

647835 EN-USM3 (D-03/2023)

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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:

▲ IMPORTANT **▲**

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.

CALIFORNIA PROPOSITION 65 WARNINGS

WARNING

This product can expose you to lead which is known to the State of California to cause cancer and birth defects or other reproductive harm.

For more information go to www.P65Warnings.ca.gov

WARNING

Breathing diesel engine exhaust exposes you to chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

- Always start and operate the engine in a well-ventilated area.
- If in an enclosed area, vent the exhaust to the outside.
- Do not modify or tamper with the exhaust system.
- Do not idle the engine except as necessary.

For more information go to www.P65Warnings.ca.gov/diesel

SILICA DUST HAZARD

Exposure to crystalline silica (found in sand, soil and rocks) has been associated with silicosis, a debilitating and often fatal lung disease. Comply with all applicable rules and regulations for the workplace. Wear approved respiratory protection or use water spray or other means if there is no other way to control the dust.

A Silica rule "29 CFR 1929.1153" by the U.S. Occupational Safety and Health (OSHA) indicates a signicant risk of chronic silicosis for workers exposed to inhaled crystalline silica over a working lifetime. Refer to the rule for more information regarding exposure limits and hazard prevention.



UPDATE B-02/2022	1 st EDITION		A-02/2021
	UPDATE	C-08/2022	2-1 - 2-52 3-43 - 3-44 1-1 - 1-20 2-4 - 2-10; 2-14 - 2-29; 2-34; 2-36 - 2-62

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MANITOU BF S.A. Public limited company with a board of directors.

Head office: 430 rue de l'Aubinière - 44150 Ancenis - France

Share capital: €39,548,949

Entered in the Nantes Trade and Companies Register under number 857 802 508.

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3 - MAINTENANCE

4 - ATTACHMENTS



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1 - OPERATING AND SAFETY INSTRUCTIONS

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INSTRUCTIONS TO THE COMPANY MANAGER

THE SITE

- Proper management of the machine's area of travel will reduce the risk of accidents:
 - · Ground not unnecessarily uneven or obstructed,
 - No excessive slopes,
 - Pedestrian traffic controlled, etc.

THE OPERATOR

- Only qualified, authorized personnel can use the machine. This authorization is given in writing by the appropriate person in the establishment where the machine is to be used and must be carried permanently by the operator.

A IMPORTANT A

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

- The foreseeable abnormal behavior resulting from ordinary negligence, but not from any intentional misuse of the equipment.
 - The reflex reactions of a person in the event of a malfunction, incident, fault, etc. during operation of the machine.
 - Behavior resulting from application of the "principle of least effort" when performing a task.
- For certain machines, the foreseeable behavior of such persons as: apprentices, teenagers, handicapped persons, trainees tempted to drive a machine, operators tempted to operate a machine to win a bet, in competition or for their own personal experience.

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

THE MACHINE

A - SUITABILITY OF THE MACHINE FOR THE TASK

- This machine is a lift truck designed for handling (moving, storing or transporting) a load.
- MANITOU has ensured that this machine is suitable for use under the standard operating conditions defined in this operator's manual, with a **STATIC TEST COEFFICIENT OF 1.33** and a **DYNAMIC TEST COEFFICIENT OF 1**, as specified in harmonized standard **ISO 3691-1** for masted forklift trucks.
- Before commissioning, the company manager must make sure that the machine is appropriate for the work to be done, and perform certain tests (in accordance with current legislation).

B-ADAPTING THE MACHINE TO USUAL ENVIRONMENTAL CONDITIONS

- In addition to the standard equipment mounted on your machine, many options are available, such as: road lighting, stop lights, revolving light, reverse lights, reverse buzzer alarm, front light, rear light, etc.
- The operator must take into account the operating conditions to specify the machine's signaling and lighting equipment. Consult your dealer.
- Take into account the climatic and atmospheric conditions of the site of utilization.
 - Protection against frost (< 3 MAINTENANCE).
 - Adaptation of lubricants (ask your dealer for information).
 - Engine filtration (< 3 MAINTENANCE).

▲ IMPORTANT ▲

For operation under average climatic conditions, i.e. between -15 °C and +35 °C, correct levels of lubricants in all the circuits are checked in production. -15 °C to +35 °C.

For operation under more severe climatic conditions, before starting up, drain all circuits, then fill using lubricants suitable for the ambient temperatures.

The same applies to the coolant.

- Preventing fire risks associated with use in dusty and flammable conditions (e.g. straw, flour, sawdust, organic waste, etc.).
- A machine operating in an area without fire extinguishing equipment must be equipped with an individual extinguisher. Solutions exist, consult your dealer.

▲ IMPORTANT **▲**

Your machine is designed for outdoor use under normal atmospheric conditions and indoor use in suitably aerated and ventilated premises.

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

Special equipment is available for use in such areas (ask your dealer for information).

- Our machines comply with Directive 2004/108/EC concerning electromagnetic compatibility (EMC) (UK: Electromagnetic Compatibility Regulations 2016), and with the corresponding harmonized standard EN 12895. Their correct operation is no longer guaranteed if they are used within areas in which the electromagnetic fields exceed the limit specified by this standard (10 V/m).

▲ IMPORTANT **▲**

After commissioning, any machine equipped with devices that are likely to emit non-ionizing radiation (e.g. radio transmitter, radiofrequency ID reader, data collection system, etc.) can cause injury, especially to people with active or inactive medical devices or implants.

- Directive 2002/44/EC requires company managers to not expose their employees to excessive vibration doses. There is no recognized code of measurement for comparing the machines of different manufacturers. The actual doses received cannot therefore be measured under actual operating conditions at the user's premises.
- The following are some tips for minimising these vibration doses:
 - Select the most suitable machine and attachment for the intended use.
 - Adapt the seat adjustment to the operator's weight (depending on machine model) and maintain it in good condition, as well as the cab suspensions. Inflate the tires in accordance with recommendations.
 - 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-MODIFYING THE MACHINE

- For your own safety and that of others, you must not change the structure and settings of the various components of your machine by yourself (hydraulic pressure, limiter calibration, engine speed, addition of extra equipment, addition of counterweights, unapproved attachments, alarm systems, etc.). In this case, the manufacturer cannot be held responsible.

D-FRENCH ROAD TRAFFIC RULES

- Only one certificate of conformity is issued. It must be kept in a safe place.
- The driving of non-approved machines on the public highway is subject to the provisions of the highway code relating to special machines, defined in Article R311-1 of the French Highway Code (*Code de la route*), in category B of the Equipment Order of 20 November 1969 that determines the procedures applicable to special machines. The machine must be fitted with an operating license plate.

INSTRUCTIONS

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

MAINTENANCE

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



Your machine must be periodically inspected to ensure its continued compliance.

The frequency of this inspection is defined by the legislation in force in the country in which the machine is used.

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

INSTRUCTIONS TO THE OPERATOR

FOREWORD

A IMPORTANT A

The risk of accident while using, servicing or repairing your machine can be reduced if you follow the safety instructions and preventive measures detailed in this manual.

Failure to respect the safety and operating instructions, or the instructions for repairing or servicing your machine, may lead to serious, even fatal accidents.

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

- Only the operations and manoeuvres described in this 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 machine itself are not exhaustive.
- As the operator, you must anticipate at all times the potential risks for yourself, for others and for the machine.

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 machine.
- You must report any plates and stickers which are no longer legible or which are damaged.

B-AUTHORIZATION FOR USE IN FRANCE

(or see current legislation in other countries)

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

C-MAINTENANCE

- If the operator observes that his machine is not in good working order or does not comply with the safety instructions must inform his manager of this immediately.
- The operator is prohibited from carrying out any repairs or adjustments himself, unless he has been trained for this purpose. He must keep his machine perfectly clean if he is responsible for this task.
- The operator must carry out daily and weekly maintenance (< € 3 MAINTENANCE).
- For the safety of the operator, maintenance must be carried out with the engine off and the ignition key removed.
- The operator must ensure tyres are appropriate for the type of ground (⋖ 2 DESCRIPTION). Optional solutions are available, please consult your dealer.
 - SAND tires.
 - FARM tires.
 - Snow chains.

▲ IMPORTANT **▲**

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

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

- The operator is responsible for 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 machine where these high-risk materials are likely to accumulate.

D-MODIFYING THE MACHINE

- For your own safety and that of others, you must not change the structure and settings of the various components of your machine by yourself (hydraulic pressure, limiter calibration, engine speed, addition of extra equipment, addition of counterweights, unapproved attachments, alarm systems, etc.). In this case, the manufacturer cannot be held responsible.

E - LIFTING PEOPLE

- It is forbidden to lift or carry people.

A - BEFORE STARTING UP THE MACHINE

- 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 objects may hinder operation of the machine.
- Make sure the lights, turn signals and windshield wipers are working properly.
- Make sure the rear-view mirrors are in good condition, clean and properly adjusted.
- Make sure the audible alarm works.

B-DRIVER'S OPERATING INSTRUCTIONS

A IMPORTANT A

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

For cabs with a heating system, check the temperature setting to prevent any risk of burns from the heating vents.

- Whatever his experience, the operator is advised to familiarize himself with the position and operation of all the controls and instruments before operating the machine.
- Wear clothes suitable for driving the machine, avoid loose clothing.
- 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 machine when getting into and out of the driver's cab:
 - Use the handle(s) provided for this purpose.
 - Use the step(s).
 - Do not jump out of the machine.
- Remain alert at all times when using the machine. 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.
- The operator must always be in the normal operator's position. Arms and legs, and generally any part of the body, should be kept inside the driver's cab of the machine.
- The safety belt must be worn and adjusted to the operator's size.
- The control units must never be used for any other than their intended purposes (e.g. Climbing onto or down from the machine, coat hanger, etc.).
- If the control components are fitted with a forced operation (lever lock) device, it is forbidden to leave the cab without first putting these controls in neutral.
- It is prohibited to carry passengers either on the machine or in the cab.

C - ENVIRONMENT

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

• Moving without load: Forks or attachment facing downhill.



Woving Without load. Forks of attachment facing downing

- Moving with load: Forks or attachment facing uphill.
- Take into account the machine's dimensions and its load before trying to negotiate a narrow or low passageway.
- Never move onto a load bridge without having first checked:
 - That it is suitably positioned and made fast.
 - That the unit to which it is connected (wagon, truck, etc.) will not shift.
 - That this bridge is prescribed for the total weight of the machine, laden or unladen.
 - That this bridge is prescribed for the size of the machine.
- Never move onto a foot bridge, floor or freight lift, without being certain that they are suitable for the weight and size of the machine, laden or otherwise, 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 before lifting the load.
- 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.
- The load or the attachment must not be left just above a structure for long periods at a time because of the descending mast. In such a case, a constant watch must be kept and the height of the forks or the attachment readjusted if necessary.
- In the case of work near to overhead lines, ensure that the safety distance is sufficient between the machine's working area and the overhead line.

▲ IMPORTANT **▲**

You must consult your local electrical agency.

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

In the event of high winds, do not carry out handling work that jeopardizes the stability of the machine 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 machine's working area, as well as that of the machine itself and the operator, are dependent on good operator visibility of the machine's immediate surroundings in all situations and at all times.
- This machine has been designed to allow good operator visibility (direct or indirect by means of rear-view mirrors) of the immediate surroundings of the machine while driving with no load and with the mast 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 operation (while standing outside the machine's area of travel), making sure to keep this person clearly in view at all times,
 - At all events, avoid reversing long distances.
- If visibility of your road is inadequate, ask someone to assist by directing the operation (while standing outside the machine'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. windshields, windows, windshield wipers, windshield washers, driving lights and worklights, rear-view mirrors).

E - STARTING THE MACHINE

SAFETY INSTRUCTIONS

▲ IMPORTANT **▲**

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

- Never try to start the machine by pushing or towing 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 being charged.

INSTRUCTIONS

- Check the closing and locking of the hood(s).
- For machines operating on gas carburization, open the gas bottle.
- Ensure that the forward/reverse selector is set to neutral.
- Turn the ignition key to the position I to activate the electrical and preheat system.
- 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 idling speed.
- 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 - OPERATING THE MACHINE

SAFETY INSTRUCTIONS

A IMPORTANT A

We would like to draw the operators' attention to the risks involved in using the machine, in particular:

- Risk of losing control.

- Risk of loss of lateral and frontal stability of the machine.

The operator must remain in control of the machine.

In the event of the machine overturning, do not try to leave the cab during the incident.

YOUR BEST PROTECTION IS TO STAY FASTENED IN THE CAB.

- Observe the company's traffic regulations or, by default, the public highway code.
- Do not carry out operations which exceed the capacities of your machine or attachment.
- Always drive the machine with the forks or attachment in the transport position, i.e. 300 mm from the ground and with the carriage sloping backward.
- Only carry loads which are balanced and properly anchored to avoid any risk of a load falling off.
- Ensure that pallets, cases, etc, are in good order and suitable for the load to be lifted.
- Familiarize yourself with the machine on the terrain where it will be used.
- Ensure that the service brakes are working properly.
- The engine speed during movement of the machine when loaded must not exceed the maximum value indicated in the machine's technical data.
- Drive smoothly at an appropriate speed for the operating conditions (land configuration, load on the machine).
- Reduce the lift truck's moving speed when transporting loads.
- Do not use the hydraulic mast controls when the machine is moving.
- Do not maneuver the machine with the mast in the raised position unless under exceptional circumstances and then with extreme caution, at very low speed and using gentle braking. Ensure that there is sufficient visibility.
- 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 machine'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 running when the lift truck is unattended.
- Do not leave the cab when the machine 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 machines 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 machines not fitted with a punch-operated cut-out.

INSTRUCTIONS

- Always drive the machine with the forks or attachment in the transport position, i.e. 300 mm from the ground and with the carriage sloping backward.
- For machines with gearboxes, use the selected gear (< 2 DESCRIPTION).
- Release the hand brake.
- Shift the forward/reverse selector to the selected direction of travel and accelerate gradually until the machine moves off.

G-STOPPING THE MACHINE

SAFETY INSTRUCTIONS

- Never leave the ignition key in the machine during the operator's absence.
- When the machine 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 machine 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 machine from bad weather, particularly from frost (check the level of antifreeze), and close and lock all the machine accesses (doors, windows, cowls, etc.).

INSTRUCTIONS

- Park the machine on flat ground or on an incline lower than 15%.
- Set the forward/reverse selector to neutral.
- Apply the parking brake.
- For machines with gearboxes, place the gear lever in neutral.
- 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 machine after intensive work, leave the engine idling for a few moments to allow the coolant 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.
- At the end of the day, activate the battery cut-off, and if the machine is being shut down from more than 20 days, disconnect the battery.
- Lock all the accesses to the machine (doors, windows, cowls, etc.).
- For machines operating on gas carburization, close the gas bottle. For a long lasting stop, let the engine stop naturally by shutting the LPG bottle before switching off the ignition, so as to eliminate all the fuel in the feed tube.

H - DRIVING THE MACHINE ON THE PUBLIC HIGHWAY

FRENCH ROAD TRAFFIC RULES

- The driving of non-approved machines on the public highway is subject to the provisions of the highway code relating to special machines, defined in Article R311-1 of the French Highway Code (*Code de la route*), in category B of the Equipment Order of 20 November 1969 that determines the procedures applicable to special machines. The machine must be fitted with an operating license plate.

SAFETY INSTRUCTIONS

- Operators driving on the public highway must comply with current highway code legislation.
- The machine 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, turn signals and windshield wipers are working properly.
- Switch off the worklights if the machine is fitted with them.
- Place the attachment 300mm from the ground.

▲ IMPORTANT **▲**

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

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

DRIVING THE MACHINE 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 machine.
- If road legislation in your country authorises circulation with a front-mounted attachment, you must at least:
 - Protect and report any sharp and/or dangerous edges on the attachment (◀ 4 ADAPTABLE ATTACHMENTS AVAILABLE ON 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 MACHINE 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 machine.
- The trailer's braking system must comply with current legislation.
- If pulling a trailer with assisted braking, the tractor machine must be equipped with a trailer braking mechanism. In this case, do not forget to connect the trailer braking equipment to that of the machine.
- The vertical force on the towing hook must not exceed the maximum authorized by the manufacturer (consult the manufacturer's plate on your machine).
- The authorized gross vehicle weight must not exceed the maximum weight authorized by the manufacturer (consult the manufacturer's plate on your machine).

IF NECESSARY, CONSULT YOUR DEALER.

INSTRUCTIONS FOR HANDLING A LOAD

A - CHOICE OF ATTACHMENTS

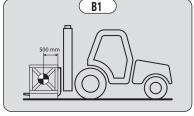
- Only attachments approved by MANITOU can be used on its machines.
- Make sure the attachment is appropriate for the work to be done (<√4 4 ADAPTABLE ATTACHMENTS AVAILABLE ON THE RANGE).
- Make sure the attachment is correctly installed and locked onto the machine carriage.
- Make sure that your machine attachments are working properly.
- Comply with the load chart limits for the machine for the attachment used.
- Do not exceed the rated capacity of the attachment.
- Never lift a load in a sling without the attachment provided for the purpose. Optional solutions are available, please consult your dealer.

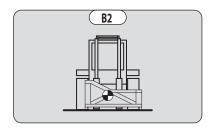
B-WEIGHT OF LOAD AND CENTRE OF GRAVITY

- Before picking up a load, you must know its weight and its center of gravity.
- The load chart for your machine is valid for a load in which the longitudinal position of the center of gravity is 500 mm or 600 mm from the base of the forks (depending on the model) (Fig. B1). For loads with center of gravity exceeding this distance, contact your dealer.
- For irregular loads, determine the transverse center of gravity before any handling (Fig. B2) and set it in the longitudinal axis of the machine.



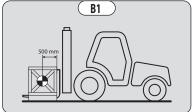
It is forbidden to handle a load heavier than the effective capacity defined on the machine load chart. For loads with a moving center of gravity (e.g. liquids), take account of the variations in the center of gravity in order to determine the load to be handled and be extra vigilant and careful to limit these variations as far as possible.





C-TRANSVERSE ATTITUDE OF THE MACHINE

- The transverse attitude is the lateral tilt of the chassis in relation to the floor.
- Raising the mast reduces the machine's lateral stability.
- The transverse attitude of the machine must be horizontal with the mast in the down position: Depending on model
 - Position the machine so that the bubble in the level is between the two lines (<√ 2 DESCRIPTION).



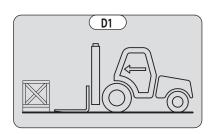
D-PICKING UP A LOAD ON THE GROUND

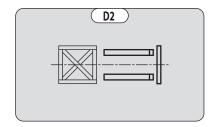
- Advance the machine perpendicular to the load, with the forks in a horizontal position (Fig. D1).
- Adjust the fork spread and centring in connection with the load (fig. D2) (optional solutions exist, consult your dealer).
- Never lift a load with a single fork.

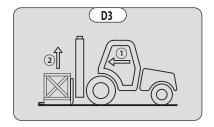
▲ IMPORTANT **▲**

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

- Move the machine forward slowly (1) and bring the forks up to the stop in front of the load (Fig. D3). If necessary, lift the mast slightly (2) while picking up the load.
- Bring the load into the transport position.
- Tilt the load far enough backwards to ensure stability (loss of load on braking or going downhill).

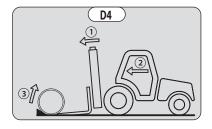






FOR A NON-PALLETIZED LOAD

- Tilt the carriage (1) forward and move the machine slowly forward (2) to insert the fork under the load (Fig. D4) (chock the load if necessary).
- Continue to move the machine (2) forward, tilting the carriage (3) (fig. D4) backward to position the load on the forks and check the load's longitudinal and lateral stability.



PICKING UP AND LAYING DOWN A HIGH LOAD ON TIRES

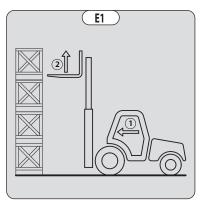
▲ IMPORTANT **▲**

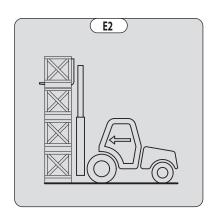
You must not raise the mast if you have not checked the transverse attitude of the machine (< ✓ INSTRUCTIONS FOR HANDLING A LOAD).

REMINDER: Make sure that the following operations can be performed with good visibility (
OPERATION INSTRUCTIONS UNLADEN AND LADEN).

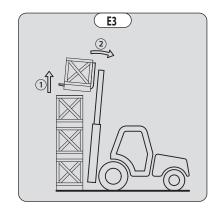
PICKING UP A HIGH LOAD ON TIRES

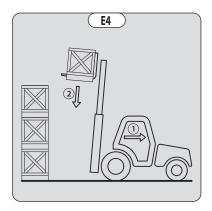
- Ensure that the forks will easily pass under the load.
- Keeping the mast vertical (1), advance the machine and raise the forks to level with the load (2) (Fig. E1).
- Manoeuvre carefully and gently to bring the forks to the stop in front of the load (fig. E2). Apply the parking brake and place the forward/reverse selector in neutral.





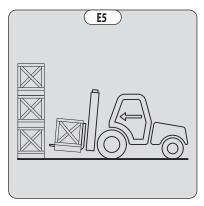
- Lift the load slightly (1) and tilt the carriage (2) backward to stabilize the load (Fig. E3).
- Tilt the load sufficiently backwards to ensure its stability.
- Reverse the machine (1) very carefully and gently to free the load. Lower the mast (2) to bring the load into transport position (fig. E4).

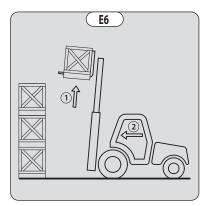


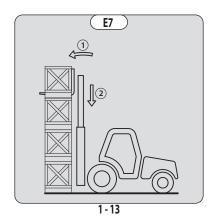


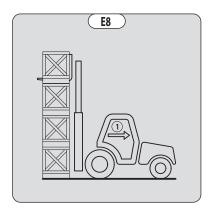
SETTING DOWN A HIGH LOAD ON TIRES

- Approach the load in the transport position in front of the pile (fig. E5).
- Raise the mast (1) until the load is higher than the pile and move the machine forward (2) (Fig. E6) very carefully and gently, until the load is over the pile. Apply the parking brake and place the forward/reverse selector in neutral.
- Place the load in a horizontal position by tilting the mast forwards (1) and lay it down on the pile (2) while checking the correct positioning of the load (fig. E7).
- Reverse the machine (1) very slowly and carefully to free the forks (Fig. E8). Then set the forks into transport position.









MACHINE MAINTENANCE INSTRUCTIONS

GENERAL INSTRUCTIONS

- Make sure the area is adequately ventilated before starting up the machine.
- Wear clothes suitable for the maintenance of the machine. Avoid wearing jewelry and loose clothes. Tie back and protect your hair, if necessary.
- Before doing any work on the machine:
 - · Switch off the engine
 - Apply the parking brake.
 - Remove the ignition key.
- 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 burning and splashing:
 - Exhaust
 - Radiator
 - Engine
 - · Cab heating vents
 - Etc.

MAINTENANCE

- Perform the periodic service (◀ 3 - MAINTENANCE) to keep your machine in good working order. Failure to perform periodic maintenance may invalidate the contractual warranty.

MAINTENANCE LOGBOOK

- The maintenance operations carried out in accordance with the recommendations given in Part: 3 - MAINTENANCE and the other inspection, servicing or repair operations or modifications performed on the machine or its attachments should be 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. If machine elements are replaced, the part numbers of these elements shall be 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 machine 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 chapter: 3 MAINTENANCE.
- Do not attempt to loosen unions, hoses or any hydraulic component with the circuit under pressure.

▲ IMPORTANT **▲**

It is dangerous to change the setting or remove the BALANCING VALVES or SAFETY VALVES that may be fitted to your machine cylinders.

The HYDRAULIC ACCUMULATORS that may be fitted on your machine are pressurized units.

Removing these accumulators and their pipework is dangerous.

Such 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 machine 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 machine.
- When carrying out electric welding work on the machine, connect the negative cable from the equipment directly to the part being welded so as to avoid very high 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 machine is equipped with an electronic control unit, disconnect it before starting to weld so as to avoid the risk of causing irreparable damage to electronic components.

WASHING THE MACHINE

- Clean the machine or at least the area concerned before any intervention.
- Remember to close and lock all accesses to the machine (doors, windows, cowls, etc.).
- 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 machine of any traces of fuel, oil or grease.

TRANSPORTING THE MACHINE



Transporting the machine involves real risks for the operator and others involved.

- Towing, slinging or transporting the machine (< 3 - MAINTENANCE).

PROLONGED MACHINE SHUTDOWN

INTRODUCTION

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

▲ IMPORTANT **▲**

Procedures to follow if the machine 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.

PREPARATION OF THE MACHINE

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

DEF (Diesel Exhaust Fluid) TANK

Depending on machine model

- Empty and rinse the "DEF" tank.
- Replace the "DEF" (Diesel Exhaust Fluid) feed pump filter (⋖ 3 MAINTENANCE).
- Fill up with new "DEF" (Diesel Exhaust Fluid) (< 2 DESCRIPTION).
- Start up the machine to pressurize the circuit and bring it up to working temperature.
- Stop the engine.
- Check the "DEF" level and top up if required.

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).
- 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 coolant 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.

MACHINE PROTECTION

- Set the machine on axle stands so that the tires are not in contact with the ground and release the parking brake.
- Protect cylinder rods which will not be retracted from corrosion.
- Wrap the tires.

N.B.: If the machine is to be stored outdoors, cover it with a waterproof tarpaulin.

RETURNING THE MACHINE TO SERVICE

- Remove the waterproof adhesive tape from all the orifices.
- 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 machine model)
- Empty and rinse the DEF tank. (depending on machine model)
- Slowly fill the tank with new "DEF" (Diesel Exhaust Fluid) up to the bottom of the filler neck. (depending on machine model)
- 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 machine completely (⋖ 3 MAINTENANCE).

▲ IMPORTANT **▲**

Make sure the area is adequately ventilated before starting up the machine.

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

DISPOSING OF THE MACHINE



Consult your dealer before disposing of the machine.

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 the plastic components are made of "thermoplastic" plastics, which 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 machine to the MANITOU network, the risk of pollution is limited and the contribution to environmental protection is made.

WORN OR DAMAGED PARTS

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

USED OIL

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

USED BATTERIES

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

N.B.: MANITOU aims to manufacture machines that provide the best performance and limit polluting emissions.

2 - DESCRIPTION

2 - DESCRIPTION

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TIRES M40-2 / M50-2	2-28
TIRES M40-4 / M50-4	2-29
INSTRUMENTS AND CONTROLS	2-30
SI INGING POINT	2-52

A IMPORTANT A

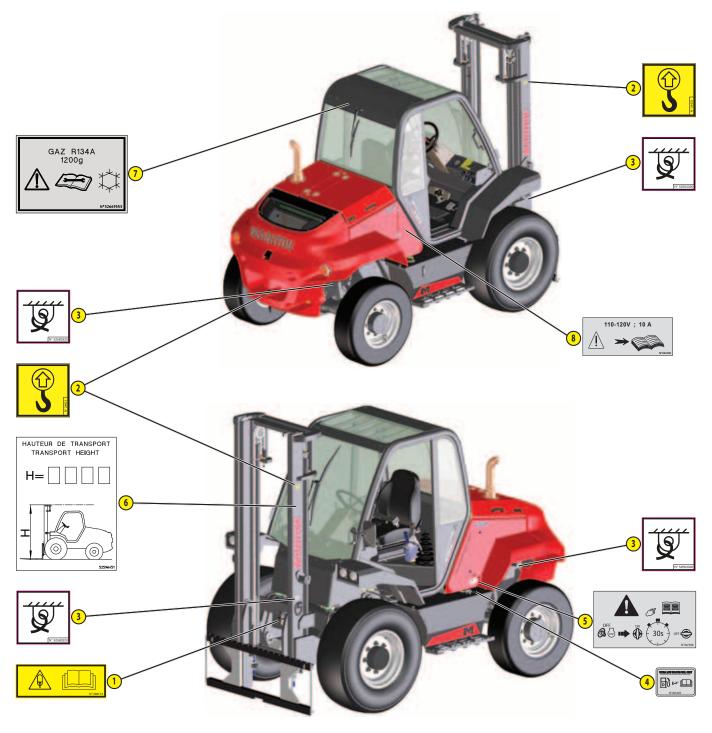
Clean all stickers and safety plates so that they are legible.

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

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

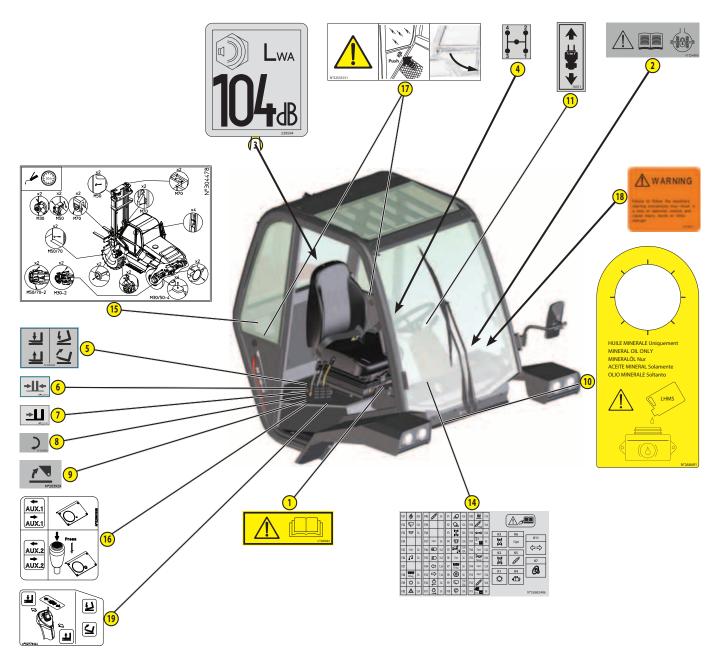
EXTERNAL PLATES AND STICKERS

REF.	REFERENCE	DESCRIPTION
1	288174	- Accumulator Instructions
2	24653	- Slinging point
3	52563320	- Anchoring point
4	305405	- Fuel instruction
5	307508	- Battery cut-off instruction
6	52596451	- Overall height (OPTION)
7	52669553	- Air conditioning (OPTION)
8	244130	- Engine block heater (Option)

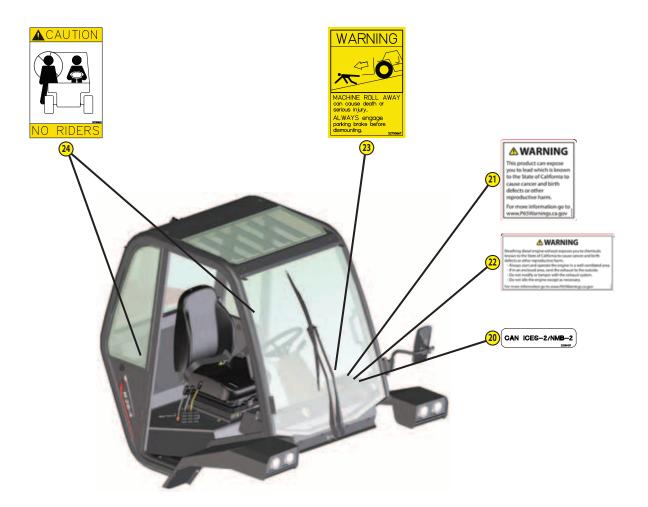


STICKERS AND PLATES IN THE CAB

REF.	REFERENCE	DESCRIPTION	
1	300681	- Safety instruction	
2	234806	- Differential lock instruction M26-2 / M30-2 / M40-2 / M50-2	
2	234806	- Differential lock instruction (OPTION) M26-4 / M30-4	
3	239594	- Sound power level 104 dB	
4	33460	- Gear selection	
5	200042	- Joystick function (first version)	
6	203792	- Joystick function	
7	203791	- Joystick function	
8	203928	- Joystick function	
9	203929	- Joystick function	
10	268491	- Brake fluid instruction	
11	76571	- Reversing shift (first version)	
12			
13			
14	52682406	- Fuses and relays (first version)	
14	52806825	- Fuses and relays (second version)	
15	304478	- Lubrication instructions	
16	52691835	- Attachment line AUX.1/AUX.2 (OPTION) M26-2 / M26-4 / M30-2 / M30-4	
17	52533151	- Door release instruction (OPTION)	
18	52759172	- WARNING risk of misuse (For UK only)	
19	52776144	- Joystick function + reversing shift (second version)	

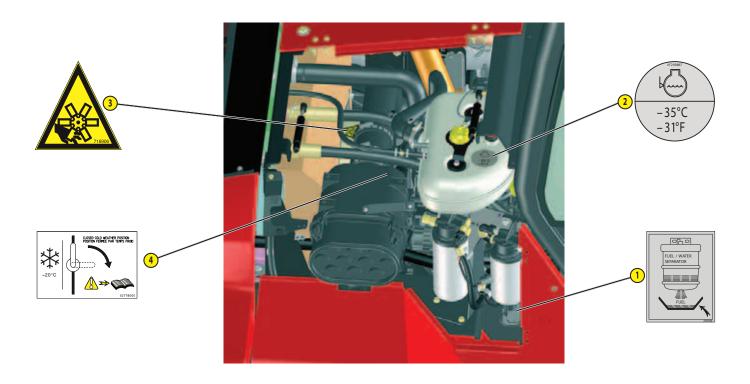


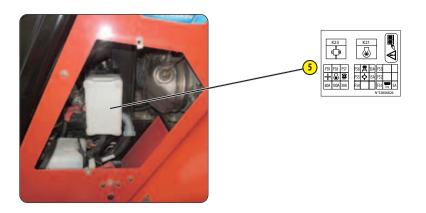
REF.	REFERENCE	DESCRIPTION
20	52588137	- CAN ICES-2 NMB-2
21	52618158	- Prop 65 warning
22	52618159	- Prop 65 exhaust warning
23	52700667	- Warning "roll away"
24	52700692	- Caution "no riders"



STICKERS AND PLATES UNDER THE ENGINE HOOD

REF.	REFERENCE	DESCRIPTION	
1	293887	- Anti-freeze	
2	259398	- Water / diesel separator	
3	716906	- Fan hazard	
4	52778005	- Extreme cold instruction (Option)	
5	52806826	- Fuses and relays	





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.

N.B.: 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: CHARACTERISTICS.

LIFT TRUCK MANUFACTURER'S PLATE

"Designation" Désignation	
"Series" Série	
"Year of manufacture" Année de fabrication	
"Model year" Année modèle	
"Serial Number / Product Identification Number" Numéro de série / Numéro	
d'identification produit	
"Unladen mass" Masse à vide	
"Power" Puissance	
"Authorized gross vehicle weight" Poids Total Roulant Autorisé	
"Rated capacity" Capacité nominale	
"Max vertical force (on trailer hook)" Effort vertical maximum (sur crochet de	
remorque)	
"Drag strain" Effort de traction	

ENGINE

"MODEL" Model	
"SER.NO" Numéro de série	
"CODE" Code fournisseur	
"SPEC" Spécification	
"CSPEC" Code spécification	



GEARBOX

MANITOU reference	
Type	
Serial number	



FRONT AXLE

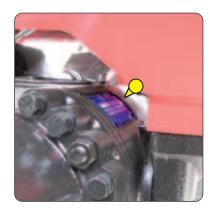
Туре	
Serial number	
MANITOU reference	



REAR AXLE

M26-4 ... / M30-4 ... / M40-4 ... / M50-4 ...

Туре	
Serial number	
MANITOU reference	



OVERHEAD GUARD

CAB (OPTION)

"Constructeur" Manufacturer	
"Type Cabine" Cab Type	
"N° de série" Serial number	



ROLLER MASTS

MANUTOLL	
I MANITO III reference	



CHASSIS

Serial number / Product I	dentification 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" Operating pressure	

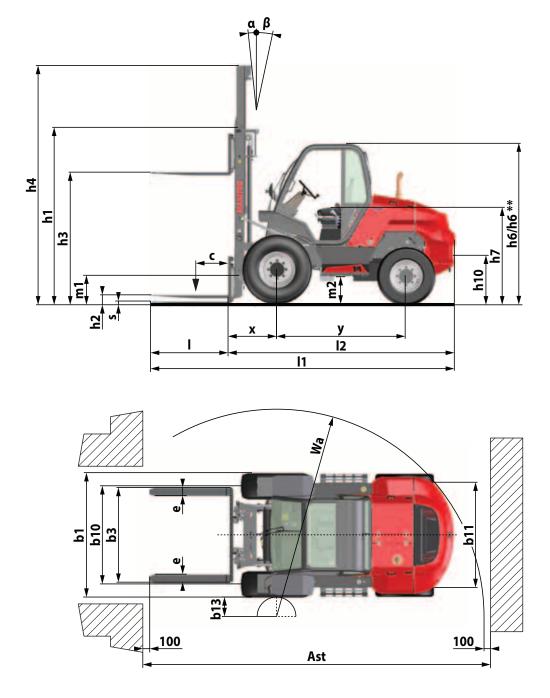
SPECIFICATIONS

M26-2 ... / M26-4 ...

N.B.: The specifications given are not binding on the manufacturer and may be modified without notice.

	1.1	-Manufacturer		MAN	ITOU
Z	1.2	-Model type		M26-2 D ST5 S1 EU	M26-4 D ST5 S1 EU
	1.3	-Propulsion: battery, diesel, gasoline, LPG, mains		Diesel	Diesel
DESIGNATION	1.4	-Operator type: hand, pedestrian, standing, seated		Seated	Seated
8	1.5	-Rated capacity/load on forks (basic capacity)	Q(t)	2.6	2.6
	1.6	-Center of gravity of load	c (mm)	500	500
"	1.8	-Distance from load bearing surface to center of the front axle	x (mm)	747	747
	1.9	-Wheelbase	y (mm)	1995	1995
	2.1	-Weight of truck in working order	kg	5590	5630
<u> </u>	2.2	-Front axle load (laden)	kg	6940	6640
WEIGHT	2.2.1	-Rear axle load (laden)	kg	1250	1590
×	2.3	-Front axle load (unladen)	kg	2530	2230
	2.3.1	-Rear axle load (unladen)	kg	3060	3400
		-Wheel equipment	ing ing	3000	3100
	3.1	bandage (V), super-elastic (SE), pneumatic (L)		L	L
AR	3.2	-Tire size, front	" or mm	14.5R20 18PR MPT80	405/70-20 149B I323
RUNNING GEAR	3.3	- Tire size, nont	" or mm	10R17.5 G291 GY	10.5-18 12PR I317
	3.5	-Number of front wheels (x = drive wheel)	Ormin	2x	2x
I	3.5.1	-Number of rear wheels (x = drive wheel)		2	2x
~	3.6	-Track width, front (middle of wheels)	b10 (mm)	1550	1520
	3.7	- Track width, nort (middle of wheels)	b11 (mm)	1644	1630
	4.1	-Mast tilt, forward	α (°)	6	6
	4.1.1	-Mast tilt, backward	β(°)	12	12
	4.2	-Height of mast, lowered	h1 (mm)	2696	2689
	4.3	-Normal free lift	h2 (mm)	-	-
	4.4	-Lift height	h3 (mm)	3700	3700
	4.5	-Height of mast, extended	h4 (mm)	4626	4619
	4.7	-Height of overhead guard, standard / cab	h6 (mm)	2450	2458
	4.7	-Height of overhead guard, lowered (Option)	h6 *(mm)	-	-
	4.7	-Height of air-conditioned cab (Option)	h6 **(mm)	2450	2458
	4.8	-Height of seat	h7 (mm)	1420	1426
	4.12	-Coupling height	h10 (mm)	700	730
DIMENSIONS	4.19	-Total length	l1 (mm)	4701	4701
NSI(4.20	-Length to face of forks	12 (mm)	3501	3501
¥	4.21	-Overall width	b1 (mm)	1923	1927
	4.22	-Fork cross-section	s (mm)	40	40
	4.22.1	-Width of fork arms	e (mm)	125	125
	4.22.2	-Length of forks	I (mm)	1200	1200
	4.23	-Fork carriage (to DIN 15173 A/B)	. ()	3 A	3 A
	4.24	-Width of fork carriage (with load backrest)	b3 (mm)	1470	1470
	4.31	-Ground clearance below mast (unladen)	m1 (mm)	406	399
	4.32	-Ground clearance center of wheelbase (unladen)	m2 (mm)	390	395
	4.33	- Aisle width for palette 1000x1200 widthways	Ast (mm)	5360	6180
	4.34	-Aisle width for palette 800x1200 widthways	Ast (mm)	5360	6180
	4.35	-Turning radius	Wa (mm)	3220	4030
	4.36	-Inner turning radius	b13 (mm)	300	1135
	5.1	-Speed of travel laden	km/h	12	12
	5.1.1	-Speed of travel unladen	km/h	22	22
	5.2	-Lifting speed (laden)	m/s	0.6	0.6
	5.2.1	-Lifting speed (unladen)	m/s	0.6	0.6
PERFORMANCE	5.3	-Speed of lowering laden	m/s	0.4	0.4
MA	5.3.1	-Lowering speed (unladen)	m/s	0.4	0.4
E	5.5	-Rated drawbar pull (laden)	daN	4000	6000
8	5.7	-Gradeability (laden)	%	-	-
-	5.7.1	-Gradeability (unladen)	%	-	-
	5.9	-Acceleration time (laden)	S	17.5	-
	5.9.1	-Acceleration time (unladen)	S	7.1	-
	5.10	-Service brake		Hydraulic power brake	Hydraulic power brake

	7.1	-Engine manufacturer/Type		DEUTZ TCD 2.9	DEUTZ TCD 2.9
	7.2	-Engine power rating (ISO 1585)	kW	55	55
l w	7.3	-Rated speed	rpm	2300	2300
ENGINE	7.3.1	-Maximum speed	rpm	3200	3200
<u></u>	7.4	-Number of cylinders / Displacement	cm ³	4 / 2925	4 / 2925
	7.5	-Fuel consumption (according to VDI cycle)	l/h	5.1	6.6
	7.6	-CO ₂ emissions	kg/h	13.3	17.2
	8.1	-Speed control		Electrical	Electrical
S	8.2	-Working hydraulic pressure for attachments	Bar	185	185
8	8.3	-Oil flow rate for attachments	L/min	52	52
W	8.3	-Oil flow rate for attachments 3rd hydraulic line	L/min	52	52
MISCELLANEOUS	8.3	-Oil flow rate for attachments 3rd hydraulic line/4th hydraulic line	L/min	25 / 52	25 / 52
<u> </u>	8.4	-Sound level at driver's ears (to DIN 12053)	dB (A)	78	78
	8.4	-Guaranteed sound power level in the environment LwA (according to Directive 2000/14/EC modified by Directive 2005/88/EC)	dB (A)	104	104



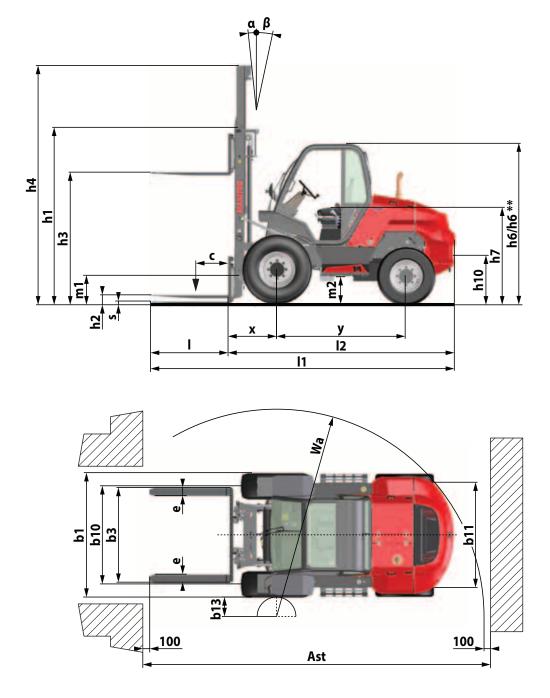
SPECIFICATIONS

M30-2 ... / M30-4 ...

N.B.: The specifications given are not binding on the manufacturer and may be modified without notice.

	1.1	-Manufacturer		MAN	ITOH
	1.2	-Model type		M30-2 D ST5 S1 EU	M30-4 D ST5 S1 EU
DESIGNATION	1.3	-Propulsion: battery, diesel, gasoline, LPG, mains		Diesel	Diesel
	1.4	-Operator type: hand, pedestrian, standing, seated		Seated	Seated
₹	1.5	-Rated capacity/load on forks (basic capacity)	Q(t)	3	3
	1.6	-Center of gravity of load	c (mm)	500	500
'	1.8	-Distance from load bearing surface to center of the front axle	x (mm)	747	747
	1.9	-Wheelbase	y (mm)	1995	1995
	2.1	-Weight of truck in working order	kg	5895	5965
_	2.2	-Front axle load (laden)	kg	7490	7490
WEIGHT	2.2.1	-Rear axle load (laden)	kg	1405	1475
×	2.3	-Front axle load (unladen)	kg	2155	2155
	2.3.1	-Rear axle load (unladen)	kg	3740	3810
		-Wheel equipment	ing ing	37 10	
	3.1	bandage (V), super-elastic (SE), pneumatic (L)		L	L
AR AR	3.2	-Tire size, front	" or mm	14.5R20 18PR MPT80	405/70-20 149B I323
E	3.3	-Tire size, rear	" or mm	10R17.5 G291 GY	10.5-18 12PR I317
RUNNING GEAR	3.5	-Number of front wheels (x = drive wheel)	OI IIIIII	2x	2x
	3.5.1	-Number of rear wheels (x = drive wheel)		2	2x
~	3.6	-Track width, front (middle of wheels)	b10 (mm)	1550	1520
	3.7	-Track width, rear (middle of wheels)	b11 (mm)	1644	1630
	4.1	-Mast tilt, forward	α (°)	6	6
	4.1.1	-Mast tilt, backward	β(°)	12	12
	4.2	-Height of mast, lowered	h1 (mm)	2696	2689
	4.3	-Normal free lift	h2 (mm)	-	-
	4.4	-Lift height	h3 (mm)	3700	3700
	4.5	-Height of mast, extended	h4 (mm)	4626	4619
	4.7	-Height of overhead guard, standard / cab	h6 (mm)	2450	2458
	4.7	-Height of overhead guard, lowered (Option)	h6 *(mm)	-	-
	4.7	-Height of air-conditioned cab (Option)	h6 **(mm)	2450	2458
	4.8	-Height of seat	h7 (mm)	1420	1426
	4.12	-Coupling height	h10 (mm)	700	730
8	4.19	-Total length	l1 (mm)	4701	4701
DIMENSIONS	4.20	-Length to face of forks	l2 (mm)	3501	3501
N N	4.21	-Overall width	b1 (mm)	1923	1927
"	4.22	-Fork cross-section	s (mm)	40	40
	4.22.1	-Width of fork arms	e (mm)	125	125
	4.22.2	-Length of forks	l (mm)	1200	1200
	4.23	-Fork carriage (to DIN 15173 A/B)		3 A	3 A
	4.24	-Width of fork carriage (with load backrest)	b3 (mm)	1470	1470
	4.31	-Ground clearance below mast (unladen)	m1 (mm)	406	399
	4.32	-Ground clearance center of wheelbase (unladen)	m2 (mm)	390	395
	4.33	-Aisle width for palette 1000x1200 widthways	Ast (mm)	5360	6180
	4.34	-Aisle width for palette 800x1200 widthways	Ast (mm)	5360	6180
	4.35	-Turning radius	Wa (mm)	3220	4030
	4.36	-Inner turning radius	b13 (mm)	300	1135
	5.1	-Speed of travel laden	km/h	12	12
	5.1.1	-Speed of travel unladen	km/h	22	22
	5.2	-Lifting speed (laden)	m/s	0.6	0.6
рц	5.2.1	-Lifting speed (unladen)	m/s	0.6	0.6
PERFORMANCE	5.3	-Speed of lowering laden	m/s	0.4	0.4
RM,	5.3.1	-Lowering speed (unladen)	m/s	0.4	0.4
<u>운</u>	5.5	-Rated drawbar pull (laden)	daN	5000	6000
	5.7	-Gradeability (laden)	%	62	-
	5.7.1	-Gradeability (unladen)	%	-	-
	5.9	-Acceleration time (laden)	S	-	-
	5.9.1	-Acceleration time (unladen)	S	- 11 - 1 - 1 - 1 - 1 - 1 - 1	- 11 1 12
	5.10	-Service brake		Hydraulic power brake	Hydraulic power brake

	7.1	-Engine manufacturer/Type		DEUTZ TCD 2.9	DEUTZ TCD 2.9
	7.2	-Engine power rating (ISO 1585)	kW	55	55
l w	7.3	-Rated speed	rpm	2300	2300
ENGINE	7.3.1	-Maximum speed	rpm	3200	3200
<u></u>	7.4	-Number of cylinders / Displacement	cm ³	4 / 2925	4 / 2925
	7.5	-Fuel consumption (according to VDI cycle)	l/h	5.1	6.6
	7.6	-CO ₂ emissions	kg/h	13.3	17.2
	8.1	-Speed control		Electrical	Electrical
S	8.2	-Working hydraulic pressure for attachments	Bar	185	185
8	8.3	-Oil flow rate for attachments	L/min	52	52
W	8.3	-Oil flow rate for attachments 3rd hydraulic line	L/min	52	52
MISCELLANEOUS	8.3	-Oil flow rate for attachments 3rd hydraulic line/4th hydraulic line	L/min	25 / 52	25 / 52
<u> </u> ≥	8.4	-Sound level at driver's ears (to DIN 12053)	dB (A)	78	78
	8.4	-Guaranteed sound power level in the environment LwA (according to Directive 2000/14/EC modified by Directive 2005/88/EC)	dB (A)	104	104



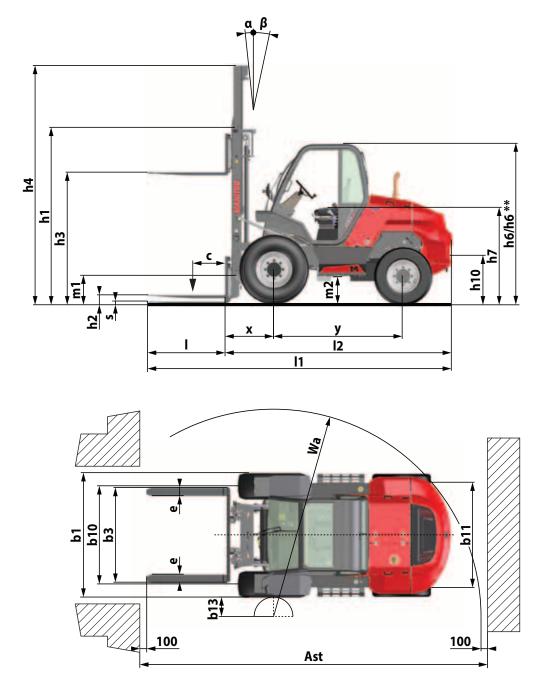
SPECIFICATIONS

M40-2 ... / M40-4 ...

N.B.: The specifications given are not binding on the manufacturer and may be modified without notice.

	1.1	-Manufacturer		MAN	ITOU
	1.2	-Model type		M40-2 D ST5 S1 EU	M40-4 D ST5 S1 EU
Z	1.3	-Propulsion: battery, diesel, gasoline, LPG, mains		Diesel	Diesel
DESIGNATION	1.4	-Operator type: hand, pedestrian, standing, seated		Seated	Seated
8	1.5	-Rated capacity/load on forks (basic capacity)	Q(t)	4	4
SE	1.6	-Center of gravity of load	c (mm)	500	500
"	1.8	-Distance from load bearing surface to center of the front axle	x (mm)	763	763
	1.9	-Wheelbase	y (mm)	2060	2120
	2.1	-Weight of truck in working order	kg	6915	6965
<u>-</u>	2.2	-Front axle load (laden)	kg	9075	9010
WEIGHT	2.2.1	-Rear axle load (laden)	kg	1840	1955
WE	2.3	-Front axle load (unladen)	kg	2625	2625
	2.3.1	-Rear axle load (unladen)	kg	4290	4340
		-Wheel equipment	ing ing	1250	15 10
	3.1	bandage (V), super-elastic (SE), pneumatic (L)		L	L
AR	3.2	-Tire size, front	" or mm	18-19.5 18PR A224	18-22.5 MPT-06
RUNNING GEAR	3.3	- Tire size, rear	" or mm	10R17.5 G291 GY	340/80 R18 143A8 A580
	3.5	-Number of front wheels (x = drive wheel)	Ormin	2x	2x
1 5	3.5.1	-Number of rear wheels (x = drive wheel)		2	2x
~	3.6	-Track width, front (middle of wheels)	b10 (mm)	1600	1620
	3.7	-Track width, nort (middle of wheels)	b11 (mm)	1640	1740
	4.1	-Mast tilt, forward	α (°)	15	15
	4.1.1	-Mast tilt, backward	β(°)	15	15
	4.2	-Height of mast, lowered	h1 (mm)	2870	2910
	4.3	-Normal free lift	h2 (mm)	-	2710
	4.4	-Lift height	h3 (mm)	3700	3700
	4.5	-Height of mast, extended	h4 (mm)	4775	4815
	4.7	-Height of overhead guard, standard / cab	h6 (mm)	2440	2486
	4.7	-Height of overhead guard, lowered (Option)	h6 *(mm)	-	-
	4.7	-Height of air-conditioned cab (Option)	h6 **(mm)	2440	2486
	4.8	-Height of seat	h7 (mm)	1407	1455
	4.12	-Coupling height	h10 (mm)	685	735
SIS	4.19	-Total length	l1 (mm)	4858	4858
DIMENSIONS	4.20	-Length to face of forks	12 (mm)	3658	3658
ME	4.21	-Overall width	b1 (mm)	2057	2080
	4.22	-Fork cross-section	s (mm)	50	50
	4.22.1	-Width of fork arms	e (mm)	150	150
	4.22.2	-Length of forks	I (mm)	1200	1200
	4.23	-Fork carriage (to DIN 15173 A/B)	1 (11111)	3 A	3 A
	4.24	-Width of fork carriage (with load backrest)	b3 (mm)	1670	1670
	4.31	-Ground clearance below mast (unladen)	m1 (mm)	250	300
	4.32	-Ground clearance center of wheelbase (unladen)	m2 (mm)	377	426
	4.33	-Aisle width for palette 1000x1200 widthways	Ast (mm)	5560	6732
	4.34	-Aisle width for palette 800x1200 widthways	Ast (mm)	5560	6732
	4.35	-Turning radius	Wa (mm)	3395	4570
	4.36	-Inner turning radius	b13 (mm)	200	1650
	5.1	-Speed of travel laden	km/h	12	12
	5.1.1	-Speed of travel unladen	km/h	22	22
	5.2	-Lifting speed (laden)	m/s	0.4	0.4
	5.2.1	-Lifting speed (unladen)	m/s	0.4	0.4
ÿ	5.3	-Speed of lowering laden	m/s	0.5	0.5
PERFORMANCE	5.3.1	-Lowering speed (unladen)	m/s	0.4	0.4
Ö	5.5	-Rated drawbar pull (laden)	daN	5000	9000
Ē	5.7	-Gradeability (laden)	%	-	-
~	5.7.1	-Gradeability (unladen)	%	-	-
	5.9	-Acceleration time (laden)	S	-	-
	5.9.1	-Acceleration time (unladen)	S	-	10.4
	5.10	-Service brake		Hydraulic power brake	Hydraulic power brake
				/	,

	7.1	-Engine manufacturer/Type		DEUTZ TCD 2.9	DEUTZ TCD 2.9
	7.2	-Engine power rating (ISO 1585)	kW	55	55
y	7.3	-Rated speed	rpm	2300	2300
ENGINE	7.3.1	-Maximum speed	rpm	3200	3200
	7.4	-Number of cylinders / Displacement	cm ³	4 / 2925	4 / 2925
	7.5	-Fuel consumption (according to VDI cycle)	l/h	5.5	6.9
	7.6	-CO ₂ emissions	kg/h	14.3	18.0
S	8.1	-Speed control		Electrical	Electrical
8	8.2	-Working hydraulic pressure for attachments	Bar	210	210
W	8.3	-Oil flow rate for attachments	L/min	52	52
🖽	8.4	-Sound level at driver's ears (to DIN 12053)	dB (A)	78	78
MISCELLANEOUS	8.4	-Guaranteed sound power level in the environment LwA (according to Directive 2000/14/EC modified by Directive 2005/88/EC)	dB (A)	104	104



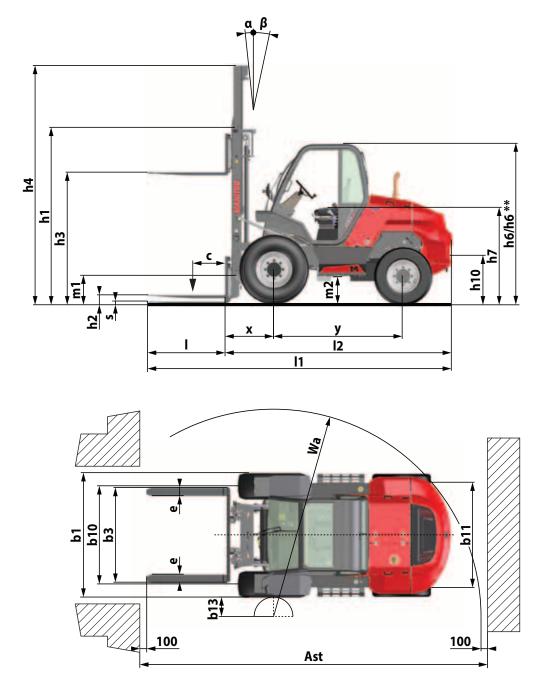
SPECIFICATIONS

M50-2 ... / M50-4 ...

N.B.: The specifications given are not binding on the manufacturer and may be modified without notice.

	1.1	-Manufacturer		MAN	ITOU
	1.2	-Model type		M50-2 D ST5 S1 EU	M50-4 D ST5 S1 EU
	1.3	-Propulsion: battery, diesel, gasoline, LPG, mains		Diesel	Diesel
₩	1.4	-Operator type: hand, pedestrian, standing, seated		Seated	Seated
DESIGNATION	1.5	-Rated capacity/load on forks (basic capacity)	Q(t)	5	5
	1.6	-Center of gravity of load	c (mm)	600	600
"	1.8	-Distance from load bearing surface to center of the front axle	x (mm)	773	773
	1.9	-Wheelbase	y (mm)	2060	2120
	2.1	-Weight of truck in working order	kg	8275	8325
_	2.2	-Front axle load (laden)	kg	11615	11520
WEIGHT	2.2.1	-Rear axle load (laden)	kg	1660	1805
WE	2.3	-Front axle load (unladen)	kg	3285	3285
	2.3.1	-Rear axle load (unladen)	kg	4990	5040
		-Wheel equipment	ING ING	1550	3010
	3.1	bandage (V), super-elastic (SE), pneumatic (L)		L	L
AR .	3.2	-Tire size, front	" or mm	18-19.5 18PR A224	18-22.5 MPT-06
RUNNING GEAR	3.3	- Tire size, nont	" or mm	10R17.5 G291 GY	340/80 R18 143A8 A580
	3.5	-Number of front wheels (x = drive wheel)	OI IIIIII	2x	2x
\{	3.5.1	-Number of rear wheels (x = drive wheel)		2	2x
≅	3.6	- Track width, front (middle of wheels)	b10 (mm)	1600	1620
	3.7	-Track width, nort (middle of wheels)	b11 (mm)	1640	1740
	4.1	-Mast tilt, forward	α (°)	15	15
	4.1.1	-Mast tilt, backward	β(°)	15	15
	4.2	-Height of mast, lowered	h1 (mm)	2870	2910
	4.3	-Normal free lift	h2 (mm)	2070	2310
	4.4	-Lift height	h3 (mm)	3700	3700
	4.5	-Height of mast, extended	h4 (mm)	4775	4815
	4.7	-Height of mast, extended -Height of overhead guard, standard / cab	h6 (mm)	2440	2486
	4.7	-Height of overhead guard, Islandia / Cab	h6 *(mm)		- 2400
	4.7	-Height of air-conditioned cab (Option)	h6 **(mm)	2440	2486
	4.8	-Height of seat	h7 (mm)	1407	1455
	4.12	-Coupling height	h10 (mm)	685	735
SNS	4.19	-Total length	I1 (mm)	4948	4948
DIMENSIONS	4.20	- Length to face of forks	12 (mm)	3748	3748
	4.21	-Overall width	b1 (mm)	2057	2080
	4.22	-Fork cross-section	s (mm)	60	60
	4.22.1	-Width of fork arms	e (mm)	150	150
	4.22.2	-Length of forks	I (mm)	1200	1200
	4.23	-Fork carriage (to DIN 15173 A/B)	I (IIIII)	4 A	4 A
	4.24	-Width of fork carriage (with load backrest)	b3 (mm)	1670	1670
	4.31	-Ground clearance below mast (unladen)	m1 (mm)	250	300
	4.32	-Ground clearance below mast (diliaderi)	m2 (mm)	377	426
	4.33	-Aisle width for palette 1000x1200 widthways	Ast (mm)	5640	6812
	4.34	-Aisle width for palette 1000x1200 widthways	Ast (mm)	5640	6812
	4.35	-Turning radius	Wa (mm)	3465	4640
	4.36	-Inner turning radius	b13 (mm)	200	1650
	5.1	-Speed of travel laden	km/h	12	12
	5.1.1	-Speed of travel unladen	km/h	22	22
	5.2	-Lifting speed (laden)	m/s	0.4	0.4
	5.2.1	- Lifting speed (unladen)	m/s	0.4	0.4
U	5.3	-Speed of lowering laden	m/s	0.5	0.5
PERFORMANCE	5.3.1	-Lowering speed (unladen)	m/s	0.4	0.4
OR OR	5.5	-Rated drawbar pull (laden)	daN	5000	9000
H H	5.7	-Gradeability (laden)	%	51	-
<u> </u>	5.7.1	-Gradeability (unladen)	%	-	-
	5.9	-Acceleration time (laden)	S	-	-
	5.9.1	-Acceleration time (unladen)	S	-	-
	5.10	-Service brake	,	Hydraulic power brake	Hydraulic power brake
	5.10	Service brane		Trydraulic power brake	Trydraune power brake

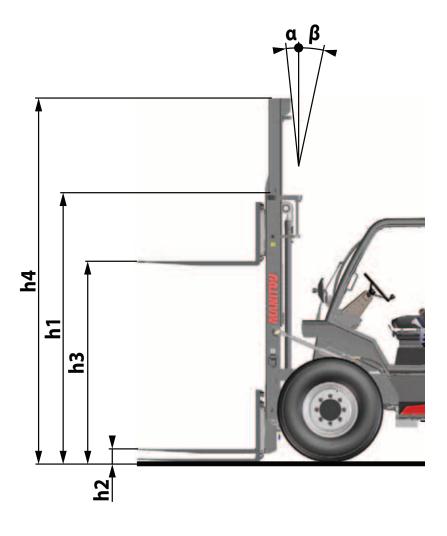
	7.1	-Engine manufacturer/Type		DEUTZ TCD 2.9	DEUTZ TCD 2.9
	7.2	-Engine power rating (ISO 1585)	kW	55	55
y	7.3	-Rated speed	rpm	2300	2300
ENGINE	7.3.1	-Maximum speed	rpm	3200	3200
6	7.4	-Number of cylinders / Displacement	cm ³	4 / 2925	4 / 2925
	7.5	-Fuel consumption (according to VDI cycle)	ℓ/h	7.5	8.0
	7.6	-CO ₂ emissions	kg/h	19.5	20.8
S	8.1	-Speed control		Electrical	Electrical
8	8.2	-Working hydraulic pressure for attachments	Bar	230	230
W	8.3	-Oil flow rate for attachments	ℓ/min	52	52
│ 🖽	8.4	-Sound level at driver's ears (to DIN 12053)	dB (A)	78	78
MISCELLANEOUS	8.4	-Guaranteed sound power level in the environment LwA (according to Directive 2000/14/EC modified by Directive 2005/88/EC)	dB (A)	104	104



MAST CHARACTERISTICS AND LOAD CHARTS M26-2 ... / M26-4 ...

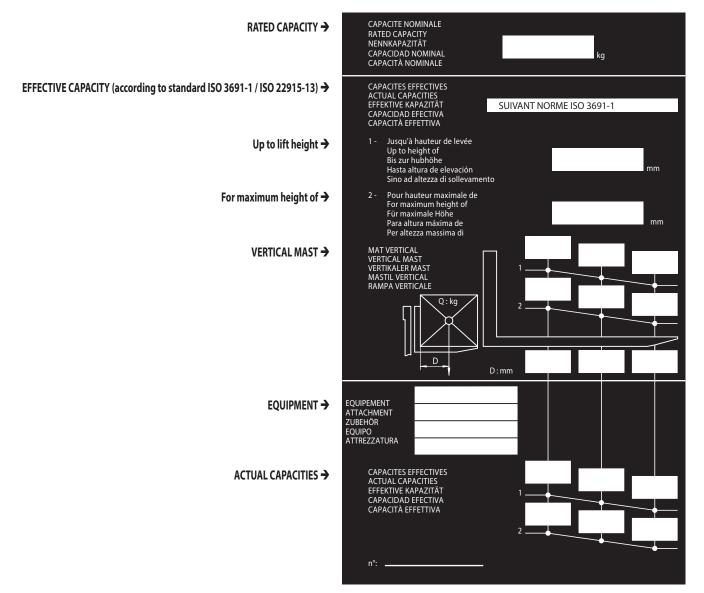
M26-2	MAST	LIFT HEIGHT	FREE LIFT	HEIGHT	OF MAST	TILT STANI	
		h3 (mm)	h2 (mm)	h1 (mm)	h4 (mm)	a (°)	β (°)
DUPLEX COMPLETE VISIBILITY	3M70	3700	-	2696	4626	6	12
DOPLEX CONFLETE VISIBILITY	4M50	4500	-	3136	5426	6	12
TRIPLEX WITHOUT FREE LIFT	5M50	5500	-	2966	6564	6	10
INIPLEX WITHOUT FREE LIFT	7M00	7000	-	3636	8234	6	10
	4M30	4300	1580	2436	5234	6	12
TRIPLEX FREE LIFT	5M00	5000	1840	2696	5934	6	12
	6M50	6500	2530	3386	7434	6	12

M26-4	MAST	LIFT HEIGHT	FREE LIFT	HEIGHT OF MAST		TILTING STANDARD	
		h3 (mm)	h2 (mm)	h1 (mm)	h4 (mm)	a (°)	β (°)
DUPLEX COMPLETE VISIBILITY	3M70	3700	-	2689	4619	6	12
DOPLEX COMPLETE VISIBILITY	4M50	4500	-	3129	5419	6	12
TRIPLEX WITHOUT FREE LIFT	5M50	5500	-	2959	6557	6	10
IRIPLEX WITHOUT FREE LIFT	7M00	7000	-	3629	8227	6	10
	4M30	4300	1580	2429	5227	6	12
TRIPLEX FREE LIFT	5M00	5000	1840	2689	5927	6	12
	6M50	6500	2530	3379	7427	6	12



VALUES (ON FORKS	VALUES WITH INTEGRAL SIDE-SHIFT CARRIAGE				
Height at max. capacity (mm)	Capacity at max. height	Height at max. capacity (mm)	Capacity at max. height			
rieight at max. capacity (mm)	D = 500 mm (kg)	rieight at max. capacity (mm)	D = 500 mm (kg)			
3700	2600	3700	2600			
4500	2600	4500	2600			

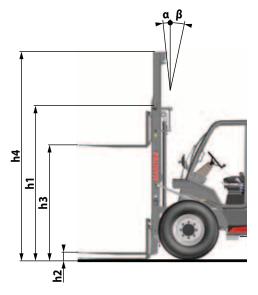
VALUES C	ON FORKS	VALUES WITH INTEGRA	L SIDE-SHIFT CARRIAGE
Height at max. capacity (mm)	Capacity at max. height	Height at max. capacity (mm)	Capacity at max. height
Height at max. capacity (min)	D = 500 mm (kg)	neight at max. capacity (min)	D = 500 mm (kg)
3700	2600	3700	2600
4500	2600	4500	2600
4800	1900	4700	1700



MAST CHARACTERISTICS AND LOAD CHARTS M3

M30-2	MAST	LIFT HEIGHT	FREE LIFT	HEIGHT OF MAST		TILTING STANDARD	
		h3 (mm)	h2 (mm)	h1 (mm)	h4 (mm)	α (°)	β (°)
DUPLEX COMPLETE VISIBILITY	3M70	3700	-	2696	4626	6	12
DOPLEX COMPLETE VISIBILITY	4M50	4500	-	3136	5426	6	12
TRIPLEX WITHOUT FREE LIFT	5M50	5500	-	2966	6564	6	10
	7M00	7000					
	4M30	4300	1580	2436	5234	6	12
TRIPLEX FREE LIFT	5M00	5000	1840	2696	5934	6	12
	6M50	6500	2530	3386	7434	6	12
SIDE-SHIFT DUPLEX COMPLETE VISIBILITY	3M70	3700	-	2696	4626	6	12
SIDE-SHIFT DOFLEY COMPLETE AISIDIFILIT	4M50	4500	-	3136	5426	6	12
CIDE CHIET TOIDI EV EDEE LIET	5M00	5000	1840	2696	5934	6	12
SIDE-SHIFT TRIPLEX FREE LIFT	6M50	6500	2530	3386	7434	6	12

M30-4	MAST	LIFT HEIGHT	FREE LIFT	HEIGHT OF MAST		TILTING STANDARD	
		h3 (mm)	h2 (mm)	h1 (mm)	h4 (mm)	a (°)	β (°)
DUPLEX COMPLETE VISIBILITY	3M70	3700	-	2689	4619	6	12
DUPLEX COMPLETE VISIBILITY	4M50	4500	-	3129	5419	6	12
TRIPLEX WITHOUT FREE LIFT	5M50	5500	-	2959	6557	6	10
IKIPLEX WITHOUT PREE LIFT							
TRIPLEX FREE LIFT	4M30	4300	1573	2429	5227	6	12
	5M00	5000	1833	2689	5927	6	12
	6M50	6500	2523	3379	7427	6	12
SIDE-SHIFT DUPLEX COMPLETE VISIBILITY	3M70	3700	-	2696	4626	6	12
SIDE-SHIFT DUPLEX COMPLETE VISIBILITY	4M50	4500	-	3136	5426	6	12
	4M30	4300	1580	2436	5234	6	12
SIDE-SHIFT TRIPLEX FREE LIFT	5M00	5000	1840	2696	5934	6	12
	6M50	6500	2530	3386	7434	6	12
SIDE-SHIFT TRIPLEX WITHOUT FREE LIFT	6M70	6700	-	3519	7917	6	12



VALUES O	N FORKS	VALUES WITH INTEGRAL SIDE-SHIFT CARRIAGE			
Height at max. capacity (mm)	Capacity at max. height D = 500 mm (kg)	Height at max. capacity (mm)	Capacity at max. height D = 500 mm (kg)		
3700	3000	3700	3000		
4500	3000	4100	2600		
4300	1600	4000	1600		
4000	2750	4000	2750		
4000	1600	4000	1600		
		Not applicable	Not applicable		
4200	2700	Not applicable	Not applicable		
		Not applicable	Not applicable		
		Not applicable	Not applicable		

VALUES O	N FORKS	VALUES WITH INTEGRAL SIDE-SHIFT CARRIAGE		
Height at max. capacity (mm)	Capacity at max. height D = 500 mm (kg)	Height at max. capacity (mm)	Capacity at max. height D = 500 mm (kg)	
3700	3000	3700	3000	
4500	3000	4500	3000	
4200	2000	4200	1500	
4300	3000	4300	3000	
		4100	1600	
		4300	500	
3700	3000	Not applicable	Not applicable	
4500	3000	Not applicable	Not applicable	
		Not applicable	Not applicable	
		Not applicable	Not applicable	
4500	800	Not applicable	Not applicable	
		Not applicable	Not applicable	
		Not applicable	Not applicable	

RATED CAPACITY →

EFFECTIVE CAPACITY (according to standard ISO 3691-1 / ISO 22915-13) →

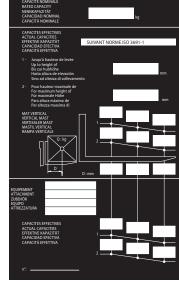
Up to lift height →

For maximum height of 🗲

VERTICAL MAST →

EQUIPMENT →

ACTUAL CAPACITIES →

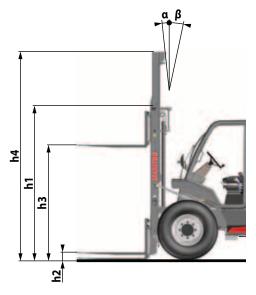


MAST CHARACTERISTICS AND LOAD CHARTS

	/ M40	

M40-2	MAST	LIFT HEIGHT	FREE LIFT	HEIGHT OF MAST		TILT STAN	
		h3 (mm)	h2 (mm)	h1 (mm)	h4 (mm)	α (°)	β (°)
	3M00	3000	-	2475	4025	15	15
	3M30	3300	-	2625	4325	15	15
	3M50	3500	-	2725	4525	15	15
DUPLEX COMPLETE VISIBILITY	3M70	3700	-	2825	4725	15	15
	4M00	4000	-	2975	5025	15	15
	4M50	4500	-	3225	5525	15	15
	5M00	5000	-	3475	6025	15	15
	3M70	3700	1255	2225	4725	15	15
	4M00	4000	1355	2325	5025	15	15
	4M30	4300	1455	2425	5325	15	15
TRIPLEX FREE LIFT	4M50	4500	1530	2500	5525	15	15
INIPLEX FREE LIFT	4M70	4700	1590	2560	5725	15	15
	5M00	5000	1705	2675	6025	10	15
	5M50	5500	1855	2825	6525	10	15
	6M00	6000	2030	3000	7025	10	15
SIDE-SHIFT DUPLEX COMPLETE VISIBILITY	3M70	3700	-	2825	4725	15	15
SIDE-SHIFT DOFLEX COMPLETE VISIBILITY	4M50	4500	-	3225	5525	15	15
SIDE-SHIFT TRIPLEX FREE LIFT	4M70	4700	1590	2560	5725	15	15
SINE-SHILL LKILLEY LKEE FILL	6M00	6000	2030	3000	7025	15	15

M40-4	MAST	LIFT HEIGHT	FREE LIFT	HEIGHT OF MAST		TILT STAN	
		h3 (mm)	h2 (mm)	h1 (mm)	h4 (mm)	α (°)	β (°)
	3M00	3000	-	2520	4070	15	15
	3M30	3300	-	2670	4370	15	15
	3M50	3500	-	2770	4570	15	15
DUPLEX COMPLETE VISIBILITY	3M70	3700	-	2870	4770	15	15
	4M00	4000	-	3020	5070	15	15
	4M50	4500	-	3270	5570	15	15
	5M00	5000	-	3520	6070	15	15
TRIPLEX WITHOUT FREE LIFT	6M70	6700	-	3365	7824	40	10
INIPLEX WITHOUT FREE LIFT							
	3M70	3700	1255	2270	4770	15	15
	4M00	4000	1355	2370	5070	15	15
	4M30	4300	1455	2470	5370	15	15
TRIPLEX FREE LIFT	4M50	4500	1530	2545	5570	15	15
INIPLEX FREE LIFT	4M70	4700	1590	2605	5770	15	15
	5M00	5000	1705	2720	6070	10	15
	5M50	5500	1855	2870	6570	10	15
	6M00	6000	2030	3045	7070	10	15
SIDE-SHIFT DUPLEX COMPLETE VISIBILITY	3M70	3700	-	2825	4725	15	15
SIDE-SHIFT DUPLEY COMPLETE AISIDILITY	4M50	4500	-	3225	5525	15	15
CINE CHIET TOIDI EV EDEE I IET	4M70	4700	1590	2560	5725	15	15
SIDE-SHIFT TRIPLEX FREE LIFT	6M00	6000	2030	3000	7025	15	15



VALUES OI	N FORKS	VALUES WITH INTEGRAL	SIDE-SHIFT CARRIAGE
Height at max. capacity (mm)	Capacity at max. height D = 500 mm (kg)	Height at max. capacity (mm)	Capacity at max. height D = 500 mm (kg)
3000	4000	3000	4000
3300	4000	3300	4000
3500	4000	3500	4000
3700	4000	3700	4000
4000	4000	4000	4000
4500	4000	4200	3900
5000	4000	4000	3600
3700	4000		
4000	4000		
4300	4000		
4500	4000	3500	3650
4200	3000	4200	3650
4500	2500	3300	2500
3700	4000	Not applicable	Not applicable
4500	4000	Not applicable	Not applicable
		Not applicable	Not applicable
		Not applicable	Not applicable

VALUES O	N FORKS	VALUES WITH INTEGRAL	SIDE-SHIFT CARRIAGE
Height at max. capacity (mm)	Capacity at max. height D = 500 mm (kg)	Height at max. capacity (mm)	Capacity at max. height D = 500 mm (kg)
3000	4000	3000	4000
3300	4000	3300	4000
3500	4000	3500	4000
3700	4000	3700	4000
4000	4000	4000	4000
		Not applicable	Not applicable
3700	4000		
4000	4000		
4300	4000		
4500	4000	4000	3800
		3700	3100
		3700	2000
3700	4000	Not applicable	Not applicable
4500	4000	Not applicable	Not applicable
4200	3500	Not applicable	Not applicable
1230	3300	Not applicable	Not applicable

RATED CAPACITY →

EFFECTIVE CAPACITY (according to standard ISO 3691-1 / ISO 22915-13) →

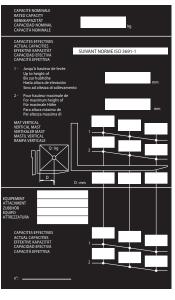
Up to lift height →

For maximum height of 🗲

VERTICAL MAST →

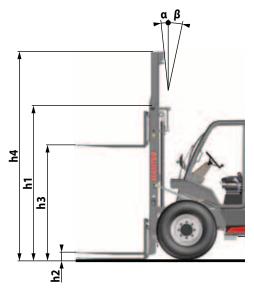
EQUIPMENT →

ACTUAL CAPACITIES →



M50-2	MAST	LIFT HEIGHT	FREE LIFT	HEIGHT (HEIGHT OF MAST		ING DARD
		h3 (mm)	h2 (mm)	h1 (mm)	h4 (mm)	α (°)	β (°)
	3M00	3000	-	2475	4025	15	15
	3M30	3300	-	2625	4325	15	15
	3M50	3500	-	2725	4525	15	15
DUPLEX COMPLETE VISIBILITY	3M70	3700	-	2825	4725	15	15
	4M00	4000	-	2975	5025	15	15
	4M50	4500	-	3225	5525	15	15
	5M00	5000	-	3475	6025	15	15
	3M70	3700	1255	2225	4725	15	15
	4M00	4000	1355	2325	5025	15	15
	4M30	4300	1455	2425	5325	15	15
TRIPLEX FREE LIFT	4M50	4500	1530	2500	5525	15	15
I RIPLEX PREE LIFT	4M70	4700	1590	2560	5725	15	15
	5M00	5000	1705	2675	6025	10	15
	5M50	5500	1855	2825	6525	10	15
	6M00	6000	2030	3000	7025	10	15
CIDE CHIET DUDI EV COMDI ETE VICIDII ITV	3M70	3700	-	2825	4725	15	15
SIDE-SHIFT DUPLEX COMPLETE VISIBILITY	4M50	4500	-	3225	5525	15	15
CIDE CHIET TRIDI EV EDEE LIET	4M70	4700	1590	2560	5725	15	15
SIDE-SHIFT TRIPLEX FREE LIFT	6M00	6000	2030	3000	7025	15	15

M50-4	MAST	LIFT HEIGHT	FREE LIFT	HEIGHT (OF MAST	TILTING STANDARD	
		h3 (mm)	h2 (mm)	h1 (mm)	h4 (mm)	α (°)	β (°)
	3M00	3000	-	2520	4070	15	15
	3M30	3300	-	2670	4370	15	15
	3M50	3500	-	2770	4570	15	15
DUPLEX COMPLETE VISIBILITY	3M70	3700	-	2870	4770	15	15
	4M00	4000	-	3020	5070	15	15
	4M50	4500	-	3270	5570	15	15
	5M00	5000	-	3520	6070	15	15
	3M70	3700	1255	2270	4770	15	15
	4M00	4000	1355	2370	5070	15	15
	4M30	4300	1455	2470	5370	15	15
TRIPLEX FREE LIFT	4M50	4500	1530	2545	5570	15	15
INIPLEX FREE LIFT	4M70	4700	1590	2605	5770	15	15
	5M00	5000	1705	2720	6070	10	15
	5M50	5500	1855	2870	6570	10	15
	6M00	6000	2030	3045	7070	10	15
SIDE-SHIFT DUPLEX COMPLETE VISIBILITY	3M70	3700	-	2825	4725	15	15
	4M50	4500	-	3225	5525	15	15
SIDE-SHIFT TRIPLEX FREE LIFT	4M70	4700	1590	2560	5725	15	15
SIDE-SHIFT TRIPLEX FREE LIFT	6M00	6000	2030	3000	7025	15	15



VALUES O	N FORKS	VALUES WITH INTEGRAL SIDE-SHIFT CARRIAGE		
Height at max. capacity (mm)	Capacity at max. height D = 600 mm (kg)	Height at max. capacity (mm)	Capacity at max. height D = 600 mm (kg)	
3000	5000	3000	4700	
3300	5000	3300	4700	
3500	5000	3500	4700	
3700	5000	3700	4700	
4000	5000	4000	4700	
4000	4750	4000	4400	
4000	3500			
3500	4800	3500	4550	
		3500	4400	
4000	4500			
4000	3500			
3700	2000	3700	3000	
3700	2000	3700	1600	
		3200	250	
3700	5000	Not applicable	Not applicable	
4000	4800	Not applicable	Not applicable	
3300	2100	Not applicable	Not applicable	
		Not applicable	Not applicable	

VALUES O	N FORKS	VALUES WITH INTEGRAL	SIDE-SHIFT CARRIAGE
Height at max. capacity (mm)	ht at max. capacity (mm) Capacity at max. height D = 600 mm (kg)		Capacity at max. height D = 600 mm (kg)
3000	5000	3000	4700
3300	5000	3300	4700
3500	5000	3500	4700
3700	5000	3700	4700
4000	5000	4000	4700
4000	3600	4000	4000
4000	2200	4000	3800
		3000	4500
3800	4500		
4000	4350	4000	4100
4000	3500	4000	3600
4000	2800	4000	2100
4000	1800	4000	2000
4000	900	4000	900
		Not applicable	Not applicable
3800	4100	Not applicable	Not applicable
3300	3000	Not applicable	Not applicable
		Not applicable	Not applicable

RATED CAPACITY ->

EFFECTIVE CAPACITY (according to standard ISO 3691-1 / ISO 22915-13) →

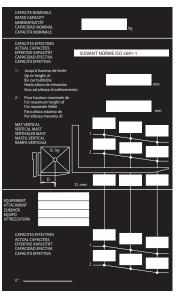
Up to lift height →

For maximum height of 🗲

VERTICAL MAST →

EQUIPMENT →

ACTUAL CAPACITIES →



M26-2 D ST5 S1 EU		PRESSURE	LOAD PER TIRE (kg)				
WI20-2 D	31331 EU	(bar)	FRONT UNLADEN	FRONT (LADEN)	REAR (UNLADEN)	REAR (LADEN)	
ALLIANCE	405/70-20 14PR 149B A-323	3,5	1250	3450			
BKT	15.5/80-24 AS 504 16PR TL	4	1250	3450			
CONTINENTAL	14.5R20 18PR 143G/J MPT80 TL	3,5	1250	3450			
MICHELIN	380/75 R20 148A8 148B XMCL TL	4	1250	3450			
ALLIANCE	10.5-18 MPT 317 12PR 130G	4,5			1550	650	
GOODYEAR	235/75R17.5 132/130 M KMAX S	8			1550	650	

M30-2 D ST5 S1 EU		PRESSURE	LOAD PER TIRE (kg)				
		(bar)	FRONT UNLADEN	FRONT (LADEN)	REAR (UNLADEN)	REAR (LADEN)	
ALLIANCE	405/70-20 14PR 149B A-323	3,5	1100	3750			
BKT	15.5/80-24 AS 504 16PR TL	4	1100	3750			
CONTINENTAL	14.5R20 18PR 143G/J MPT80 TL	3,5	1100	3750			
MICHELIN	380/75 R20 148A8 148B XMCL TL	4	1100	3750			
OTR	16/70-20 STABILIZER 10PR TL	3,5	1100	3750			
ALLIANCE	10.5-18 MPT 317 12PR 130G	4,5			1850	700	
GOODYEAR	10R17.5 G 291 134/132 MTL	5,5			1850	700	
OTR	10.5/80-18 STABILIZER 10PR TL	3,7			1850	700	

		PRESSURE	LOAD (kg)	GROUND CONTACT PRESSURE (kg/cm2)		GROUND CONTACT AREA (cm2)	
		(bar)	LOND (Ng)	HARD GROUND	SOFT GROUND	HARD GROUND	SOFT GROUND
			1100	5,48	1,67	194	647
	405/70-20 14PR 149B A-323	2.5	1250	5,71	1,70	212	724
	403/70-20 14PK 149D A-323	3,5	3450	7,61	2,55	442	1310
ALLIANCE			3750	7,83	2,67	471	1375
ALLIANCE			650				
	10.5-18 MPT 317 12PR 130G	4.5	700				
	10.5-16 MP1 517 12PK 150G	4,5	1550				
			1850				
	15.5/80-24 AS 504 16PR TL		1100				
BKT		4	1250				
DVI			3450				
			3750				
	14.5R20 18PR 143G/J MPT80 TL	3,5	1100	1,77	0,89	620	1240
CONTINENTAL			1250	1,94	0,97	643	1286
CONTINENTAL			3450	3,33	1,67	1031	2062
			3750	3,44	1,72	1090	2180
	235/75R17.5 132/130 M KMAX S		650				
GOODYEAR	233//3R17.3 132/130 W RWAX 3	8	1550				
GOODTEAK	10R17.5 G 291 134/132 M TL	5,5	700	6,31	4,40	111	159
	10K17.3 G 291 134/132 WITE	5,5	1850	7,23	5,47	256	338
			1100				
MICHELIN	380/75 R20 148A8 148B XMCL TL	4	1250				
MICHELIN	300//3 R20 140A0 140D AWICL IL	4	3450				
			3750				
	16/70 20 CTARH IZER 10PP TI	2.5	1100				
OTR	16/70-20 STABILIZER 10PR TL	3,5	3750				
UIK	10.5/80-18 STABILIZER 10PR TL 3,7	2.7	700				
		3,/	1850				

M26-4 D ST5 S1 EU		PRESSURE			PER TIRE (g)	
W20-4 D	31331 60	(bar)	FRONT UNLADEN FRONT (LADEN)		REAR (UNLADEN)	REAR (LADEN)
ALLIANCE	405/70-20 14PR 149B A-323	3,5	1100	3300		
BKT	15.5/80-24 AS 504 16PR TL	4	1100	3300		
MICHELIN	380/75 R20 148A8 148B XMCL TL	4	1100	3300		
ALLIANCE	10.5-18 MPT 317 12PR 130G	4,5			1700	800

M30-4 D	M30-4 D ST5 S1 EU		LOAD PER TIRE (kg)					
MI30-4 D 313 31 EU		(bar)	FRONT UNLADEN	FRONT (LADEN)	REAR (UNLADEN)	REAR (LADEN)		
ALLIANCE	405/70-20 14PR 149B A-323	3,5	1050	3750				
BKT	15.5/80-24 AS 504 16PR TL	4	1050	3750				
MICHELIN	380/75 R20 148A8 148B XMCL TL	4	1050	3750				
OTR	16/70-20 STABILIZER 10PR TL	3,5	1050	3750				
CAMSO	13.00-24 TLH 592S		1050	3750				
CAMSO	400/80-24 MPT753	5	1050	3750				
ALLIANCE	10.5-18 MPT 317 12PR 130G	4,5			1900	750		
OTR	10.5/80-18 STABILIZER 10PR TL	3,7			1900	750		
CAMSO	36X14-20 SKS 792S				1900	750		
CAMSO	340/80-18 143 A8 MPT 753	3,2			1900	750		

		PRESSURE	LOAD (kg)	GROUND CONTACT	PRESSURE (kg/cm2)	GROUND CONTACT AREA (cm2)	
		(bar)	zono (ng)	HARD GROUND	SOFT GROUND	HARD GROUND	SOFT GROUND
			1050	5,40	1,65	188	622
	405/70-20 14PR 149B A-323	3,5	1100	5,48	1,67	194	647
	405//0-20 14FK 149D A-323	3,3	3300	7,49	2,49	427	1278
ALLIANCE			3750	7,83	2,67	471	1375
ALLIANCE			750				
	10.5-18 MPT 317 12PR 130G	4,5	800				
	10.5-16 MP1 517 12PK 150G	C14	1700				
			1900				
	15.5/80-24 AS 504 16PR TL	4	1050	1,9	540		
ВКТ			1100	1,9	579		
DNI			3300	2,4	1359		
			3750	2,5	1525		
	380/75 R20 148A8 148B XMCL TL		1050				
MICHELIN		4	1100				
MICHELIN	300/73 N20 140A0 140B AMCE 1E		3300				
			3750				
	16/70-20 STABILIZER 10PR TL	3,5	1050				
OTR	10/70-20 STADILIZER TOPK TE	3,3	3750				
OIN	10.5/80-18 STABILIZER 10PR TL	3,7	750				
	10.5/00-10 STADILIZER TOTAL TE	3,1	1900				
	13.00-24 TLH 592S		1050				
	13/00 27 12/13/23		3750				
	400/80-24 MPT753	5	1050				
CAMSO	400/00 Z4 IIII 1733		3750				
C/11/150	36X14-20 SKS 792S		750				
	30/11 20 3N3 / 723		1900				
	340/80-18 143 A8 MPT 753	3,2	750				
	340/00-10 143 A0 MF 1 733	3,2	1900				

MAO 2 D STE SA FIL		PRESSURE	LOAD PER TIRE (kg)					
W40-2 D	M40-2 D ST5 S1 EU		FRONT UNLADEN	FRONT (LADEN)	REAR (UNLADEN)	REAR (LADEN)		
ALLIANCE	18-19.5 224 18PR	7,25	1300	4550				
MICHELIN	18R19-5 XF TL	6,5	1300	4550				
OTR	18/22.5 STABILIZER 16PR TL	3,5	1300	4550				
GOODYEAR	235/75R17.5 132/130 M KMAX S	9,4			2150	900		
OTR	12.5/80-18 STABILIZER 10PR TL	3,7			2150	900		

M50-2 D ST5 S1 EU		PRESSURE			PER TIRE	
W150-2 D	M20-7 D 212 21 EO		FRONT UNLADEN	FRONT (LADEN)	REAR (UNLADEN)	REAR (LADEN)
ALLIANCE	18-19.5 224 18PR	7,25	1650	5800		
MICHELIN	18R19-5 XF TL	6,5	1650	5800		
OTR	18/22.5 STABILIZER 16PR TL	3,5	1650	5800		
GOODYEAR	235/75R17.5 132/130 M KMAX S	9,4			2500	850
OTR	12.5/80-18 STABILIZER 10PR TL	3,7			2500	850

		PRESSURE	LOAD (kg)	GROUND CONTACT	PRESSURE (kg/cm2)	GROUND CONTACT AREA (cm2)	
		(bar)	20/13 (1.ig)	HARD GROUND	SOFT GROUND	HARD GROUND	SOFT GROUND
			1300				
ALLIANCE	ALLIANCE 10.10.5.334.10DD	7,25	1650				
ALLIANCE 18-19.5 224 18PR	1,23	4550					
			5800				
			850				
GOODYEAR 235/75R17.5 132/130 M KMAX	235/75R17.5 132/130 M KMAX S	9,4	900				
GOODILAN	255,751(7.15 152,150 M 141170C 5		2150				
			2500				
		6,5	1300	2,94	1,36	441	952
MICHELIN	18R19-5 XF TL		1650	3,38	1,57	489	1054
	33 32 12	,,,,	4550	4,05	1,88	1118	2413
			5800	4,21	1,95	1375	2966
			1300				
OTR	18/22.5 STABILIZER 16PR TL	3,5	1650				
			4550				
			5800				
			850				
OTR	12.5/80-18 STABILIZER 10PR TL	3,7	900				
			2150				
			2500				

M40.4 D	M40-4 D ST5 S1 EU		LOAD PER TIRE (kg)					
IVI4U-4 D 313 31 EU		(bar)	FRONT UNLADEN	FRONT (LADEN)	REAR (UNLADEN)	REAR (LADEN)		
MICHELIN	18R22-5 XF TL	5,5	1300	4500				
MITAS	480/65-22.5 IND 16PR/163A8 MPT-06 TL	4,5	1300	4500				
OTR	18/22.5 STABILIZER 16PR TL	3,5	1300	4500				
BKT	15.5/80-24 AS 504 16PR TL	4	1300	4500				
CAMSO	13.00-24 TLH 592S		1300	4500				
CAMSO	400/80-24 MPT753	5	1300	4500				
MICHELIN	340/80 R18 143A8/143B IND TL XMCL	3,2			2150	1000		
OTR	12.5/80-18 STABILIZER 10PR TL	3,7			2150	1000		
ALLIANCE	340/80R18 IND 143A8 A580	3,2			2150	1000		
CAMSO	340/80-20 144 A8 MPT 753	3,2			2150	1000		
CAMSO	340/80-18 143 A8 MPT 753	3,2			2150	1000		

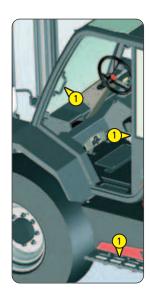
M50-4 D ST5 S1 EU		PRESSURE	LOAD PER TIRE (kg)					
		(bar)	FRONT UNLADEN	FRONT (LADEN)	REAR (UNLADEN)	REAR (LADEN)		
MICHELIN	18R22-5 XF TL	5,5	1650	5750				
MITAS	480/65-22.5 IND 16PR/163A8 MPT-06 TL	4,5	1650	5750				
OTR	18/22.5 STABILIZER 16PR TL	3,5	1650	5750				
MICHELIN	340/80 R18 143A8/143B IND TL XMCL	3,2			2500	900		
OTR	12.5/80-18 STABILIZER 10PR TL	3,7			2500	900		
ALLIANCE	340/80R18 IND 143A8 A580	3,2			2500	900		

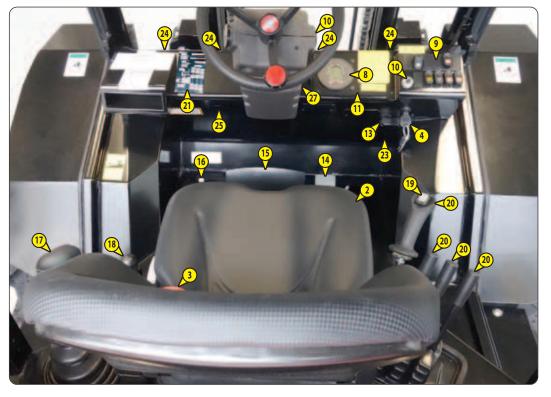
		PRESSURE	LOAD (kg)	GROUND CONTACT	PRESSURE (kg/cm2)	GROUND CONTACT AREA (c	
		(bar)		HARD GROUND	SOFT GROUND	HARD GROUND	SOFT GROUND
			1300	1,66	0,77	787	1697
	18R22-5 XF TL	5,5	1650	1,94	0,90	836	1803
	IONZZ-5 AF IL	5,5	4500	3,37	1,56	1282	2766
MICHELIN			5750	3,68	1,71	1560	3366
MICHELIN			900				
	340/80 R18 143A8/143B IND TL XMCL	2.2	1000				
		3,2	2150				
			2500				
	MITAS 480/65-22.5 IND 16PR/163A8 MPT-06		1300				
MITAC		4,5	1650				
WITHS	TL		4500				
			5750				
			1300				
	18/22.5 STABILIZER 16PR TL	3,5	1650				
	10/22.3 STADILIZER TOPK IL	3,3	4500				
OTR			5750				
OIN			900				
	12.5/80-18 STABILIZER 10PR TL	3,7	1000				
	12.5/60-10 STADILIZER TUPK IL	3,7	2150				
			2500				
BKT	15.5/80-24 AS 504 16PR TL	4	1300				
DNI	13.3/60-24 A3 304 TOPK IL	4	4500				
	13.00-24 TLH 592S		1300				
	15.00-24 1211 5925		4500				
	400/80-24 MPT753	5	1300				
CAMSO	400/00-24 IVIF 1/33	,	4500				
CHINIO	340/80-20 144 A8 MPT 753	3,2	1000				
	3-10/00-20 144 NO WIF 1 /33	3,2	2150				
	340/80-18 143 A8 MPT 753	3,2	1000				
	340/00-10 143 MO WIFT /33	3,2	2150				

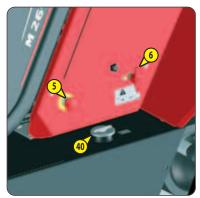
INSTRUMENTS AND CONTROLS

N.B.: 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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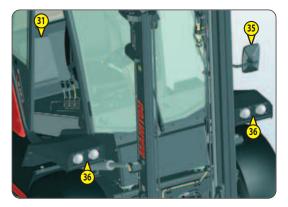




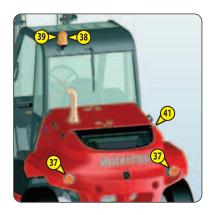






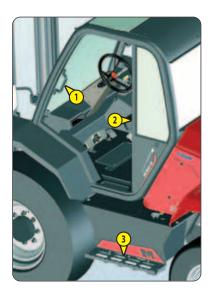






1 - DRIVER'S CAB ACCESS

- 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 Driver's cab pillar.
 - 3 Step.



2 - DRIVER'S SEAT

DRIVER'S SEAT, SKAI UPHOLSTERY (STANDARD)

DRIVER'S SEAT, FABRIC UPHOLSTERY (OPTION)

For increased comfort, adjust the seat to your requirements for a correct position in the driver's cab.

LONGITUDINAL ADJUSTMENT

- Pull lever 1 and slide the seat to the desired position.
- Release the lever and be sure it returns to the lock position.

SEAT HEIGHT ADJUSTMENT (first version only)

- Sit down correctly in the seat.
- Turn the knob 2 according to the desired height, clockwise to raise, counterclockwise to lower.

SEAT SUSPENSION ADJUSTMENT (first version)

- Make sure that the indicator 3 is in the green zone.

SEAT SUSPENSION ADJUSTMENT (second version)

- Adjust the operator's weight with knob 2.

BACKREST ANGLE ADJUSTMENT (first version)

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

BACKREST ANGLE ADJUSTMENT (second version)

- Support the backrest, pull the lever 4 and tilt the backrest to the desired position.



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

MAINTENANCE

- Keep your seat clean to ensure it operates efficiently.
- Clean the cushions using a suitable product.
- Apply to a small hidden area first, to check the colour-fastness of covering.
- Avoid wetting the cushions.





DRIVER'S PNEUMATIC SEAT (OPTION)

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

SEAT WEIGHT AND HEIGHT ADJUSTMENT

Adjust the weight when the driver is sitting on the seat.

- Switch on lift truck ignition.
- Move the weight adjustment lever 1 upwards to increase the weight or downwards to reduce it.
- The min. and max. weight can be set by engaging the upper or lower limit switch.
- The driver's weight is correctly adjusted when the arrow is in the center of the indicator 2
- The seat height can be adjusted within this zone.

N.B.: To avoid health problems, it is recommended that the weight setting is checked and adjusted before starting the lift truck.



To avoid damage, do not operate the compressor for more than 1 minute.

LONGITUDINAL ADJUSTMENT

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

LUMBAR ADJUSTMENT

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

- Turn the handle 4 upward to adjust the height and depth of the lumbar support on the upper part of the backrest.
- Turn the handle 4 downward to adjust the height and depth of the lumbar support of the lower part of the backrest.

BACKREST ANGLE ADJUSTMENT

- Support the backrest, pull the lever 5 and tilt the backrest to the desired position.



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

MAINTENANCE

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

- The cushions do not need to be removed from the seat frame for cleaning.

A IMPORTANT A

A moving backrest increases the risk of an accident!

First check the resistance of the fabric on a small concealed area before using any fabric and plastic cleaner.

3 - SEAT BELT

A IMPORTANT A

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 the 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 - IGNITION SWITCH

This key switch has 5 positions:

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



5 - EXTERNAL EMERGENCY STOP (OPTION)

▲ IMPORTANT **▲**

Be ready for hydraulic movements suddenly stopping when you press this button. If possible stop the lift truck before using the emergency stop button.

- OFF (locked): Press the button to stop the engine.
- ON (unlocked): Pull the button or turn it clockwise a quarter turn and release it.





6 - 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 no less than 30 seconds after turning off the ignition with the ignition key.



7 - "EasyMANAGER" KEYPAD (OPTION)

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.

N.B.: 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.



8 - DASHBOARD HANDSET

INDICATOR LIGHTS

A IMPORTANT A

A permanently lit or flashing warning light, with the engine running, is the sign of an operating fault.

The lighting of some lamps may be accompanied by an audible signal. Do not ignore this warning, consult your dealer without delay.

If one of the warning lights comes on while the lift truck is in motion, stop the lift truck under the safest possible conditions.

When activating the electrical system of the lift truck, all the red and orange lamps and the panel's buzzer must light to indicate their good working order. If one of the red lights or the buzzer fails to operate, carry out the necessary repairs.





BATTERY CHARGE WARNING INDICATOR

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



PARKING BRAKE INDICATOR LAMP

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



ENGINE FAULT INDICATOR

If the indicator light 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.



SEAT BELT INDICATOR

The light accompanied by a buzzer indicates that the operator has not fastened the seat belt.



ENGINE STOP WARNING INDICATOR

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



HYDRAULIC RETURN FILTER CLOGGING FAULT INDICATOR LAMP

The indicator light and buzzer come on when the hydraulic return oil filter cartridge is clogged. Stop the engine and carry out the necessary repairs (3 - MAINTENANCE: FILTER CARTRIDGES AND BELTS).

NOTE: This lamp may come on when starting the forklift truck, and it should go off when the hydraulic fluid reaches its operating temperature.



AIR FILTER CLOGGING WARNING INDICATOR

The light and the buzzer come on when the air filter cartridge is clogged. Stop the engine and carry out the necessary repairs (◀ 3 - MAINTENANCE: FILTER CARTRIDGES AND BELTS).



ENGINE WATER LEVEL WARNING INDICATOR LAMP

If the indicator light 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.).



BRAKE FLUID LEVEL WARNING INDICATOR

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



ENGINE OIL PRESSURE WARNING INDICATOR LAMP

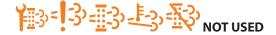
If the indicator lamp comes on when the forklift truck is running, stop the engine immediately and determine the cause (< oil level in engine crankcase).

N.B.: 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.



WATER IN FUEL PRE-FILTER WARNING INDICATOR LAMP

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



MULTIFUNCTION SCREEN



FORWARD/NEUTRAL/REVERSE INDICATOR



TURN SIGNAL INDICATOR

LIGHTING, INDICATOR AND HORN SWITCH

⋖ SWITCHES

■ MAIN BEAM INDICATOR LAMP

⋖ SWITCHES



⚠ GENERAL FAULT WARNING INDICATOR

The indicator light is accompanied by an error code on the display. Consult your dealer.



₹ 500H MAINTENANCE INDICATOR

The indicator light is accompanied by the time remaining or the time elapsed on the display (\triangleleft MAINTENANCE).

NOTE: The maintenance wench appears 50 hours before the deadline and generates an audible signal when the lift truck is started.

ENGINE PREHEAT INDICATOR

Preheating is necessary. When the lift truck is switched on, the indicator light comes on and then goes off as soon as the preheat sequence has ended. Start the lift truck's engine.

○ I GEARBOX OIL TEMPERATURE WARNING INDICATOR

The indicator and buzzer come on when the gearbox oil temperature is abnormally high. Stop the engine and determine the cause (gearbox oil level, possible leak, radiator, etc.).

GEARBOX OIL PRESSURE WARNING INDICATOR LAMP

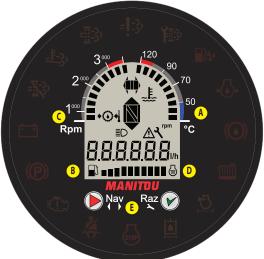
The indicator lamp and buzzer come on when there is an abnormal drop in gearbox pressure, in forward gear. Stop the engine and determine the cause (gearbox oil level, possible leak, radiator, etc.).

N.B.: This indicator lamp operates in forward travel conditions only, and can be ignored when the lift truck is stopped with the engine running at min rpm.

A - ENGINE WATER TEMPERATURE

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

N.B.: The intermittent flashing of all the LEDs, the indicator light and the buzzer indicates a malfunction. Consult your dealer.



B-FUEL LEVEL

If the indicator light \(\begin{align*} \begin{align*} \langle \text{and} \\ \text{the buzzer come on when the lift truck is running, you have reached the reserve fuel level and your operating time is limited.}

N.B.: The intermittent flashing of all the LEDs, the indicator light and the buzzer indicates a malfunction. Consult your dealer.

C-REV COUNTER



Do not exceed the engine's maximum speed (< SPECIFICATIONS [7.3.1]).

D-NO PREHEATING ROD PLUG (OPTION)

The indicator lamp flashes when the power plug of the engine block heater is not connected to the safety socket.

✓ DESCRIPTION (option): ENGINE BLOCK HEATER

E-NAVIGATION



MENU SCROLL BUTTON

NOTE: By default, when the lift truck is started, the screen displays the last selection made by the operator.

- 1 Hour meter (h)
- 2 Rev counter (rpm)
- 3 Current fuel consumption (I/h)
- 4 Forward/reverse -> Rev counter (rpm)
 - Neutral -> Hour meter (h)





VALIDATION BUTTON, MAINTENANCE, ERROR CODES AND RESET

• 1 - Menu selected by the operator displayed

NO ERROR CODE

- 2 a Time to 500H maintenance (h)
- To reset this maintenance, carry out the 500-hour maintenance (◀ 3 MAINTENANCE).
 - 3 a No error

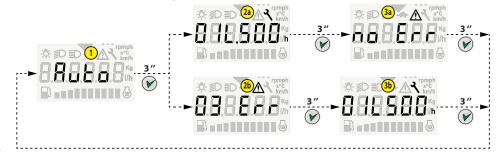
WITH ERROR CODE(S)

- 2 b Error (scroll through error codes in a loop or press)
- Before contacting your dealer, check the fuses.



In order to resolve the problems with the lift truck, communicate the error code(s) to your dealer.

- 3 b Time to 500H maintenance (h)
- To reset this maintenance, carry out the 500-hour maintenance (◀ 3 MAINTENANCE).



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9 - SWITCHES

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



REAR AXLE CLUTCH

M26-4 ... / M30-4 ... / M40-4 ... / M50-4 ...

- 0 2 Driving wheels.
- II 4 Driving wheels (indicator lamp on).



TRANSMISSION CUT-OFF

- 0 Transmission cut-off on gear lever.
- II Transmission cut-off on gear lever and service brake pedal (indicator light on).



HAZARD WARNING LIGHTS

- 0 Stop.
- II On (indicator light on).



FRONT WINDSHIELD WIPER AND WINDSHIELD WASHER FLUID

- 0 Stop.
- I Front windshield wiper (indicator light on).
- II Windshield washer (push).



REAR WINDSHIELD WIPER + ROOF WINDSHIELD WIPER (OPTION)

- I Rear windshield wiper (indicator light on).
- II Roof windshield wiper (push).



ROTATING BEACON OR FLASHING LIGHT (OPTION)

- 0 Stop.
- II On (indicator light on).



FRONT WORKLIGHTS (OPTION)

- 0 Stop.
- II On (indicator light on).



REAR WORKLIGHTS (OPTION)

- 0 Stop.
- II On (indicator light on).



HEATING FAN (OPTION)

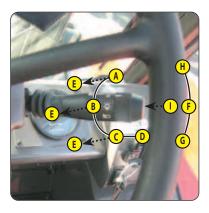
- 0 Stop.
- I Speed 1 (indicator light on).
- II Speed 2 (indicator light on).

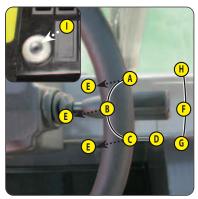


<u>10 - LIGHTING, HORN AND TURN SIGNALS (Depending on model)</u>

The road lights can be used without the ignition key.

- A Road lights off
- B Front and rear sidelights
- C Low beam headlights
- D High beam headlights
- E Headlight flashing (pulse)
- F Turn signals off
- G Right turn signals
- H Left turn signals
- I Horn (pulse)





11 - FUSES AND RELAYS IN THE CAB

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

FIRST VERSION

MINIFUSE

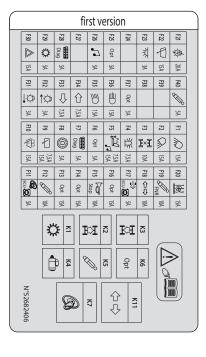
	FU3E	
F1		Front worklights (Option)
F2		Rear worklights (Option)
F3		Rear axle clutch. M26-4 / M30-4 / M40-4 / M50-4
F4		Rotating beacon light (Option)
	7.5 A	Car radio (Option)
F5	15 A	Car radio (Option)
	IDA	Pneumatic seat (Option)
F6	3 A	"EasyMANAGER" keypad (Option)
F7	5 A	Diagnostics plug
F8	5 A	Control instruments panel
	7.5 A	Rear windshield wiper
F9		Rear windshield wiper
	15 A	Roof wiper (Option)
		Front windshield wiper
F10	15 A	Front windshield washer
		Fuel preheat
F11	5 A	Engine ECU
[[]	J A	F41 power supply
E12	10 4	
F12		Driver presence safety Free
F13		Free Free
F14	IDA	
F15	10 A	Audible alarm
		Stop switch
F16	_	Free
F17	5 A	Free
F18	10 A	Flashing unit
F19	10 A	Forward/neutral/reverse selector
		Forward/neutral/reverse power relay
F20		Ventilation/heating (Option)
F21		Lighting, horn and indicator lights switch
F22		Front windscreen wiper automatic return
F23	3 A	Roof light (Option)
F24	3 A	Free
F25	_	Free
F26	5 A	Car radio (Option)
F27	3 A	Free
F28	5 A	Diagnostics plug
F29		Transmission cut-off on gear lever
F30	15 A	Hazard warning lights
_		Right sidelights
F31	3 A	Side marker lights indicator.
		Control panel illumination
F32	3 A	Left sidelights
Г32	3 K	Air conditioning lighting (Option)
F33		Right indicator lights
F34		Left indicator lights
F35		Dipped beam headlights
F36	15 A	Main beam headlights
F37	3 A	Anti-start
F38		Free
F39		Free
F40	5 A	4th and 5th hydraulic line (Option)

RELAYS

	····
K1	Transmission cut-off
K2	Forward gear
К3	Reverse gear Reversing sound alarm (Option)
K4	Start safety
K5	Driver presence safety
K6	Air conditioning (Option)
K7	General power supply
K11	Flashing unit



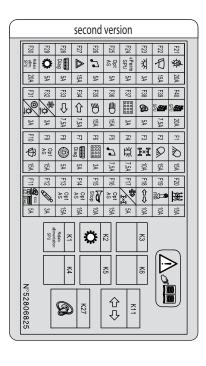




SECOND VERSION

MINIFUSE

MINIFUSE			
F1	15 A	Front worklights (Option)	
F2	15 A	Rear worklights (Option)	
F3	10 A	Rear axle clutch. M26-4 / M30-4 / M40-4 / M50-4	
F4	7.5 A	Rotating beacon light (Option)	
F5		Car radio (Option)	
F6		"EasyMANAGER" keypad (Option) +APC	
F7		Diagnostics plug	
F8		Control instruments panel	
F9		Rear windshield wiper	
F10		Front windshield wiper	
1 10	אכו	Fuel preheat	
F11	- ^	•	
F11	5 A	Engine ECU	
		F41 power supply	
F12		Relay power supply K2	
F13		Option	
F14	15 A	Option	
F15	10 A	Audible alarm	
LID	IUA	Stop switch	
F16	15 A	Free	
F17	5 A	Transmission cut-off switch	
F40	40.0	Hazard warning lights + PERM	
F18	10 A	Movement cut-off switch	
F19	10 A	Forward/neutral/reverse selector	
F20		Ventilation/heating (Option)	
F21	20 A	Lighting, horn and indicator lights switch	
F22		Front windscreen wiper automatic return	
F23		Roof light (Option)	
F24		Power supply +PERM SPU	
F25		Free	
F26		Car radio (Option)	
F27		Hazard warning lights + APC	
F28		Diagnostics plug	
F29	5 A	Transmission cut-off on gear lever	
F30		Power supply +PERM SPU	
150	2071	Right sidelights	
F31	2 V	Side marker lights indicator.	
LOI	J A		
		Control panel illumination	
F32	3 A	Left sidelights	
		Air conditioning lighting (Option)	
F33	7.5 A	Right indicator lights	
F34		Left indicator lights	
F35		Dipped beam headlights	
F36		Main beam headlights	
F37		"EasyMANAGER" keypad (Option) +PERM	
F38		Immobilizer shunt	
F39		Power supply +APC SPU	
F40	7.5 A	Power supply +APC SPU	



RELAYS

K1	Power supply +PERM SPU
K2	Hydraulic ground
K11	Flashing unit
K27	Power supply +APC

12 - FUSES AND RELAYS UNDER THE ENGINE HOOD

- Remove access panel 1.
- Remove the cover 2.
- Replace a blown fuse with a new fuse of the same quality and rating.
- Never use a repaired fuse.





FIRST VERSION

MINIFUSE

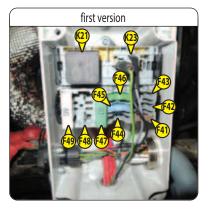
F41	5A	Engine diagnostics plug
F42		Free
F43		Free
F44		Free
F45	15A	Fuel pump
F46	30A	Fuel preheat

MAXIFUSE

F47	30A	Engine control unit power supply
F48	100A	Engine preheat
F49	80A	Overhead guard power supply

RELAIS

_	
K21	Engine preheat
K23	Fuel pump



SECOND VERSION

MINIFUSE

F51	5A	Engine diagnostics plug
F52		Free
F53		Free
F54		Free
F55	15A	Fuel pump
F56	30A	Fuel preheat

MAXIFUSE

F57	30A	Engine control unit power supply
F58	100A	Engine preheat
F59	80A	Cab power supply

RELAIS

K21	Engine preheat
K23	Fuel pump

| K23 | K21 | K21 | K23 | K21 | K21 | K23 | K21 | K23 | K21 | K23 | K24 | K25 | K25

13 - DIAGNOSTICS PLUG (Depending on model)

- Remove the protective casing to access the plug.



15 - SERVICE BRAKE PEDAL AND TRANSMISSION CUT-OFF

The pedal acts on the front wheels by means of a hydraulic brake system enabling the lift truck to be slowed down and stopped. Depending on the position of the transmission cut-off switch, it enables the transmission to be cut off during the free travel.



16 - DIFFERENTIAL LOCK PUSHBUTTON

STANDARD => M26-2 ... / M30-2 ... / M40-2 ... / M50-2 ... OPTIONAL => M26-4 ... / M30-4 ...

▲ IMPORTANT **▲**

While the differential lock is engaged, always drive in a straight line and remain in first gear.

The differential lock allows the driving wheels to turn at the same speed regardless of

- Press the pushbutton and hold this position for as long as the differential lock is required.
- To disengage, simply remove the foot from the push-button that will automatically return to its initial position.



17 - 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, 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 light 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 r-1 gear (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.
- 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.

18 - PARKING BRAKE LEVER

To prevent accidental loosening or release, the lever is fitted with safety locking.

- To apply the parking brake, pull the lever backward (position A).
- To loosen the parking brake, release and push the lever forward (position B).

N.B.: If the parking brake is released when the engine is stopped, the alarm sounds.





19 - FORWARD/NEUTRAL/REVERSE SELECTOR

FIRST VERSION

When changing the direction of travel, the lift truck should be traveling at slow speed and not accelerating. When the reverser is in the neutral position a mechanical lock prevents accidental engagement of forward or reverse gear.

- A FORWARD GEAR: Lift slightly and push the lever forward.
- B REVERSE GEAR: Lift slightly and pull the lever backward.
- C NEUTRAL: The lever must be in neutral in order to start the lift truck.

N.B.: As an OPTION, reversing lights and an acoustic reversing alarm indicate that the lift truck is running in reverse.

SAFETY FOR MOVING THE LIFT TRUCK

The operator must observe the following sequence to move the truck forward or backward:

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

To stop the forklift truck, the following sequence must be observed:

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

If the operator exits the driver's cab with forward or reverse gear engaged: an alarm will sound.

- In the event of a continuous alarm, the operator may sit down again and continue moving forward or backward.
- In the event of a discontinuous alarm, the operator must sit down again, put the selector in neutral and select forward or reverse if he wishes to continue moving.

SECOND VERSION

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

The forward/reverse selector must be in neutral in order to start the lift truck.

A - FORWARD GEAR

- Press the front of the switch.

B-REVERSE GEAR

- Press the back of the switch.

N.B.: A reversing alarm and a reversing light are available as an option.

C-NEUTRAL

- Lightly press the front or back of the switch.

SAFETY FOR MOVING THE LIFT TRUCK

Movement of the lift truck is only authorized if the operator is in the seat with the seat belt on.

To move the forklift truck, the operator must observe the following sequence:

- 1 Sit down correctly in the driver's seat,
- 2 Buckle the seat belt,
- 3 Release the parking brake,
- 4 Engage forward or reverse gear.

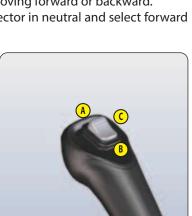
To stop the forklift truck, the operator must observe the following sequence:

- 1 Set the forward/reverse selector to neutral,
- 2 Engage the parking brake,
- 3 Undo the seat belt,
- 4 Get out of the lift truck.

If the operator leaves the driver's cab with forward or reverse gear in operation:

- The alarm emits 1 beep, the operator may sit down again and continue moving.
- If the alarm emits 2 beeps, the operator must sit back in the seat and reset the forward/reverse selector to neutral before continuing to move.

NOTA 1 : Depending on the model, a safety device on the seat belt fastener prevents movement. A beep signals it is in operation.



▲ IMPORTANT **▲**

If it malfunctions contact your dealer.

Do not try to modify the hydraulic pressure of the system.

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.

M-26-2 ... / M26-4 ... / M-30-2 ... / M30-4 ...

A - LOAD LIFTING CONTROL LEVER

- Lever backwards to lift
- · Lever forwards to lower

B-MAST TILTING CONTROL LEVER

- Lever backward to tilt backward
- · Lever forward to tilt forward

N.B.: An optional balancing valve adaptation is available.

C - OPTION CONTROL LEVER

ATTACHMENT OPTION (AUX.1)

· Lever forward or backward

ADDITIONAL ATTACHMENT OPTION (AUX.2)

• Button 1 down and lever forward or backward

N.B.: If indicator 2 is on, it means that the additional attachment line is in use.

M-30-2 ... / M30-4 ...

C-OPTION CONTROL LEVER

MAST TRANSLATION OPTION (AUX.1)

▲ IMPORTANT **▲**

Do not travel when the mast is tilted forward or backward as this may cause damage to the mast.

- Lever backward to move left
- · Lever forward to move right

ADDITIONAL ATTACHMENT OPTION (AUX.2)

• Button 1 down and lever forward or backward

N.B.: If indicator 2 is on, it means that the additional attachment line is in use.

M40-2 ... / M40-4 ... / M50-2 ... / M50-4 ...

A - LOAD LIFTING CONTROL LEVER

- Lever backwards to lift
- · Lever forwards to lower

B-MAST TILTING CONTROL LEVER

- · Lever backward to tilt backward
- · Lever forward to tilt forward

N.B.: An optional balancing valve adaptation is available.

C - OPTION CONTROL LEVER

MAST TRAVEL OPTION

▲ IMPORTANT **▲**

Do not travel when the mast is tilted forward or backward as this may cause damage to the mast.

- Lever backward to move left
- Lever forward to move right

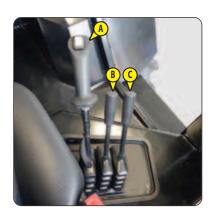
OPTIONAL ATTACHMENT

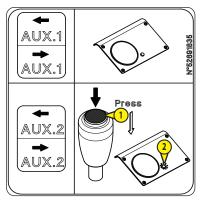
Lever forward or backward

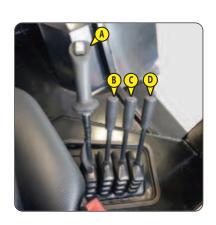
D-OPTION CONTROL LEVER

ADDITIONAL ATTACHMENT OPTION

• Lever forward or backward

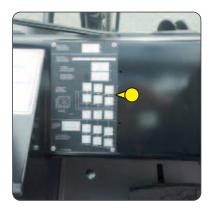






21 - LOAD CHARTS

For your safety, and before handling any load, consult the load charts available in the driver's cab.



22 - LEVEL INDICATOR

Enables the operator to check that the lift truck is in the horizontal position.



23 - HEATER CONTROL (OPTION)

- A 2-speed fan on/off
- B Temperature setting
 - Turn the switch clockwise to increase the temperature.

N.B.: As a minimum, one cab heating vent must be open.





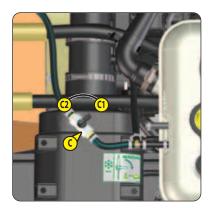
There is an optional EXTREME COLD adaptation.

IMPORTANT ▲

Above 0 °C, the cooling system must be opened to avoid overheating and engine damage.

Below 0 $^{\circ}$ C, valve C in the closed position C1 allows the engine and cab heater to heat up quickly.

- C1 Cooling system closed
- C2 Cooling system open



24 - WINDSHIELD DEFROSTER VENTS (Option)

For optimum effectiveness, close the heating vents.

25 - HEATING VENTS (Option)

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

26 - AIR CONDITIONING CONTROL (Option)

A IMPORTANT A

In winter, once a week, operate the air conditioning from time to time to guarantee it is operating correctly. In cold weather, start and warm up the engine before starting the air conditioning to avoid damaging the air conditioning circuit.

If the air conditioning seems to operate irregularly carry out a service (MAINTENANCE) or consult your dealer.

Never try to repair possible faults in the system, consult your dealer.

- A On/Off for the air conditioning with indicator lamp.
- B Temperature setting
- C Ventilation speed adjustment

CONDITIONS OF USE:

- The air conditioning only works:
 - If the engine is running.
 - If the ventilation is working
- The doors and windows must be closed.
- The air intakes must not be obstructed (frost, snow, leaves, etc.).
- As a minimum, one cab heating vent 1 must be open to avoid the risk of the air conditioning circuit freezing.
- For demisting, the air conditioning must be on with the heating temperature at maximum.

NOTE: Possible water loss under the lift truck are due to the dehumidifying effect of the unit. These losses may vary depending on the exterior temperature and humidity.



27 - STEERING WHEEL ADJUSTMENT LEVER (OPTION)

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

- Turn the handle 1 toward A to loosen and adjust the steering wheel.
- Turn the handle 1 toward B to lock steering wheel in the desired position.



28 - DOOR HANDLES (OPTION)

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



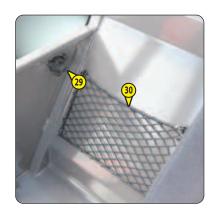


29 - DOOR BLOCK BUTTONS (OPTION)

- Open the door fully and make sure it is blocked in the open position.

30 - STORAGE NET

Ensure that the operator's manual is in its place in the storage net.



31 - WATERPROOF DOCUMENT-HOLDER (OPTION)



32 - SUN VISOR (OPTION)



33 - ROOF LIGHT



34 - INSIDE REAR-VIEW MIRROR (OPTION)



35 - OUTSIDE REAR VIEW MIRRORS

- A Left outside rear view mirror.
- B Right outside rear view mirror (OPTION).





36 - FRONT HEADLIGHTS

- A Right front high beam headlight and turn signal.
- B Right front sidelight and dipped beam headlight.
- C Left front sidelight and dipped beam headlight.
- D Left front high beam headlight and turn signal.





37 - REAR LIGHTS

- A Left rear light (rear light, stop light and turn signal).
- B Right rear light (rear light, stop light and turn signal).

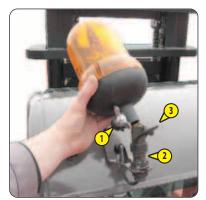




38 - ROTATING BEACON LIGHT

The rotating beacon can be removed, for example to reduce the lift truck's overall external dimensions or to prevent theft.

- Loosen nut 1 and remove the rotating beacon.
- Protect the mount 2 with the cap 3.



39 - FLASHING LIGHT

The flashing light can be removed, for example to reduce the lift truck's overall external dimensions or to prevent theft.

- Loosen nut 1 and remove the rotating beacon.
- Protect the mount 2 with the cap 3.



40 - FUEL TANK

As far as possible, keep the fuel tank well filled in order to minimize 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 the engine is running.

- If necessary, add diesel (< 3 MAINTENANCE: LUBRICANTS AND FUEL).
- Remove the cap 1.
- Fill the fuel tank with clean diesel filtered through the filler port.
- Refit the cap.
- Visually check that there is no leakage in the tank and pipes.



41 - ENGINE BLOCK HEATER (OPTION)

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

SUPPLY CHARACTERISTICS OF PREHEATING SYSTEM:

- Rated power supply voltage range: 110-120V.
- Current consumed: 10A.
- · Class 1 equipment.
- Equipment can only be connected to TT or TN supply diagrams.
- Installation category 2.

ENVIRONMENTAL CONDITIONS FOR USE:

- Maximum ambient temperature for using preheat: + 25 °C.
- Pollution level 2.

CONDITIONS FOR CONNECTION AND USE OF PREHEATING:

- The preheat 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 breaker, sensitive to 30 mA.
- Only connect to and disconnect from the power supply while the unit is switched off and the engine is stopped.

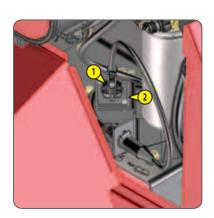
SAFETY FOR MOVING THE MACHINE:

▲ IMPORTANT **▲**

To use the machine, the electric plug 1 of the engine block heater must be connected to the safety socket 2.

If the engine block heater's electric plug is not connected to the safety socket:

- the machine's movement controls are disabled
- If the forward/reverse selector is in the neutral position:
 - The no engine block heater plug indicator flashes on the multifunction screen.
- If the forward/reverse selector is in the forward or reverse position:
 - The no engine block heater plug indicator flashes on the multifunction screen.
 - The requested direction indicator alternates with neutral on the multifunction screen.
 - The alarm sounds intermittently.



SLINGING POINT

▲ IMPORTANT **▲**

This lift truck is not intended for use with a trailer.

IF NECESSARY, CONSULT YOUR DEALER.

This device is used only for slinging and securing the lift truck ($\mathrel{\checkmark\!\!\!/}$ 3 - MAINTENANCE: OCCASIONAL OPERATION).



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 COUNTERFEIT PARTS OR COMPONENTS NOT APPROVED BY THE MANUFACTURER MEANS YOU LOSE THE BENEFIT OF THE CONTRACTUAL GUARANTEE.

- Legally, incurring 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 as a result of 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

▲ IMPORTANT **▲**

THE OPERATOR IS AUTHORIZED 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

A IMPORTANT A

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

A IMPORTANT A

THE PERIODIC MAINTENANCE MUST BE CARRIED OUT BY A PROFESSIONAL APPROVED BY THE MANITOU NETWORK

MAINTENANCE SCHEDULE

- CHECK

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	12
- CHECK	Engine oil level	12
- CHECK	Coolant level	12
- CHECK	Fuel pre-filter	12

Protection of electrical connections 3-14

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

- CHECK	Gearbox oil level	3-14
- CHECK	Tire pressure	3-14
- CHECK	Wheel nut tightening	
- CHECK	Front axle differential seal	3-14
- CHECK	Rear axle differential seal	
- CHECK	Front wheel reducer seals	3-15
- CHECK	Rear wheel reducer seals	
- CHECK	Brake fluid level	3-15
- CHECK	Tension and alignment of mast lifting chains	3-16
- CHECK	Tension and alignment of mast lifting chains	3-16
- CHECK	Hydraulic fluid level	3-16
- CHECK	Windshield washer fluid level	3-17
- CLEAN	Radiator cores	3-17
- CLEAN	Condenser harness (Air conditioning OPTION)	3-17
- LUBRICATE	General lubrication	

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 operation before the first 6 months have expired, perform both the mandatory maintenance and periodic 500 H maintenance (500 H - PERIODIC MAINTENANCE - 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 Gearbox oil level 3-14 CHECK Tire pressure. -3-14 CHECK Wheel nut tightening 3-14 CHECK Front axle differential seal 3-14 CHECK Rear axle differential seal 3-15 CHECK Rear wheel reducer seals 3-15 CHECK Brake fluid level 3-15 CHECK Tension and alignment of mast lifting chains 3-16 CHECK Tension and alignment of mast lifting chains 3-16 CHECK Hydraulic fluid level 3-17 CHECK Hydraulic fluid level 3-16 CHECK Windshield washer fluid level 3-17 CLEAN Radiator cores 3-17 CLEAN Radiator cores 3-17 CLEAN Radiator cores 3-17 LUBRICATE General lubrication 3-18 CHECK <t< th=""><th>- CHECK</th><th>Protection of electrical connections</th><th> 3-14</th></t<>	- CHECK	Protection of electrical connections	3-14
CHECK Wheel nut tightening 3-14 CHECK Front axle differential seal 3-14 CHECK Rear axle differential seal 3-15 CHECK Front wheel reducer seals 3-15 CHECK Rear wheel reducer seals 3-15 CHECK Brake fluid level. 3-15 CHECK Tension and alignment of mast lifting chains. 3-16 CHECK Tension and alignment of mast lifting chains. 3-16 CHECK Hydraulic fluid level. 3-16 CHECK Hydraulic fluid level. 3-17 CLEAN Radiator cores 3-17 CHECK Parking brake lever mechanism	- CHECK	Gearbox oil level	
CHECK Front axle differential seal 3-14 CHECK Rear axle differential seal 3-15 CHECK Front wheel reducer seals 3-15 CHECK Rear wheel reducer seals 3-15 CHECK Brake fluid level 3-15 CHECK Tension and alignment of mast lifting chains 3-16 CHECK Tension and alignment of mast lifting chains 3-16 CHECK Hydraulic fluid level 3-16 CHECK Hydraulic fluid level 3-16 CHECK Windshield washer fluid level 3-17 CLEAN Radiator cores 3-17 CLEAN Radiator cores 3-17 CLEAN Radiator cores 3-17 CLEAN Condenser harmess (Air conditioning OPTION) 3-17 LUBRICATE General lubrication 3-18 CHECK Parking brake 3-20 CHECK Parking brake 3-20 CHECK Parking brake 3-21 CHECK Parking brake 3-20 CHECK Fo	- CHECK	Tire pressure	3-14
CHECK Rear axle differential seal 3-15 CHECK Front wheel reducer seals 3-15 CHECK Rear wheel reducer seals 3-15 CHECK Brake fluid level 3-16 CHECK Tension and alignment of mast lifting chains. 3-16 CHECK Tension and alignment of mast lifting chains. 3-16 CHECK Hydraulic fluid level 3-16 CHECK Windshield washer fluid level. 3-17 CLEAN Radiator cores 3-17 CLEAN Condenser harness (Air conditioning OPTION) 3-17 LUBRICATE General lubrication 3-18 CHECK Parking brake 3-20 CUBRICATE Parking brake 3-20 LUBRICATE Parking brake lever mechanism 3-21 CHECK Parking brake 3-22 CHECK Fork wear * 3-22 CHECK Fork wear * 3-22 CHECK Sea belt 3-22 CHECK Sea belt 3-32 CHECK Gearbox silent	- CHECK	Wheel nut tightening	3-14
CHECK Front wheel reducer seals 3-15 CHECK Rear wheel reducer seals 3-15 CHECK Brake fluid level 3-15 CHECK Tension and alignment of mast lifting chains. 3-16 CHECK Tension and alignment of mast lifting chains. 3-16 CHECK Hydraulic fluid level 3-16 CHECK Windshield washer fluid level 3-17 CLEAN Radiator cores 3-17 CLEAN Condenser harness (Air conditioning OPTION) 3-17 LUBRICATE General lubrication 3-18 CHECK Parking brake 3-20 LUBRICATE Parking brake 3-20 LUBRICATE Parking brake lever mechanism 3-21 CHECK Parking brake lever mechanism 3-21 CHECK Fork wear * 3-22 CHECK Fork wear * 3-22 CHECK Fork wear * 3-22 CHECK Seat belt 3-30 CHECK Engine shock mounts * 3-30 CHECK G	- CHECK	Front axle differential seal	3-14
- CHECK Rear wheel reducer seals 3-15 - CHECK Brake fluid level 3-15 - CHECK Tension and alignment of mast lifting chains 3-16 - CHECK Tension and alignment of mast lifting chains 3-16 - CHECK Hydraulic fluid level 3-17 - CHECK Windshield washer fluid level 3-17 - CLEAN Radiator cores 3-17 - CLEAN Condenser harness (Air conditioning OPTION) 3-17 - LUBRICATE General lubrication 3-17 - CHECK Parking brake 3-20 - CHECK Parking brake 3-21 - CHECK Parking brake lever mechanism 3-21 - GREASE Mast lifting chains 3-21 - CHECK Fork wear* 3-22 - CHECK Fork wear* 3-22 - CHECK Seat belt 3-22 - CHECK Engine shock mounts * 3-30 - CHECK Gearbox silent blocks * 3-30 - CHECK Gear box controls * 3-30 - CHECK Gear box controls * 3-30 - CHECK <td>- CHECK</td> <td>Rear axle differential seal</td> <td> 3-15</td>	- CHECK	Rear axle differential seal	3-15
- CHECK Brake fluid level 3-15 - CHECK Tension and alignment of mast lifting chains 3-16 - CHECK Tension and alignment of mast lifting chains 3-16 - CHECK Hydraulic fluid level 3-16 - CHECK Windshield washer fluid level 3-17 - CLEAN Radiator cores 3-17 - CLEAN Condenser harness (Air conditioning OPTION) 3-17 - LUBRICATE General lubrication 3-18 - CHECK Parking brake 3-20 - LUBRICATE Parking brake lever mechanism 3-21 - CHECK Parking brake lever mechanism 3-21 - CHECK Pork wear * 3-22 - CHECK For wear * 3-22 - CHECK For wear * 3-22 - CHECK Seat belt 3-26 - CHECK Seat belt 3-26 - CHECK Gearbox silent blocks * 3-36 - CHECK Gearbox controls * 3-36 - CHECK Gearbox controls * 3-36 - CHECK </td <td>- CHECK</td> <td>Front wheel reducer seals</td> <td></td>	- CHECK	Front wheel reducer seals	
- CHECK Tension and alignment of mast lifting chains. 3-16 - CHECK Tension and alignment of mast lifting chains. 3-16 - CHECK Hydraulic fluid level. 3-16 - CHECK Windshield washer fluid level. 3-17 - CLEAN Radiator cores. 3-17 - CLEAN Condenser harness (Air conditioning OPTION) 3-17 - LUBRICATE General lubrication 3-18 - CHECK Parking brake 3-20 - LUBRICATE Parking brake lever mechanism 3-21 - GREASE Mast lifting chains 3-21 - CHECK Fork wear * 3-22 - CHECK Seat belt 3-26 - CLEAN Fuel tank 3-27 - CHECK Gearbox silent blocks * 3-30 - CHECK Gearbox controls * 3-30 - CHECK Gearbox controls * 3-30 - CHECK Condition of wiring harnesses and cables * 3-30 - CHECK Condition of wiring harnesses wiring wiring wiring wiring wiring wiring wiring wiring wiring	- CHECK	Rear wheel reducer seals	3-15
- CHECK Tension and alignment of mast lifting chains. 3-16 - CHECK Hydraulic fluid level. 3-16 - CHECK Windshield washer fluid level. 3-17 - CLEAN Radiator cores 3-17 - CLEAN Condenser harness (Air conditioning OPTION) 3-17 - CLEAN Condenser harness (Air conditioning OPTION) 3-17 - CLEAN Condenser harness (Air conditioning OPTION) 3-17 - CLEAN General lubrication 3-18 - CHECK Parking brake 3-20 - CHECK Parking brake lever mechanism 3-21 - GREASE Mast lifting chains 3-21 - CHECK Fork wear * 3-25 - CHECK Seat belt 3-26 - CLEAN Fuel tank 3-27 - CHECK Engine shock mounts * 3-30 - CHECK Gearbox silent blocks * 3-30 - CHECK Gearbox silent	- CHECK	Brake fluid level	
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- CLEAN Fuel tank 3-27 - CHECK Engine shock mounts * 3-30 - CHECK Gearbox silent blocks * 3-30 - CHECK Gear box controls * 3-30 - CHECK Brake system pressure * 3-30 - CHECK Condition of wiring harnesses and cables * 3-30 - CHECK Lights and signals * 3-30 - CHECK Warning indicators * 3-30 - CHECK Condition of the rear view mirrors * 3-30 - CHECK Overhead guard structure * 3-30 - CHECK Cabin structure (OPTION) * 3-30 - CHECK Chassis structure * 3-30 - CHECK Chassis structure * 3-30	- CHECK	Fork wear *	3-25
- CHECK Engine shock mounts *	- CHECK	Seat belt	3-26
- CHECK Gearbox silent blocks *	- CLEAN	Fuel tank	3-27
- CHECK Gear box controls *	- CHECK	Engine shock mounts *	3-30
- CHECK Brake system pressure *	- CHECK	Gearbox silent blocks *	3-30
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- CHECK Cabin structure (OPTION) *	- CHECK	Condition of the rear view mirrors *	3-30
- CHECK Chassis structure *	- CHECK	Overhead guard structure *	3-30
	- CHECK	Cabin structure (OPTION) *	3-30
	- CHECK		
- CHECK Attachment mounting system *	- CHECK		
- CHECK Condition of attachments *	- CHECK	Condition of attachments *	

* Consult your dealer.

PERIODIC MAINTENANCE

MAINTENANCE SCHEDULE

	U o	R U				
SCHEDULE 🗢	FIRST 6 MONTHS	FIRST 500 HOURS	500 H or 1 YEAR	1000 H or 2 YEARS	1500 H or 3 YEARS	2000 H or 4 YEARS
PERIODIC MAINTENANCE	MANDATORY SERVICE	MANDATORY SERVICE +	0	0+2	0	0+0+8
MACHINE COUNTER 🗢						
DATE OF SERVICING						

SCHEDULE 🗢	2500 H or 5 YEARS	3000 H or 6 YEARS	3500 H or 7 YEARS	4000 H or 8 YEARS	4,500 H or 9 YEARS	5000 H or 10 YEARS	5500 H or 11 YEARS
PERIODIC MAINTENANCE	0	0+0	0	0+2+8	0	0+0	0
MACHINE COUNTER 🗢							
DATE OF SERVICING							

SCHEDULE 🗢	6000 H or 12 YEARS	6500 H or 13 YEARS	7000 H or 14 YEARS	7500 H or 15 YEARS	8000 H or 16 YEARS	8500 H or 17 YEARS	9,000 H or 18 YEARS
PERIODIC MAINTENANCE	0+0+8	0	0+0	0	0+2+8	0	0+0
MACHINE COUNTER 🗢							
DATE OF SERVICING							

- CHECK	Parking brake	3-20
- CHECK	Hydraulic oil	3-21
- LUBRICATE	Parking brake lever mechanism	3-21
- GREASE	Mast lifting chains	3-21
- REPLACE	Engine oil	3-22
- REPLACE	Engine oil filter	3-22
- REPLACE	Gearbox oil filter	
- REPLACE	Front axle differential oil	3-23
- REPLACE	Front axle cooling system filter	3-23
- REPLACE	Hydraulic return oil filter cartridge	3-23
- REPLACE	Hydraulic oil tank filter cap	3-24
- REPLACE	Cab ventilation filter (OPTION)	3-24
- REPLACE	A/C ventilation filter (OPTION)	
- CHECK	Fork wear *	3-25

* Consult your dealer.

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

	ALSO CARRY OUT THE PERIODIC MAINTENANCE FOR 500 HOURS OF SERVICE.
- CHECK	Seat belt
- REPLACE	Dry air filter cartridge
- CLEAN	Fuel tank
- REPLACE	Fuel tank breather
- REPLACE	Fuel pre-filter 3-2
- REPLACE	Fuel filter 3-2
- REPLACE	Coolant
- REPLACE	Gearbox oil
- CLEAN	Gearbox sump strainer
- REPLACE	Rear axle differential oil
- REPLACE	Front wheel reducer oil
- REPLACE	Rear wheel reducer oil
- CHECK	Engine shock mounts *
- CHECK	Gearbox silent blocks *
- CHECK	Gear box controls *
- CHECK	Brake system pressure *
- CHECK	Condition of wiring harnesses and cables *
- CHECK	Lights and signals *
- CHECK	Warning indicators *
- CHECK	Condition of the rear view mirrors *
- CHECK	Overhead guard structure *
- CHECK	Cabin structure (OPTION) *
- CHECK	Chassis structure *
- CHECK	Attachment mounting system *
- CHECK	Condition of attachments *
- REPLACE	Brake fluid *
- BLEED	Braking system *
- ADJUST	Brake *
	*Consult your deale
3 2,000H - PERIODIC	MAINTENANCE - EVERY 2,000 HOURS OF SERVICE OR EVERY 4 YEARS
	ALSO PERFORM THE 500 HOUR AND 1000 HOUR PERIODIC MAINTENANCE.

- CHFCK - CLEAN - RFPI ACF - CLEAN - REPLACE - CHECK - REPLACE * Consult your dealer.

3,000H - PERIODIC MAINTENANCE - EVERY 3,000 HOURS OF SERVICE OR EVERY 6 YEARS

- REPLACE

OCCASIONAL MAINTENANCE AND OPERATION

OCCASIONAL MAINTENANCE - CLEAN - CLEAN Inside of the frame 3-38 - CLEAN - REPLACE - REPLACE OCCASIONAL OPERATION - TOW OR WINCH - SLING - TRANSPORT Lift truck. 3-41

FILTER CARTRIDGES AND BELTS

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



ENGINE OIL FILTER



FILTER CAP FOR HYDRAULIC FLUID TANK



GEARBOX OIL FILTER



CAB VENTILATION FILTER (OPTION)



FRONT AXLE COOLING CIRCUIT FILTER



A/C VENTILATION FILTER (OPTION)



HYDRAULIC RETURN OIL FILTER CARTRIDGE

2 1,000H - 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



FUEL PRE-FILTER



FUEL TANK BREATHER



FUEL FILTER

3 2,000H - PERIODIC MAINTENANCE - EVERY 2,000 HOURS OF SERVICE OR EVERY 4 YEARS

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



BREATHER FOR HYDRAULIC OIL TANK



ALTERNATOR BELT



SUCTION STRAINER FOR HYDRAULIC OIL TANK



ALTERNATOR BELT (AIR CONDITIONING OPTION)

3,000H - PERIODIC MAINTENANCE - EVERY 3,000 HOURS OF SERVICE OR EVERY 6 YEARS

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



SAFETY DRY AIR FILTER CARTRIDGE

▲ 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.

- EN590 diesel fuel (sulphur content < 10 ppm)
- ASTM D975 diesel fuel (sulphur content < 15 ppm)

RECOMMENDATION

ENGINE											
DESCRIPTION	CAPACITY	RECOMMENDATION									
		-40 °	C -30	-20	-10	0	+10	+20	+30	+40	+50 °C
						5W30					
						51	V40				
						10	W30				
ENGINE	7 ℓ				MAN	IITOU EVO	LOGY OIL	. 10W40 A	PI CJ4		
							15W30				
							15W4	10			
		-40 °	C -30	-20	-10	0	+10	+20	+30	+40	+50 °C
COOLING CIRCUIT	14.5 ℓ					CO	OLANT-3	5 ℃			
		-40 °	C -30	-20	-10	0	+10	+20	+30	+40	+50 °C
FUELTANK	85 ℓ					HP	NON-ROA	AD DIESEL	(GNR) *		

TRANSMISSION											
DESCRIPTION	CAPACITY		RECOMMENDATION								
		-40 °C	-30	-20	-10	0	+10	+20	+30	+40	+50 °C
GEARBOX	17.5 ℓ				MANITO	J DX IIIG	AUTOMA	TIC TRAN	SMISSION	N OIL	
											Ì

FRONT AXLE											
DESCRIPTION	CAPACITY	RECOMMENDATION									
FRONT AXLE DIFFERENTIAL	11 &			SPEC	CIAL MANI	TOU OIL	FOR IMM	ERSED BR	AKES		
		-40 °C	-30	-20	-10	0	+10	+20	+30	+40	+50 °C
FRONT WHEEL REDUCING GEAR	2 x 0.75 ℓ				MANITOU	SAE80V	190 MECH	IANICAL T	RANSMIS	SION OIL	
											Ī

REAR AXLE M26-2 / M30-2											
DESCRIPTION	CAPACITY				R	RECOMM	ENDATIO	N			
		-40 °C	-30	-20	-10	0	+10	+20	+30	+40	+50 °C
SWIVEL PINS			·		·	·		·	·		
STEERING CYLINDER FOOT				MAN	NITOU BL	LUE MULT	I-PURPOS	E LUBRIC	ANT		
REAR AXLE OSCILLATION											
THE THE TAKE OSCILLATION			ı						i		i

REAR AXLE M40-2 / M50-2	***										
DESCRIPTION	CAPACITY	RECOMMENDATION									
		-40 °C	-30	-20	-10	0	+10	+20	+30	+40	+50 °C
SWIVEL PINS REAR AXLE OSCILLATION					MAN	IITOU BL	UE MULTI	-PURPOS	E LUBRIC	ANT	

REAR AXLE M26-4 / M30-4 / M40-4	/ M50-4										
DESCRIPTION	CAPACITY					COMMEN					
REAR AXLE DIFFERENTIAL	6.5 ℓ			SPEC	IAL MANIT	OU OIL FO	R IMMI	ERSED B	RAKES		
		-40 °C	-30	-20	-10	0	+10	+20	+30	+40	+50 °C
DEAD WHITE DEDUCING CEAD											
REAR WHEEL REDUCING GEAR	2 x 0.75 ℓ	1 .	1		MANITOU :	SAE80W9) MECH	ANICAL	TRANSMI	SSION OII	
		-40 °C	-30	-20	-10	0	+10	+20	+30	+40	+50 °C
		-40 C	-30	-20	-10		+10	+20	+30	+40	+30 C
REAR WHEEL REDUCING GEAR PIVOTS			ı		MA	NITOU BL	ACK MU	II TI-PUR	POSE LUB	RICANT	
NEAN WITELL NEDUCTING GEAN FIVOIS									052 205		
		-40 °C	-30	-20	-10	0	+10	+20	+30	+40	+50 °C
REAR AXLE OSCILLATION		'			MAN	TOU BLU	MULTI	-PURPO	SE LUBRIC	ANT	
DDAVEC											
DESCRIPTION DESCRIPTION	CAPACITY	Τ			RF	COMMEN	DATIO	V			
BRAKE SYSTEM	1.5 ℓ					J MINERA					
	1.00										
MAST											
DESCRIPTION			RECOMMENDATION								
		-40 °C	-30	-20	-10	0	+10	+20	+30	+40	+50 °C
MAGE LIFTING GLIAING						MANUTOU	CDECL	I CHAIN	IC LUDDIC	ANIT	
MAST LIFTING CHAINS			1			MANITOU	SPECIA	AL CHAIR	IS LUBRIC	ANI	
		-40 °C	-30	-20	-10	0	+10	+20	+30	+40	+50 °C
		1 10 0	-30	-20	-10	Ī	110	120	130	140	130 €
GREASING OF THE MAST		'	MANITOU BLACK MULTI-PURPOSE LUBRICANT								
			,		•						
HYDRAULICS DESCRIPTION	CAPACITY	<u> </u>			Dr	COMMEN	DATIO	\I			
DESCRIPTION	CAPACITY	-40 °C	-30	-20	-10	0	+10	+20	+30	+40	+50 °C
		100	-30	-20	-10	Ī	110	120	130	140	130 €
		'	ı	'	Į			ISO	VG 100		
			ISO VG 68 MANITOU ISO VG 46 HYDRAULIC FLUID								
HYDRAULIC OIL TANK	80 દ										
			ISO VG 37								
					ISO	VG 68					
OVERHEAD GUARD											
DESCRIPTION	CAPACITY	T			RF	COMMEN	DATIO	V			
WINDSHIELD WASHER TANK	1.5 ℓ					HIELD WA				_	
The state of the s											
CAB (OPTION)											
DESCRIPTION	CAPACITY				RE	COMMEN	DATIO	N			

-40 °C

1.5 ℓ 0.24 ℓ

CAB DOOR

OPTION)

WINDSHIELD WASHER TANK
COMPRESSOR (AIR CONDITIONING

-20

MANITOU BLUE MULTI-PURPOSE LUBRICANT

WINDSHIELD WASHER FLUID

R12 MINERAL OIL

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

CHECK Lift truck environment

▲ IMPORTANT **▲**

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

- Carry out a general inspection of the lift truck:
 - Fluid leaks or stains on the ground.
 - Additional object on the lift truck or in the overhead guard or cab.
 - Mounting and adjustment of lights and rear view mirrors.
 - Mounting and locking of the attachment.
 - Condition of the tires, to detect cuts, blisters, wear, etc.
- According to the conditions of use and the environment, ensure that the lift truck is clean:
 - Lights, rear view mirrors, windows, bodywork.
 - Driver's cab (< OCCASIONAL MAINTENANCE).
 - Engine housing and inside the frame (OCCASIONAL MAINTENANCE) to prevent leaks and accumulation of materials (e.g. straw, flour, sawdust, organic waste, etc.).

A IMPORTANT A

Particular attention should be paid to accumulations of flammable materials and fuel or lubricant leaks. These significantly increase the risk of fire.

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 left engine cover.
- Pull out the dipstick 1.
- Clean the dipstick and check the correct level between the two notches.
- If necessary, add oil (< LUBRICANTS AND FUEL) through the filler hole 2.
- Check for leaks.



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 circuit 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 right 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 right side 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.



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

Protection of electrical connections CHECK

▲ IMPORTANT **▲**

In case of technical faults, consult your dealer.

- Check the presence and condition of the electrical connection protection.

CHECK Gearbox oil level

Place the lift truck on level ground with the I.C. engine cold and idling.

- Remove access panel 1.
- Pull out the dipstick 2.
- Wipe the dipstick and check the correct level at the upper mark.
- If necessary, add oil (< 1000H: REPLACE Gear box oil).
- Visually check that there is no leakage or seepage.
- Refit access panel 1.





CHECK Tire pressure

CHECK Wheel nut tightening

▲ 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 wheel nut torque. Non-compliance with this instruction can lead to deterioration and breakage of the wheel lugs and distortion of the wheels.
- Check and restore tyre pressures if necessary (< 2 DESCRIPTION: TIRES).

Front axle differential seal **CHECK**

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

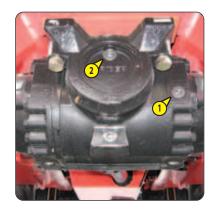
- Visually check that there is no leakage or seepage.
- If there is any leakage or seepage, check the level:
 - Remove the level plug 1, the oil should be flush with the edge of the hole.
 - If necessary, add oil (<! LUBRICANTS AND FUEL) by the same hole.
 - Refit and tighten the level plug (tightening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



M26-4 ... / M30-4 ... / M40-4 ... / M50-4 ...

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 to 49 N.m).



CHECK

Front wheel reducer seals

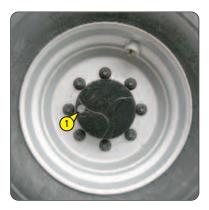
CHECK

Rear wheel reducer seals

M26-4 ... / M30-4 ... / M40-4 ... / M50-4 ...

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 to 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.

- Remove the front panel 1.
- 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) through the filler hole 2.
- Refit the front panel 1.





M26-2 ... / M26-4 ... / M30-2 ... / M30-4 ...

Place the lift truck on level ground with the mast in a vertical position and the forks raised approximately 200 mm.

▲ IMPORTANT ▲

These checks are important to ensure correct mast operation.

In case of technical faults, consult your dealer.

- Check the alignment of the mast lifting chains between the carriage chain fasteners and the chain rollers.
- Manually inspect the chain tension and, if necessary, adjust as indicated below while ensuring that the carriage is perpendicular to the mast.
- Loosen nut 1.
- Loosen the chain tensioner locknut 2.
- Adjust the tension by tightening or loosening the nut 3 while checking the alignment of the lifting chains.
- Then tighten locknut 2 and nut 3.
- Retighten the nut 1.



Tension and alignment of mast lifting chains

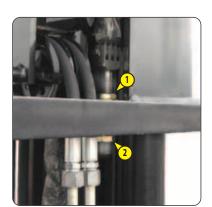
M40-2 ... / M40-4 ... / M50-2 ... / M50-4 ...

Place the lift truck on level ground with the mast in a vertical position and the forks raised approximately 200 mm.

▲ IMPORTANT **▲**

These checks are important to ensure correct mast operation.
In case of technical faults, consult your dealer.

- Check the alignment of the mast lifting chains between the carriage chain fasteners and the chain rollers.
- Manually inspect the chain tension and, if necessary, adjust as indicated below while ensuring that the carriage is perpendicular to the mast.
- Loosen the chain tensioner locknut 1.
- Adjust the tension by tightening or loosening the nut 2 while checking the alignment of the lifting chains.
- Tighten the lock nut 1.
- Retighten the nut 2.



CHECK Hydraulic fluid level

Place the lift truck on level ground with the engine stopped, the mast tilted backward and lowered as far as possible.

A IMPORTANT A

Use a very clean funnel and clean the top of the oil can before filling.

- Check dipstick 1, the correct level must be between the two marks.
- If necessary, add oil (< LUBRICANTS AND FUEL).
- Remove the lock 2.
- Remove the cap 3.
- Add oil through filler port.
- Refit the cap and its lock.
- Check for leaks.



Place the lift truck on level ground.

- Remove access panel 1.
- Visually check the level in the tank.
- If necessary add windscreen washer liquid (< LUBRICANTS AND FUEL).
- Remove the cap 2.
- Add windshield washer liquid through filler port.
- Refit the cap.
- Refit access panel 1.





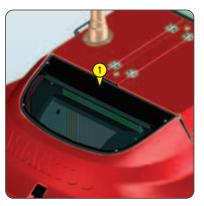
CLEAN Radiator cores

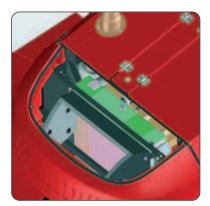
▲ IMPORTANT **▲**

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 covers.
- Remove and clean the intake grille 1.
- Using a soft cloth, clean the radiator cores in order to remove as much dirt as possible.
- Clean the radiator with compressed air directed from the back toward the engine.





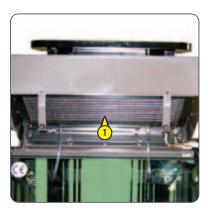
CLEAN

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.

- Remove the protective grid 1 and clean it if necessary.
- 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.



LUBRICATE General lubrication

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 oxidizing atmosphere, reduce this interval to every 10 hours of service or every day.

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

REAR AXLE

M26-2 ... / M30-2

- 1 Lubricators for the swivel pins (6 lubricators).
- 2 Lubricators for the tie-rods (4 lubricators).
- 3 Rear axle oscillation lubricators (2 lubricators). M40-2 ... / M50-2
- 4 Lubricators for the swivel pins (4 lubricators).
- 5 Rear axle oscillation lubricators (2 lubricators). M26-4 ... / M30-4 ... / M40-4 ... / M50-4 ...
- 6 Lubricators of the rear wheel reduction gear pivots (4 lubricators).
- 7 Lubricators of the rear axle oscillation pin (2 lubricators).

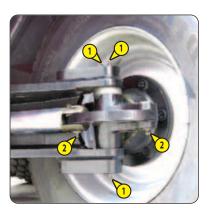
MAST

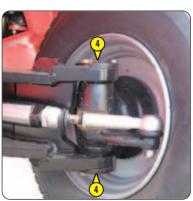
M26-2 ... / M26-4 ... / M30-2 ... / M30-4 ...

- 8 Mast foot hinge pins (2 lubricators).
- 9 Tilt cylinder foot axles (2 lubricators).
- 10 Tilt cylinder head axles (2 lubricators). M40-2 ... / M40-4 ... / M50-2 ... / M50-4 ...
- 11 Mast foot hinge pins (2 lubricators).
- 12 Tilt cylinder foot axles (2 lubricators).
- 13 Tilt cylinder head axles (2 lubricators).
- 14 Lubricators of upper guide rollers on mast (2 lubricators).
- 15 Lubricators of lower guide rollers on mast (2 lubricators).
- N.B.: Wide tire OPTION, raise the forks approximately 2 meters to lubricate the mast's lower guide rollers via hole 15A.

CAB (OPTION)

16 - Cab door lubricators (4 lubricators).

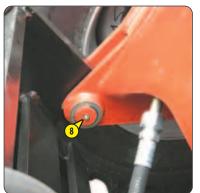




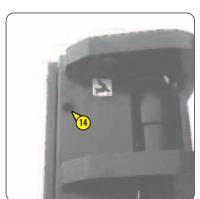




























CHECK Parking brake

▲ IMPORTANT **▲**

The manufacturer's stop settings must not be changed under any circumstances.

BRAKE SYSTEM CHECK

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

- Remove the cover plate 1.

N.B.: When removing cover plates and hatches, clean the surrounding area and remove any accumulations of flammable materials.

- If necessary, correctly clean the environment of the connecting rods and setting stops.
- Release then apply the parking brake several times, while checking that the connecting rods 2 return to the stops 3.
- In the event of a malfunction, contact your dealer.

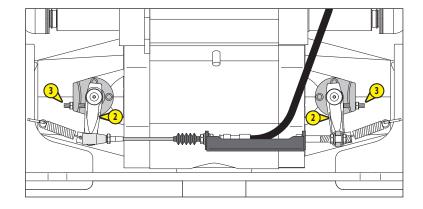
BRAKE CHECK

Place the lift truck on a slope of 15% with the rated load in the transport position.

- Immobilize the lift truck using the service brake pedal.
- Firmly apply the parking brake in position A (400 N.m).
- Release the service brake pedal.
- Braking is working correctly if the lift truck remains stationary on the slope.
- In the event of poor braking, contact your dealer.







CHECK Hydraulic oil

MANITOU offers a hydraulic oil analysis kit which makes it possible to extend the recommended interval for periodic maintenance from 1,000 to 2,000 hours.

In this case, hydraulic oil analysis must be carried out every 500 hours of service.

This analysis makes it possible to confirm the oil quality to reach the deadline of 2,000 hours.

N.B.: This kit is highly recommended for specific uses causing stresses on the hydraulic circuit:

- Extreme environmental conditions
- Use of attachments with a very high hydraulic flow rate (sweepers, mixers, etc.)

ANALYSIS PROCEDURE

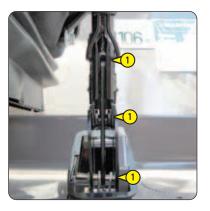
- Order an oil analysis kit from your dealer (part no. MANITOU 958162).
- On receipt of the kit, take a sample and follow the detailed instructions.
- According to the results, keep the analysis report or replace the hydraulic fluid.



LUBRICATE

Parking brake lever mechanism

- Clean and lubricate the pivot pins 1 with grease (< LUBRICANTS AND FUEL).



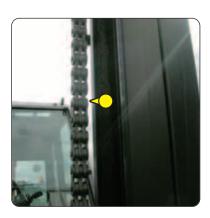
GREASE Mast lifting chains

- Wipe the mast lifting chains with a clean, lint-free cloth.
- 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.
- Carefully check each chain for any signs of wear.



In case of technical faults, consult your dealer.

- Grease the chains sparingly ($\mathrel{\begin{subarray}{c} \checkmark}$ LUBRICANTS AND FUEL).



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. Hand-tighten the oil filter and lock in place with a quarter turn.

DRAINING THE OIL

- Remove the closure plates 1 (3 closure plates).

N.B.: When removing cover plates and hatches, clean the surrounding area and remove any accumulations of flammable materials.

- Place a container under the drain hole and unscrew the drain plug 2.
- Open the right engine cover and the right side cover.
- 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 grease 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 port 4.

N.B.: For this operation, we recommend you use a funnel fitted with a hose.

- 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.
- Put the closure plates 1 back in place (3 closure plates).

INITIALIZATION OF 500-HOUR MAINTENANCE

- Contact your agent or dealer.







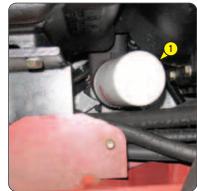


REPLACE Gearbox oil filter

A IMPORTANT A

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

- Unscrew and discard gearbox oil filter 1.
- Carefully clean the filter head with a clean, lint-free cloth.
- Lightly oil the new seal and fit it to the filter.
- Fill up the new gear box oil filter (◀ FILTER CARTRIDGES AND BELTS) with oil (◀ LUBRICANTS AND FUEL).
- Refit the filter, making sure that the seal is correctly positioned and tightened.



REPLACE

Front axle differential oil

REPLACE

Front axle cooling system filter

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



Dispose of the used oil in an ecological manner.

DRAINING THE OIL

- Place a container under drain plugs 1 and unscrew them.
- Remove the level and filler plug 2 to ensure correct drainage.
- Refit and tighten the drain plugs 1 (tightening torque 34 49 N.m).

REPLACEMENT OF THE FILTER

▲ IMPORTANT **▲**

Be careful to mount the filter 6 in the same direction as the arrow.

- Unscrew the half clamp 3.
- Unscrew the two hoses 4 and remove the two connectors 5.
- Replace the filter 6 (< FILTER CARTRIDGES AND BELTS).
- Retighten the two hoses 4 and the two connectors 5.
- Retighten the half clamp 3.

FILLING WITH OIL

- Fill up with oil (◀ LUBRICANTS AND FUEL) through the level and filler hole 2 until the oil is flush with the opening.
- Put the cap 2 back.
- Start the engine and allow to run for a few minutes to fill the cooling circuit.
- Stop the engine, wait a few minutes and top-up the level.
- Remove the cap 2.
- The level is correct when the oil level is flush with the edge of the level and filler port 2.
- Check for any possible leaks at the drain plugs.
- Refit and tighten the level and filler plug 2 (tightening torque 34 49 N.m).

REPLACE

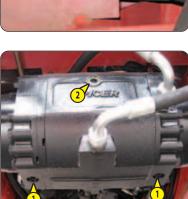
Hydraulic return oil filter cartridge

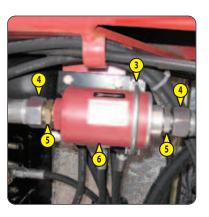
Stop the engine and release the pressure from the systems by operating the hydraulic controls.

▲ IMPORTANT **▲**

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

- Open the engine hood.
- Unscrew the fastening screws of the cover 1.
- Remove the hydraulic return oil filter cartridge 2 and replace it with a new one (◀ FILTER CARTRIDGES AND BELTS).
- Make sure that the cartridge is correctly positioned and refit the cover 1.







- Remove the filler cap lock 1.
- Unscrew the retaining screws 2, remove and replace the filter plug 2 with a new one (⋖ FILTER CARTRIDGES AND BELTS).
- Remove the filler cap lock 1.



REPLACE

Cab ventilation filter (OPTION)

- Remove the protective panel 1.
- Take out the ventilation filter 2 and replace it with a new one (${<\!\!\!<}$ FILTER CARTRIDGES AND BELTS).
- Refit the protective casing.





REPLACE

A/C ventilation filter (OPTION)

- Remove the protective panel 1.
- Take out the ventilation filter 2 and replace it with a new one (${<\!\!\!<}$ FILTER CARTRIDGES AND BELTS).
- Refit the protective casing.





CHECK Fork wear *

* Consult your dealer.

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

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

CHECK 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.

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.

N.B.: Replace the seat belt after an accident.

REPLACE Dry air filter cartridge

In case of use in a heavily dust-laden atmosphere, the cartridge replacement interval must be reduced (to 250 hours in a heavily dust laden atmosphere).

▲ IMPORTANT **▲**

Change the cartridge in a clean location, with the engine stopped.

Do not clean the dry air filter cartridge by washing it in liquid.

Never operate the lift truck without an air filter or with an air filter that is damaged.

If the air filter clogging indicator \longrightarrow comes on, replace the cartridge with minimum delay (maximum 1 hour).

- Open the right side engine cover.
- Loosen the locks and remove cover 1.
- Pivot cartridge 2 toward the front and carefully remove to avoid spilling the dust.
- 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.
- Check the condition of the new filter cartridge before fitting (◀ FILTER ELEMENTS AND BELTS).
- Place the cartridge into the filter and position it by pressing the edges, not the middle.
- Refit the cover and ensure that the clips are properly secured. The cover should fit on easily. If this is not the case, check the position of the cartridges in the filter.





CLEAN Fuel tank

REPLACE Fuel tank breather

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

▲ IMPORTANT **▲**

Do not smoke or approach with a flame during this operation.

Never attempt to carry out welding or any other operation by yourself, as this could cause 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 the filler hole 2.
- Refit and tighten the drain plug 1 (tightening torque 29 to 39 N.m).
- Remove access panel 3.
- Unscrew the breather 4 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 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 right side 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 impregnated with 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.



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.

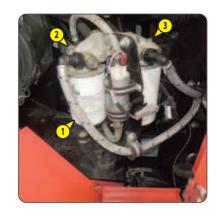
- Open the right engine cover.

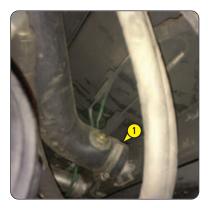
DRAINING THE LIQUID

- Place a container under the radiator hose 1.
- Remove the hose.
- Remove the filler plug 2 of the expansion tank 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 and their fixings, and change the hoses if necessary.
- Rinse the circuit with clean water, or use a cleaning agent if necessary.

FILLING WITH COOLANT

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







REPLACE Gearbox oil

CLEAN

Gearbox sump strainer

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

▲ IMPORTANT ▲

Dispose of the used oil in an ecological manner.

DRAINING THE OIL

- Place a container under drain plug 1 and under the electric plate 2.
- Unscrew the drain plug 1.
- Remove dipstick 3 and unscrew filling plug 4 in order to ensure that the oil is drained properly.

CLEANING THE SUCTION STRAINER

- Remove cover 2 and set aside the O-ring joint and sealing washer.
- Allow the rest of the oil to drain away.
- Clean the strainer with a compressed air jet.
- Clean the magnetic section on the plate.
- Refit the assembly and tighten up plate 2 (tightening torque 18 to 31 N.m).

FILLING WITH OIL

- Refit and tighten the drain plug 1 (tightening torque 34 to 54 N.m).
- Fill up with oil (
 LUBRICANTS AND FUEL) through the filler port 5 and refit the plug.
- Start the engine and let it run for a few minutes.
- Check any possible leaks from the drain plug or cover.
- Top up the level, if necessary.







REPLACE

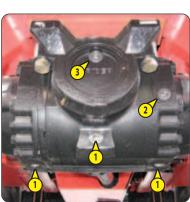
Rear axle differential oil

M26-4 ... / M30-4 ... / M40-4 ... / M50-4 ...

▲ IMPORTANT **▲**

Dispose of the used oil in an ecological manner.

- Place the lift truck on level ground with the engine stopped and the differential oil still warm.
- Place a container under drain plugs 1 and unscrew them.
- Undo level plug 2 and filler 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 port 3.
- The level is correct when the oil level is flush with the sight gauge 2.
- Check for any possible leaks at the drain plugs.
- Refit and tighten level plug 2 (tightening torque 34 49 N.m) and filler plug 3 (tightening torque 34 49 N.m).



REPLACE Front wheel reducer oil

REPLACE Rear wheel reducer oil

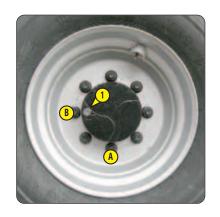
M26-4 ... / M30-4 ... / M40-4 ... / M50-4 ...

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 port 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 shock mounts *
CHECK	Gearbox silent blocks *
CHECK	Gear box controls *
CHECK	Brake system pressure *
CHECK	Condition of wiring harnesses and cables *
CHECK	Lights and signals *
CHECK	Warning indicators *
CHECK	Condition of the rear view mirrors *
CHECK	Overhead guard structure *
CHECK	Cabin structure (OPTION) *
CHECK	Chassis structure *
CHECK	Attachment mounting system *
CHECK	Condition of attachments *
REPLACE	Brake fluid *
BLEED	Braking system *
ADJUST	Brake *
	* Consult your dealer

 $\hbox{* Consult your dealer.}$

3 3 2,000H - PERIODIC MAINTENANCE - EVERY 2,000 HOURS OF SERVICE OR EVERY 4 YEARS

ALSO PERFORM THE 500 HOUR AND 1000 HOUR PERIODIC MAINTENANCE.

CHECK Wheel nut tightening torque

- Check the condition of the tires to detect cuts, blisters, wear, etc.
- Check the tightening torque of the wheel nuts with a torque wrench:
 - Front wheels = 630 N.m \pm 94 N.m
 - Rear wheels = 340 N.m \pm 51 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

N.B.: 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 eves, 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 colorless and odorless 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 system under any circumstances, as this could cause refrigerant to escape.
- The compressor has a fluid level gage; never unscrew this gage because it would depressurize the system. The fluid level should only be checked when draining the system.

* Consult your dealer.



REPLACE

CLEAN

Hydraulic oil tank suction strainer

REPLACE

Breather for the hydraulic oil tank

Place the lift truck on level ground with the engine stopped, the mast tilted backward and lowered as far as possible.

▲ IMPORTANT **▲**

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

Dispose of the used oil in an ecological manner.

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

- Open the right side engine cover.

DRAINING THE OIL

- Place a container under drain plug 1 and unscrew the plug.
- Remove the filler cap lock 2.
- Remove the filler plug 3 to ensure correct drainage.
- Allow the hydraulic tank to empty completely.

CLEANING THE SUCTION STRAINER

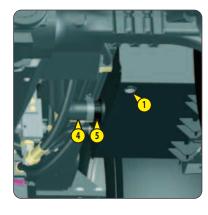
- Remove the suction hose 4.
- Remove and clean the suction strainer 5 using a compressed air jet, check its condition and replace if necessary (< FILTER CARTRIDGES AND BELTS).
- Refit the strainer and the hose.

REPLACING THE BREATHER

- Unscrew the breather 6 and replace it with a new one (◀ FILTER CARTRIDGES AND BELTS).

FILLING WITH OIL

- Clean and refit the drain plug 1 (tightening torque 73 97 N.m).
- Fill up with oil (< LUBRICANTS AND FUEL) through filler port 3.
- Observe the oil level on dipstick 8; the oil level should be between the min. and max. marks on the dipstick.
- Check for any possible leaks at the drain plug.
- Refit the cap and its lock.







Radiator *	CHECK
Transmission pressures *	СНЕСК
Steering *	СНЕСК
Steering swivel joints *	СНЕСК
Steering swivel joints *	СНЕСК
Condition of mast assembly *	СНЕСК
Mast lifting chains *	СНЕСК
Mast rollers *	СНЕСК
Condition of hoses and flexible pipes *	СНЕСК
Condition of cylinders (leakage, rods) *	СНЕСК
Hydraulic circuit pressures *	СНЕСК
Chassis bearings and bushings*	СНЕСК
Alternator belt *	REPLACE

* Consult your dealer.

3,000H - PERIODIC MAINTENANCE - EVERY 3,000 HOURS OF SERVICE OR EVERY 6 YEARS

ALSO PERFORM THE 500 HOUR AND 1000 HOUR PERIODIC MAINTENANCE.

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 dismantling and refitting the cartridge (< 2,000H: REPLACE Air filter cartridge).
- Carefully remove the dry air filter safety cartridge 1 to reduce dust fall as much as possible.
- 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.



OCCASIONAL MAINTENANCE

CLEAN Driver's cab

NOTE: The frequency of cleaning is given as an example.

▲ IMPORTANT ▲

Do not use a high pressure cleaner or water jet.

Take precautions with electrical and electronic components.

- Clean the inside of the overhead guard or the cab using a small brush, vacuum cleaner and a cloth.

CLEAN Engine compartment

CLEAN Inside of the frame

▲ IMPORTANT ▲

Do not use a water jet or high-pressure steam.

- Open the engine hood.
- Remove the access panels.
- Clean the engine compartment and the inside of the frame using a compressed air jet.

REPLACE Wheels

▲ 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 OPERATING AND 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.
- Loosen the nuts of the wheel to be changed until they can be easily removed.

REAR WHEEL

For this operation, we recommend using the hydraulic jack (MANITOU Part No.: 505507).

- Place and adjust the jack under the rear axle, as near as possible to the wheel.
- Lift the wheel until it comes off the ground and put in place the safety block under the axle.
- Completely unscrew the wheel nuts and remove them.
- Free the wheel using back and forth 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 security block and lower the lift truck with the jack.
- Tighten the wheel nuts with a torque wrench (< 2000H PERIODIC MAINTENANCE
 - EVERY 2,000 HOURS OF SERVICE OR EVERY 4 YEARS) for tightening torque.



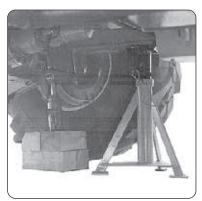


FRONT WHEEL

For this operation, we recommend using the hydraulic jack (MANITOU Part No.: 505507) and the safety strut (MANITOU Part No.: 554772).

- Place and adjust the jack under the flared axle tube, as near as possible to the wheel.
- Lift the wheel until it comes off the ground and put in place the safety support under the frame.
- Loosen the wheel nuts and remove them completely.
- Free the wheel using back and forth movements and roll it to the side.
- Place the new wheel on the wheel hub.
- Hand-tighten the nuts, grease them if necessary.
- Remove the security block and lower the lift truck with the jack.
- Tighten the wheel nuts with a torque wrench (< 2000H PERIODIC MAINTENANCE
- EVERY 2,000 HOURS OF SERVICE OR EVERY 4 YEARS) for tightening torque.





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.

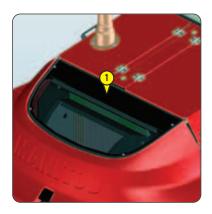
- In the event of electrolyte being spilled onto the skin or splashed in the eyes, rinse thoroughly with cold water for 15 minutes and call a doctor.

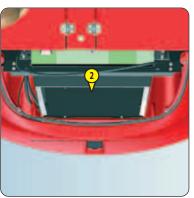
BATTERY REPLACEMENT

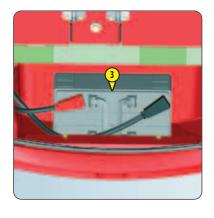
- Remove the protective grid 1.
- Remove the crankcase 2.
- Remove the fasteners from the battery 3.
- Replace the battery.

CONNECTION OF A BACK-UP BATTERY

- Remove the protective grid 1.
- Remove the crankcase 2.
- Bring a backup battery of the same type as the one used for the lift truck, together with battery cables.
- Connect the backup battery, respecting the polarity (-) and (+).
- Start the lift truck and remove the cables as soon as the engine is running.







TOW OR WINCH

Lift truck

▲ IMPORTANT **▲**

Do not tow the lift truck at more than 15 km/h, and abide by local traffic regulations.

- Place the forward/reverse selector and the gear lever in neutral.
- Release the hand brake.
- Switch on the hazard warning lights.

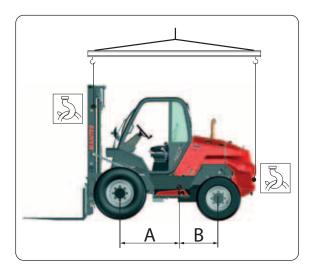
Since there will be no power steering or hydraulic brake assistance, operate the steering and controls slowly and forcefully. Avoid sudden or jerky movements.

SLING Lift truck

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

A = 1,095 mm	B = 900 mm	M26-2
A = 1,205 mm	B = 790 mm	M26-4
A = 1,265 mm	B = 730 mm	M30-2
A = 1,275 mm	B = 720 mm	M30-4
A = 1,280 mm	B = 780 mm	M40-2
A = 1,320 mm	B = 800 mm	M40-4
A = 1,240 mm	B = 820 mm	M50-2
A = 1,280 mm	B = 840 mm	M50-4

- Place the sling hooks in the anchorage points 1 provided.







TRANSPORT Lift truck

▲ IMPORTANT **▲**

Check that the safety instructions relating to the flatbed have been correctly applied before loading the lift truck and that the transport company is informed about the dimensions and the weight of the lift truck (<1 2 - DESCRIPTION: SPECIFICATIONS).

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

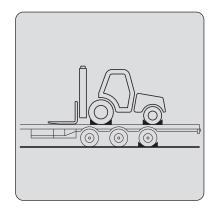
Also check the allowable ground contact pressure of the platform relative to the lift truck.

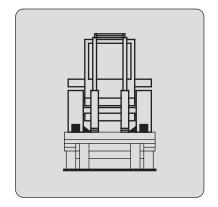
LOADING THE LIFT TRUCK

- 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 (< 1 OPERATING AND SAFETY INSTRUCTIONS: DRIVING INSTRUCTIONS UNLADEN AND LADEN).

STOWING THE LIFT TRUCK

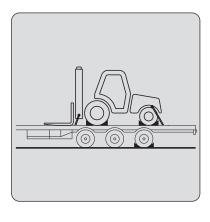
- Fix the chocks to the flatbed at the front and at the back of each tire.
- Also fix the chocks to the flatbed on the inside of each tire.
- Secure the lift truck to the platform with sufficiently strong straps:
 - At the front, at the foot of the mast, to the anchorage points 1.
 - At the rear, to the anchorage points 2.
 - Tighten the straps.











4 - OPTIONAL ADAPTABLE ATTACHMENTS FOR THE RANGE

4 - OPTIONAL ADAPTABLE ATTACHMENTS FOR THE RANGE INTRODUCTION 4-3 TECHNICAL SPECIFICATIONS FOR ATTACHMENTS M26-2 ... / M26-4 ... / M30-2 ... / M30-4 TECHNICAL SPECIFICATIONS FOR ATTACHMENTS M40-2 ... / M40-4 ... 4-6 TECHNICAL SPECIFICATIONS FOR ATTACHMENTS M50-2 ... / M50-4 ... 4-8 ATTACHMENT GUARDS

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 mass and centre 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. Optional solutions exist, consult your dealer.

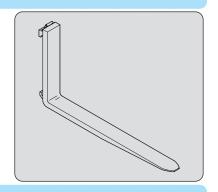
SUSPENDED LOAD

▲ IMPORTANT **▲**

Suspended loads MUST be handled with a lift truck designed for that purpose.

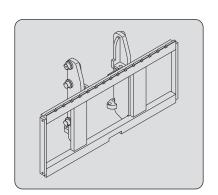
STANDARDISED FORK

	"ISO A"	"MAN A"
PART NO.	415446	52608461
Section	125 x 45 x 1200 mm	122 x 40 x 1200 mm
Weight	75 kg	76 kg



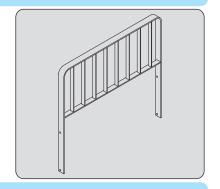
STANDARDISED FORK CARRIAGE

DUPLEX TOTAL VISIBILIT	ГҮ		
PART NO.	L1470	L1750	L2000
"ISO A"	52587485	52587486	52587487
"ISO A" CL	52586410	52586411	52586412
"MAN A"	52586407	52586408	52586409
TRIPLEX FREE LIFT			
PART NO.	L1470	L1750	L2000
"ISO A"	52588789	52588791	52588793
"ISO A" CL	52588795	52588797	52588799
"MAN A"	52588801	52588803	52588805
TRIPLEX WITHOUT FREE	LIFT		
PART NO.	L1470	L1750	L2000
"ISO A"	52593330	52593332	52593333
"ISO A" CL	52593336	52593338	52593340
"MAN A"	52593342	52593344	52593346



LOAD BACK REST

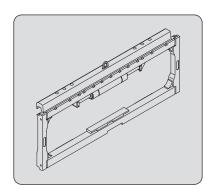
PART NO.	52579855	52586271	52586272
Width	1470 mm	1750 mm	2000 mm
Weight	40 ka	46 ka	51 ka



STANDARDISED SIDE-SHIFT CARRIAGE

DUPLEX TOTAL VISIBILITY TRIPLEX FREE LIFT

	TDL 100F-SSS-B551	TDL 100F-SSS-B695	TDL 100F-SSS-B514
	L1470	L1750	L2000
PART NO.	52656054	52656121	52656126
Rated capacity	3000 kg	3000 kg	3000 kg
Side-shift	2 x 100 mm	2 x 100 mm	2 x 100 mm
Width	1470 mm	1750 mm	2000 mm
Weight	167 kg	206 kg	234 kg



TRIPLEX WITHOUT FREE LIFT

 TDL 100F-SSS-B551

 L1470
 PART NO.
 52656054

 Rated capacity
 3000 kg

 Side-shift
 2 x 100 mm

 Width
 1470 mm

 Weight
 167 kg

FORK POSITIONER WITH SIDE-SHIFT

DUPLEX VISIBILITÉ TOTALE TRIPLEX LEVÉE LIBRE

 PART NO.
 52656058

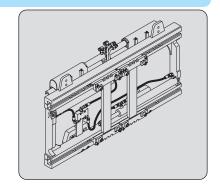
 Rated capacity
 3000 kg

 Spacing
 305-1345 mm

 Side-shift
 2 x 100 mm

 Width
 1250 mm

206 kg



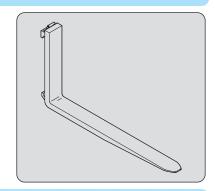
US - 24P FORK

Weight

 PART NO.
 415125

 Section
 125 x 45 x 1500 mm

 Weight
 88 kg



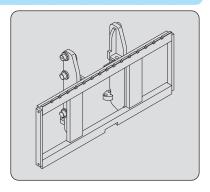
US - 24P FORK CARRIAGE

DUPLEX VISIBILITÉ TOTALE 3M70

L1470 L1750 L2000 PART NO. 52748733 52749391 52749491

TRIPLEX LEVÉE LIBRE 4M30

L1470 L1750 L2000 PART NO. 52750135 52750766 52750767



US - 24P BIN CLAMP

DUPLEX VISIBILITÉ TOTALE 3M70 TRIPLEX LEVÉE LIBRE 4M30

PART NO. 52743538
Width 1470 mm
Weight kg



TECHNICAL SPECIFICATIONS FOR ATTACHMENTS

M40-2 ... / M40-4 ...

148 kg

STANDARDISED FORK

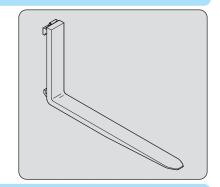
M40-2 ...

Weight

PART NO.	"ISO A" 415449	"MAN A" 415493	"MAN B" 415217
Section	150 x 50 x 1200 mm	150 x 50 x 1200 mm	150 x 50 x 1200 mm
Weight	128 kg	134 kg	143 kg
M40-4			
	"ISO A"	"MAN A"	"MAN B"
PART NO.	415449	415497	415460
Section	150 x 50 x 1200 mm	150 x 50 x 1200 mm	150 x 50 x 1200 mm

138 kg

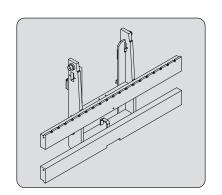
128 kg



STANDARDISED FORK CARRIAGE

DUPLEX TOTAL VISIBILITY

DOLFY LOTAL AISIBILITY		
M40-2		
PART NO.	L1670	L2000
"ISO A"	52663685	52663688
"MAN A"	219278	219283
"MAN B"	219281	219285
M40-4		
PART NO.	L1670	L2000
"ISO A"	52557057	52557058
"MAN A"	219278	219283
"MAN B"	219281	219285
TRIPLEX FREE LIFT		
M40-2		
PART NO.	L1670	L2000
"ISO A"	52663690	52663693
"MAN A"	219355	219392
"MAN B"	219593	219594
M40-4		
PART NO.	L1670	L2000
"ISO A"	52558137	52558138
"MAN A"	219355	219392
"MAN B"	219593	219594



LOAD BACK REST

PART NO.	251387	251389
Width	1670 mm	2000 mm
Weight	57 kg	65 kg



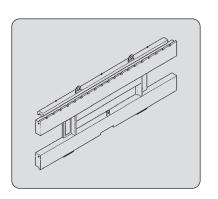
STANDARDISED SIDE-SHIFT CARRIAGE

DUPLEX TOTAL VISIBILITY

	TDL A 50N L1670	TDL A 50 N L2000
PART NO.	52696146	52696148
Rated capacity	4500 kg	3000 kg
Side-shift	2 x 100 mm	2 x 100 mm
Width	1670 mm	2000 mm
Weight	360 kg	206 kg



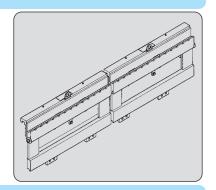
TDL A 50N L1670	TDL A 50 N L2000
52696149	52696151
4500 kg	3000 kg
2 x 100 mm	2 x 100 mm
1670 mm	2000 mm
360 kg	206 kg
	52696149 4500 kg 2 x 100 mm 1670 mm



STANDARD DOUBLE SIDE-SHIFT CARRIAGE

DUPLEX TOTAL VISIBILITY

	DTDL A 50 N "FEM A"	DTDL A 50 N "FEM B"
PART NO.	52696419	52696421
Rated capacity	2 x 2500 kg	2 x 2500 kg
Side-shift	2 x 150/100 mm	2 x 150/100 mm
Width	2 x 985 mm	2 x 985 mm
Weight	2 x 165 kg	2 x 165 kg



STANDARDISED FORK

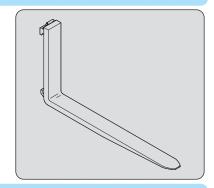
DUPLEX TOTAL VISIBILITY

M40-2 ...

PART NO.	"FEM A" 415744	"FEM B" 415483
Section	125 x 40 x 1200 mm	125 x 40 x 1200 mm
Weight	65 kg	72 kg
MAO-A		

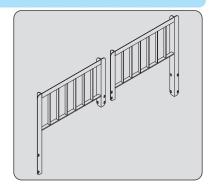
M40-4 ...

	"FEM A"	"FEM B"
PART NO.	415745	415484
Section	125 x 40 x 1200 mm	125 x 40 x 1200 mm
Weight	70 kg	70 kg



LOAD BACK REST

PART NO.	252826
Width	2 x 985 mm
Weight	2 x 25 kg



148 kg

STANDARDISED FORK

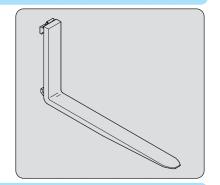
M50-2 ...

Weight

11150 2 111	"ISO A"	"MAN A"	"MAN B"
PART NO.	415450	415495	415454
Section	150 x 60 x 1200 mm	150 x 60 x 1200 mm	150 x 60 x 1200 mm
Weight	128 kg	134 kg	143 kg
M50-4	-		-
	"ISO A"	"MAN A"	"MAN B"
PART NO.	415450	415499	415461
Section	150 x 60 x 1200 mm	150 x 60 x 1200 mm	150 x 60 x 1200 mm

138 kg

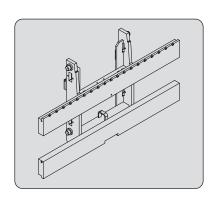
128 kg



STANDARDISED FORK CARRIAGE

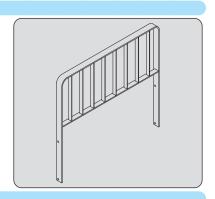
DUPLEX TOTAL VISIBILITY

1	
L1670	L2000
52663687	52663689
219279	219282
219284	219286
L1670	L2000
52557448	52557449
219279	219282
219284	219286
L1670	L2000
52663692	52663694
219356	219393
219592	219595
L1670	L2000
52558318	52558319
219356	219393
219592	219595
	52663687 219279 219284 L1670 52557448 219279 219284 L1670 52663692 219356 219592 L1670 52558318 219356



LOAD BACK REST

PART NO.	251387	251389
Width	1670 mm	2000 mm
Weight	57 kg	65 kg



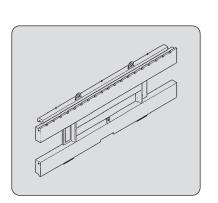
STANDARDISED SIDE-SHIFT CARRIAGE

DUPLEX TOTAL VISIBILITY

PART NO.	TDL A 50N L1670 52696146	TDL A 50 N L2000 52696148
Rated capacity	4500 kg	3000 kg
Side-shift	2 x 100 mm	2 x 100 mm
Width	1670 mm	2000 mm
Weight	360 kg	206 kg



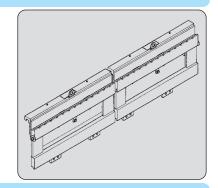
PART NO.	TDL A 50N L1670 52696150	TDL A 50 N L2000 52696152
PART NO.	32090130	32090132
Rated capacity	4500 kg	3000 kg
Side-shift	2 x 100 mm	2 x 100 mm
Width	1670 mm	2000 mm
Weight	360 kg	206 kg



STANDARD DOUBLE SIDE-SHIFT CARRIAGE

DUPLEX TOTAL VISIBILITY

	DTDL A 50 N "FEM A"	DTDL A 50 N "FEM B"
PART NO.	52696419	52696421
Rated capacity	2 x 2500 kg	2 x 2500 kg
Side-shift	2 x 150/100 mm	2 x 150/100 mm
Width	2 x 985 mm	2 x 985 mm
Weight	2 x 165 kg	2 x 165 kg



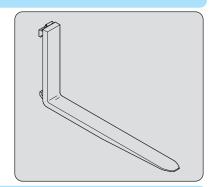
STANDARDISED FORK

DUPLEX TOTAL VISIBILITY

M50-2 ...

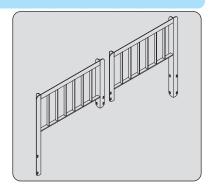
"FEM A" "FEM B" PART NO. 415742 415485 Section 125 x 40 x 1200 mm 125 x 40 x 1200 mm Weight 68 kg 72 kg M50-4...

"FEM A" "FEM B" PART NO. 415746 415486 Section 125 x 40 x 1200 mm 125 x 40 x 1200 mm Weight 70 kg 74 kg



LOAD BACK REST

PART NO. 252826 Width 2 x 985 mm Weight 2 x 26 kg



ATTACHMENT GUARDS

FORK GUARD

PART NO. 227801

