bracket.

FILLING WITH OIL

- Refit and tighten the drain plug 1 (tightening torque 34 - 54 N.m).
- Fill up with oil (↩ LUBRICANTS AND FUEL) through filler hole 2.
- Start the engine and leave it at idle.
- Check for possible leaks from the drain plug and the oil filter.
- Check the correct level against the MAX mark on the dipstick 2.
- Top up the level, if necessary.



REPLACE

Front wheel reducer oil

REPLACE

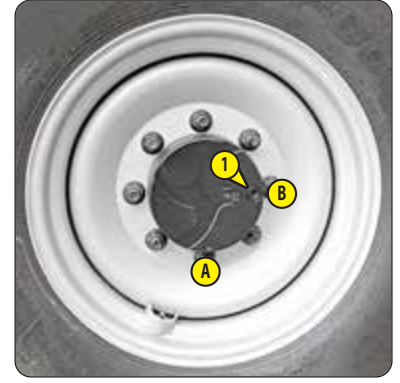
Rear wheel reducer oil

Place the lift truck on level ground with the engine stopped and the reducers' oil still warm.

⚠ IMPORTANT ⚠

Dispose of the used oil in an ecological manner.

- Drain and change the oil of each wheel reduction gear.
- Place drain plug 1 in position A.
- Place a container under the drain plug and unscrew the plug.
- Let the oil drain fully.
- Place the drain port in position B, i.e. in a level port.
- Fill up with oil (⚠ LUBRICANTS AND FUEL) through level hole 1.
- The level is correct when the oil level is flush with the edge of the hole.
- Refit and tighten the drain plug (tightening torque 34 - 49 N.m).



CHECK

Engine silent blocks *

CHECK

Gearbox silent blocks *

CHECK

Gear box controls *

CHECK

Brake system pressure *

CHECK

Boom pad wear *

CHECK

Condition of wiring harnesses and cables *

CHECK

Lights and signals *

CHECK

Warning indicators *

CHECK

Condition of the rear view mirrors *

CHECK

Cabin structure *

CHECK

Chassis structure *

CHECK

Attachment mounting system *

CHECK

Condition of attachments *

REPLACE

Brake fluid *

BLEED

Braking system *

ADJUST

Brake *

** Consult your dealer.*

➔ 4 2000H - PERIODIC MAINTENANCE - EVERY 2000 HOURS OF SERVICE OR EVERY 4 YEARS

ALSO PERFORM THE 500-HOUR AND 1000-HOUR PERIODIC MAINTENANCE PROCEDURES.

CHECK

Wheel nut tightening torque

- Check the condition of the tyres to detect cuts, blisters, wear, etc.
- Check the tightening torque of the wheel nuts with a torque wrench:
 - Front wheels = 630 N.m ± 94 N.m
 - Rear wheels = 630 N.m ± 94 N.m

CLEAN

Air conditioning (OPTION) *

CLEANING CONDENSER AND EVAPORATOR COILS

CLEANING CONDENSATE TRAY AND RELIEF VALVE

COLLECTING COOLANT TO REPLACE DRIER FILTER

REFILLING WITH COOLANT AND CHECKING THE THERMOSTATIC CONTROL AND PRESSURE SWITCHES

NOTE: When opening the evaporator unit, remember to replace the cover seal.

⚠ IMPORTANT ⚠

NEVER TRY TO REPAIR ANY FAULTS YOURSELF.

WHEN REFILLING CIRCUITS, ALWAYS REFER TO A DEALER WHO HAS THE CORRECT SPARE PARTS AND THE TECHNICAL KNOWLEDGE AND TOOLS REQUIRED.

In any of the following circumstances, call a doctor.

If inhaled, take the victim to fresh air.

If there is contact with the skin, wash immediately with plenty of water.

If there is frostbite, apply a sterile dressing.

If there is contact with the eyes, rinse with clear water for 15 minutes.

IMPORTANT INFORMATION REGARDING THE COOLANT USED

- This product contains fluorinated greenhouse gases covered by the Kyoto Protocol.
- Coolant type: R134A; it is colourless and odourless and heavier than air. Its GWP (Global Warming Potential) is 1430.
- Do not allow the gases to escape into the atmosphere. Do not open the circuit under any circumstances, as this could cause refrigerant to escape.
- The compressor has a fluid level gauge; never unscrew this gauge because it would depressurize the system. The fluid level should only be checked when draining the system.

* Consult your dealer.



REPLACE

Dry air filter safety cartridge

⚠ IMPORTANT ⚠

The safety cartridge replacement frequency is given for information only. It must be changed every second time the dry air filter cartridge is changed.

- For the dismantling and refitting of the cartridge (⚠ 1000H: REPLACE Air filter cartridge).
- Remove the dry air filter safety cartridge 1 carefully, to minimize dust fall.
- Clean the gasket surface on the filter with a damp, clean lint-free cloth.
- Check the condition of the new safety cartridge before fitting (⚠ FILTER CARTRIDGES AND BELTS).
- Insert the cartridge in the filter axis and push the cartridge pressing against the outer edge and not the center.



REPLACE

Hydraulic fluid

REPLACE

Breather for the hydraulic fluid tank

CLEAN

Hydraulic fluid tank suction strainer

REPLACE

Brake accumulator unit filter

REPLACE

Distributor control head filter

REPLACE

Fan reversal filter (OPTION)

Place the lift truck on level ground with the engine shut down and the boom retracted and lowered as far as possible.

⚠ IMPORTANT ⚠

Before any intervention, thoroughly clean the area surrounding the drain plug and the suction strainer on the hydraulic tank.

Use a clean container and funnel and clean the underside of the oil drum before filling. Dispose of the used oil in an ecological manner.

DRAINING THE OIL

- Remove the protective casing 1.
- Place a container under drain plug 2 and unscrew the plug.
- Remove the filler plug 3 to ensure correct drainage.

REPLACING THE BREATHER

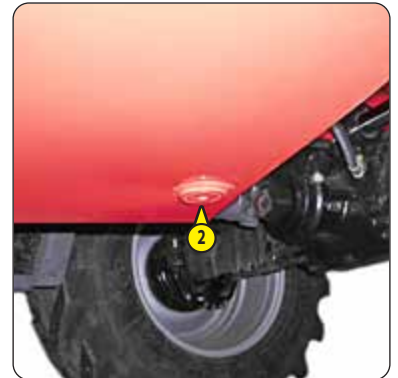
- Unscrew the breather 4 and replace it with a new one (⚡ FILTER CARTRIDGES AND BELTS).

CLEANING THE STRAINER

- Disconnect hose 5.
- Remove and clean the suction strainer 6 using a compressed air jet, check its condition and replace if necessary (⚡ FILTER CARTRIDGES AND BELTS).
- Refit the suction strainer making sure the seal is in the correct position.

REPLACING THE BRAKE ACCUMULATOR UNIT FILTER

- Unscrew plug 7, remove the filter and replace with a new one.
- Refit and tighten the plug 7 (tightening torque 70 - 80 N.m).

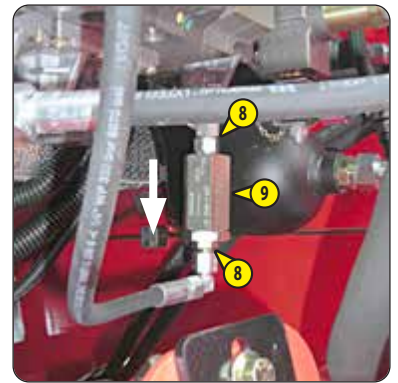


REPLACING THE DISTRIBUTOR CONTROL HEAD FILTER

⚠ IMPORTANT ⚠

Be careful to mount the filter 9 in the same direction as the arrow.

- Undo the two connections 8 and replace the filter 9 (⇐ FILTER CARTRIDGES AND BELTS).



REPLACING THE FAN REVERSAL FILTER (OPTION)

⚠ IMPORTANT ⚠

Be careful to mount the filter 10 in the same direction as the arrow.

- Unscrew the filter 10 and replace it with a new one (⇐ FILTER CARTRIDGES AND BELTS).



FILLING WITH OIL

- Refit and tighten the drain plug 2 (tightening torque 72 - 88 N.m).
- Fill up with oil (⇐ LUBRICANTS AND FUEL) through filler hole 11.
- Observe the oil level on the dipstick 12; the oil level should be at the level of the red dot.
- Check for any possible leaks at the drain plug.
- Refit the filler plug 3.



CHECK	Radiator *
CHECK	Water pump and thermostat *
CHECK	Alternator and starter *
CHECK	Turbocharger *
CHECK	Transmission pressures *
CHECK	Steering *
CHECK	Steering swivel joints *
CHECK	Brake pad and brake disk wear *
CHECK	Condition of boom assembly *
CHECK	Bearings and bushings of the boom *
CHECK	Condition of hoses and flexible pipes *
CHECK	Condition of cylinders (leakage, rods) *
CHECK	Hydraulic circuit pressures *
CHECK	Chassis bearings and bushings*
CLEAN	Hydraulic pump tubular filter *

*** Consult your dealer.**

↻ 4000H - PERIODIC MAINTENANCE - EVERY 4000 HOURS OF SERVICE OR EVERY 8 YEARS

CHECK

Boom inner chain wear

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⚠ IMPORTANT ⚠

Checking of the boom's inner chains requires the telescopes to be disassembled (contact your dealer).

CLEAN


"Stationary lift truck" exhaust regeneration

⚠ IMPORTANT ⚠

If you are performing regeneration during the periodic 500-hour service, do the regeneration before replacing the engine oil.

- Check the following points:
 - stabilizers up,
 - forward/reverse selector in neutral,
 - parking brake applied,
 - no action on the hydraulic control joystick,
 - boom in transport position,
 - idling speed,
- Check that the fuel level is sufficient.
- Start the lift truck and run the engine for a few minutes to bring it up to its normal operating temperature.




- Press the top of button  and hold for at least two seconds to launch exhaust regeneration. The indicator lamp comes on fixed and the engine speed increases, confirming the start of regeneration.
- The length of the exhaust regeneration procedure varies (between 40 and 50 minutes).

⚠ IMPORTANT ⚠

Exhaust regeneration must only be stopped if absolutely necessary.

Regeneration stops automatically if the operator:

- activates the hydraulic control joystick,
- engages forward or reverse gear,
- switches off the engine,
- presses switch 1.

- When regeneration is complete, the indicator lamp  goes out and the countdown to next regeneration screen reverts to 700 hours (700h => 0h).

REPLACE

Wheels

For this operation, we advise you to use the hydraulic jack (MANITOU part no.: 505507) and the safety support prop (MANITOU part no.: 554772).

⚠ IMPORTANT ⚠

In the event of a wheel being changed on the public highway, secure the lift truck vicinity:

- Stop the lift truck, if possible on firm, level ground.
- Stop the lift truck (⚠ 1 - SAFETY INSTRUCTIONS: DRIVING INSTRUCTIONS UNLADEN AND LADEN).
- Switch on the hazard warning lights.
- Immobilize the lift truck in both directions on the axle opposite to the wheel to be changed.
- Unlock the nuts of the wheel to be changed.
- Place the jack under the flared axle tube, as near as possible to the wheel and adjust the jack.
- Raise the wheel until it is clear of the ground and place the safety support under the axle.
- Completely unscrew the wheel nuts and remove them.
- Free the wheel by reciprocating movements and roll it to the side.
- Slip the new wheel on the wheel hub.
- Hand-tighten the nuts, grease them if necessary.
- Remove the safety support and lower the lift truck with the jack.
- Tighten the lug nuts to the prescribed torque value (⚠ 2000H - PERIODIC MAINTENANCE - EVERY 2000 HOURS OF SERVICE OR EVERY 4 YEARS) with a torque wrench.



REPLACE

Battery

⚠ IMPORTANT ⚠

Operate the battery cut-off for a minimum of 30 seconds after having switched off the ignition with the ignition key.
Handling and servicing a battery can be dangerous, take the following precautions:

- Wear protective goggles.
- Keep the battery horizontal.
- Never smoke or work near a naked flame.
- Work in a well-ventilated area.

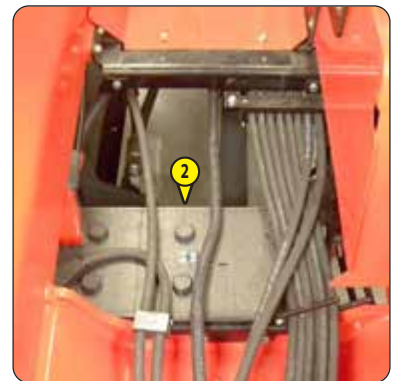
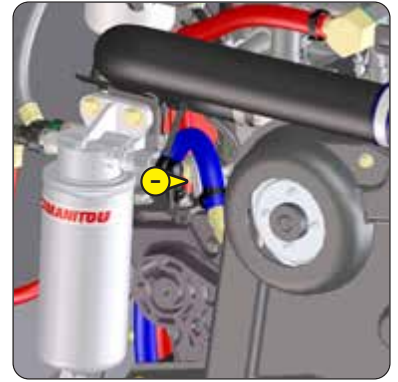
- In the event of electrolyte being spilled onto the skin or splashed in the eyes, rinse thoroughly with cold water for 15 minutes and call a doctor.

- Open the engine cover.
- Bring a back-up battery of the same type as the one used for the lift truck, together with battery cables.
- Connect the back-up battery, respecting the polarity (-) (+).
- Start the lift truck and remove the cables as soon as the engine is running.

⚠ IMPORTANT ⚠

Raise the boom and place the boom safety wedge on the rod of the lifting cylinder (⚠ 1 - INSTRUCTIONS AND SAFETY RECOMMENDATIONS: LIFT TRUCK MAINTENANCE INSTRUCTIONS).

- Remove the protective casing 1.
- Change the battery 2.



ADJUST

Front headlights

RECOMMENDED SETTING

(according to standard ECE-76/756 76/761 ECE20)

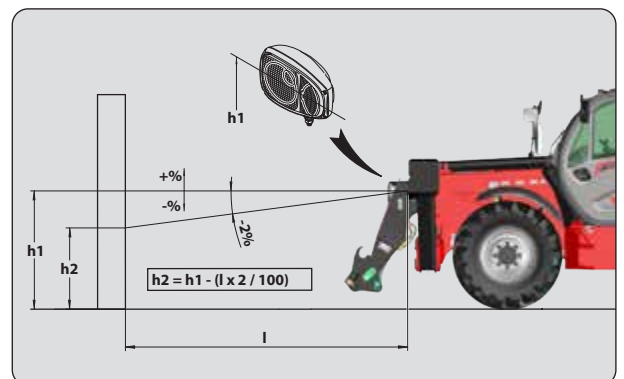
Adjustment of -2 % of the dipped beam harness relative to the horizontal axis of the headlight.

ADJUSTMENT PROCEDURE

- Place the unladen lift truck in the transport position and perpendicular to a white wall on flat, level ground.
- Check the tire pressures (⚠ 2 - DESCRIPTION: TIRES).
- Put the gearshift lever in neutral.

CALCULATING THE HEIGHT OF THE DIPPED BEAM (H2)

- h1 = Height of the dipped beam in relation to the ground.
- h2 = Height of the adjusted beam.
- l = Distance between the dipped beam and the white wall.



According to the use of the lift truck, the device may need to be periodically reset.



This operation can be easily performed by means of the following procedure.

- Provide a fork carrier or a bucket and a load corresponding to at least half the lift truck's rated capacity.
- Preferably perform the reset when the lift truck is still cold (before it is used) or ensure that the temperature of the rear axle is not more than 50 °C.



⚠ IMPORTANT ⚠

Carefully follow the boom positioning instructions.

*When the reset is completed, check the operation of the longitudinal stability limiter and warning device (⚡ 10H - DAILY MAINTENANCE OR EVERY 10 HOURS OF SERVICE).
If in doubt, consult your dealer.*

- Place the lift truck on flat, level ground with the wheels straight.
- Press the  button to show the "PREFERENCES" menu.
- Press the  button to select in the menu and sub-menus.



- Press the  button to confirm.
- Follow the steps described on the information screen (OK = press button ).

OCCASIONAL OPERATION

TOW OR WINCH

Lift truck

⚠ IMPORTANT ⚠

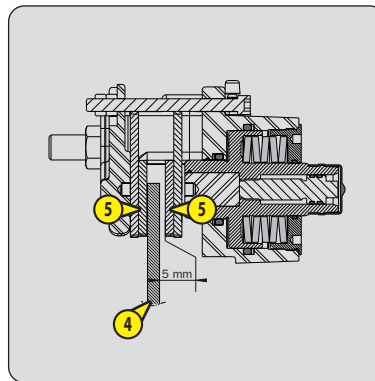
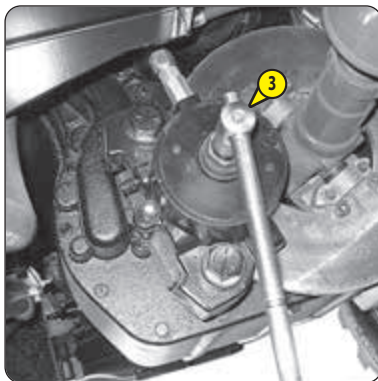
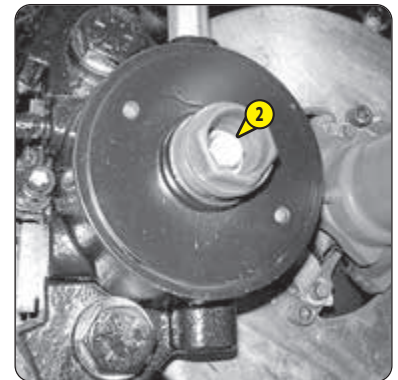
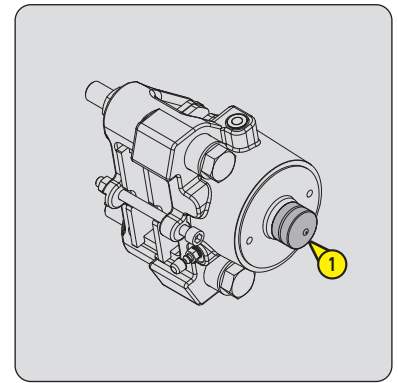
Do not tow the lift truck at a speed exceeding 6 km/h. over a maximum distance of 5 km. This is a dangerous maneuver. Carefully chock the lift truck before towing, as the parking brake system is inoperative.

- Place the forward/reverse selection lever and gear lever in neutral.
- Chock the lift truck.
- Remove the cap 1.
- Loosen screw 2 with a pin wrench 3 to release the brake disk. Leave a minimum clearance of 5 mm between the disk 4 and the brake pads 5.
- Put the towing device in place.
- Remove the chocks.
- Switch on the hazard warning lights.

NOTE: Since there will be no power steering or hydraulic brake assistance, operate the steering and controls slowly and with force. Avoid sudden or jerky movements.

⚠ IMPORTANT ⚠

For adjusting the parking brake, please contact your dealer.



SLING

Lift truck

- Take into account the position of the lift truck center of gravity for lifting.

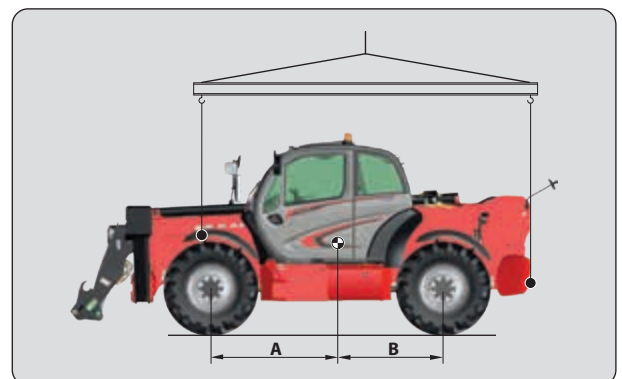
FLOATING FORK CARRIAGE

A = 1580 mm	B = 1490 mm	MT 1440 ...
A = 1635 mm	B = 1435 mm	MT 1840 ...

EXTENDIBLE PLATFORM 2M25/4M 1000KG

A = 1270 mm	B = 1800 mm	MT 1440 ...
A = 1365 mm	B = 1705 mm	MT 1840 ...

- Place the hooks in the fastening points 1 provided.



⚠ IMPORTANT ⚠

Ensure that the safety instructions associated with the flatbed are complied with before loading the lift truck and that the driver of the carrier vehicle is informed of the dimensions and the weight of the lift truck ($\leq 2 - DESCRIPTION: SPECIFICATIONS$).

Make sure that the flatbed is large enough and has sufficient loading capacity to carry the lift truck.

Check also the allowable ground contact pressure of the platform relative to the lift truck.

⚠ IMPORTANT ⚠

For lift trucks equipped with a turbo-charged engine, block off the exhaust outlet to avoid rotation of the turbo shaft without lubrication when transporting the vehicle.

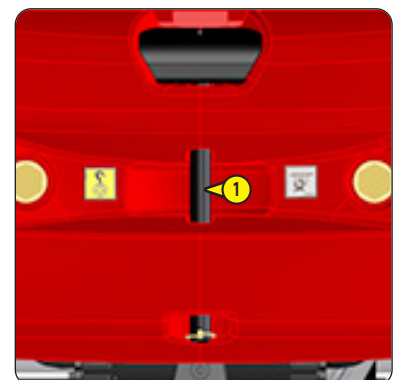
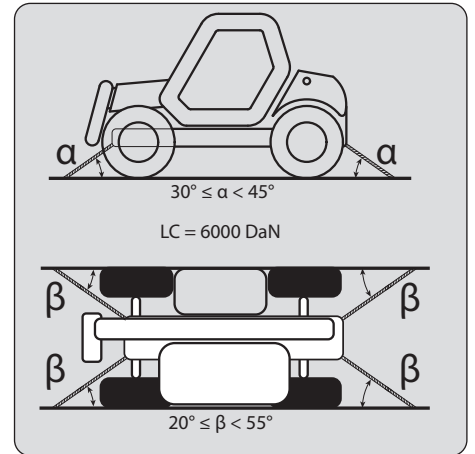
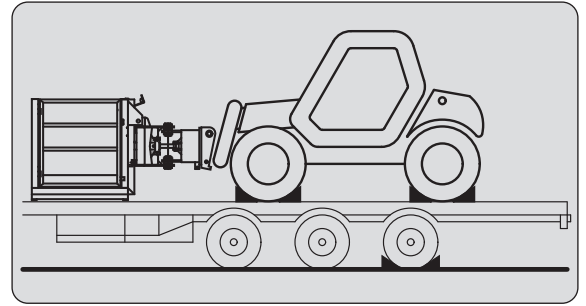
NOTE: If the platform is wider than the transport flatbed, remove the platform ($\leq 2 - DESCRIPTION: USE OF THE PLATFORM$) and load it separately in the longitudinal direction.

LOADING THE LIFT TRUCK

- Block the wheels of the platform.
- Attach the loading ramps to the platform in such a way as to give the shallowest possible ramp angle for the lift truck.
- Load the lift truck parallel to the platform.
- Stop the lift truck ($\leq 1 - OPERATING AND SAFETY INSTRUCTIONS: DRIVING INSTRUCTIONS UNLADEN AND LADEN$).

STOWING THE LIFT TRUCK

- Fix the chocks to the flatbed at the front and at the back of each tyre.
- Also fix the chocks to the flatbed on the inside of each tyre.
- Secure the lift truck to the flatbed with straps, in the anchoring points 1 provided.
- In order to ensure the lift truck is securely lashed to the flatbed, observe the lashing angles (α) and (β) and the resistance (LC) of the straps.
- Tighten the straps.



4 - ATTACHMENTS THAT CAN BE ADAPTED TO THE RANGE

4 - ATTACHMENTS THAT CAN BE ADAPTED TO THE RANGE

<i>INTRODUCTION</i>	<i>4-3</i>
<i>PICKING UP THE ATTACHMENTS</i>	<i>4-4</i>
<i>TECHNICAL SPECIFICATIONS OF ATTACHMENTS</i>	<i>4-6</i>
<i>ATTACHMENT GUARDS</i>	<i>4-12</i>

INTRODUCTION

- Your lift truck must be used with interchangeable equipment. These items are called: ATTACHMENTS.
- A wide range of attachments is available, guaranteed by MANITOU and designed to fit your lift truck perfectly.

⚠ IMPORTANT ⚠

*Only attachments approved by MANITOU can be used on its lift trucks (← TECHNICAL CHARACTERISTICS OF ATTACHMENTS).
The manufacturer cannot be held responsible for any modifications or adaptations to attachments without its knowledge.*

- The attachments are delivered with a load chart concerning your lift truck. The operator's manual and the load chart should be kept in the places provided in the lift truck. For standard attachments, their use is governed by the instructions contained on this notice.

⚠ IMPORTANT ⚠

*Maximum loads are defined by the capacity of a lift truck taking account of the attachment's weight and center of gravity.
Should the attachment have a lower capacity than the lift truck, never exceed this limit.*

- Some particular uses require the adaptation of the attachment which is not provided in the price-listed options. Solutions exist, consult your dealer.

⚠ IMPORTANT ⚠

Depending on their size, certain attachments may, when the boom is lowered and retracted, come into contact with the front tires and cause damage to them if excavation is activated in the direction of the discharge.

TO PREVENT THIS RISK, EXTEND THE TELESCOPE TO A SUFFICIENT EXTENT FOR THE PARTICULAR LIFT TRUCK AND ATTACHMENT SO THAT THIS CONTACT IS NOT POSSIBLE.

SUSPENDED LOAD

⚠ IMPORTANT ⚠

Suspended loads MUST be handled with a lift truck designed for that purpose (← 1 - OPERATING AND SAFETY INSTRUCTIONS: INSTRUCTIONS FOR HANDLING LOADS: H PICKING UP AND PUTTING DOWN A SUSPENDED LOAD).

USE OF BUCKETS

⚠ IMPORTANT ⚠

MT 1440/1840... lift trucks are essentially intended for handling, for which occasional use with the buckets CBC/CBR/CB4x1 is authorised (only with the boom fully retracted, in order to reduce stresses on the boom head), but under no circumstances for difficult applications (quarry, waste, cereals, agriculture, etc.). Back-scraping is also prohibited with the MT 1840... lift trucks to avoid additional stresses on the inner boom chains.

PICKING UP THE ATTACHMENTS

1 - ATTACHMENT WITHOUT HYDRAULICS AND HAND LOCKING DEVICE

FITTING AN ATTACHMENT

- Ensure that the attachment is in a position facilitating the locking to the carriage. If it is not correctly oriented, take the necessary precautions in order to move it safely.
- Check that the locking pin is in position in the bracket (Fig. A).
- Place the lift truck with the boom lowered in front of and parallel to the attachment, and tilt the carriage forwards (Fig. B).
- Bring the carriage under the locking tube of the attachment, slightly raise the boom, tilt the carriage backwards in order to position the attachment (Fig. C).
- Lift the attachment off the ground to facilitate locking.

MANUAL LOCKING

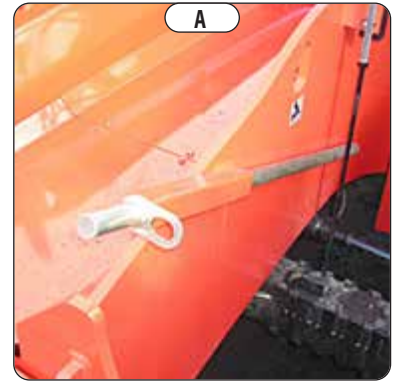
- Take the locking pin on the bracket (Fig. A) and lock the attachment (Fig. D). Do not forget to fit the pin.

MANUAL UNLOCKING

- Proceed in the reverse order to MANUAL LOCKING, taking care to refit the locking pin in the bracket (Fig. A).

REMOVING THE ATTACHMENT

- Proceed in the reverse order to FITTING AN ATTACHMENT, taking care to store the attachment flat on the ground and in the closed position.



2 - HYDRAULIC ATTACHMENT AND MANUAL LOCKING DEVICE

FITTING AN ATTACHMENT

- Ensure that the attachment is in a position facilitating the locking to the carriage. If it is not correctly oriented, take the necessary precautions in order to move it safely.
- Check that the locking pin is in position in the bracket (Fig. A).
- Place the lift truck with the boom lowered in front of and parallel to the attachment, and tilt the carriage forwards (Fig. B).
- Bring the carriage under the locking tube of the attachment, slightly raise the boom, tilt the carriage backwards in order to position the attachment (Fig. C).
- Lift the attachment off the ground to facilitate locking.

MANUAL LOCKING AND CONNECTION OF THE ATTACHMENT

⚠ IMPORTANT ⚠

Make sure that the rapid connectors are clean and protect the holes which are not used, with the caps provided.

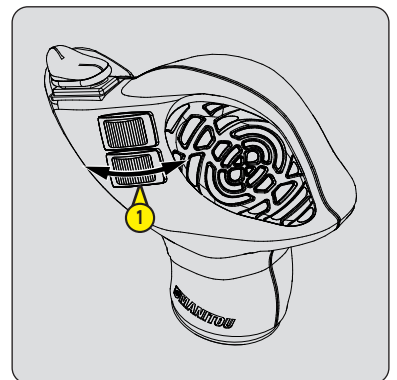
- Take the locking pin on the bracket and lock the attachment (fig. D). Do not forget to fit the pin.
- Stop the engine and keep the ignition on the lift truck.
- Release the pressure in the attachment hydraulic circuit by operating switch 1 on the distributor lever backwards and forwards 4 or 5 times.
- Connect the quick-release couplers according to the logic of the attachment's hydraulic movements.

MANUAL RELEASE AND DISCONNECTION OF THE ATTACHMENT

- Proceed in the reverse order of paragraph MANUAL LOCKING AND CONNECTION OF THE ATTACHMENT, taking care to refit the locking pin in the bracket.

REMOVING THE ATTACHMENT

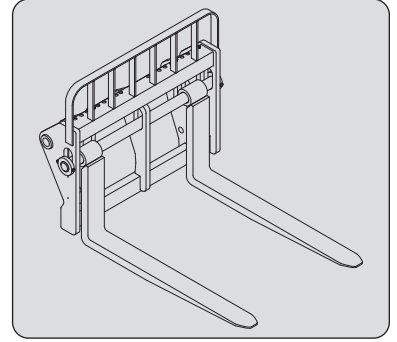
- Proceed in the reverse order to FITTING AN ATTACHMENT, taking care to store the attachment flat on the ground and in the closed position.



TECHNICAL SPECIFICATIONS OF ATTACHMENTS

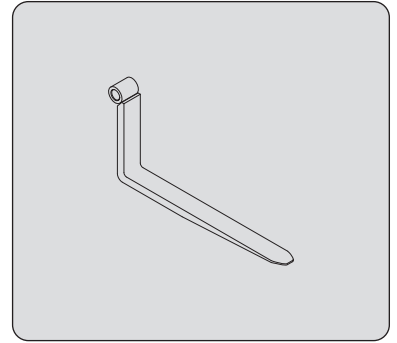
FLOATING FORK CARRIAGE

	TFF 45 MT-1040	TFF 45 MT-1300
PART NO.	653344	653345
Rated capacity	4500 kg	4500 kg
Width	1040 mm	1300 mm
Weight	370 kg	400 kg



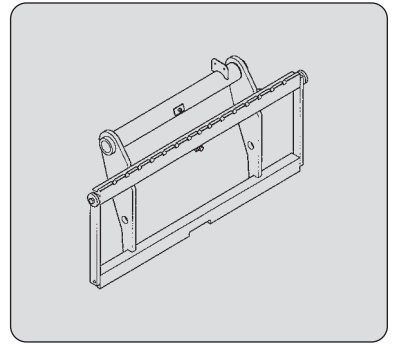
FLOATING FORK

	PART NO.	211922
Section		125x50x1200 mm
Weight		71 kg



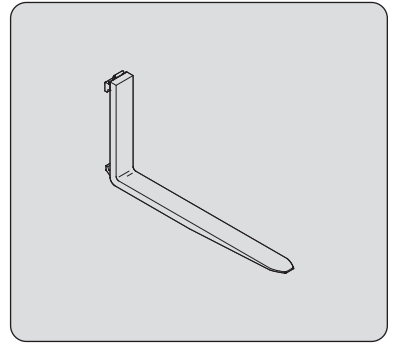
STANDARDISED TILTING FORK CARRIAGE

	PFB 45 N MT-1260 S2	PFB 45 N MT-1670 S2	PFB 45 N MT-2000 S2
PART NO.	654407	653747	653748
Rated capacity	4500 kg	4500 kg	4500 kg
Width	1260 mm	1670 mm	2000 mm
Weight	200 kg	255 kg	300 kg



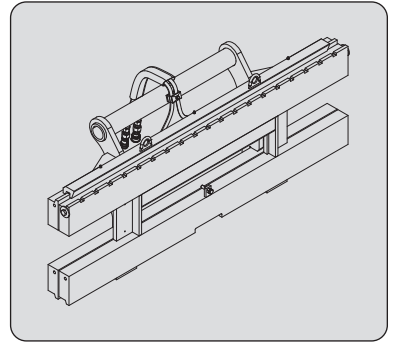
STANDARDISED FORK

	PART NO.	415652
Section		125x50x1200 mm
Weight		78 kg



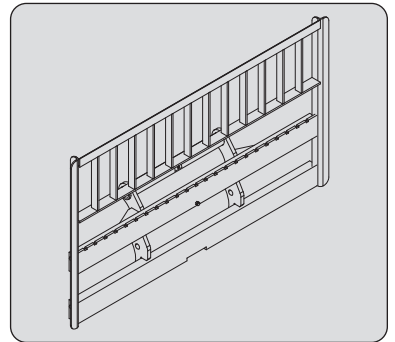
STANDARDISED TILTING FORK CARRIAGE + STANDARDISED SIDE-SHIFT CARRIAGE

	PFB 45 N 1670 DL
PART NO.	52000103
Rated capacity	4300 kg
Side-shift	2x100 mm
Width	1670 mm
Weight	530 kg



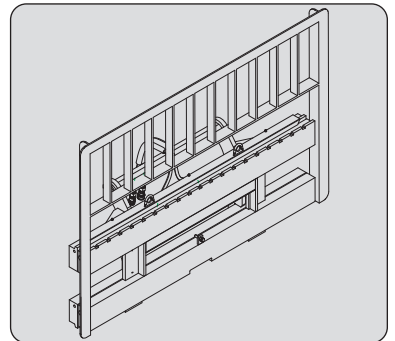
STANDARDISED TILTING FORK CARRIAGE + LOAD BACK REST

	PFB 45 N 1670 LB	PFB 45 N 2000 LB
PART NO.	52000202	52000203
Rated capacity	4500 kg	4500 kg
Width	1670 mm	2000 mm
Weight	310 kg	360 kg



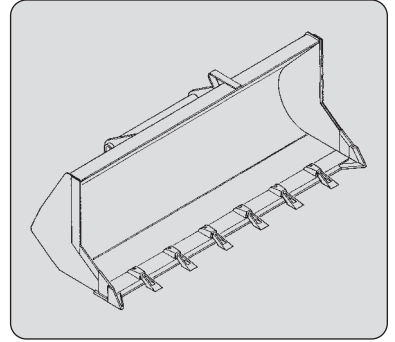
STANDARDISED TILTING FORK CARRIAGE + STANDARDISED SIDE-SHIFT CARRIAGE + LOAD BACK REST

	PFB 45 N 1670 DL/LB
PART NO.	52000206
Rated capacity	4300 kg
Side-shift	2x100 mm
Width	1670 mm
Weight	585 kg



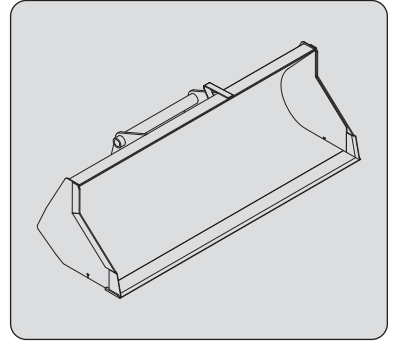
BUILDING BUCKET

	CBC 800 L2250 S3	CBC 900 L2450 S3
PART NO.	654471	654470
Rated capacity	814 ℓ	893 ℓ
Width	2250 mm	2450 mm
Weight	385 kg	410 kg



LOADING BUCKET

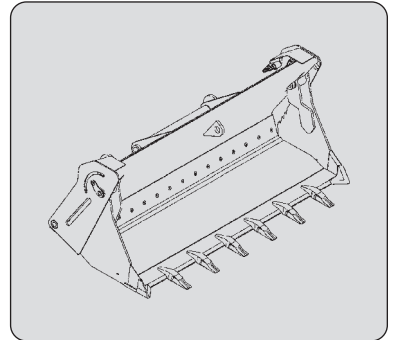
	CBR 900 L2250 S2	CBR 1000 L2450 S2
PART NO.	653749	654716
Rated capacity	904 ℓ	990 ℓ
Width	2250 mm	2450 mm
Weight	390 kg	410 kg



BUCKET 4X1

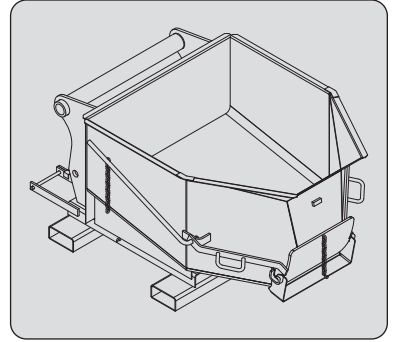
MT 1440 ...

	CB4X1-700 L1950	CB4X1-850 L2300	CB4X1-900 L2450
PART NO.	751402	751401	751465
Rated capacity	700 ℓ	850 ℓ	900 ℓ
Width	1950 mm	2300 mm	2450 mm
Weight	640 kg	735 kg	765 kg



CONCRETE BUCKET (ADAPTABLE ON FORKS)

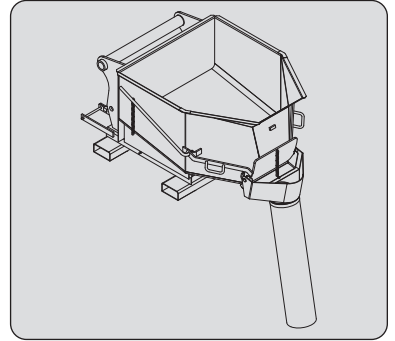
	BB 500 S4 654409	BBH 500 S4 751462
Rated capacity	500 l/1300 kg	500 l/1300 kg
Width	1100 mm	1100 mm
Weight	205 kg	220 kg



CONCRETE BUCKET WITH SPOUT (ADAPTABLE ON FORKS)

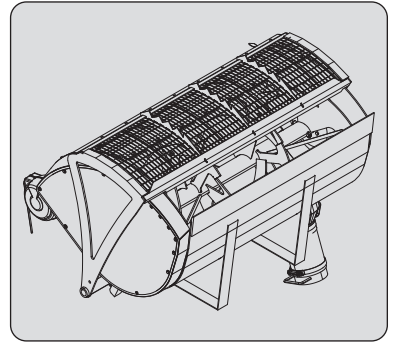
MT 1440 ...

	BBG 500 S4 654411	BBHG 500 S4 751464
Rated capacity	500 l/1300 kg	500 l/1300 kg
Width	1100 mm	1100 mm
Weight	220 kg	235 kg



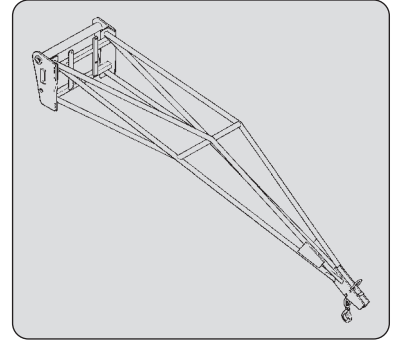
MIXER BUCKET

	MBM 500 757637
Rated capacity	300 l
Weight	753 kg



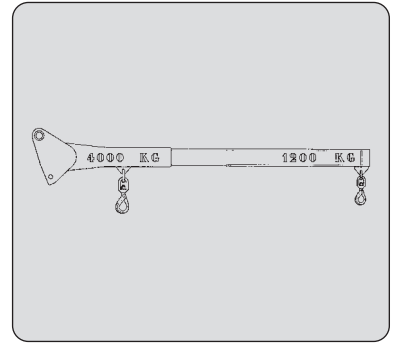
CRANE

PART NO.	P 600 MT S3 653228
Rated capacity	600 kg
Weight	170 kg



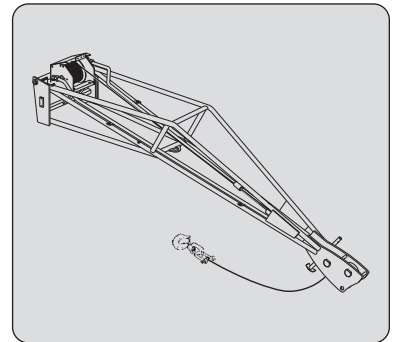
CRANE

PART NO.	P 4000 MT S2 653226
Rated capacity	4000 kg/1200 kg
Weight	210 kg



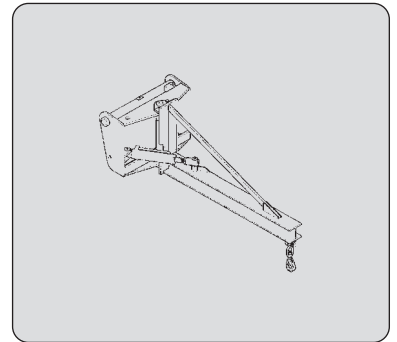
CRANE JIB WITH WINCH

PART NO.	PT 600 MT S6 708538
Rated capacity	600 kg
Weight	288 kg



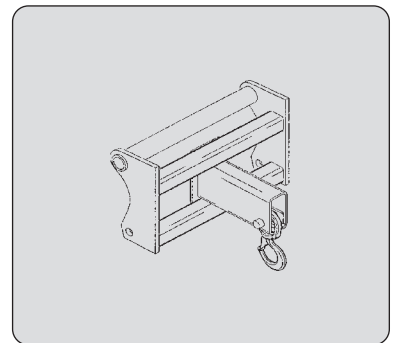
15°/15° MULTI-DIRECTIONAL CRANE JIB

PART NO.	PO 600 L2500 784641	PO 1000 L1500 784642	PO 2000 L1000 784643
Rated capacity	600 kg	1000 kg	2000 kg
Weight	320 kg	275 kg	255 kg



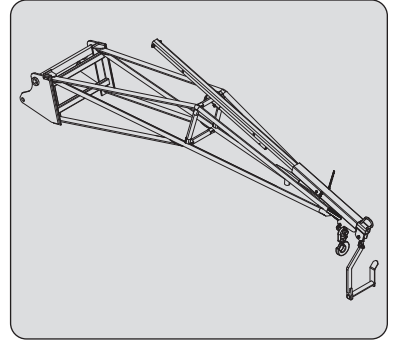
CRANE

PART NO.	PC 50 708544
Rated capacity	5000 kg
Weight	120 kg



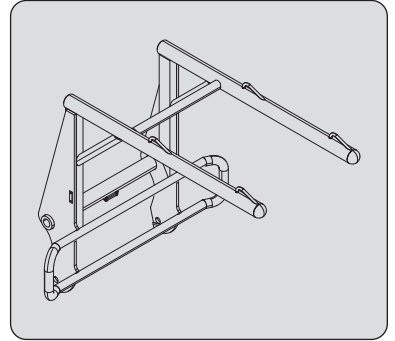
CRANE

PART NO.	JE 6000/600 939995
Rated capacity	600 kg
Weight	182 kg



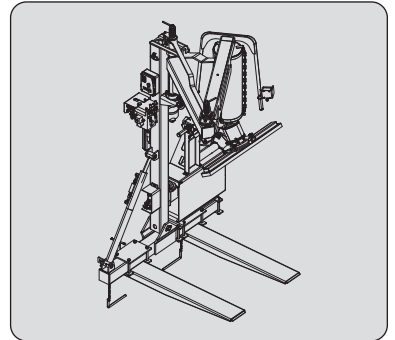
BOOM CRANE WITH BIG BAG

PART NO.	HBB 1500/2400 931627
Rated capacity	2400 kg
Weight	186 kg



POSITIONING THE EDGE

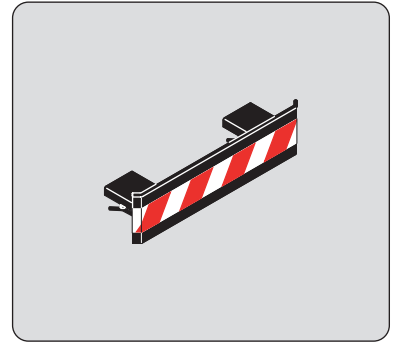
PART NO.	PBA 790523
Rated capacity	1500 kg
Weight	450 kg



ATTACHMENT GUARDS

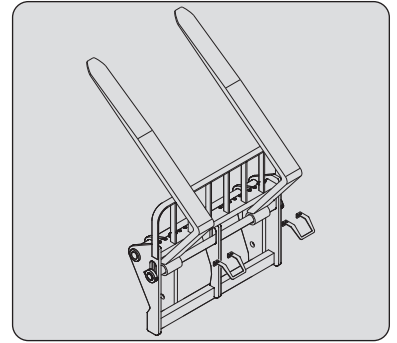
FORK GUARD

PART NO. 227801



FORK BLOCK FOR FLOATING FORK CARRIAGE

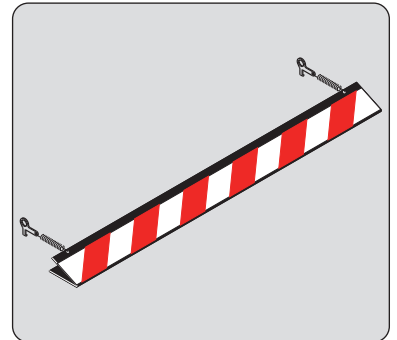
PART NO. 261210



BUCKET PROTECTOR

Always ensure that the width of the protector you choose is less than or equal to the width of the bucket.

Width	PART NO. 206734	206732	206730
	1375 mm	1500 mm	1650 mm
Width	PART NO. 235854	206728	206726
	1850 mm	1950 mm	2000 mm
Width	PART NO. 223771	223773	206724
	2050 mm	2100 mm	2150 mm
Width	PART NO. 206099	206722	223775
	2250 mm	2450 mm	2500 mm



5 - OPTIONAL ADAPTABLE PLATFORMS FOR THE RANGE

5 - OPTIONAL ADAPTABLE PLATFORMS FOR THE RANGE

<u>INTRODUCTION</u>	<u>5-3</u>
<u>TECHNICAL CHARACTERISTICS OF FIXED PLATFORMS</u>	<u>5-4</u>
<u>TECHNICAL CHARACTERISTICS OF SWIVEL PLATFORMS</u>	<u>5-6</u>
<u>TECHNICAL CHARACTERISTICS OF ROOFER'S PLATFORMS</u>	<u>5-10</u>
<u>TECHNICAL SPECIFICATIONS OF PLATFORMS "PSE"</u>	<u>5-12</u>

INTRODUCTION

⚠ IMPORTANT ⚠

Only platforms approved by MANITOU can be used on its lift trucks (⚠ TECHNICAL CHARACTERISTICS OF PLATFORMS).

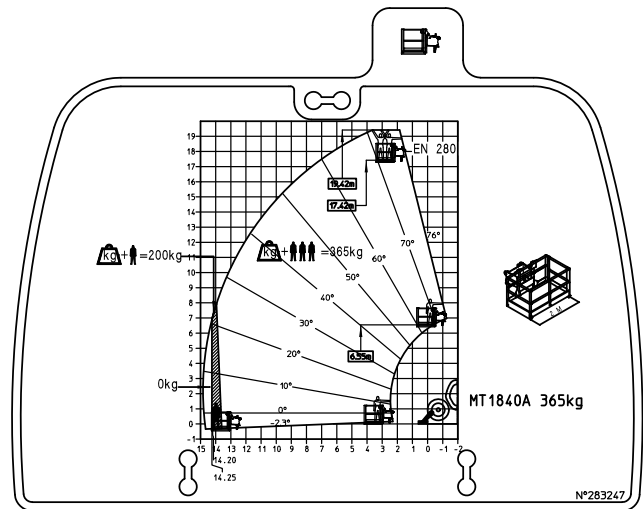
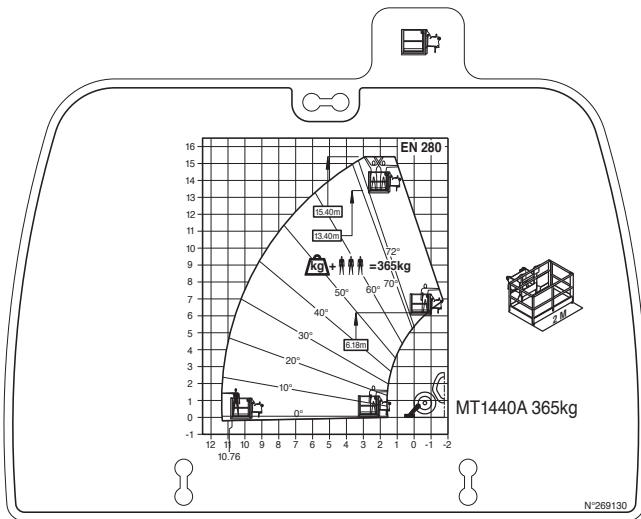
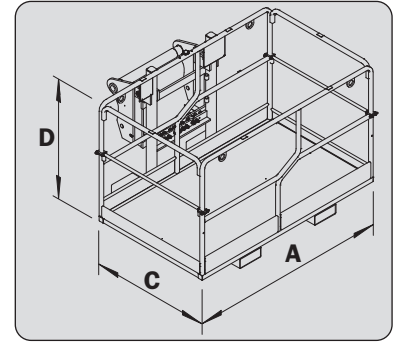
The manufacturer cannot be held responsible for any modifications or adaptations made to platforms without its knowledge.

- A wide range of platforms are available, guaranteed by MANITOU and designed to fit your lift truck perfectly.
- The platforms are delivered with a load chart concerning your lift truck. The operator's manual and the load chart should be kept in the places provided in the lift truck. Their use is governed by the instructions contained on this notice.
- Some particular uses require the adaptation of the attachment which is not provided in the priced options. Solutions exist, consult your dealer.

TECHNICAL CHARACTERISTICS OF FIXED PLATFORMS

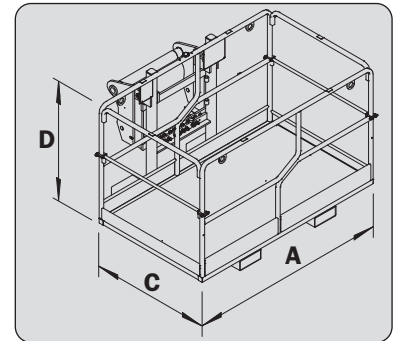
FIXED PLATFORM 2M

PART NO.	788782
Rated capacity	365 kg including 3 persons
A	2000 mm
C	1210 mm
D	1292 mm
Weight	410 kg



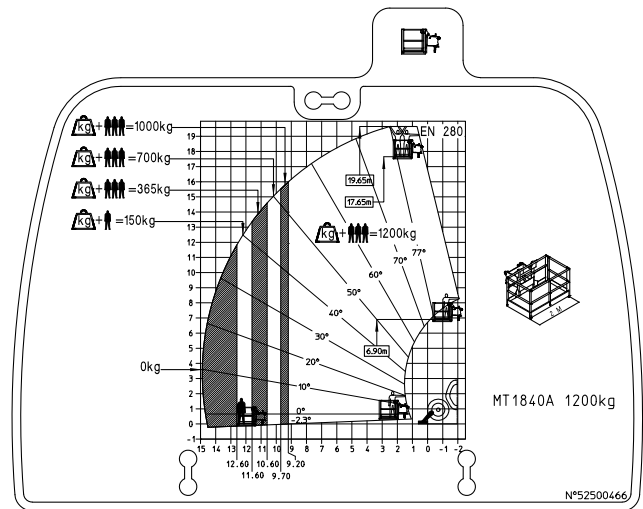
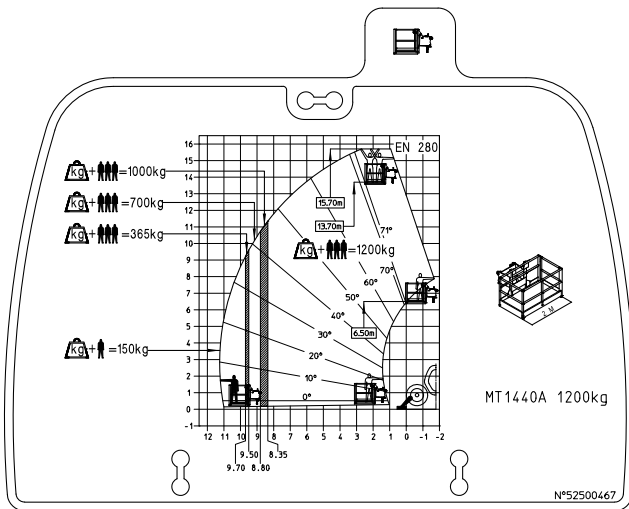
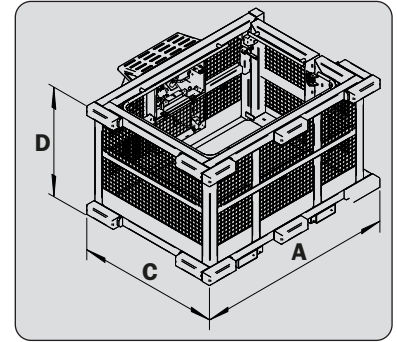
FIXED PLATFORM 1,2x0,8 200KG

PART NO.	939382
Rated capacity	200 kg including 2 persons
A	1200 mm
C	800 mm
D	1105 mm
Weight	165 kg



MINE PLATFORM 1200KG

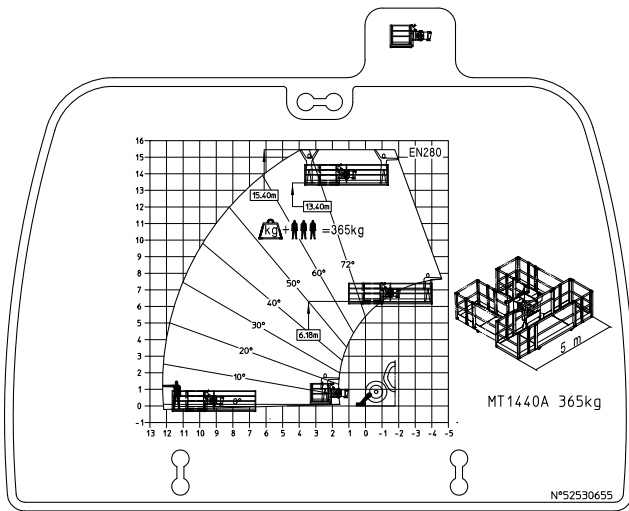
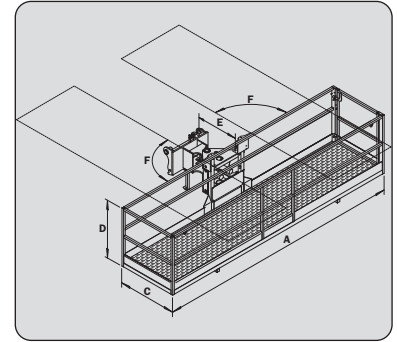
PART NO.	914730	939701
Rated capacity	1,200 kg including 3 people	1,200 kg including 3 people
A	2216 mm	2216 mm
C	1608 mm	1608 mm
D	1215 mm	1215 mm
Weight	1010 kg	1096 kg



TECHNICAL CHARACTERISTICS OF SWIVEL PLATFORMS

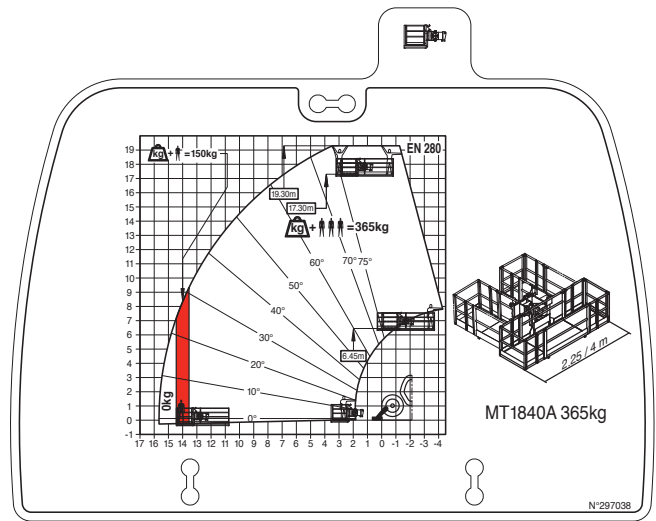
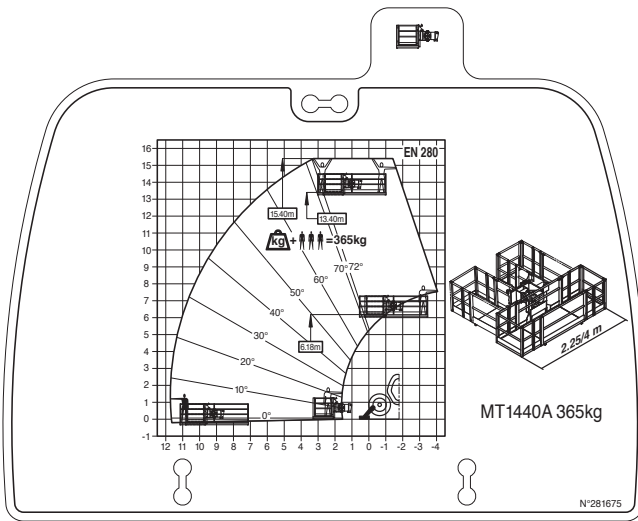
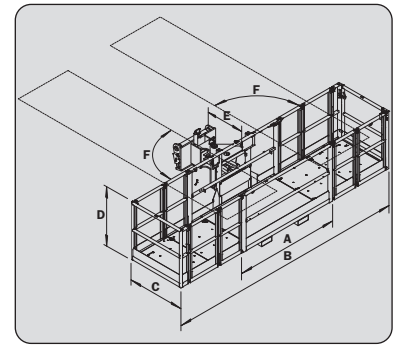
SWIVELLING PLATFORM 5M00

PART NO.	52526534
Rated capacity	365 kg including 3 persons
A	5000 mm
C	1200 mm
D	1250 mm
E	887 mm
F	90°
Weight	770 kg



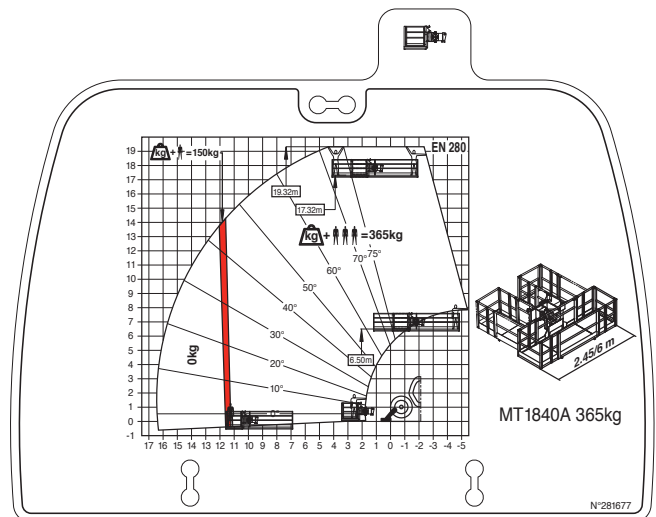
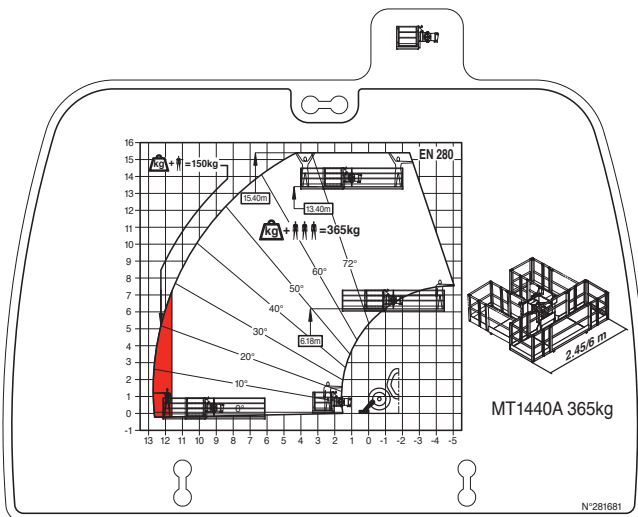
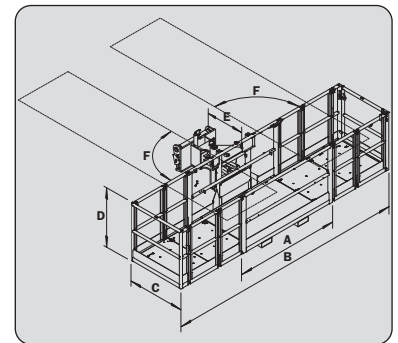
EXTENDIBLE AND SWIVELLING PLATFORM 2M25/4M00

PART NO.	788783
Rated capacity	365 kg including 3 persons
A	2250 mm
B	4000 mm
C	1210 mm
D	1320 mm
E	980 mm
F	90°
Weight	700 kg



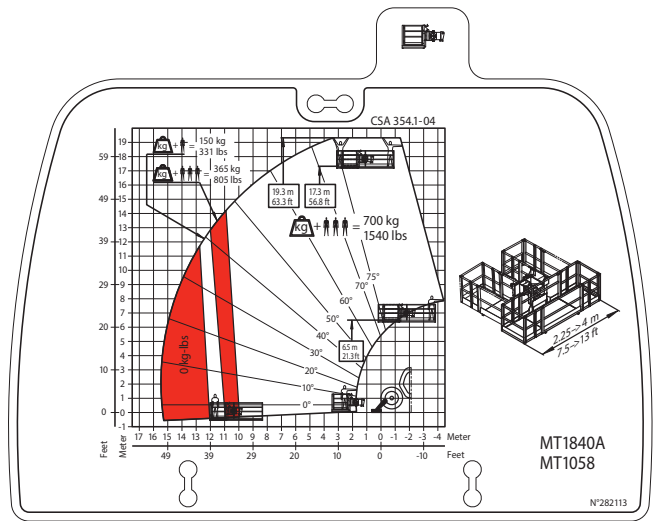
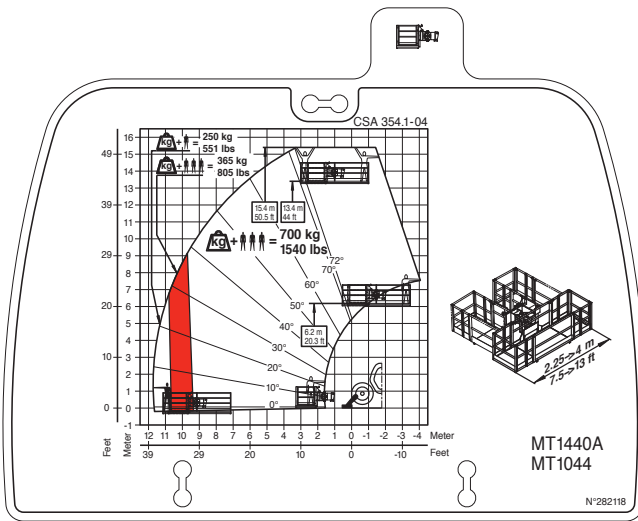
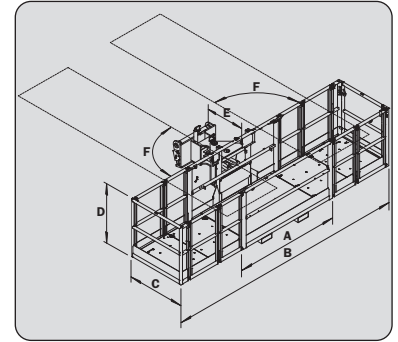
EXTENDIBLE AND SWIVELLING PLATFORM 2M45/6M00

PART NO.	788784
Rated capacity	365 kg including 3 persons
A	2450 mm
B	6000 mm
C	1200 mm
D	1300 mm
E	887 mm
F	90°
Weight	1210 kg



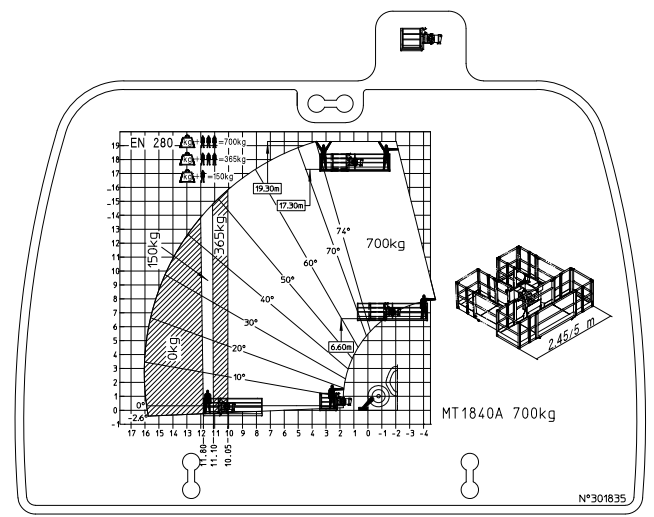
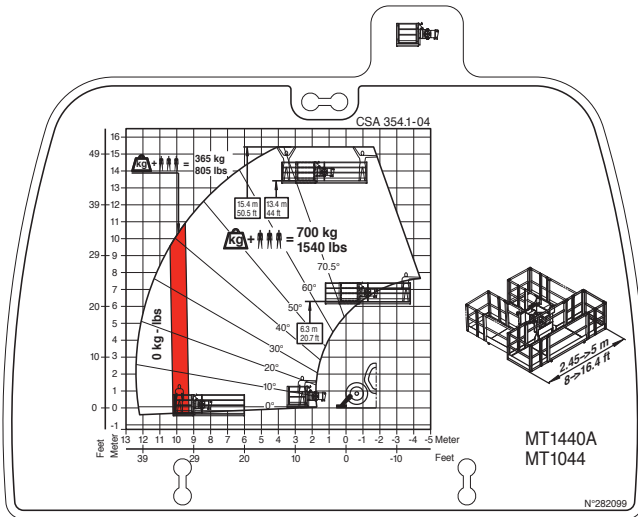
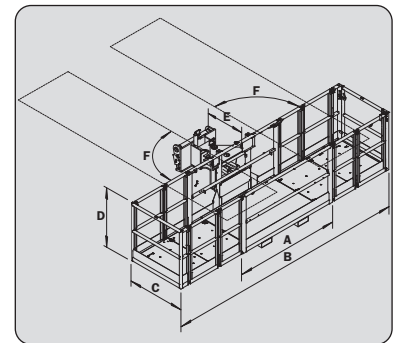
EXTENDIBLE AND SWIVELLING PLATFORM 2M25/4M00 700KG

PART NO.	788787
Rated capacity	700 kg including 3 persons
A	2250 mm
B	4000 mm
C	1200 mm
D	1300 mm
E	887 mm
F	90°
Weight	1030 kg



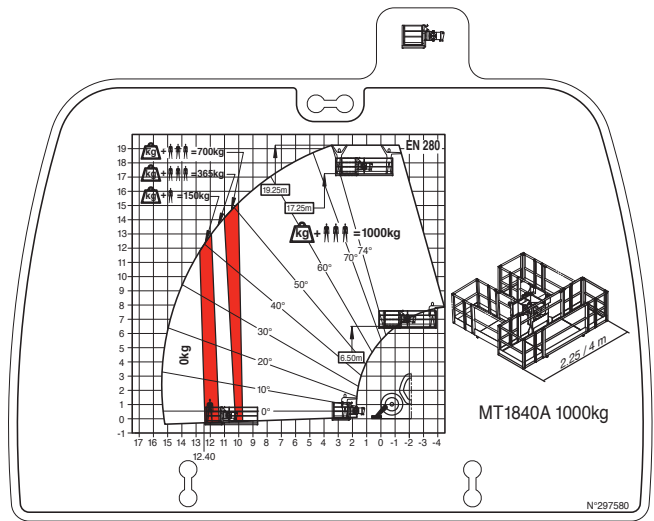
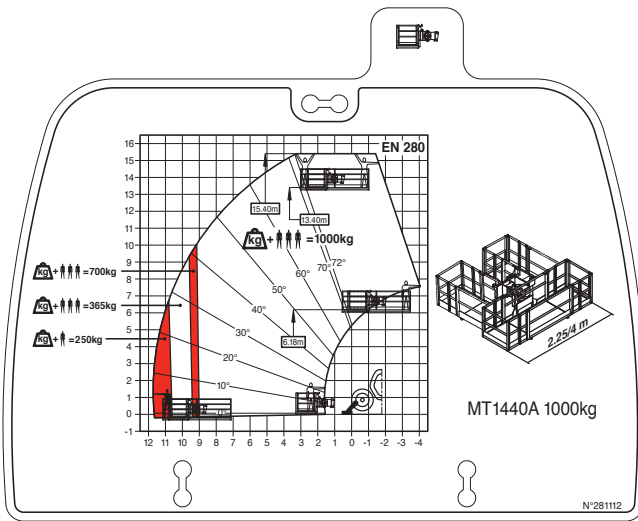
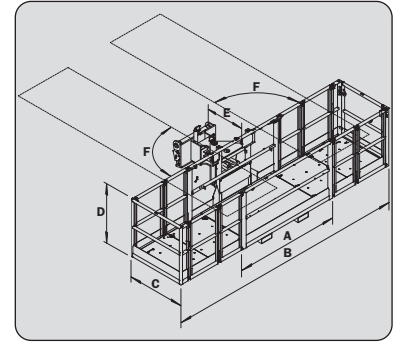
EXTENDIBLE AND SWIVELLING PLATFORM 2M45/5M00 700KG

PART NO.	788788
Rated capacity	700 kg including 3 persons
A	2450 mm
B	5000 mm
C	1200 mm
D	1300 mm
E	887 mm
F	90°
Weight	1150 kg



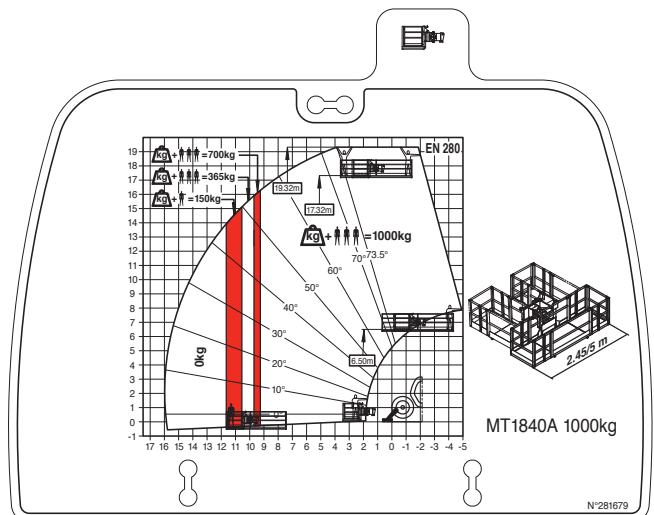
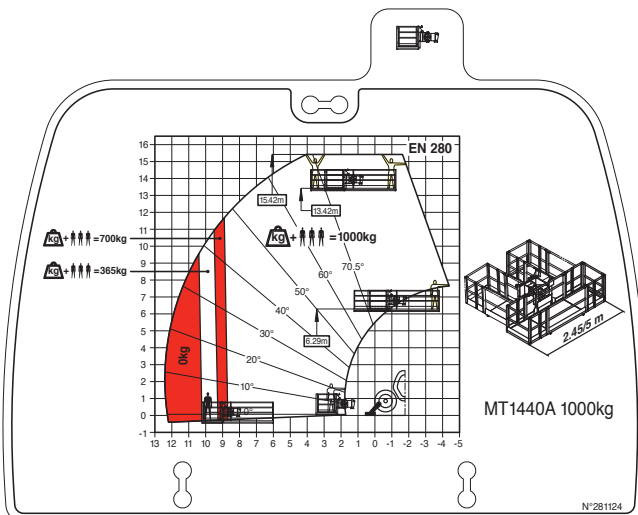
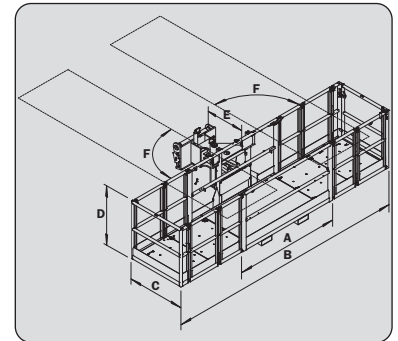
EXTENDIBLE AND SWIVELLING PLATFORM 2M25/4M00 1000KG

PART NO.	788785
Rated capacity	1,000 kg including 3 people
A	2250 mm
B	4000 mm
C	1200 mm
D	1300 mm
E	887 mm
F	90°
Weight	1030 kg



EXTENDIBLE AND SWIVELLING PLATFORM 2M45/5M00 1000KG

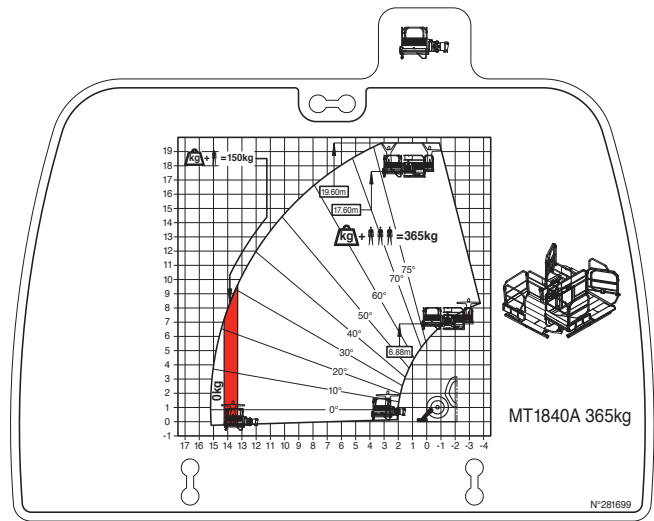
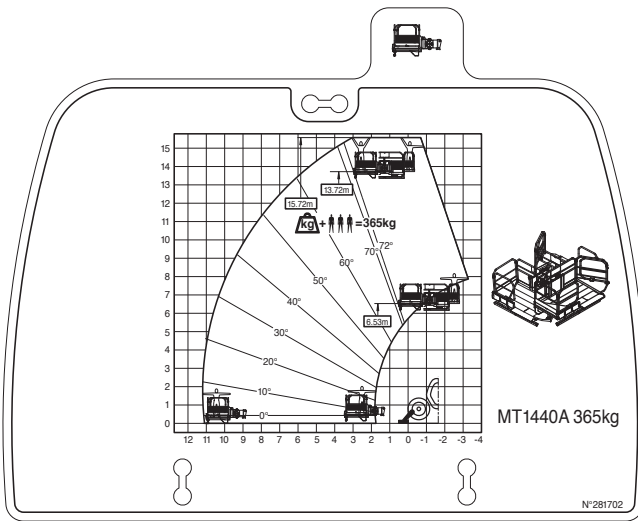
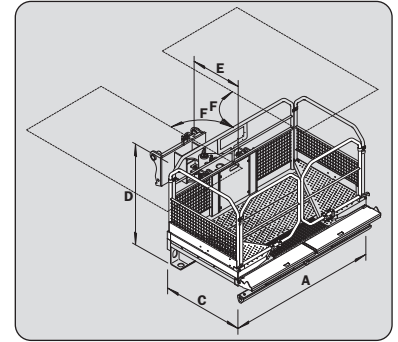
PART NO.	788786
Rated capacity	1,000 kg including 3 people
A	2450 mm
B	5000 mm
C	1200 mm
D	1300 mm
E	887 mm
F	90°
Weight	1150 kg



TECHNICAL CHARACTERISTICS OF ROOFER'S PLATFORMS

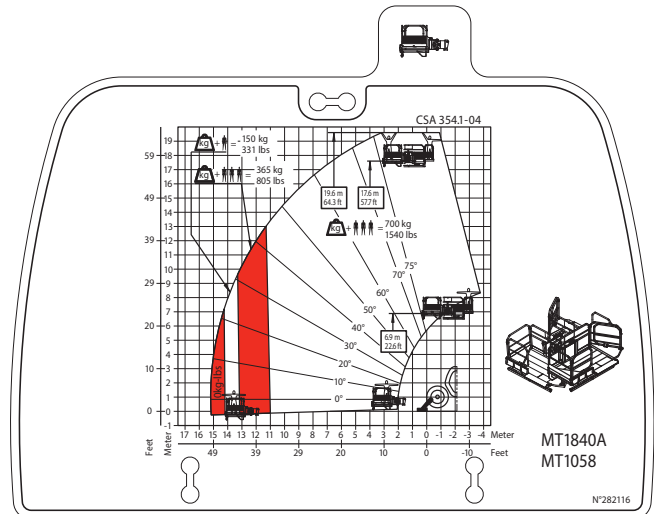
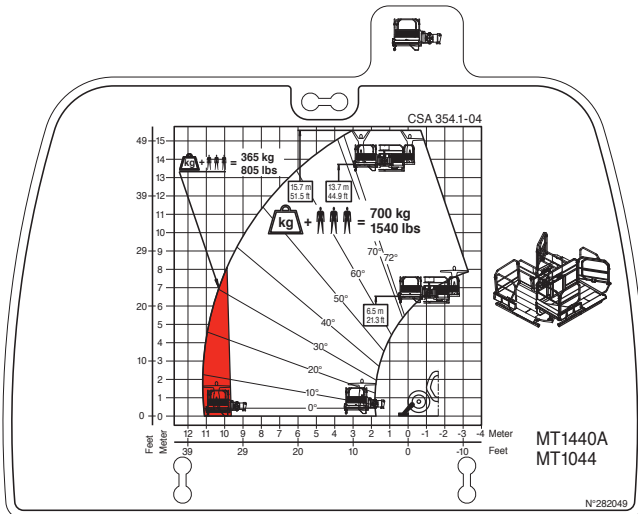
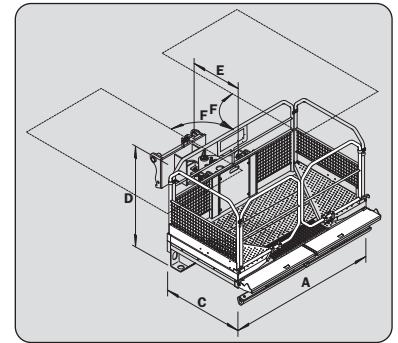
ROOFER PLATFORM NC 365KG

PART NO.	788789
Rated capacity	365 kg including 3 persons
A	2420 mm
C	1305 mm
D	1600 mm
E	1200 mm
F	90°
Weight	1745 kg (1110 + 635 kg)
- Pod only	1110 kg
- Platform orientation	635 kg



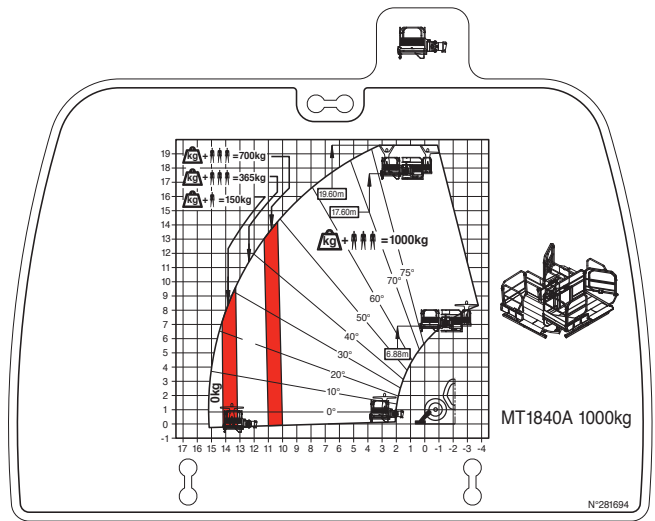
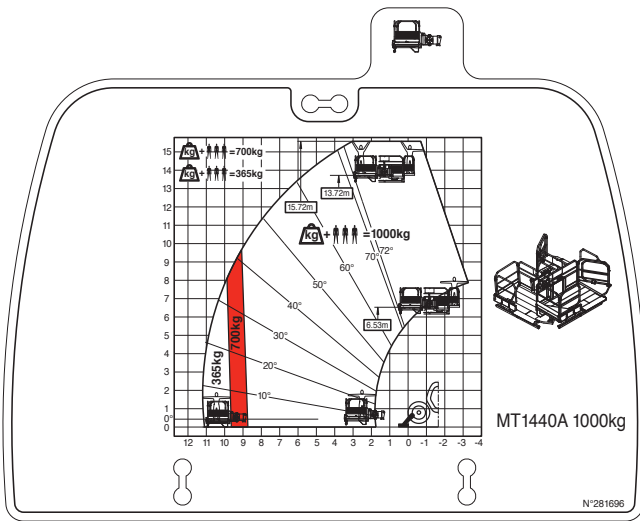
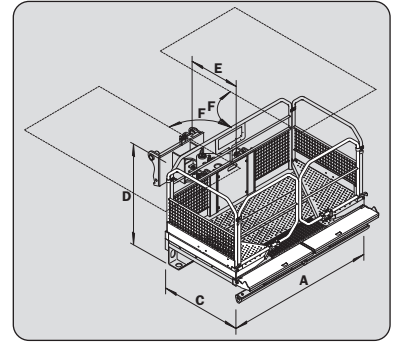
ROOFER PLATFORM NC 700KG

PART NO.	788790
Rated capacity	700 kg including 3 persons
A	2420 mm
C	1305 mm
D	1600 mm
E	887 mm
F	90°
Weight	1655 kg (1020 + 635 kg)
- Pod only	1020 kg
- Platform orientation	635 kg



ROOFER PLATFORM NC 1000KG

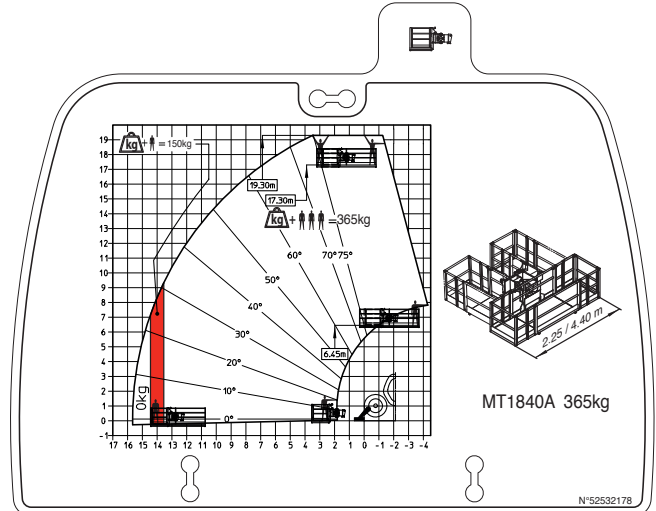
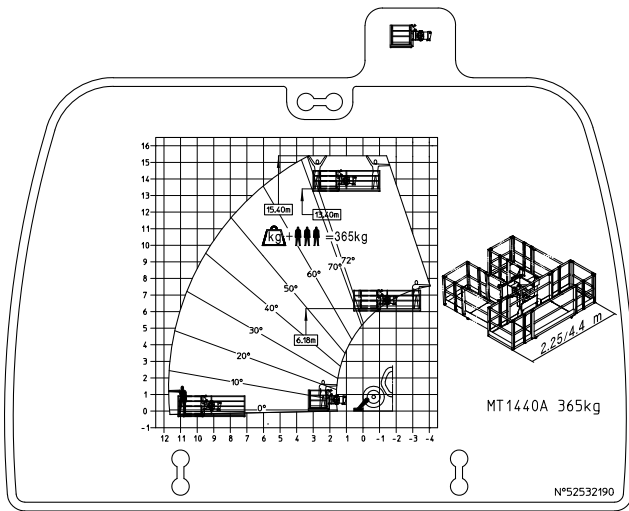
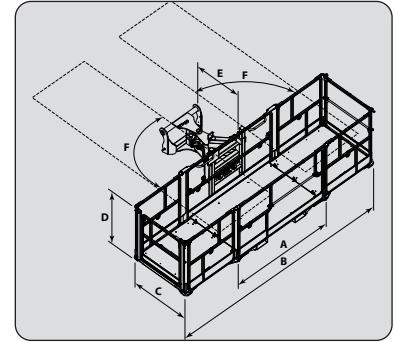
PART NO.	788791
Rated capacity	1,000 kg including 3 people
A	2420 mm
C	1305 mm
D	1600 mm
E	887 mm
F	90°
Weight	1655 kg (1020 + 635 kg)
- Pod only	1020 kg
- Platform orientation	635 kg



TECHNICAL SPECIFICATIONS OF PLATFORMS "PSE"

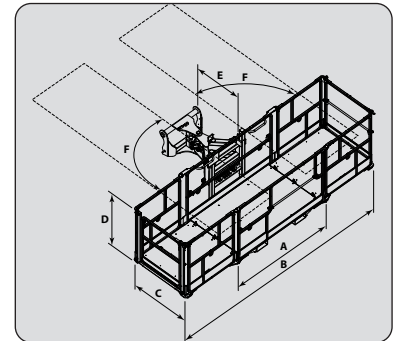
PLATFORM PSE 4400/365 D

PART NO.	939021
Rated capacity	365 kg including 3 persons
A	2212 mm
B	4328 mm
C	1280 mm
D	1300 mm
E	887 mm
F	90°
Weight	670 kg



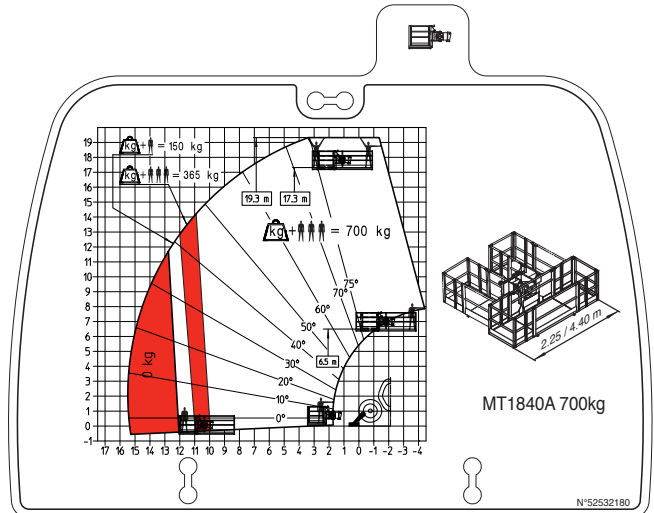
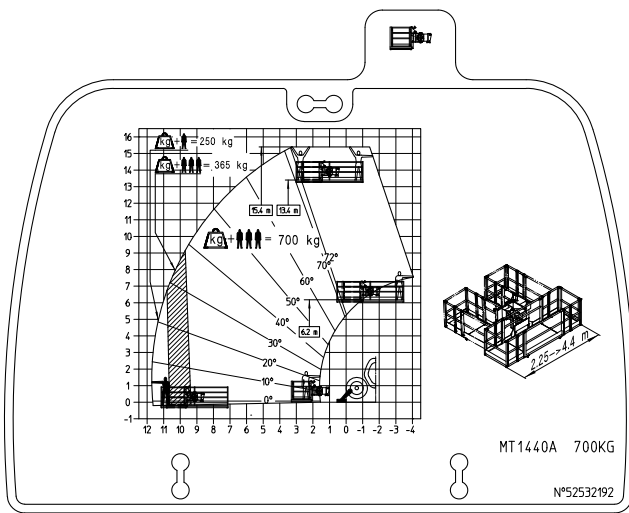
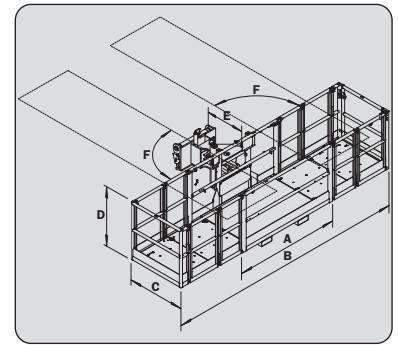
PLATFORM PSE 4400/365 DD

PART NO.	53012073
Rated capacity	365 kg including 3 persons
A	2212 mm
B	4328 mm
C	1280 mm
D	1300 mm
E	887 mm
F	90°
Weight	690 kg



PLATFORM PSE 4400/700 D

PART NO.	939023
Rated capacity	700 kg including 3 persons
A	2212 mm
B	4348 mm
C	1300 mm
D	1312 mm
E	887 mm
F	90°
Weight	1030 kg



PLATFORM PSE 4400/1000 D

PART NO.	939022
Rated capacity	1,000 kg including 3 people
A	2212 mm
B	4348 mm
C	1300 mm
D	1312 mm
E	887 mm
F	90°
Weight	1030 kg

