



**BP 249
44158 ANCENIS CEDEX - FRANCE
TEL: 33 (0)2 40 09 10 11**

YOUR DEALER

547848 EN (02/05/2007)

**ML 635 Turbo Série 3-E2
MT 940 L Turbo Série 3-E2
MT 1235 S Série 3-E2 + Turbo
MT 1240 L Turbo Série 3-E2 + ULTRA
MT 1335 SL Série 3-E2 + Turbo
MT 1340 SL Turbo Série 3-E2 + ULTRA
MT 1435 SL Série 3-E2 + Turbo
MT 1440 SL Série 3-E2 + Turbo + Turbo ULTRA
MT 1740 SL Turbo Série 3-E2 + ULTRA**

OPERATOR'S MANUAL

1 - OPERATING AND SAFETY INSTRUCTIONS

2 - DESCRIPTION

3 - MAINTENANCE

4 - ADAPTABLE ATTACHMENTS IN OPTION ON THE RANGE

20/05/2003	1ST DATE OF ISSUE
31/10/2003	UP DATING
17/05/2005	UP DATING (1-4 ; 1-6 ; 1-14 ; 2-82 ; 4-3 ; 4-5 ; 4-15 – 4-28)
10/06/2005	UP DATING ADDING MT 1240 L Turbo Série 3-E2 MT 1335 SL Turbo Série 3-E2
16/09/2005	UP DATING (1-9)
23/09/2005	UP DATING MT 1235 S Série 3-E2 MT 1235 S Turbo Série 3-E2 ADDING MT 1435 SL Série 3-E2 MT 1435 SL Turbo Série 3-E2 MT 1440 SL Série 3-E2 MT 1440 SL Turbo Série 3-E2 MT 1440 SL Turbo ULTRA Série 3-E2
18/04/2006	UP DATING (2-78 – 2-83 ; 2-104 – 2-110 ; 3-39)
01/09/2006	UP DATING (1-3 – 1-5 ; 2-9 ; 2-11 ; 2-13 ; 2-15 ; 2-17 ; 2-19 ; 2-29 ; 2-31 ; 2-33 ; 2-35 ; 2-37 ; 2-39 ; 2-41)
02/05/2007	UP DATING (2-8 ; 2-30 ; 2-38 ; 2-40 ; 3-3 ; 3-6 – 3-15 ; 3-17 ; 3-20 ; 3-21 ; 3-24 ; 3-41 ; 3-55)



MT 1740 SL Turbo ULTRA Série 3-E2

1 - OPERATING AND SAFETY INSTRUCTIONS

TABLE OF CONTENTS

INSTRUCTIONS TO THE COMPANY MANAGER **1 - 4**

THE OPERATOR	1 - 4
THE LIFT TRUCK	1 - 4
A - THE LIFT TRUCK'S SUITABILITY FOR THE JOB	1 - 4
B - ADAPTATION OF THE LIFT TRUCK TO STANDARD ENVIRONMENTAL CONDITIONS	1 - 4
C - MODIFICATION OF THE LIFT TRUCK	1 - 5
THE INSTRUCTIONS	1 - 5
THE MAINTENANCE	1 - 5

INSTRUCTIONS FOR THE OPERATOR **1 - 6**

PREAMBULE	1 - 6
GENERAL INSTRUCTIONS	1 - 6
A - OPERATOR'S MANUAL	1 - 6
B - AUTHORIZATION FOR USE IN FRANCE (or see current legislation in other countries)	1 - 6
C - MAINTENANCE	1 - 6
D - MODIFICATION OF THE LIFT TRUCK	1 - 6
E - LIFTING PEOPLE	1 - 7
OPERATING INSTRUCTIONS UNLADEN AND LADEN	1 - 8
A - BEFORE STARTING THE LIFT TRUCK	1 - 8
B - DRIVER'S OPERATING INSTRUCTIONS	1 - 8
C - ENVIRONMENT	1 - 9
D - VISIBILITY	1 - 9
E - STARTING THE LIFT TRUCK	1 - 10
F - DRIVING THE LIFT TRUCK	1 - 10
G - STOPPING THE LIFT TRUCK	1 - 11
H - DRIVING THE LIFT TRUCK ON THE PUBLIC HIGHWAY	1 - 12
INSTRUCTIONS FOR HANDLING A LOAD	1 - 14
A - CHOICE OF ATTACHMENTS	1 - 14
B - MASS OF LOAD AND CENTRE OF GRAVITY	1 - 14
C - LONGITUDINAL STABILITY ALARM	1 - 14
D - TRANSVERSE ATTITUDE OF THE LIFT TRUCK	1 - 15
E - TAKING UP A LOAD ON THE GROUND	1 - 15
F - TAKING UP AND LAYING A HIGH LOAD ON TYRES	1 - 16
G - TAKING UP AND LAYING A HIGH LOAD ON STABILIZERS	1 - 18
OPERATING INSTRUCTIONS THE PLATFORM	1 - 20
A - DISPOSITION IN THE PLATFORM	1 - 20
B - OPERATING THE PLATFORM	1 - 20
C - ENVIRONMENT	1 - 20
INSTRUCTIONS FOR USING THE RADIO-CONTROL	1 - 21

MAINTENANCE INSTRUCTIONS OF THE LIFT TRUCK **1 - 22**

GENERAL INSTRUCTIONS	1 - 22
MAINTENANCE	1 - 22
LUBRICANT AND FUEL LEVELS	1 - 22
HYDRAULIC	1 - 22
ELECTRICITY	1 - 22
WELDING	1 - 23
WASHING THE LIFT TRUCK	1 - 23

IF THE LIFT TRUCK IS NOT TO BE USED FOR A LONG TIME **1 - 24**

INTRODUCTION	1 - 24
PREPARING THE LIFT TRUCK	1 - 24
PROTECTING THE I.C. ENGINE	1 - 24
PROTECTING THE LIFT TRUCK	1 - 24
BRINGING THE LIFT TRUCK BACK INTO SERVICE	1 - 25

INSTRUCTIONS TO THE COMPANY MANAGER

THE OPERATOR

- Only qualified, authorized personnel can use the lift truck. This authorization is given in writing by the appropriate person in the establishment with respect to the use of lift trucks and must be carried permanently by the operator.

 **On the basis of experience, there are a number of possible situations in which operating the lift truck is contra-indicated. Such foreseeable abnormal uses, the main ones being listed below, are strictly forbidden.**

- The foreseeable abnormal behaviour resulting from ordinary neglect, but does not result from any wish to put the machinery to any improper use.
- The reflex reactions of a person in the event of a malfunction, incident, fault, etc. during operation of the lift truck.
- Behaviour resulting from application of the "principle of least action" when performing a task.
- For certain machines, the foreseeable behaviour of such persons as: apprentices, teenagers, handicapped persons, trainees tempted to drive a lift truck, operator tempted to operate a truck to win a bet, in competition or for their own personal experience. The person in charge of the equipment must take these criteria into account when assessing whether or not a person will make a suitable driver.

THE LIFT TRUCK

A - THE TRUCK'S SUITABILITY FOR THE JOB

- MANITOU has ensured that this lift truck is suitable for use under the standard operating conditions defined in this operator's manual, with a **STATIC** test coefficient of **1.33** and a **DYNAMIC** test coefficient of **1**, as specified in harmonized norm **EN 1459** for variable range trucks.
- Before commissioning, the company manager must make sure that the lift truck is appropriate for the work to be done, and perform certain tests (in accordance with current legislation).

B - ADAPTATION OF THE LIFT TRUCK TO STANDARD ENVIRONMENTAL CONDITIONS

- In addition to series equipment mounted on your lift truck, many options are available, such as: road lighting, stop lights, flashing light, reverse lights, reverse buzzer alarm, front light, rear light, light at the jib head, etc.
- The operator must take into account the operating conditions to define the lift truck's signalling and lighting equipment. Contact your dealer.
- Take into account climatic and atmospheric conditions of the site of utilisation.
 - Protection against frost (see: 3 - MAINTENANCE: LUBRICANTS AND FUEL).
 - Adaptation of lubricants (ask your dealer for information).
 - I.C. engine filtration (see: 3 - MAINTENANCE: FILTERS CARTRIDGES AND BELTS).

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

- A lift truck operating in an area without fire extinguishing equipment must be equipped with an individual extinguisher. There are solutions, consult your dealer.

 **Your lift truck is designed for outdoor use under normal atmospheric conditions and indoor use in suitably aerated and ventilated premises. It is prohibited to use the lift truck in areas where there is a risk of fire or which are potentially explosive (e.g. Refineries, fuel or gas depots, stores of inflammable products...). For use in these areas, specific equipment is available (ask your dealer for information).**

- Our trucks comply with Directive 89/336/EC concerning electromagnetic compatibility (EMC), and with the corresponding harmonized norm EN 12895. Their proper operation is no longer guaranteed if they are used within areas in which the electromagnetic fields exceed the limit specified by that norm (10 V/m).
- Directive 2002/44/EC requires company managers to not expose their employees to excessive vibration doses. There is no recognized code of measurement for comparing the machines of different manufacturers. The actual doses received can therefore be measured only under actual operating conditions at the user's premises.
- The following are some tips for minimizing these vibration doses:
 - Select the most suitable lift truck and attachment for the intended use.
 - Adapt the seat adjustment to the operator's weight (according to lift truck model) and maintain it in good condition, as well as the cab suspension. 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 - MODIFICATION OF THE LIFT TRUCK

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

THE INSTRUCTIONS

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

THE 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 lift truck must be inspected periodically to ensure that it remains in compliance. The frequency of this inspection is defined by current legislation in the country in which the lift truck is used.

INSTRUCTIONS FOR THE OPERATOR

PREAMBULE

WHENEVER YOU SEE THIS SYMBOL IT MEANS:



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

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

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

 **Failure to respect the safety and operating instructions, or the instructions for repairing or servicing your lift truck may lead to serious, even fatal accident.**

GENERAL INSTRUCTIONS

A - OPERATOR'S MANUAL

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

B - AUTHORIZATION FOR USE IN FRANCE

(or see current legislation in other countries)

- Only qualified, authorized personnel may use the lift truck. This authorization is given in writing by the appropriate person in the company, in charge of using the lift truck, and must be permanently carried by the operator.
- The operator is not competent to authorise the driving of the lift truck by another person.

C - MAINTENANCE

- The operator must immediately advise his superior if his lift truck is not in good working order or does not comply with the safety notice.
- The operator is prohibited from carrying out any repairs or adjustments himself, unless he has been trained for this purpose. He must keep the lift truck properly cleaned if this is among his responsibilities.
- The operator must carry out daily maintenance (see: 3 - MAINTENANCE: A - DAILY OR EVERY 10 HOURS SERVICE).
- The operator must ensure tyres are adapted to the nature of the ground (see area of the contact surface of the tyres in the chapter: 2 - DESCRIPTION: CHARACTERISTICS). There are optional solutions, consult your dealer.
 - . SAND tyres.
 - . LAND tyres.
 - . Snow chains.

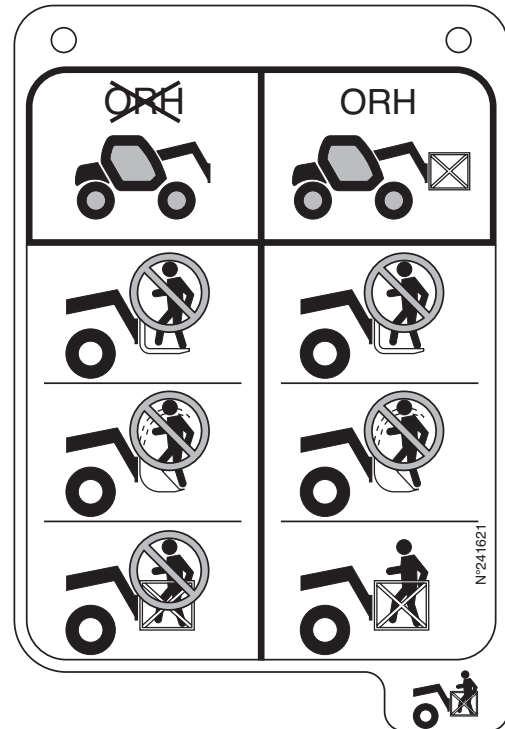
 **Do not use the lift truck if the tyres are incorrectly inflated, damaged or excessively worn, because this could put your own safety or that of others at risk, or cause damage to the lift truck itself. The fitting of foam inflated tyres is prohibited and is not guaranteed by the manufacturer, excepting prior authorisation.**

D - MODIFICATION OF THE LIFT TRUCK

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

E - LIFTING PEOPLE

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



OPERATING INSTRUCTIONS UNLADEN AND LADEN

A - BEFORE STARTING THE LIFT TRUCK

- Carry out daily maintenance (see: 3 - MAINTENANCE: A - DAILY OR EVERY 10 HOURS SERVICE).
- Make sure the lights, indicators and windscreen wipers are working properly.
- Make sure the rear view mirrors are in good condition, clean and properly adjusted.
- Make sure the horn works.

B - DRIVER'S OPERATING INSTRUCTIONS

- Whatever his experience, the operator is advised to familiarize himself with the position and operation of all the controls and instruments before operating the lift truck.
- Wear clothes suited for driving the lift truck, avoid loose clothes.
- Make sure you have the appropriate protective equipment for the job to be done.
- 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 lift truck when getting into and leaving the driving seat and use the handle(s) provided for this purpose. Do not jump out of the seat to get down.
- Always pay attention when using the lift truck. Do not listen to the radio or music using headphones or earphones.
- Never operate the lift truck when hands or feet are wet or soiled with greasy substances.
- For increased comfort, adjust the seat to your requirements and adopt the correct position in the driver's cab.



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

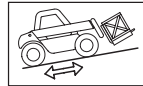
- The operator must always be in his normal position in the driver's cab. It is prohibited to have arms or legs, or generally any part of the body, protruding from the driver's cab of the lift truck.
- The safety belt must be worn and adjusted to the operator's size.
- The control units must never in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

C - ENVIRONMENT

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



- Moving without load: Forks or attachment facing downhill.



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

A *If the load or the attachment must remain above a structure for a long time, there is the risk that it will rest on the structure because of the jib descending owing to the oil in the cylinders cooling down.*

To eliminate this risk:

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

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

A *You must consult your local electrical agency. You could be electrocuted or seriously injured if you operate or park the lift truck too close to power cables.*

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

D - VISIBILITY

- The safety of people within the lift truck's working area, as well as that of the lift truck itself and the operator are depend on good operator visibility of the lift truck's immediate vicinity in all situations and at all times.
- This lift truck has been designed to allow good operator visibility (direct or indirect by means of rear-view mirrors) of the immediate vicinity of the lift truck while traveling with no load and with the jib in the transport position.
- Special precautions must be taken if the size of the load restricts visibility towards the front:
 - moving in reverse,
 - site layout,
 - assisted by a person directing the maneuver (while standing outside the truck's area of travel), making sure to keep this person clearly in view at all times.
 - in any case, avoid reversing over long distances.
- Certain special accessories may require the truck to travel with the jib in the raised position. In such cases, visibility on the right hand side is restricted, and special precautions must be taken:
 - site layout,
 - assisted by a person directing the maneuver (while standing outside the truck's area of travel).
- If visibility of your road is inadequate, ask someone to assist by directing the maneuver (while standing outside the truck's area of travel), making sure to keep this person clearly in view at all times.
- Keep all components affecting visibility in a clean, properly adjusted state and in good working order (e.g. windscreens, windows, windscreen wipers, windscreen washers, driving and work lights, rear-view mirrors).

E - STARTING THE LIFT TRUCK

SAFETY NOTICE



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

- Never try to start the lift truck by pushing or towing it. Such operation may cause severe damage to the transmission. If necessary, to tow the lift truck in an emergency, the transmission must be placed in the neutral position (see: 3 - MAINTENANCE: G - OCCASIONAL 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.



Failure to respect polarity between batteries can cause serious damage to the electrical circuit. The electrolyte in the battery may produce an explosive gas. Avoid flames and generation of sparks close to the batteries. Never disconnect a battery while it is charging.

INSTRUCTIONS

- Check the closing and locking of the hood(s).
- Make sure that the forward/reverse lever is in neutral.
- Turn the ignition key to the position I to activate the electrical system.
- Whenever you switch on the lift truck, perform the automatic check on the longitudinal stability alarm system (see: 2 - DESCRIPTION: INSTRUMENTS AND CONTROLS). Do not use the lift truck if it does not conform to the regulations.
- Make sure the signal lights on the instrument control panel and fuel level indicators are working properly (see: 2 - DESCRIPTION: INSTRUMENTS AND CONTROLS).
- Turn the ignition key to position II to preheat for 5 seconds and turn the ignition key fully: the I.C. engine should then start. Release the ignition key and let the I.C. engine run at idle.
- Do not engage the starter motor for more than 15 seconds and carry out the preheating for 5 seconds between unsuccessful attempts.
- Make sure all the signal lights on the control instrument panel are off.
- Check all control instruments when the I.C. 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 I.C. engine and immediately carry out the necessary operations.

F - DRIVING THE LIFT TRUCK

SAFETY NOTICE



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

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

The operator must remain in control of the lift truck.

In the event of the lift truck overturning, do not try to leave the cabin during the incident. YOUR BEST PROTECTION IS TO STAY FASTENED IN THE CABIN.

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

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

INSTRUCTIONS

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

G - STOPPING THE LIFT TRUCK

SAFETY NOTICE

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

INSTRUCTIONS

- Park the lift truck on flat ground or on an incline lower than 15 %.
- Place the forward/reverse lever in neutral.
- Apply the parking brake.
- For lift trucks with gearboxes, place the gear lever in neutral.
- Retract entirely the jib.
- Lower the forks or attachment to rest on the ground.
- When using an attachment with a grab or jaws, or a bucket with hydraulic opening, close the attachment fully.
- Before stopping the lift truck after a long working period, leave the I.C. engine idling for a few moments, to allow the coolant liquid and oil to lower the temperature of the I.C. engine and transmission. Do not forget this precaution, in the event of frequent stops or warm stalling of the I.C. 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 I.C. engine with the ignition switch.
- Remove the ignition key.
- Lock all the accesses to the lift truck (doors, windows, cowls...).

H - DRIVING THE LIFT TRUCK ON THE PUBLIC HIGHWAY**SAFETY INSTRUCTIONS**

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

INSTRUCTIONS

- Make sure the revolving light is in place, switch it on and verify its operation.
- Check the good working order and cleanness of lights, indicators and windscreen wiper.
- Switch off the working headlights if the lift truck is fitted with them.
- Select the steering mode "HIGHWAY TRAFFIC" (as model of lift truck) (see: 2 - DESCRIPTION: INSTRUMENTS AND CONTROLS).
- Retract entirely the jib and put the attachment at 300 mm from the ground.
- Place the slope correctors in the central position, i.e. the transverse shaft of the axles parallel to the chassis (as model of lift truck).
- Lift up the stabilizers to the maximum and turn the blocks inwards (as model of lift truck).
- For lift trucks with gearboxes:

On the road, set off in 3rd gear and go into 4th (as model of lift truck) when the conditions and state of the road allow. In hilly areas, set off in 2nd gear and go into 3rd when the conditions and state of the road allow.



Never move in neutral (gear reverser or gear lever in neutral or transmission cut-off button pressed) to preserve the lift truck engine brake. Failure to respect this instruction on a slope will lead to excessive speed which may make the lift truck uncontrollable (steering, brakes) and may cause severe mechanical damage.

DRIVING THE LIFT TRUCK WITH A FRONT-MOUNTED ATTACHMENT

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

OPERATING THE LIFT TRUCK WITH A TRAILER

- For using a trailer, observe the regulations in force in your country (maximum travel speed, braking, maximum weight of trailer, etc.).
- Do not forget to connect the trailer's electrical equipment to that of the lift truck.
- The trailer's braking system must comply with current legislation.
- If pulling a trailer with assisted braking, the tractor lift truck must be equipped with a trailer braking mechanism. In this case, do not forget to connect the trailer braking equipment to the lift truck.
- The maximum vertical pull on the trailer hook must not exceed 1500 daN.
- The authorised maximum train weight must not exceed the maximum weight authorised by the manufacturer (consult the manufacturer's plate on your lift truck).
- For lift trucks with gearboxes:
When driving with a trailer, set off in 2nd gear and go into 3rd when the conditions and state of the road allow. Do not exceed 4th gear to avoid overheating the internal combustion engine and the transmission.

IF NECESSARY, CONSULT YOUR DEALER.

INSTRUCTIONS FOR HANDLING A LOAD

A - CHOICE OF ATTACHMENTS

- Only attachments approved by MANITOU can be used on its lift trucks.
- Make sure the attachment is appropriate for the work to be done (see: 4 - ADAPTABLE ATTACHMENTS IN OPTION ON THE RANGE).
- Make sure the attachment is correctly installed and locked onto the lift truck carriage.
- Make sure that your lift truck attachments work properly.
- Comply with the load chart limits for the lift truck for the attachment used.
- Do not exceed the rated capacity of the attachment.
- Never lift a load in a sling without the attachment provided for the purpose. There are optional solutions ; contact your dealer.

B - MASS OF LOAD AND CENTRE OF GRAVITY

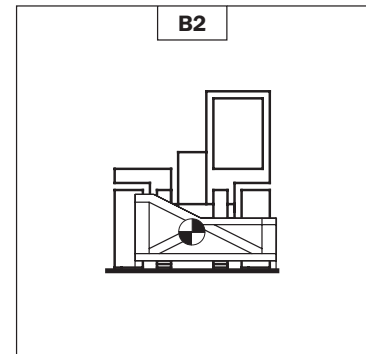
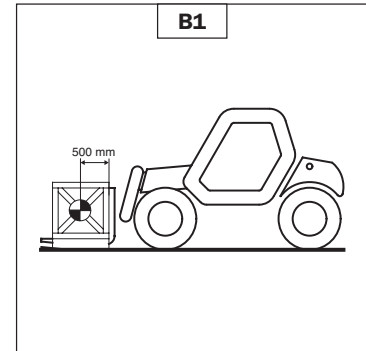
- Before taking up a load, you must know its mass and its centre of gravity.
- The load chart for your lift truck is valid for a load in which the longitudinal position of the centre of gravity is 500 mm from the base of the forks (fig. B1). For a higher centre of gravity, contact your dealer.
- For irregular loads, determine the transverse centre of gravity before any movement (fig. B2) and set it in the longitudinal axis of the lift truck.



It is forbidden to move a load heavier than the effective capacity defined on the lift truck load chart.



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

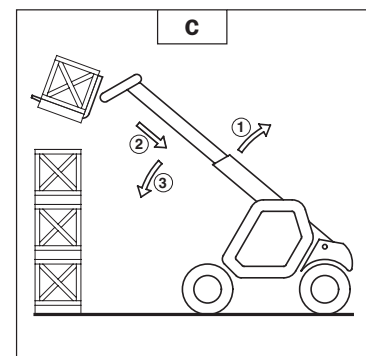


C - LONGITUDINAL STABILITY ALARM

- This device gives an indication of the lift truck's longitudinal stability. Move the jib very carefully when approaching the authorized load limit (see: 2 - DESCRIPTION: INSTRUMENTS AND CONTROLS).
- Always watch this device during handling operations.
- When the device is in alert mode, it is forbidden to perform so-called "AGGRAVATING" movements, these being:
 - A - Extending the jib.
 - B - Lowering the jib.
- Perform movements to relieve aggravation in the following order (fig. C): if necessary, raise the jib (1), retract the jib as far as possible (2) and lower the jib (3) to release the load.



The instrument reading may be erroneous when the steering is at its maximum limit or the rear axle oscillated to its limit. Before lifting a load, make sure that the lift truck is not in either of these situations.



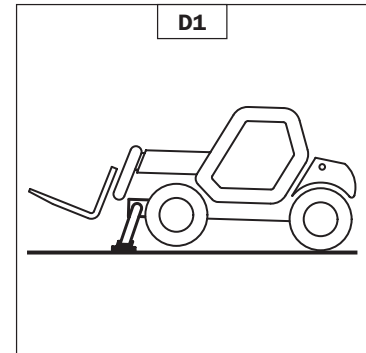
D - TRANSVERSE ATTITUDE OF THE LIFT TRUCK (depending on the model of lift truck)

The transverse attitude is the transverse slope of the chassis with respect to the horizontal.

Raising the jib reduces the lift truck's lateral stability. The transverse attitude must be set with the jib in down position as follows:

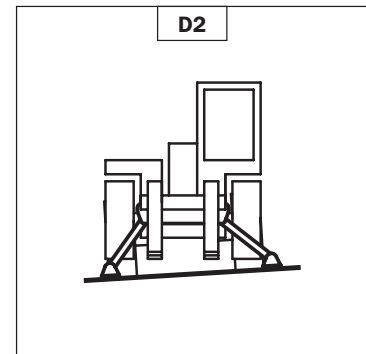
1 - LIFT TRUCK WITHOUT SLOPE CORRECTOR USED ON TYRES

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



2 - LIFT TRUCK WITH SLOPE CORRECTOR USED ON TYRES

- Correct the slope using the hydraulic control and verify the horizontality via the level. The bubble in the level must be between the two lines (see: 2 - DESCRIPTION: INSTRUMENTS AND CONTROLS).



3 - LIFT TRUCK USED ON STABILIZERS

- Set the two stabilizers on the ground and raise the two front wheels of the lift truck (fig. D1).
- Correct the slope using the stabilizers (fig. D2) and make sure the truck is horizontal by checking the level. The bubble of the level must be between the two lines (see: 2 - DESCRIPTION: INSTRUMENTS AND CONTROLS). In this position, the two front wheels must be off the ground.

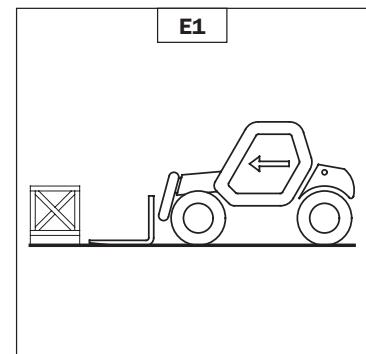
E - TAKING UP A LOAD ON THE GROUND

- Approach the lift truck perpendicular to the load, with the jib retracted and the forks in a horizontal position (fig. E1).
- Adjust the fork spread and centering in connection with the load (fig. E2) (optional solutions exist, consult your dealer).
- Never lift a load with a single fork.



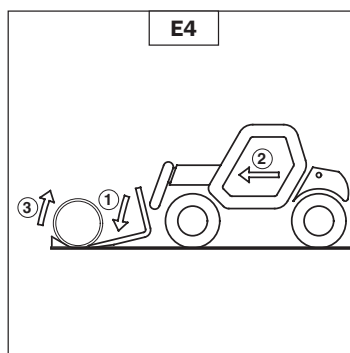
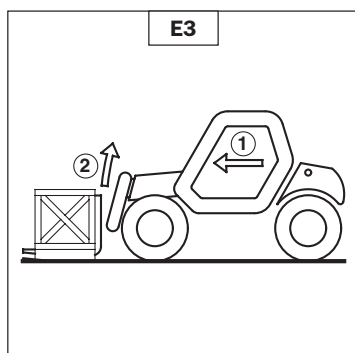
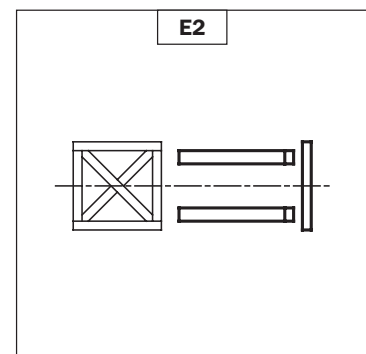
Beware of the risks of trapping or squashing limbs when manually adjusting the forks.

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



FOR A NON-PALLETIZED LOAD

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



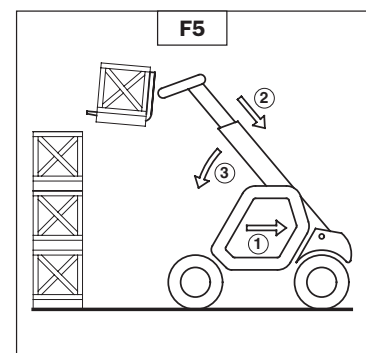
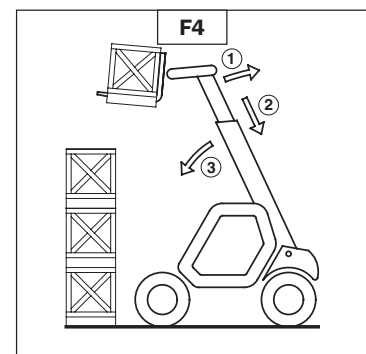
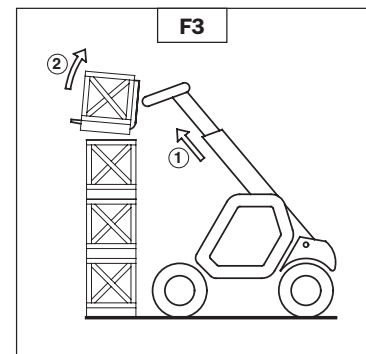
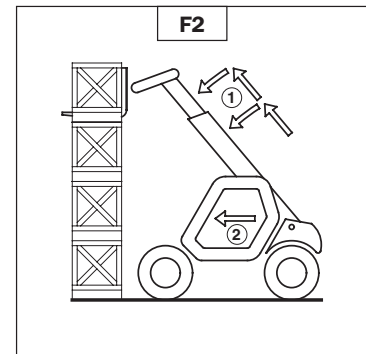
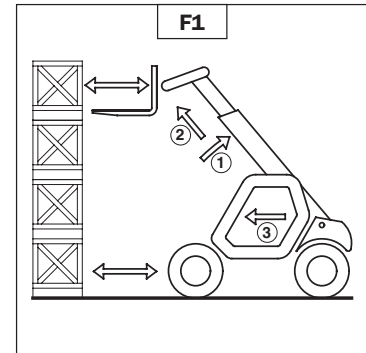
F - TAKING UP AND LAYING A HIGH LOAD ON TYRES

A You must not raise the jib if you have not checked the transverse attitude of the lift truck (see: INSTRUCTIONS FOR HANDLING A LOAD: D - TRANSVERSE ATTITUDE OF THE LIFT TRUCK).

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

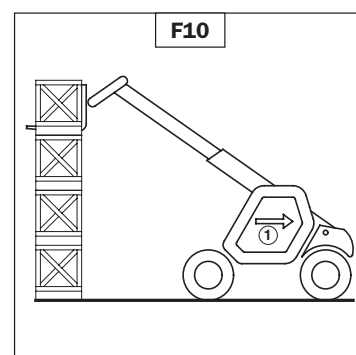
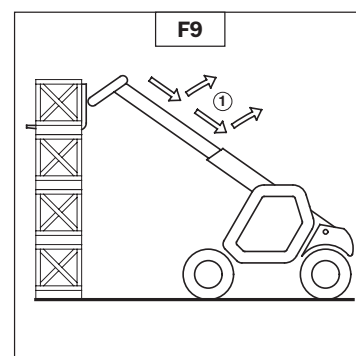
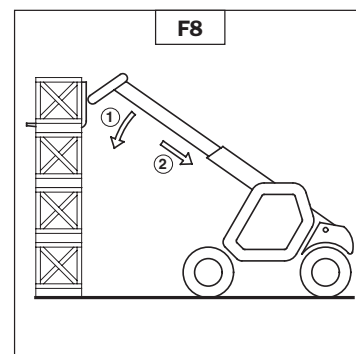
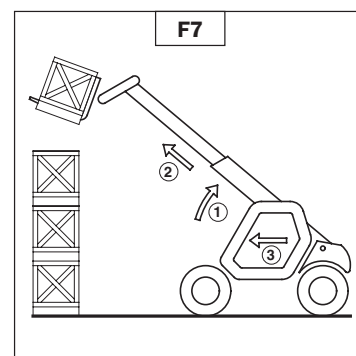
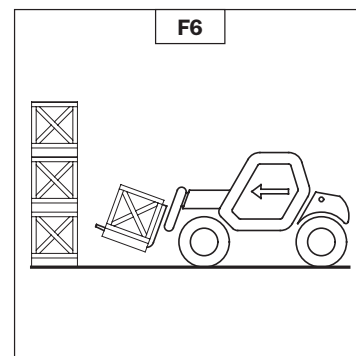
TAKING UP A HIGH LOAD ON TYRES

- Ensure that the forks will easily pass under the load.
- Lift and extend the jib (1) (2) until the forks are level with the load, moving the lift truck (3) forward if necessary (fig. F1), moving very slowly and carefully.
- Always think about keeping the distance necessary to fit the forks under the load, between the pile and the lift truck (fig. F1) and use the shortest possible length of jib.
- Stop the forks in front of the load by alternately extending and retracting the jib (1) or, if necessary, moving the lift truck forward (2) (fig. F2). Put the handbrake on and set the reverse gear to neutral.
- Slightly lift the load (1) and incline the carriage (2) backwards to stabilize the load (fig. F3).
- Tilt the load sufficiently backwards to ensure its stability.
- Watch the longitudinal stability alarm (see: INSTRUCTIONS FOR HANDLING A LOAD: C - LONGITUDINAL STABILITY ALARM). If it is overloaded, replace the load in the place from which it was taken.
- If possible lower the load without shifting the lift truck. Lift the jib (1) to release the load, retract (2) and lower the jib (3) to bring the load into the transport position (fig. F4).
- If this is not possible, back up the lift truck (1), manoeuvring very gently and carefully to release the load. Retract (2) and lower the jib (3) to bring the load into the transport position (fig. F5).



LAYING A HIGH LOAD ON TYRES

- Approach the load in the transport position in front of the pile (fig. F6).
- Put the handbrake on and set the reversing lever to neutral.
- Lift and extend the jib (1) (2) until the load is above the pile, while keeping an eye on the longitudinal stability alarm (see: INSTRUCTIONS FOR HANDLING A LOAD: C - LONGITUDINAL STABILITY ALARM). If necessary, move the lift truck (3) forward (fig. F7), driving very slowly and carefully.
- Place the load in a horizontal position and lay it down on the pile by lowering and retracting the jib (1) (2) in order to position the load correctly (fig. F8).
- If possible, release the fork by alternately retracting and raising the jib (1) (fig. F9). Then set the forks into transport position.
- If this is not possible, reverse the lift truck (1) very slowly and carefully to release the forks (fig. F10). Then set them into transport position.



G - TAKING UP AND LAYING A HIGH LOAD ON STABILIZERS

(depending on the model of lift truck)



You must not raise the jib if you have not checked the transverse attitude of the lift truck (see: INSTRUCTIONS FOR HANDLING A LOAD: D - TRANSVERSE ATTITUDE OF THE LIFT TRUCK).

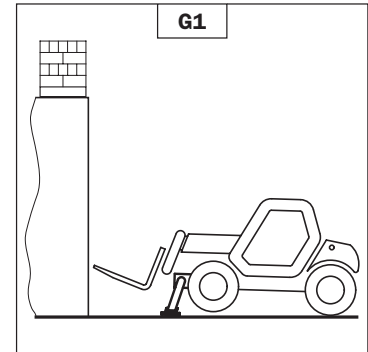
REMINDER: Make sure that the following operations can be performed with good visibility (see: OPERATIONS INSTRUCTIONS UNLADEN AND LADEN: D - VISIBILITY).

USING THE STABILIZERS

The stabilizers are used to optimise the lift truck's lifting performances (see: 2 - DESCRIPTION: INSTRUMENTS AND CONTROLS).

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

- Set the forks in transport position in front of the elevation.
- Stay far enough away to have room for the jib to be raised.
- Put on the parking brake and set the gear reverser lever to neutral.
- Set the two stabilizers on the ground and lift the two front wheels of the lift truck (fig. G1), while maintaining its transverse stability.



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

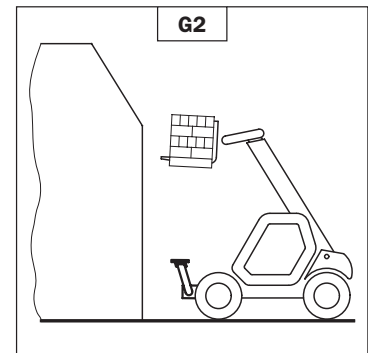
- Raise both stabilizers fully and at the same time.

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



This operation must be exceptional and performed with great care.

- Raise the jib and retract the telescopes completely.
- Set the lift truck in position in front of the elevation (fig. G2) moving very slowly and carefully.
- Put on the parking brake and set the gear reverser lever to neutral.
- Move the stabilizers very slowly and gradually as soon as they are close to the ground or in contact with it.
- Lower the two stabilizers and lift the two front wheels of the lift truck (fig. G3). During this operation, transverse attitude must be permanently maintained: the bubble in the level must be kept between the two lines.

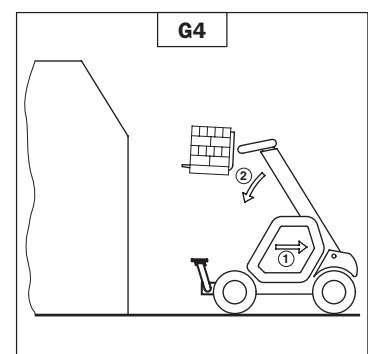
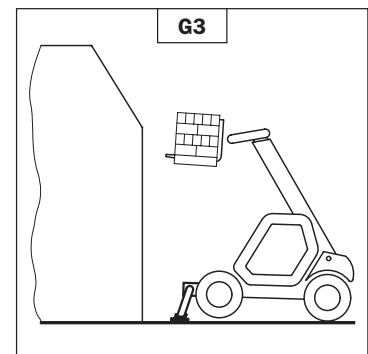


RAISING THE STABILIZERS WITH THE JIB UP (UNLADEN AND LADEN)



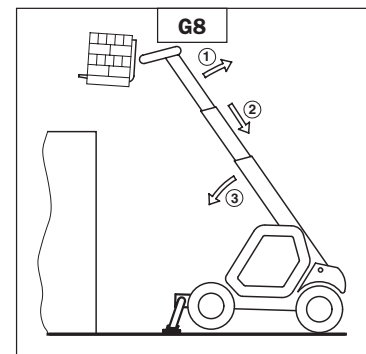
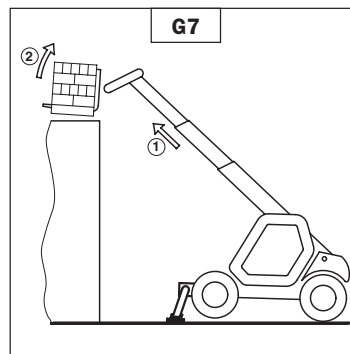
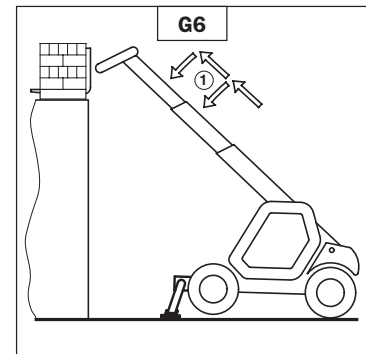
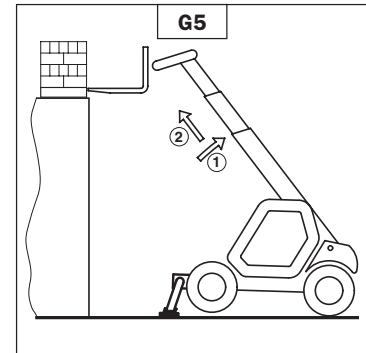
This operation must be exceptional and performed with great care.

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



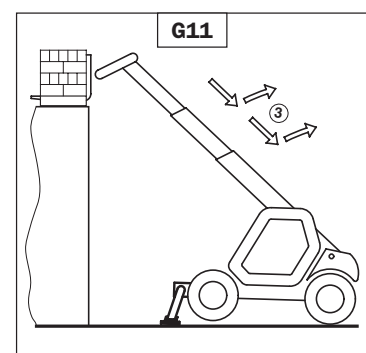
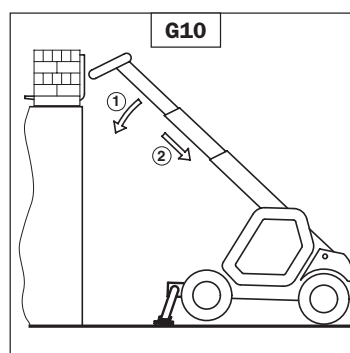
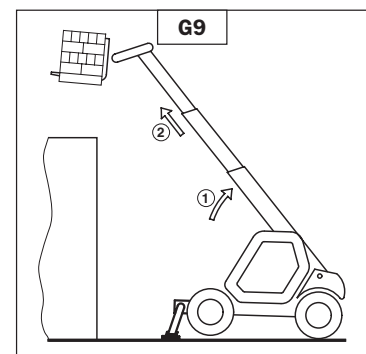
TAKING UP A HIGH LOAD ON STABILIZERS

- Make sure the forks will fit easily under the load.
- Check the position of the lift truck with respect to the load and make a test run, if necessary, without taking the load.
- Raise and extend the jib (1) (2) until the forks are at the level of the load (fig. G5).
- Block the forks in front of the load by alternately using the controls to extend and lower the jib (1) (fig. G6).
- Lift the load slightly (1) and tilt the carriage (2) backwards to stabilise the load (fig. G7).
- Monitor the longitudinal stability alarm (see: INSTRUCTIONS FOR HANDLING A LOAD: C - LONGITUDINAL STABILITY ALARM). If it is overloaded, set the load down in the place from where it was taken.
- If possible lower the load without moving the lift truck. Raise the jib (1) to release the load, retract (2) and lower the jib (3) to set the load into transport position (fig. G8).



LAYING A HIGH LOAD ON STABILIZERS

- Raise and extend the jib (1) (2) until the load is above the elevation (fig. G9), while monitoring the longitudinal stability alarm (see: INSTRUCTIONS FOR HANDLING A LOAD: C - LONGITUDINAL STABILITY ALARM).
- Position the load horizontally and release it by lowering and retracting the jib (1) (2) to position the load correctly (fig. G10).
- Release the forks by alternating retracting and raising the jib (3) (fig. G11).
- If possible, set the jib in transport position without moving the lift truck.



OPERATING INSTRUCTIONS THE PLATFORM

For ORH lift trucks

 **Installation of the platform on the lift truck is only possible if the shields "operating the platform" of the lift truck and the platform are identical (see: 2 - DESCRIPTION: OPERATING THE PLATFORM).**

A - DISPOSITION IN THE PLATFORM

- Wear clothes suited for operating the platform, avoid loose clothes.
- Never operate the platform when hands or feet are wet or soiled with greasy substances.
- It is highly recommended that a safety harness be worn and hooked onto the ring placed there for this purpose.
- The controls must not be used for any other than their intended purpose (e.g. getting in and out of the lift truck, coat hanger etc.).
- Safety helmets must be worn.

B - OPERATING THE PLATFORM

- However experienced they may be, operators must acquaint themselves with the emplacement and operation of all control instruments prior to operating the platform.
- Check before operating that the platform has been correctly assembled and locked onto the lift truck.
- Check before operating the platform that the access gate has been properly locked.
- The platform should be operated in an area free of any obstructions or danger when it is lowered to the ground.
- The operator using the platform must be aided on the ground by a person with adequate training.
- You should stay within the limits set out in the platform load chart.
- The lateral stresses are limited pressure (see: 2 - DESCRIPTION: CHARACTERISTICS).
- It is strictly forbidden to suspend a load from the platform or from the lift truck jib.
- The lift truck must not be moved with one (or more) person(s) in the platform.
- It is forbidden to transport people on the platform using the hydraulic controls in the lift truck's driver's cab (except in case of rescue).
- The operator must not get in or out of the platform when it is not on ground level (jib retracted and in the down position).
- The platform must not be fitted with attachments that increase the unit's wind load.
- Do not use ladders or improvised structures in the platform to gain extra height.
- Do not climb onto the sides of the platform to gain extra height.
- Remember to unlock the rear axle oscillation before moving the lift truck (as model of lift truck).

C - ENVIRONMENT

 **Operating the platform close to electricity cables is forbidden.**

- In the event of wind speeds of between 45 and 90 km/h, the rear axle oscillation must be locked (as model of lift truck).

 **Operation of the platform is strictly forbidden in the event of wind speeds of over 90 km/h.**

INSTRUCTIONS FOR USING THE RADIO-CONTROL

For lift trucks with RC radio control

HOW TO USE THE RADIO-CONTROL

SAFETY INSTRUCTIONS

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



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

- ***The physical and mental health of the user or others.***
- ***The lift truck and other neighbouring items.***



Everyone working with this radio-control:

- ***Must be qualified in line with current regulations and therefore appropriately trained.***
- ***Must follow this instruction manual as closely as possible.***

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

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



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

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

INSTRUCTIONS

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



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

PROTECTIVE DEVICES

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



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

MAINTENANCE INSTRUCTIONS OF THE LIFT TRUCK

GENERAL INSTRUCTIONS

- Ensure the area is sufficiently ventilated before starting the lift truck.
- Wear clothes suitable for the maintenance of the lift truck, avoid wearing jewellery and loose clothes. Tie and protect your hair, if necessary.
- Stop the I.C. engine and remove the ignition key, when an intervention is necessary.
- Read the operator's manual carefully.
- Carry out all repairs immediately, even if the repairs concerned are minor.
- Repair all leaks immediately, even if the leak concerned is minor.
- Make sure that the disposal of process materials and of spare parts is carried out in total safety and in a ecological way.
- Be careful of the risk of burning and splashing (exhaust, radiator, I.C. engine, etc.).

MAINTENANCE

- Perform the periodic service (see: 3 - MAINTENANCE) to keep your lift truck in good working conditions. Failure to perform the periodic service may cancel the contractual guarantee.

LUBRICANT AND FUEL LEVELS

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

HYDRAULIC

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



BALANCING VALVE: For inspection, see: 3 – MAINTENANCE: D - EVERY 500 HOURS SERVICE. It is dangerous to change the setting and remove the balancing valves or safety valves which may be fitted to your lift truck cylinders. These operations must only be performed by approved personnel (consult your dealer).



The HYDRAULIC ACCUMULATORS that may be fitted on your lift truck are pressurised units. Removing these accumulators and their pipework is a dangerous operation and must only be performed by approved personnel (consult your dealer).

ELECTRICITY

- Do not short-circuit the starter relay to start the IC engine. If the gear reverser is not in neutral and the parking brake is not engaged, the lift truck may suddenly start to move.
- Do not drop metallic items on the battery.
- Disconnect the battery before working on the electrical circuit.

WELDING

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

WASHING THE LIFT TRUCK

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

FOR ANY INTERVENTION OTHER THAN REGULAR MAINTENANCE, CONSULT YOUR DEALER.

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

INTRODUCTION

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

For these operations, we recommend the use of a MANITOU protective product, reference 603726.

Instructions for using the product are given on the packaging.

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

PREPARING THE LIFT TRUCK

- Clean the lift truck 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 lift truck in clear and cold water and wipe them.
- Touch up the paintwork if necessary.
- Shut down the lift truck (see: OPERATING INSTRUCTIONS UNLADEN AND LADEN).
- Make sure the jib cylinder rods are all in retracted position.
- Release the pressure in the hydraulic circuits.

PROTECTING THE I.C. ENGINE

- Fill the tank with fuel (see: 3 - MAINTENANCE: A - DAILY OR EVERY 10 HOURS SERVICE).
 - Empty and replace the cooling liquid (see: 3 - MAINTENANCE: F - EVERY 2000 HOURS SERVICE).
 - Leave the I.C. engine running at idling speed for a few minutes, then switch off.
 - Replace the I.C. engine oil and oil filter (see: 3 - MAINTENANCE: D - EVERY 500 HOURS SERVICE).
 - Add the protective product to the engine oil.
 - Run the I.C. engine for a short time so that the oil and cooling liquid circulate inside.
 - Disconnect the battery and store it in a safe place away from the cold, after charging it to a maximum.
 - Remove the injectors and spray the protective product into each cylinder for two seconds with the piston in low neutral position.
 - Turn the crankshaft once slowly and refit the injectors (see I.C. engine REPAIR MANUAL).
 - Remove the intake hose from the manifold or turbocharger and spray the protective product into the manifold or turbocharger.
 - Cap the intake manifold or turbocharger hole with waterproof adhesive tape.
 - Remove the exhaust pipe and spray the protective product into the exhaust manifold or turbocharger.
 - Refit the exhaust pipe and block the outlet with waterproof adhesive tape.
- NOTE: The spray time is noted on the product packaging and must be increased by 50 % for turbo engines.
- Open the filler plug, spray the protective product around the rocker arm shaft and refit the filler plug.
 - Cap the fuel tank using waterproof adhesive tape.
 - Remove the drive belts and store them in a safe place.
 - Disconnect the engine cut-off solenoid on the injection pump and carefully insulate the connection.

PROTECTING THE LIFT TRUCK

- Set the lift truck on axle stands so that the tyres are not in contact with the ground and release the handbrake.
- Protect cylinder rods which will not be retracted, from corrosion.
- Wrap the tyres.

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

BRINGING THE LIFT TRUCK BACK INTO SERVICE

- Remove the waterproof adhesive tape from all the holes.
- Refit the intake hose.
- Refit and reconnect the battery.
- Remove the protection from the cylinder rods.
- Perform the daily service (see: 3 - MAINTENANCE: A - DAILY OR EVERY 10 HOURS SERVICE).
- Put the handbrake on and remove the axle stands.
- Empty and replace the fuel and replace the fuel filter (see: 3 - MAINTENANCE: D - EVERY 500 HOURS SERVICE).
- Refit and set the tension in the drive belts (see: 3 - MAINTENANCE: C - EVERY 250 HOURS SERVICE).
- Turn the I.C. engine using the starter, to allow the oil pressure to rise.
- Reconnect the engine cut-off solenoid.
- Lubricate the lift truck completely (see: 3 - MAINTENANCE: SERVICING SCHEDULE).



Make sure the area is adequately ventilated before starting up the lift truck.

- Start up the lift truck, following the safety instructions and regulations (see: OPERATING INSTRUCTIONS UNLADEN AND LADEN).
- Run all the jib's hydraulic movements, concentrating on the ends of travel for each cylinder.

2 - DESCRIPTION

TABLE OF CONTENTS

IDENTIFICATION OF THE LIFT TRUCK	2 - 4
---	--------------

CHARACTERISTICS	2 - 6
------------------------	--------------

ML 635 Turbo Série 3-E2	2 - 6 and 2 - 8
MT 940 L Turbo Série 3-E2	2 - 6 and 2 - 10
MT 1235 S Série 3-E2	2 - 6 and 2 - 12
MT 1235 S Turbo Série 3-E2	2 - 6 and 2 - 14
MT 1240 L Turbo Série 3-E2	2 - 6 and 2 - 16
MT 1240 L Turbo ULTRA Série 3-E2	2 - 6 and 2 - 18
MT 1335 SL Série 3-E2	2 - 6 and 2 - 20
MT 1335 SL Turbo Série 3-E2	2 - 6 and 2 - 22
MT 1340 SL Turbo Série 3-E2	2 - 6 and 2 - 24
MT 1340 SL Turbo ULTRA Série 3-E2	2 - 6 and 2 - 26
MT 1435 SL Série 3-E2	2 - 6 and 2 - 28
MT 1435 SL Turbo Série 3-E2	2 - 6 and 2 - 30
MT 1440 SL Série 3-E2	2 - 6 and 2 - 32
MT 1440 SL Turbo Série 3-E2	2 - 6 and 2 - 34
MT 1440 SL Turbo ULTRA Série 3-E2	2 - 6 and 2 - 36
MT 1740 SL Turbo Série 3-E2	2 - 6 and 2 - 38
MT 1740 SL Turbo ULTRA Série 3-E2	2 - 6 and 2 - 40

DIMENSIONS AND LOAD CHART	2 - 42
----------------------------------	---------------

ML 635 Turbo Série 3-E2	2 - 42
MT 940 L Turbo Série 3-E2	2 - 43
MT 1235 S Série 3-E2	2 - 44
MT 1235 S Turbo Série 3-E2	2 - 46
MT 1240 L Turbo Série 3-E2	2 - 48
MT 1240 L Turbo ULTRA Série 3-E2	2 - 49
MT 1335 SL Série 3-E2	2 - 50
MT 1335 SL Turbo Série 3-E2	2 - 52
MT 1340 SL Turbo Série 3-E2	2 - 54
MT 1340 SL Turbo ULTRA Série 3-E2	2 - 56
MT 1435 SL Série 3-E2	2 - 58
MT 1435 SL Turbo Série 3-E2	2 - 60
MT 1440 SL Série 3-E2	2 - 62
MT 1440 SL Turbo Série 3-E2	2 - 64
MT 1440 SL Turbo ULTRA Série 3-E2	2 - 66
MT 1740 SL Turbo Série 3-E2	2 - 68
MT 1740 SL Turbo ULTRA Série 3-E2	2 - 70

INSTRUMENTS AND CONTROLS	2 - 72
---------------------------------	---------------

TOWING PIN AND HOOK	2 - 100
----------------------------	----------------

DESCRIPTION AND USE OF ELECTRIC AND HYDRAULIC OPTIONS	2 - 102
--	----------------

IDENTIFICATION OF THE LIFT TRUCK

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

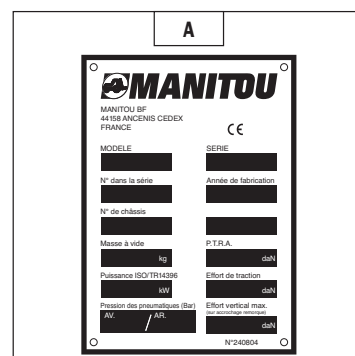
When you order parts, or when you require any technical information, always specify:

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

PLATE MANUFACTURER OF THE LIFT TRUCK (FIG. A)

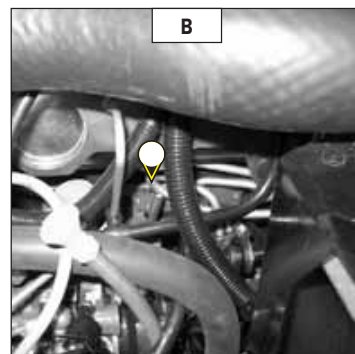
- Model _____
- Series _____
- Serial Nr _____
- Chassis Nr _____
- Year of manufacture _____

For any further technical information regarding your lift truck refer to chapter: 2 - DESCRIPTION: CHARACTERISTICS.



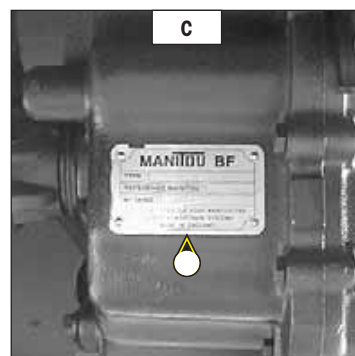
I.C. ENGINE (FIG. B)

- I.C. engine Nr _____



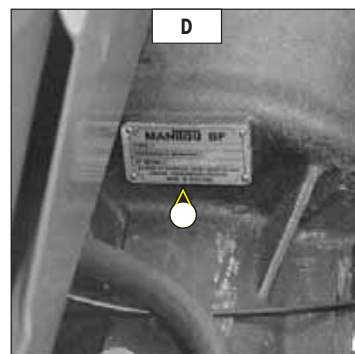
TRANSMISSION (FIG. C)

- Type _____
- MANITOU reference _____
- Serial Nr _____



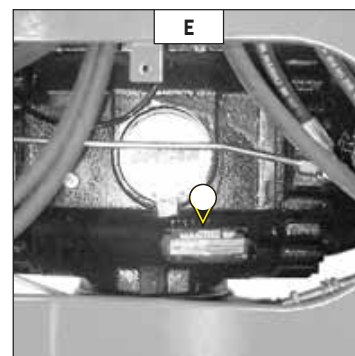
ANGLE GEAR-BOX (FIG. D)

- Type _____
- MANITOU reference _____
- Serial Nr _____



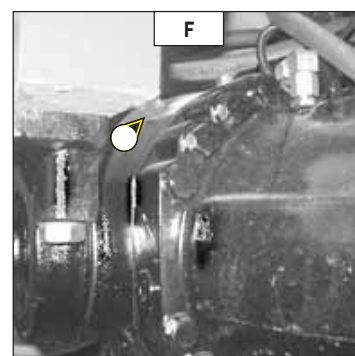
FRONT AXLE (FIG. E)

- Type _____
- Serial Nr _____
- MANITOU reference _____



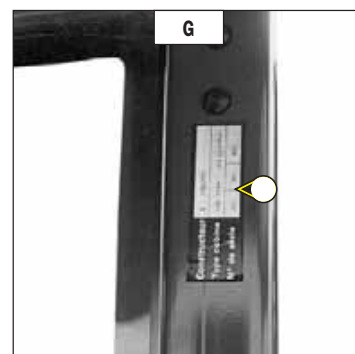
REAR AXLE (FIG. F)

- Type _____
- Serial Nr _____
- MANITOU reference _____



CAB (FIG. G)

- Type _____
- Serial Nr _____



JIB (FIG. H)

- MANITOU reference _____
- Date of manufacture _____

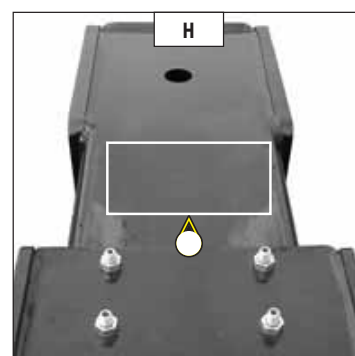
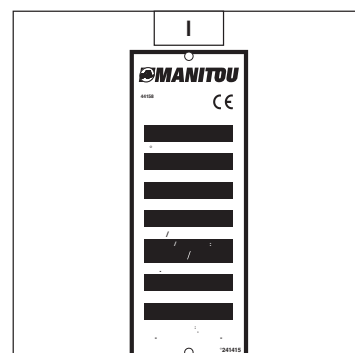


PLATE MANUFACTURER OF THE ATTACHMENT (FIG. I)

- Model _____
- Serial Nr _____
- Year of manufacture _____



CHARACTERISTICS

I.C. ENGINE

- Type

ML 635 Turbo Série 3-E2
MT 940 L Turbo Série 3-E2
MT 1235 S Série 3-E2
MT 1235 S Turbo Série 3-E2
MT 1240 L Turbo Série 3-E2
MT 1240 L Turbo ULTRA Série 3-E2
MT 1335 SL Série 3-E2
MT 1335 SL Turbo Série 3-E2
MT 1340 SL Turbo Série 3-E2
MT 1340 SL Turbo ULTRA Série 3-E2
MT 1435 SL Série 3-E2
MT 1435 SL Turbo Série 3-E2
MT 1440 SL Série 3-E2
MT 1440 SL Turbo Série 3-E2
MT 1440 SL Turbo ULTRA Série 3-E2
MT 1740 SL Turbo Série 3-E2
MT 1740 SL Turbo ULTRA Série 3-E2

PERKINS 1104C-44T RG81374
PERKINS 1104C-44T RG81374
PERKINS 1104C-44 RE81372
PERKINS 1104C-44T RG81374
PERKINS 1104C-44T RG81374
PERKINS 1104C-44T RG81374
PERKINS 1104C-44 RE81372
PERKINS 1104C-44T RG81374
PERKINS 1104C-44T RG81374
PERKINS 1104C-44T RG81374
PERKINS 1104C-44 RE81372
PERKINS 1104C-44T RG81374
PERKINS 1104C-44 RE81372
PERKINS 1104C-44T RG81374
PERKINS 1104C-44T RG81374
PERKINS 1104C-44T RG81374
PERKINS 1104C-44T RG81374

- Number of cylinders
- Number of strokes
- Suction
- Injection system
- Ignition sequence
- Clearance of rocker valve (cold)
 - . Inlet
 - . Exhaust
- Capacity
- Bore
- Stroke
- Compression ratio
- Nominal rating loaded
- Rating slow unladen
- Max. rating unladen
- Power ISO/TR 14396
- Maximum torque ISO/TR 14396
- Air cleaner

1104C-44

4 in line
4
Natural
Direct
1.3.4.2.

0,20 mm
0,45 mm
4400 cm³
105 mm
127 mm
19,3/1
2200 rpm
930 ⁺²⁰ rpm
2400 rpm
84 cv/61,5 kw
302 Nm at 1400 rpm
Dry 3 µ

1104C-44T

4 in line
4
Turbocharged
Direct
1.3.4.2.

0,20 mm
0,45 mm
4400 cm³
105 mm
127 mm
17,5/1
2200 rpm
930 ⁺²⁰ rpm
2350 rpm
101 cv/74,5 kw
412 Nm at 1400 rpm
Dry 3 µ

COOLING CIRCUIT

- Type

By water

- Fan

Puller

- . Number of blades
- . Diameter

10
508 mm

- Thermostat

- . Start opening
- . Full opening

79 °C/84 °C
93 °C

TRANSMISSION

- Type

**TURNER POWERTRAIN SYSTEMS
SACHS**

- Torque converter

- Gear box

- . Number of forward speeds
- . Number of reverse speeds

4
4
Electro-hydraulic

- Gear reverser

ANGLE GEAR-BOX

- Type

TURNER POWERTRAIN SYSTEMS

FRONT AXLE

- Type
- Hub reducers

DANA
Epicyclic

REAR AXLE

- Type
- Hub reducers

DANA
Epicyclic

BRAKE

- Service brake
 . Type
- Parking brake
 . Type

MT 940 L Turbo Série 3-E2
(up to machine Nr 203419)

- Parking brake
 . Type

(from machine Nr 203420)

- Parking brake
 . Type

Foot pedal. Hydraulic servo-brake, applied on the front and rear wheels.
Multidisc brake immersed in oil.
Mechanical hand lever applied on the front wheels.
Multidisc brake immersed in oil.

Mechanical hand lever applied on the front wheels.
Multidisc brake immersed in oil.

Switch. Electro-hydraulic brake acting on front wheels through pressure break.
Multidisc brake immersed in oil.

ELECTRIC CIRCUIT

- Earth
- Battery
- Alternator
 . Type
 . Tension regulator
- Starter
 . Type

Negative
12 V - 110 Ah - 750 A EN
12 V - 75 A
Denso A115i
Incorporated into the alternator
12 V - 3,0 kW
Denso E95RL

CHARACTERISTICS

ML 635 Turbo Série 3-E2

FRONT AND REAR TYRES

DIMENSIONS	PRESSURE	TYRE LOAD		PRESSURE ON THE CONTACT SURFACE		AREA OF THE CONTACT SURFACE	
				HARD GROUND	LIGHT GROUND	HARD GROUND	LIGHT GROUND
440/80-24 T37 158B TUBELESS DUNLOP	4,1 BAR	FRONT UNLADEN	KG	KG/CM2	KG/CM2	CM2	CM2
		FRONT LADEN	KG	KG/CM2	KG/CM2	CM2	CM2
		REAR UNLADEN	KG	KG/CM2	KG/CM2	CM2	CM2
		REAR LADEN	KG	KG/CM2	KG/CM2	CM2	CM2
15,5-25 12PR SGL DL 2A GOODYEAR	4,5 BAR	FRONT UNLADEN	KG	KG/CM2	KG/CM2	CM2	CM2
		FRONT LADEN	KG	KG/CM2	KG/CM2	CM2	CM2
		REAR UNLADEN	KG	KG/CM2	KG/CM2	CM2	CM2
		REAR LADEN	KG	KG/CM2	KG/CM2	CM2	CM2
15,5/80-24 SGI 16PR TUBELESS GOODYEAR	4,5 BAR	FRONT UNLADEN	KG	KG/CM2	KG/CM2	CM2	CM2
		FRONT LADEN	KG	KG/CM2	KG/CM2	CM2	CM2
		REAR UNLADEN	KG	KG/CM2	KG/CM2	CM2	CM2
		REAR LADEN	KG	KG/CM2	KG/CM2	CM2	CM2
445/70R24 XM47 151G TUBELESS MICHELIN	4,1 BAR	FRONT UNLADEN	KG	KG/CM2	KG/CM2	CM2	CM2
		FRONT LADEN	KG	KG/CM2	KG/CM2	CM2	CM2
		REAR UNLADEN	KG	KG/CM2	KG/CM2	CM2	CM2
		REAR LADEN	KG	KG/CM2	KG/CM2	CM2	CM2
1200R24 X MINE D2 MICHELIN	6 BAR	FRONT UNLADEN	KG	KG/CM2	KG/CM2	CM2	CM2
		FRONT LADEN	KG	KG/CM2	KG/CM2	CM2	CM2
		REAR UNLADEN	KG	KG/CM2	KG/CM2	CM2	CM2
		REAR LADEN	KG	KG/CM2	KG/CM2	CM2	CM2
15,5R25 XHA TUBELESS MICHELIN	4 BAR	FRONT UNLADEN	KG	KG/CM2	KG/CM2	CM2	CM2
		FRONT LADEN	KG	KG/CM2	KG/CM2	CM2	CM2
		REAR UNLADEN	KG	KG/CM2	KG/CM2	CM2	CM2
		REAR LADEN	KG	KG/CM2	KG/CM2	CM2	CM2
445/65R22,5 XZY 169K TUBELESS MICHELIN	4,5 BAR	FRONT UNLADEN	KG	KG/CM2	KG/CM2	CM2	CM2
		FRONT LADEN	KG	KG/CM2	KG/CM2	CM2	CM2
		REAR UNLADEN	KG	KG/CM2	KG/CM2	CM2	CM2
		REAR LADEN	KG	KG/CM2	KG/CM2	CM2	CM2
445/70R24 IT510 151 G GOODYEAR	4,1 BAR	FRONT UNLADEN	KG	KG/CM2	KG/CM2	CM2	CM2
		FRONT LADEN	KG	KG/CM2	KG/CM2	CM2	CM2
		REAR UNLADEN	KG	KG/CM2	KG/CM2	CM2	CM2
		REAR LADEN	KG	KG/CM2	KG/CM2	CM2	CM2

HYDRAULIC CIRCUIT

- Type of pump	Gear pump with flow divider
. Capacity	41 cm3
. Max. rating capacity unladen	96 L/mn
. Flow rate at 2300 rpm	94 L/mn
. Flow rate at 1600 rpm	66 L/mn
- Pressure	
. Lifting, tilting, attachment circuit	260 Bar
. Steering circuit	140 Bar
. Braking circuit	40 Bar
- Filtration	
. Return	10 µm
. Suction	125 µm

SPECIFICATIONS

- Level of sound pressure in the driver's cab LpA (according to standard prEN 12053: 1995)	dB	
- Level of sound power in the LwA environment (according to directive 2000/14/EC modified by directive 2005/88/EC)	106 dB	
- Average weighted acceleration on driver's body (according to standard NF EN 13059)	m/s ²	
- The average weighted acceleration transmitted to the driver's hand/arm system (in accordance with ISO 5349-2) is less than 2.5 m/s ²		
- Speed of movement of lift truck in standard configuration on horizontal ground (except particular conditions)		
. Forward unladen	27,6 km/h	
. Reverse unladen	27,6 km/h	
- Standard lift height	5300 mm	
- Rated capacity with standard attachment	3500 kg	
- Load center	500 mm	
- Weight of forks (each)	72 kg	
- Lifting motions		
. Unladen lifting	10,5 s	30,3 m/mn
. Laden lifting	11,1 s	28,6 m/mn
. Unladen lowering	7,2 s	44,2 m/mn
. Laden lowering	6,7 s	47,5 m/mn
- Reverse tilt time unladen	4,6 s	30,9 °/s
- Forward tilt time unladen	3,7 s	38,4 °/s
- Lift truck weight with standard attachment		
. Unladen	8850 kg	
. Rated load	12350 kg	
- Axle weight with attached equipment (transport position)		
. Front unladen	kg	
rated load	kg	
. Rear unladen	kg	
rated load	kg	
- Tensile strain at coupling hook		
. Unladen	6600 daN	
. Rated load	7500 daN	
- Break out force with bucket (according to standard iso 8313)	6650 daN	

CHARACTERISTICS

MT 940 L Turbo Série 3-E2

FRONT AND REAR TYRES

DIMENSIONS	PRESSURE	TYRE LOAD		PRESSURE ON THE CONTACT SURFACE		AREA OF THE CONTACT SURFACE	
				HARD GROUND	LIGHT GROUND	HARD GROUND	LIGHT GROUND
440/80-24 T37 158B TUBELESS DUNLOP	4,5 BAR	FRONT UNLADEN	2000 KG	7,91 KG/CM2	2,20 KG/CM2	252 CM2	908 CM2
		FRONT LADEN	5800 KG	12,41 KG/CM2	3,41 KG/CM2	467 CM2	1699 CM2
		REAR UNLADEN	2400 KG	8,42 KG/CM2	2,34 KG/CM2	285 CM2	1025 CM2
		REAR LADEN	650 KG	5,72 KG/CM2	1,59 KG/CM2	113 CM2	407 CM2
400/80-24 T37 156B TUBELESS DUNLOP	4,75 BAR	FRONT UNLADEN	2000 KG	8,96 KG/CM2	2,48 KG/CM2	223 CM2	805 CM2
		FRONT LADEN	5800 KG	13,58 KG/CM2	3,82 KG/CM2	427 CM2	1519 CM2
		REAR UNLADEN	2400 KG	9,47 KG/CM2	2,63 KG/CM2	253 CM2	913 CM2
		REAR LADEN	650 KG	6,49 KG/CM2	1,81 KG/CM2	100 CM2	358 CM2
15,5-25 12PR SGL DL 2A GOODYEAR	4,5 BAR	FRONT UNLADEN	2000 KG	6,96 KG/CM2	3,76 KG/CM2	288 CM2	533 CM2
		FRONT LADEN	5800 KG	8,40 KG/CM2	4,54 KG/CM2	690 CM2	1278 CM2
		REAR UNLADEN	2400 KG	6,81 KG/CM2	3,71 KG/CM2	353 CM2	648 CM2
		REAR LADEN	650 KG	4,64 KG/CM2	2,50 KG/CM2	140 CM2	260 CM2
15,5/80-24 SGI 16PR TUBELESS GOODYEAR	4,5 BAR	FRONT UNLADEN	2000 KG	9,09 KG/CM2	2,47 KG/CM2	220 CM2	810 CM2
		FRONT LADEN	5800 KG	13,81 KG/CM2	3,74 KG/CM2	420 CM2	1550 CM2
		REAR UNLADEN	2400 KG	10,00 KG/CM2	2,69 KG/CM2	240 CM2	892 CM2
		REAR LADEN	650 KG	8,77 KG/CM2	2,35 KG/CM2	74 CM2	277 CM2
445/70R24 IT510 151G TUBELESS GOODYEAR	4,1 BAR	FRONT UNLADEN	2000 KG	8,79 KG/CM2	2,90 KG/CM2	228 CM2	690 CM2
		FRONT LADEN	5800 KG	10,29 KG/CM2	3,40 KG/CM2	564 CM2	1708 CM2
		REAR UNLADEN	2400 KG	9,06 KG/CM2	3,01 KG/CM2	265 CM2	798 CM2
		REAR LADEN	650 KG	6,70 KG/CM2	2,24 KG/CM2	97 CM2	290 CM2
445/70R24 XM47 151G TUBELESS MICHELIN	4,1 BAR	FRONT UNLADEN	2000 KG	1,90 KG/CM2		1050 CM2	
		FRONT LADEN	5800 KG	3,32 KG/CM2		1745 CM2	
		REAR UNLADEN	2400 KG	2,13 KG/CM2		1125 CM2	
		REAR LADEN	650 KG	0,87 KG/CM2		746 CM2	
1200R24 X MINE D2 MICHELIN	6,5 BAR	FRONT UNLADEN	2000 KG	4,17 KG/CM2		477 CM2	
		FRONT LADEN	5800 KG	6,83 KG/CM2		849 CM2	
		REAR UNLADEN	2400 KG	4,65 KG/CM2		516 CM2	
		REAR LADEN	650 KG	1,88 KG/CM2		345 CM2	
15,5R25 XHA TUBELESS MICHELIN	4 BAR	FRONT UNLADEN	2000 KG	2,82 KG/CM2	1,32 KG/CM2	685 CM2	1466 CM2
		FRONT LADEN	5800 KG	3,63 KG/CM2	1,64 KG/CM2	1600 CM2	3540 CM2
		REAR UNLADEN	2400 KG	3,10 KG/CM2	1,45 KG/CM2	775 CM2	1661 CM2
		REAR LADEN	650 KG	1,53 KG/CM2	0,71 KG/CM2	436 CM2	931 CM2
480/65R24 146D SF TUBELESS NOKIAN	3,8 BAR	FRONT UNLADEN	2000 KG	3,18 KG/CM2	0,97 KG/CM2	627 CM2	2047 CM2
		FRONT LADEN	5800 KG	3,32 KG/CM2	1,98 KG/CM2	1746 CM2	2931 CM2
		REAR UNLADEN	2400 KG	3,24 KG/CM2	1,11 KG/CM2	740 CM2	2153 CM2
		REAR LADEN	650 KG	2,89 KG/CM2	0,39 KG/CM2	222 CM2	1632 CM2
460/70R24 XMCL 159A8 MICHELIN	4 BAR	FRONT UNLADEN	2000 KG	KG/CM2	KG/CM2	CM2	CM2
		FRONT LADEN	5800 KG	KG/CM2	KG/CM2	CM2	CM2
		REAR UNLADEN	2400 KG	KG/CM2	KG/CM2	CM2	CM2
		REAR LADEN	650 KG	KG/CM2	KG/CM2	CM2	CM2

HYDRAULIC CIRCUIT

- Type of pump	Gear pump with flow divider
. Capacity	41 cm3
. Max. rating capacity unladen	96 L/mn
. Flow rate at 2300 rpm	94 L/mn
. Flow rate at 1600 rpm	66 L/mn
- Pressure	
. Lifting, tilting, telescoping, tilting corrector, attachment circuit	250 Bar
. Steering circuit	140 Bar
. Braking circuit	40 Bar
- Filtration	
. Return	10 µm
. Suction	125 µm

SPECIFICATIONS

- Level of sound pressure in the driver's cab LpA (according to standard prEN 12053: 1995)	dB	
- Level of sound power in the LwA environment (according to directive 2000/14/EC modified by directive 2005/88/EC)	106 dB	
- Average weighted acceleration on driver's body (according to standard NF EN 13059)	m/s ²	
- The average weighted acceleration transmitted to the driver's hand/arm system (in accordance with ISO 5349-2) is less than 2.5 m/s ²		
- Speed of movement of lift truck in standard configuration on horizontal ground (except particular conditions)		
. Forward unladen	27,6 km/h	
. Reverse unladen	27,6 km/h	
- Standard lift height	8970 mm	
- Rated capacity with standard attachment	4000 kg	
- Load center	500 mm	
- Weight of forks (each)	71 kg	
- Lifting motions (jib retracted)		
. Unladen lifting	12 s	28,6 m/mn
. Laden lifting	12,5 s	27,4 m/mn
. Unladen lowering	8,5 s	40,3 m/mn
. Laden lowering	8 s	42,8 m/mn
- Telescoping motions (lifting jib)		
. Unladen extending	13 s	16,2 m/mn
. Laden extending	13 s	16,2 m/mn
. Unladen retracting	7,2 s	29,3 m/mn
. Laden retracting	6,7 s	31,5 m/mn
- Reverse tilt time unladen	4,6 s	30,6 °/s
- Forward tilt time unladen	3,7 s	38,1 °/s
- Lift truck weight with standard attachment		
. Unladen	8870 kg	
. Rated load	12870 kg	
- Axle weight with attached equipment (transport position)		
. Front unladen	4030 kg	
rated load	11590 kg	
. Rear unladen	4840 kg	
rated load	1280 kg	
- Tensile strain at coupling hook		
. Unladen	6100 daN	
. Rated load	8600 daN	
- Break out force with bucket (according to standard ISO 8313)	7000 daN	

CHARACTERISTICS

MT 1235 S Série 3-E2

FRONT AND REAR TYRES

DIMENSIONS	PRESSURE	TYRE LOAD		PRESSURE ON THE CONTACT SURFACE		AREA OF THE CONTACT SURFACE	
				HARD GROUND	LIGHT GROUND	HARD GROUND	LIGHT GROUND
18-19,5 16PR I224 TUBELESS ALLIANCE	5,5 BAR	FRONT UNLADEN	2250 KG	4,21 KG/CM2	1,79 KG/CM2	534 CM2	1260 CM2
		FRONT LADEN	5750 KG	7,20 KG/CM2	3,07 KG/CM2	799 CM2	1875 CM2
		REAR UNLADEN	2250 KG	4,21 KG/CM2	1,79 KG/CM2	534 CM2	1260 CM2
		REAR LADEN	500 KG	1,77 KG/CM2	0,75 KG/CM2	279 CM2	662 CM2
400/80-24 156A8 PIA TUBELESS BF GOODRICH	4,1 BAR	FRONT UNLADEN	2250 KG	KG/CM2	KG/CM2	CM2	CM2
		FRONT LADEN	5750 KG	KG/CM2	KG/CM2	CM2	CM2
		REAR UNLADEN	2250 KG	KG/CM2	KG/CM2	CM2	CM2
		REAR LADEN	500 KG	KG/CM2	KG/CM2	CM2	CM2
440/80-24 T37 158B TUBELESS DUNLOP	4,5 BAR	FRONT UNLADEN	2250 KG	8,18 KG/CM2	2,27 KG/CM2	275 CM2	990 CM2
		FRONT LADEN	5750 KG	12,37 KG/CM2	3,40 KG/CM2	465 CM2	1690 CM2
		REAR UNLADEN	2250 KG	8,18 KG/CM2	2,27 KG/CM2	275 CM2	990 CM2
		REAR LADEN	500 KG	5,37 KG/CM2	1,49 KG/CM2	93 CM2	335 CM2
15,5-25 12PR SGL DL 2A GOODYEAR	4,5 BAR	FRONT UNLADEN	2250 KG	6,82 KG/CM2	3,69 KG/CM2	330 CM2	610 CM2
		FRONT LADEN	5750 KG	8,39 KG/CM2	4,53 KG/CM2	685 CM2	1269 CM2
		REAR UNLADEN	2250 KG	6,82 KG/CM2	3,69 KG/CM2	330 CM2	610 CM2
		REAR LADEN	500 KG	3,57 KG/CM2	1,92 KG/CM2	140 CM2	260 CM2
15,5/80-24 SGI 16PR TUBELESS GOODYEAR	4,5 BAR	FRONT UNLADEN	2250 KG	9,57 KG/CM2	2,63 KG/CM2	235 CM2	855 CM2
		FRONT LADEN	5750 KG	13,81 KG/CM2	3,74 KG/CM2	420 CM2	1550 CM2
		REAR UNLADEN	2250 KG	9,57 KG/CM2	2,63 KG/CM2	235 CM2	855 CM2
		REAR LADEN	500 KG	8,82 KG/CM2	2,41 KG/CM2	57 CM2	207 CM2
445/70R24 XM47 151G TUBELESS MICHELIN	4,1 BAR	FRONT UNLADEN	2250 KG	2,04 KG/CM2		1100 CM2	
		FRONT LADEN	5750 KG	3,31 KG/CM2		1736 CM2	
		REAR UNLADEN	2250 KG	2,04 KG/CM2		1100 CM2	
		REAR LADEN	500 KG	0,70 KG/CM2		710 CM2	
1200R24 X MINE D2 MICHELIN	6 BAR	FRONT UNLADEN	2250 KG	4,43 KG/CM2		508 CM2	
		FRONT LADEN	5750 KG	6,65 KG/CM2		864 CM2	
		REAR UNLADEN	2250 KG	4,43 KG/CM2		508 CM2	
		REAR LADEN	500 KG	1,52 KG/CM2		330 CM2	
15,5R25 XHA TUBELESS MICHELIN	4 BAR	FRONT UNLADEN	2250 KG	3,06 KG/CM2	1,43 KG/CM2	731 CM2	1565 CM2
		FRONT LADEN	5750 KG	3,62 KG/CM2	1,64 KG/CM2	1588 CM2	3513 CM2
		REAR UNLADEN	2250 KG	3,06 KG/CM2	1,43 KG/CM2	731 CM2	1565 CM2
		REAR LADEN	500 KG	1,38 KG/CM2	0,65 KG/CM2	408 CM2	872 CM2
18R19,5 XF TUBELESS MICHELIN	6,5 BAR	FRONT UNLADEN	2250 KG	3,46 KG/CM2	1,60 KG/CM2	632 CM2	1363 CM2
		FRONT LADEN	5750 KG	4,20 KG/CM2	1,95 KG/CM2	1369 CM2	2953 CM2
		REAR UNLADEN	2250 KG	3,46 KG/CM2	1,60 KG/CM2	632 CM2	1363 CM2
		REAR LADEN	500 KG	2,63 KG/CM2	1,22 KG/CM2	190 CM2	410 CM2
480/65R24 146D SF TUBELESS NOKIAN	3,8 BAR	FRONT UNLADEN	2250 KG	3,22 KG/CM2	1,06 KG/CM2	697 CM2	2113 CM2
		FRONT LADEN	5750 KG	3,32 KG/CM2	1,97 KG/CM2	1731 CM2	2920 CM2
		REAR UNLADEN	2250 KG	3,25 KG/CM2	1,08 KG/CM2	694 CM2	2123 CM2
		REAR LADEN	500 KG	2,97 KG/CM2	0,45 KG/CM2	203 CM2	1647 CM2
400/80-24 162 A8 PI TL GOODRICH	4,8 BAR	FRONT UNLADEN	2250 KG	KG/CM2	KG/CM2	CM2	CM2
		FRONT LADEN	5750 KG	KG/CM2	KG/CM2	CM2	CM2
		REAR UNLADEN	2250 KG	KG/CM2	KG/CM2	CM2	CM2
		REAR LADEN	500 KG	KG/CM2	KG/CM2	CM2	CM2

HYDRAULIC CIRCUIT

- Type of pump	Gear pump with flow divider
. Capacity	43,8 cm3
. Max. rating capacity unladen	105 L/mn
. Flow rate at 2300 rpm	101 L/mn
. Flow rate at 1600 rpm	70 L/mn
- Pressure	
. Lifting, tilting, telescoping, stabilizer, attachment circuit	260 Bar
. Steering circuit	140 Bar
. Braking circuit	40 Bar
- Filtration	
. Return	10 µm
. Suction	125 µm

SPECIFICATIONS

- Level of sound pressure in the driver's cab LpA (according to standard prEN 12053: 1995)	79 dB	
Level of sound power in the LwA environment (according to directive 2000/14/EC modified by directive 2005/88/EC)	105 dB	
- Average weighted acceleration on driver's body (according to standard NF EN 13059)	m/s ²	
- The average weighted acceleration transmitted to the driver's hand/arm system (in accordance with ISO 5349-2) is less than 2.5 m/s ²		
- Speed of movement of lift truck in standard configuration on horizontal ground (except particular conditions)		
. Forward unladen	27,6 km/h	
. Reverse unladen	27,6 km/h	
- Standard lift height	12000 mm	
- Rated capacity with standard attachment	3500 kg	
- Load center	500 mm	
- Weight of forks (each)	68 kg	
- Lifting motions (jib retracted)		
. Unladen lifting	11,2 s	29,8 m/mn
. Laden lifting	11,7 s	28,6 m/mn
. Unladen lowering	7,9 s	42,3 m/mn
. Laden lowering	7,5 s	44,6 m/mn
- Telescoping motions (lifting jib)		
. Unladen extending	21,1 s	18,9 m/mn
. Laden extending	21,1 s	18,9 m/mn
. Unladen retracting	17,4 s	23,0 m/mn
. Laden retracting	16,7 s	23,9 m/mn
- Reverse tilt time unladen	4,4 s	28,2 °/s
- Forward tilt time unladen	3,9 s	31,8 °/s
- Lift truck weight with standard attachment		
. Unladen	8960 kg	
. Rated load	12460 kg	
- Axle weight with attached equipment (transport position)		
. Front unladen	4510 kg	
rated load	11470 kg	
. Rear unladen	4450 kg	
rated load	990 kg	
- Tensile strain at coupling hook		
. Unladen	6100 daN	
. Rated load	7500 daN	
- Break out force with bucket (according to standard ISO 8313)	7000 daN	

CHARACTERISTICS

MT 1235 S Turbo Série 3-E2

FRONT AND REAR TYRES

DIMENSIONS	PRESSURE	TYRE LOAD		PRESSURE ON THE CONTACT SURFACE		AREA OF THE CONTACT SURFACE	
				HARD GROUND	LIGHT GROUND	HARD GROUND	LIGHT GROUND
18-19,5 16PR I224 TUBELESS ALLIANCE	5,5 BAR	FRONT UNLADEN	2250 KG	4,21 KG/CM2	1,79 KG/CM2	534 CM2	1260 CM2
		FRONT LADEN	5750 KG	7,20 KG/CM2	3,07 KG/CM2	799 CM2	1875 CM2
		REAR UNLADEN	2250 KG	4,21 KG/CM2	1,79 KG/CM2	534 CM2	1260 CM2
		REAR LADEN	500 KG	1,77 KG/CM2	0,75 KG/CM2	279 CM2	662 CM2
400/80-24 156A8 PIA TUBELESS BF GOODRICH	4,1 BAR	FRONT UNLADEN	2250 KG	KG/CM2	KG/CM2	CM2	CM2
		FRONT LADEN	5750 KG	KG/CM2	KG/CM2	CM2	CM2
		REAR UNLADEN	2250 KG	KG/CM2	KG/CM2	CM2	CM2
		REAR LADEN	500 KG	KG/CM2	KG/CM2	CM2	CM2
440/80-24 T37 158B TUBELESS DUNLOP	4,5 BAR	FRONT UNLADEN	2250 KG	8,18 KG/CM2	2,27 KG/CM2	275 CM2	990 CM2
		FRONT LADEN	5750 KG	12,37 KG/CM2	3,40 KG/CM2	465 CM2	1690 CM2
		REAR UNLADEN	2250 KG	8,18 KG/CM2	2,27 KG/CM2	275 CM2	990 CM2
		REAR LADEN	500 KG	5,37 KG/CM2	1,49 KG/CM2	93 CM2	335 CM2
15,5-25 12PR SGL DL 2A GOODYEAR	4,5 BAR	FRONT UNLADEN	2250 KG	6,82 KG/CM2	3,69 KG/CM2	330 CM2	610 CM2
		FRONT LADEN	5750 KG	8,39 KG/CM2	4,53 KG/CM2	685 CM2	1269 CM2
		REAR UNLADEN	2250 KG	6,82 KG/CM2	3,69 KG/CM2	330 CM2	610 CM2
		REAR LADEN	500 KG	3,57 KG/CM2	1,92 KG/CM2	140 CM2	260 CM2
15,5/80-24 SGI 16PR TUBELESS GOODYEAR	4,5 BAR	FRONT UNLADEN	2250 KG	9,57 KG/CM2	2,63 KG/CM2	235 CM2	855 CM2
		FRONT LADEN	5750 KG	13,81 KG/CM2	3,74 KG/CM2	420 CM2	1550 CM2
		REAR UNLADEN	2250 KG	9,57 KG/CM2	2,63 KG/CM2	235 CM2	855 CM2
		REAR LADEN	500 KG	8,82 KG/CM2	2,41 KG/CM2	57 CM2	207 CM2
445/70R24 XM47 151G TUBELESS MICHELIN	4,1 BAR	FRONT UNLADEN	2250 KG	2,04 KG/CM2		1100 CM2	
		FRONT LADEN	5750 KG	3,31 KG/CM2		1736 CM2	
		REAR UNLADEN	2250 KG	2,04 KG/CM2		1100 CM2	
		REAR LADEN	500 KG	0,70 KG/CM2		710 CM2	
1200R24 X MINE D2 MICHELIN	6 BAR	FRONT UNLADEN	2250 KG	4,43 KG/CM2		508 CM2	
		FRONT LADEN	5750 KG	6,65 KG/CM2		864 CM2	
		REAR UNLADEN	2250 KG	4,43 KG/CM2		508 CM2	
		REAR LADEN	500 KG	1,52 KG/CM2		330 CM2	
15,5R25 XHA TUBELESS MICHELIN	4 BAR	FRONT UNLADEN	2250 KG	3,06 KG/CM2	1,43 KG/CM2	731 CM2	1565 CM2
		FRONT LADEN	5750 KG	3,62 KG/CM2	1,64 KG/CM2	1588 CM2	3513 CM2
		REAR UNLADEN	2250 KG	3,06 KG/CM2	1,43 KG/CM2	731 CM2	1565 CM2
		REAR LADEN	500 KG	1,38 KG/CM2	0,65 KG/CM2	408 CM2	872 CM2
18R19,5 XF TUBELESS MICHELIN	6,5 BAR	FRONT UNLADEN	2250 KG	3,46 KG/CM2	1,60 KG/CM2	632 CM2	1363 CM2
		FRONT LADEN	5750 KG	4,20 KG/CM2	1,95 KG/CM2	1369 CM2	2953 CM2
		REAR UNLADEN	2250 KG	3,46 KG/CM2	1,60 KG/CM2	632 CM2	1363 CM2
		REAR LADEN	500 KG	2,63 KG/CM2	1,22 KG/CM2	190 CM2	410 CM2
480/65R24 146D SF TUBELESS NOKIAN	3,8 BAR	FRONT UNLADEN	2250 KG	3,22 KG/CM2	1,06 KG/CM2	697 CM2	2113 CM2
		FRONT LADEN	5750 KG	3,32 KG/CM2	1,97 KG/CM2	1731 CM2	2920 CM2
		REAR UNLADEN	2250 KG	3,25 KG/CM2	1,08 KG/CM2	694 CM2	2123 CM2
		REAR LADEN	500 KG	2,97 KG/CM2	0,45 KG/CM2	203 CM2	1647 CM2
400/80-24 162 A8 PI TL GOODRICH	4,8 BAR	FRONT UNLADEN	2250 KG	KG/CM2	KG/CM2	CM2	CM2
		FRONT LADEN	5750 KG	KG/CM2	KG/CM2	CM2	CM2
		REAR UNLADEN	2250 KG	KG/CM2	KG/CM2	CM2	CM2
		REAR LADEN	500 KG	KG/CM2	KG/CM2	CM2	CM2

HYDRAULIC CIRCUIT

- Type of pump	Gear pump with flow divider
. Capacity	43,8 cm3
. Max. rating capacity unladen	103 L/mn
. Flow rate at 2300 rpm	101 L/mn
. Flow rate at 1600 rpm	70 L/mn
- Pressure	
. Lifting, tilting, telescoping, stabilizer, attachment circuit	260 Bar
. Steering circuit	140 Bar
. Braking circuit	40 Bar
- Filtration	
. Return	10 µm
. Suction	125 µm

SPECIFICATIONS

- Level of sound pressure in the driver's cab LpA (according to standard prEN 12053: 1995)	dB	
Level of sound power in the LwA environment (according to directive 2000/14/EC modified by directive 2005/88/EC)	106 dB	
- Average weighted acceleration on driver's body (according to standard NF EN 13059)	m/s ²	
- The average weighted acceleration transmitted to the driver's hand/arm system (in accordance with ISO 5349-2) is less than 2.5 m/s ²		
- Speed of movement of lift truck in standard configuration on horizontal ground (except particular conditions)		
. Forward unladen	27,6 km/h	
. Reverse unladen	27,6 km/h	
- Standard lift height	12000 mm	
- Rated capacity with standard attachment	3500 kg	
- Load center	500 mm	
- Weight of forks (each)	68 kg	
- Lifting motions (jib retracted)		
. Unladen lifting	11,2 s	29,8 m/mn
. Laden lifting	11,7 s	28,6 m/mn
. Unladen lowering	7,9 s	42,3 m/mn
. Laden lowering	7,5 s	44,6 m/mn
- Telescoping motions (lifting jib)		
. Unladen extending	21,1 s	18,9 m/mn
. Laden extending	21,1 s	18,9 m/mn
. Unladen retracting	17,4 s	23,0 m/mn
. Laden retracting	16,7 s	23,9 m/mn
- Reverse tilt time unladen	4,4 s	28,2 °/s
- Forward tilt time unladen	3,9 s	31,8 °/s
- Lift truck weight with standard attachment		
. Unladen	8960 kg	
. Rated load	12460 kg	
- Axle weight with attached equipment (transport position)		
. Front unladen	4510 kg	
rated load	11470 kg	
. Rear unladen	4450 kg	
rated load	990 kg	
- Tensile strain at coupling hook		
. Unladen	6100 daN	
. Rated load	8600 daN	
- Break out force with bucket (according to standard ISO 8313)	7000 daN	

CHARACTERISTICS

MT 1240 L Turbo Série 3-E2

FRONT AND REAR TYRES

DIMENSIONS	PRESSURE	TYRE LOAD		PRESSURE ON THE CONTACT SURFACE		AREA OF THE CONTACT SURFACE	
				HARD GROUND	LIGHT GROUND	HARD GROUND	LIGHT GROUND
440/80-24 T37 158B TUBELESS DUNLOP	4,5 BAR	FRONT UNLADEN	2250 KG	8,18 KG/CM2	2,27 KG/CM2	275 CM2	990 CM2
		FRONT LADEN	6100 KG	12,71 KG/CM2	3,49 KG/CM2	480 CM2	1750 CM2
		REAR UNLADEN	2500 KG	8,47 KG/CM2	2,34 KG/CM2	295 CM2	1070 CM2
		REAR LADEN	650 KG	5,72 KG/CM2	1,59 KG/CM2	113 CM2	407 CM2
400/80-24 T37 156B TUBELESS DUNLOP	4,75 BAR	FRONT UNLADEN	2250 KG	9,38 KG/CM2	2,59 KG/CM2	240 CM2	870 CM2
		FRONT LADEN	6100 KG	13,86 KG/CM2	3,89 KG/CM2	440 CM2	1570 CM2
		REAR UNLADEN	2500 KG	9,62 KG/CM2	2,66 KG/CM2	260 CM2	940 CM2
		REAR LADEN	650 KG	6,49 KG/CM2	1,81 KG/CM2	100 CM2	358 CM2
15,5-25 12PR SGL DL 2A GOODYEAR	4,5 BAR	FRONT UNLADEN	2250 KG	6,82 KG/CM2	3,69 KG/CM2	330 CM2	610 CM2
		FRONT LADEN	6100 KG	8,47 KG/CM2	4,59 KG/CM2	720 CM2	1330 CM2
		REAR UNLADEN	2500 KG	6,94 KG/CM2	3,76 KG/CM2	360 CM2	665 CM2
		REAR LADEN	650 KG	4,64 KG/CM2	2,50 KG/CM2	140 CM2	260 CM2
15,5/80-24 SGI 16PR TUBELESS GOODYEAR	4,5 BAR	FRONT UNLADEN	2250 KG	9,57 KG/CM2	2,63 KG/CM2	235 CM2	855 CM2
		FRONT LADEN	6100 KG	14,02 KG/CM2	3,79 KG/CM2	435 CM2	1610 CM2
		REAR UNLADEN	2500 KG	10,42 KG/CM2	2,73 KG/CM2	240 CM2	915 CM2
		REAR LADEN	650 KG	8,77 KG/CM2	2,35 KG/CM2	74 CM2	277 CM2
445/70R24 IT510 151G TUBELESS GOODYEAR	4,1 BAR	FRONT UNLADEN	2250 KG	9,00 KG/CM2	2,96 KG/CM2	250 CM2	760 CM2
		FRONT LADEN	6100 KG	10,34 KG/CM2	3,41 KG/CM2	590 CM2	1790 CM2
		REAR UNLADEN	2500 KG	9,09 KG/CM2	3,01 KG/CM2	275 CM2	830 CM2
		REAR LADEN	650 KG	6,70 KG/CM2	2,24 KG/CM2	97 CM2	290 CM2
445/70R24 XM47 151G TUBELESS MICHELIN	4,1 BAR	FRONT UNLADEN	2250 KG	2,04 KG/CM2		1100 CM2	
		FRONT LADEN	6100 KG	3,39 KG/CM2		1798 CM2	
		REAR UNLADEN	2500 KG	2,19 KG/CM2		1140 CM2	
		REAR LADEN	650 KG	0,87 KG/CM2		746 CM2	
1200R24 X MINE D2 MICHELIN	6,5 BAR	FRONT UNLADEN	2250 KG	4,49 KG/CM2		501 CM2	
		FRONT LADEN	6100 KG	6,94 KG/CM2		879 CM2	
		REAR UNLADEN	2500 KG	4,75 KG/CM2		526 CM2	
		REAR LADEN	650 KG	1,88 KG/CM2		345 CM2	
15,5R25 XHA TUBELESS MICHELIN	4 BAR	FRONT UNLADEN	2250 KG	3,06 KG/CM2	1,43 KG/CM2	731 CM2	1565 CM2
		FRONT LADEN	6100 KG	3,68 KG/CM2	1,66 KG/CM2	1671 CM2	3702 CM2
		REAR UNLADEN	2500 KG	3,09 KG/CM2	1,44 KG/CM2	810 CM2	1736 CM2
		REAR LADEN	650 KG	1,53 KG/CM2	0,71 KG/CM2	436 CM2	931 CM2
18R19,5 XF TUBELESS MICHELIN	6,5 BAR	FRONT UNLADEN	2250 KG	3,46 KG/CM2	1,60 KG/CM2	632 CM2	1363 CM2
		FRONT LADEN	6100 KG	4,31 KG/CM2	2,00 KG/CM2	1413 CM2	3047 CM2
		REAR UNLADEN	2500 KG	3,52 KG/CM2	1,63 KG/CM2	685 CM2	1477 CM2
		REAR LADEN	650 KG	3,04 KG/CM2	1,41 KG/CM2	213 CM2	460 CM2

HYDRAULIC CIRCUIT

- Type of pump	Double gear pump with flow divider on the 2nd chamber	
	1st chamber	2nd chamber
. Capacity	41 cm3	28,5 cm3
. Max. rating capacity unladen	96 L/mn	67 L/mn
. Flow rate at 2300 rpm	94 L/mn	66 L/mn
. Flow rate at 1600 rpm	66 L/mn	46 L/mn
- Pressure		
. Telescoping circuit	260 Bar	160 Bar
. Lifting, tilting tilting corrector, attachment circuit	260 Bar	
. Steering circuit		140 Bar
. Braking circuit		40 Bar
- Filtration		
. Return	10 µm	10 µm
. Suction		125 µm

SPECIFICATIONS

- Level of sound pressure in the driver's cab LpA (according to standard prEN 12053: 1995)	dB	
Level of sound power in the LwA environment (according to directive 2000/14/EC modified by directive 2005/88/EC)	106 dB	
- Average weighted acceleration on driver's body (according to standard NF EN 13059)	m/s ²	
- The average weighted acceleration transmitted to the driver's hand/arm system (in accordance with ISO 5349-2) is less than 2.5 m/s ²		
- Speed of movement of lift truck in standard configuration on horizontal ground (except particular conditions)		
. Forward unladen	27,6 km/h	
. Reverse unladen	27,6 km/h	
- Standard lift height	11640 mm	
- Rated capacity with standard attachment	4000 kg	
- Load center	500 mm	
- Weight of forks (each)	71 kg	
- Lifting motions (jib retracted)		
. Unladen lifting	12 s	27,9 m/mn
. Laden lifting	12,5 s	26,8 m/mn
. Unladen lowering	8,5 s	39,4 m/mn
. Laden lowering	8 s	41,8 m/mn
- Telescoping motions (lifting jib)		
. Unladen extending	15,4 s	25,9 m/mn
. Laden extending	15,4 s	25,9 m/mn
. Unladen retracting	12,7 s	31,5 m/mn
. Laden retracting	12,2 s	32,7 m/mn
- Reverse tilt time unladen	4,75 s	26,1 °/s
- Forward tilt time unladen	4,2 s	29,5 °/s
- Lift truck weight with standard attachment		
. Unladen	9470 kg	
. Rated load	13470 kg	
- Axle weight with attached equipment (transport position)		
. Front unladen	4480 kg	
rated load	12150 kg	
. Rear unladen	4990 kg	
rated load	1320 kg	
- Tensile strain at coupling hook		
. Unladen	6100 daN	
. Rated load	8600 daN	
- Break out force with bucket (according to standard ISO 8313)	7000 daN	

CHARACTERISTICS

MT 1240 L Turbo ULTRA Série 3-E2

FRONT AND REAR TYRES

DIMENSIONS	PRESSURE	TYRE LOAD		PRESSURE ON THE CONTACT SURFACE		AREA OF THE CONTACT SURFACE	
				HARD GROUND	LIGHT GROUND	HARD GROUND	LIGHT GROUND
440/80-24 T37 158B TUBELESS DUNLOP	4,5 BAR	FRONT UNLADEN	2250 KG	8,18 KG/CM2	2,27 KG/CM2	275 CM2	990 CM2
		FRONT LADEN	6100 KG	12,71 KG/CM2	3,49 KG/CM2	480 CM2	1750 CM2
		REAR UNLADEN	2500 KG	8,47 KG/CM2	2,34 KG/CM2	295 CM2	1070 CM2
		REAR LADEN	650 KG	5,72 KG/CM2	1,59 KG/CM2	113 CM2	407 CM2
400/80-24 T37 156B TUBELESS DUNLOP	4,75 BAR	FRONT UNLADEN	2250 KG	9,38 KG/CM2	2,59 KG/CM2	240 CM2	870 CM2
		FRONT LADEN	6100 KG	13,86 KG/CM2	3,89 KG/CM2	440 CM2	1570 CM2
		REAR UNLADEN	2500 KG	9,62 KG/CM2	2,66 KG/CM2	260 CM2	940 CM2
		REAR LADEN	650 KG	6,49 KG/CM2	1,81 KG/CM2	100 CM2	358 CM2
15,5-25 12PR SGL DL 2A GOODYEAR	4,5 BAR	FRONT UNLADEN	2250 KG	6,82 KG/CM2	3,69 KG/CM2	330 CM2	610 CM2
		FRONT LADEN	6100 KG	8,47 KG/CM2	4,59 KG/CM2	720 CM2	1330 CM2
		REAR UNLADEN	2500 KG	6,94 KG/CM2	3,76 KG/CM2	360 CM2	665 CM2
		REAR LADEN	650 KG	4,64 KG/CM2	2,50 KG/CM2	140 CM2	260 CM2
15,5/80-24 SGI 16PR TUBELESS GOODYEAR	4,5 BAR	FRONT UNLADEN	2250 KG	9,57 KG/CM2	2,63 KG/CM2	235 CM2	855 CM2
		FRONT LADEN	6100 KG	14,02 KG/CM2	3,79 KG/CM2	435 CM2	1610 CM2
		REAR UNLADEN	2500 KG	10,42 KG/CM2	2,73 KG/CM2	240 CM2	915 CM2
		REAR LADEN	650 KG	8,77 KG/CM2	2,35 KG/CM2	74 CM2	277 CM2
445/70R24 IT510 151G TUBELESS GOODYEAR	4,1 BAR	FRONT UNLADEN	2250 KG	9,00 KG/CM2	2,96 KG/CM2	250 CM2	760 CM2
		FRONT LADEN	6100 KG	10,34 KG/CM2	3,41 KG/CM2	590 CM2	1790 CM2
		REAR UNLADEN	2500 KG	9,09 KG/CM2	3,01 KG/CM2	275 CM2	830 CM2
		REAR LADEN	650 KG	6,70 KG/CM2	2,24 KG/CM2	97 CM2	290 CM2
445/70R24 XM47 151G TUBELESS MICHELIN	4,1 BAR	FRONT UNLADEN	2250 KG	2,04 KG/CM2		1100 CM2	
		FRONT LADEN	6100 KG	3,39 KG/CM2		1798 CM2	
		REAR UNLADEN	2500 KG	2,19 KG/CM2		1140 CM2	
		REAR LADEN	650 KG	0,87 KG/CM2		746 CM2	
1200R24 X MINE D2 MICHELIN	6,5 BAR	FRONT UNLADEN	2250 KG	4,49 KG/CM2		501 CM2	
		FRONT LADEN	6100 KG	6,94 KG/CM2		879 CM2	
		REAR UNLADEN	2500 KG	4,75 KG/CM2		526 CM2	
		REAR LADEN	650 KG	1,88 KG/CM2		345 CM2	
15,5R25 XHA TUBELESS MICHELIN	4 BAR	FRONT UNLADEN	2250 KG	3,06 KG/CM2	1,43 KG/CM2	731 CM2	1565 CM2
		FRONT LADEN	6100 KG	3,68 KG/CM2	1,66 KG/CM2	1671 CM2	3702 CM2
		REAR UNLADEN	2500 KG	3,09 KG/CM2	1,44 KG/CM2	810 CM2	1736 CM2
		REAR LADEN	650 KG	1,53 KG/CM2	0,71 KG/CM2	436 CM2	931 CM2
18R19,5 XF TUBELESS MICHELIN	6,5 BAR	FRONT UNLADEN	2250 KG	3,46 KG/CM2	1,60 KG/CM2	632 CM2	1363 CM2
		FRONT LADEN	6100 KG	4,31 KG/CM2	2,00 KG/CM2	1413 CM2	3047 CM2
		REAR UNLADEN	2500 KG	3,52 KG/CM2	1,63 KG/CM2	685 CM2	1477 CM2
		REAR LADEN	650 KG	3,04 KG/CM2	1,41 KG/CM2	213 CM2	460 CM2

HYDRAULIC CIRCUIT

- Type of pump	Double gear pump with flow divider on the 2nd chamber	
	1st chamber	2nd chamber
. Capacity	41 cm3	28,5 cm3
. Max. rating capacity unladen	96 L/mn	67 L/mn
. Flow rate at 2300 rpm	94 L/mn	66 L/mn
. Flow rate at 1600 rpm	66 L/mn	46 L/mn
- Pressure		
. Telescoping circuit	260 Bar	195 Bar
. Lifting, tilting circuit	260 Bar	
. Tilting corrector, attachment circuit		195 Bar
. Steering circuit		140 Bar
. Braking circuit		40 Bar
- Filtration		
. Return	10 µm	10 µm
. Suction		125 µm
. Pressure	20 µm	20 µm

SPECIFICATIONS

- Level of sound pressure in the driver's cab LpA (according to standard prEN 12053: 1995)	dB	
Level of sound power in the LwA environment (according to directive 2000/14/EC modified by directive 2005/88/EC)	106 dB	
- Average weighted acceleration on driver's body (according to standard NF EN 13059)	m/s ²	
- The average weighted acceleration transmitted to the driver's hand/arm system (in accordance with ISO 5349-2) is less than 2.5 m/s ²		
- Speed of movement of lift truck in standard configuration on horizontal ground (except particular conditions)		
. Forward unladen	27,6 km/h	
. Reverse unladen	27,6 km/h	
- Standard lift height	11640 mm	
- Rated capacity with standard attachment	4000 kg	
- Load center	500 mm	
- Weight of forks (each)	71 kg	
- Lifting motions (jib retracted)		
. Unladen lifting	12 s	27,9 m/mn
. Laden lifting	12,5 s	26,8 m/mn
. Unladen lowering	8,5 s	39,4 m/mn
. Laden lowering	8 s	41,8 m/mn
- Telescoping motions (lifting jib)		
. Unladen extending	15,4 s	25,9 m/mn
. Laden extending	15,4 s	25,9 m/mn
. Unladen retracting	12,7 s	31,5 m/mn
. Laden retracting	12,2 s	32,7 m/mn
- Reverse tilt time unladen	4,8 s	26,1 °/s
- Forward tilt time unladen	4,2 s	29,5 °/s
- Lift truck weight with standard attachment		
. Unladen	9470 kg	
. Rated load	13470 kg	
- Axle weight with attached equipment (transport position)		
. Front unladen	4480 kg	
rated load	12150 kg	
. Rear unladen	4990 kg	
rated load	1320 kg	
- Tensile strain at coupling hook		
. Unladen	6100 daN	
. Rated load	8600 daN	
- Break out force with bucket (according to standard ISO 8313)	7000 daN	

CHARACTERISTICS

MT 1335 SL Série 3-E2

FRONT AND REAR TYRES

DIMENSIONS	PRESSURE	TYRE LOAD		PRESSURE ON THE CONTACT SURFACE		AREA OF THE CONTACT SURFACE	
				HARD GROUND	LIGHT GROUND	HARD GROUND	LIGHT GROUND
18-19,5 16PR I224 TUBELESS ALLIANCE	5,5 BAR	FRONT UNLADEN	2650 KG	4,59 KG/CM2	1,95 KG/CM2	569 CM2	1341 CM2
		FRONT LADEN	6150 KG	7,49 KG/CM2	3,19 KG/CM2	823 CM2	1931 CM2
		REAR UNLADEN	2400 KG	4,37 KG/CM2	1,85 KG/CM2	549 CM2	1295 CM2
		REAR LADEN	650 KG	2,05 KG/CM2	0,86 KG/CM2	310 CM2	736 CM2
400/80-24 156A8 PIA TUBELESS BF GOODRICH	4,1 BAR	FRONT UNLADEN	2650 KG	KG/CM2	KG/CM2	CM2	CM2
		FRONT LADEN	6150 KG	KG/CM2	KG/CM2	CM2	CM2
		REAR UNLADEN	2400 KG	KG/CM2	KG/CM2	CM2	CM2
		REAR LADEN	650 KG	KG/CM2	KG/CM2	CM2	CM2
440/80-24 T37 158B TUBELESS DUNLOP	4,5 BAR	FRONT UNLADEN	2650 KG	8,69 KG/CM2	2,40 KG/CM2	305 CM2	1105 CM2
		FRONT LADEN	6150 KG	12,75 KG/CM2	3,50 KG/CM2	483 CM2	1758 CM2
		REAR UNLADEN	2400 KG	8,42 KG/CM2	2,34 KG/CM2	285 CM2	1025 CM2
		REAR LADEN	650 KG	5,72 KG/CM2	1,59 KG/CM2	113 CM2	407 CM2
15,5-25 12PR SGL DL 2A GOODYEAR	4,5 BAR	FRONT UNLADEN	2650 KG	6,95 KG/CM2	3,77 KG/CM2	381 CM2	703 CM2
		FRONT LADEN	6150 KG	8,48 KG/CM2	4,59 KG/CM2	725 CM2	1339 CM2
		REAR UNLADEN	2400 KG	6,81 KG/CM2	3,71 KG/CM2	353 CM2	648 CM2
		REAR LADEN	650 KG	4,64 KG/CM2	2,50 KG/CM2	140 CM2	260 CM2
15,5/80-24 SGI 16PR TUBELESS GOODYEAR	4,5 BAR	FRONT UNLADEN	2650 KG	10,49 KG/CM2	2,82 KG/CM2	253 CM2	939 CM2
		FRONT LADEN	6150 KG	14,06 KG/CM2	3,80 KG/CM2	438 CM2	1618 CM2
		REAR UNLADEN	2400 KG	10,00 KG/CM2	2,69 KG/CM2	240 CM2	892 CM2
		REAR LADEN	650 KG	8,77 KG/CM2	2,35 KG/CM2	74 CM2	277 CM2
445/70R24 IT510 151G TUBELESS GOODYEAR	4,1 BAR	FRONT UNLADEN	2650 KG	9,15 KG/CM2	3,05 KG/CM2	289 CM2	867 CM2
		FRONT LADEN	6150 KG	10,35 KG/CM2	3,41 KG/CM2	594 CM2	1804 CM2
		REAR UNLADEN	2400 KG	9,06 KG/CM2	3,01 KG/CM2	265 CM2	798 CM2
		REAR LADEN	650 KG	6,70 KG/CM2	2,24 KG/CM2	97 CM2	290 CM2
1200R24 X MINE D2 MICHELIN	6 BAR	FRONT UNLADEN	2650 KG	4,83 KG/CM2		549 CM2	
		FRONT LADEN	6150 KG	6,81 KG/CM2		904 CM2	
		REAR UNLADEN	2400 KG	4,59 KG/CM2		523 CM2	
		REAR LADEN	650 KG	1,88 KG/CM2		345 CM2	
15,5R25 XHA TUBELESS MICHELIN	4 BAR	FRONT UNLADEN	2650 KG	3,09 KG/CM2	1,44 KG/CM2	857 CM2	1839 CM2
		FRONT LADEN	6150 KG	3,68 KG/CM2	1,66 KG/CM2	1683 CM2	3729 CM2
		REAR UNLADEN	2400 KG	3,10 KG/CM2	1,45 KG/CM2	775 CM2	1661 CM2
		REAR LADEN	650 KG	1,53 KG/CM2	0,71 KG/CM2	436 CM2	931 CM2
18R19,5 XF TUBELESS MICHELIN	6,5 BAR	FRONT UNLADEN	2650 KG	3,56 KG/CM2	1,65 KG/CM2	716 CM2	1546 CM2
		FRONT LADEN	6150 KG	4,32 KG/CM2	2,00 KG/CM2	1419 CM2	3061 CM2
		REAR UNLADEN	2400 KG	3,49 KG/CM2	1,62 KG/CM2	663 CM2	1432 CM2
		REAR LADEN	650 KG	3,04 KG/CM2	1,41 KG/CM2	213 CM2	460 CM2

HYDRAULIC CIRCUIT

- Type of pump	Gear pump with flow divider
. Capacity	43,8 cm3
. Max. rating capacity unladen	105 L/mn
. Flow rate at 2300 rpm	101 L/mn
. Flow rate at 1600 rpm	70 L/mn
- Pressure	
. Lifting, tilting, telescoping, tilting corrector, stabilizer, attachment circuit	260 Bar
. Steering circuit	140 Bar
. Braking circuit	40 Bar
- Filtration	
. Return	10 µm
. Suction	125 µm

SPECIFICATIONS

- Level of sound pressure in the driver's cab LpA (according to standard prEN 12053: 1995)	dB	
- Level of sound power in the LwA environment (according to directive 2000/14 CE guaranteed)	105 dB	
- Speed of movement of lift truck in standard configuration on horizontal ground (except particular conditions)		
. Forward unladen	27,6 km/h	
. Reverse unladen	27,6 km/h	
- Standard lift height	13000 mm	
- Rated capacity with standard attachment	3500 kg	
- Load center	500 mm	
- Weight of forks (each)	68 kg	
- Lifting motions (jib retracted)		
. Unladen lifting	11,0 s	32,3 m/mn
. Laden lifting	11,5 s	30,9 m/mn
. Unladen lowering	7,8 s	45,6 m/mn
. Laden lowering	7,4 s	48,0 m/mn
- Telescoping motions (lifting jib)		
. Unladen extending	23,3 s	18,9 m/mn
. Laden extending	23,3 s	18,9 m/mn
. Unladen retracting	19,2 s	23,0 m/mn
. Laden retracting	18,5 s	23,8 m/mn
- Reverse tilt time unladen	4,4 s	28,2 °/s
- Forward tilt time unladen	3,9 s	31,8 °/s
- Lift truck weight with standard attachment		
. Unladen	10090 kg	
. Rated load	13590 kg	
- Axle weight with attached equipment (transport position)		
. Front unladen	5310 kg	
rated load	12310 kg	
. Rear unladen	4780 kg	
rated load	1280 kg	
- Tensile strain at coupling hook		
. Unladen	6100 daN	
. Rated load	7500 daN	
- Break out force with bucket (according to standard iso 8313)	8430 daN	

CHARACTERISTICS

MT 1335 SL Turbo Série 3-E2

FRONT AND REAR TYRES

DIMENSIONS	PRESSURE	TYRE LOAD		PRESSURE ON THE CONTACT SURFACE		AREA OF THE CONTACT SURFACE	
				HARD GROUND	LIGHT GROUND	HARD GROUND	LIGHT GROUND
18-19,5 16PR I224 TUBELESS ALLIANCE	5,5 BAR	FRONT UNLADEN	2650 KG	4,59 KG/CM2	1,95 KG/CM2	569 CM2	1341 CM2
		FRONT LADEN	6150 KG	7,49 KG/CM2	3,19 KG/CM2	823 CM2	1931 CM2
		REAR UNLADEN	2400 KG	4,37 KG/CM2	1,85 KG/CM2	549 CM2	1295 CM2
		REAR LADEN	650 KG	2,05 KG/CM2	0,86 KG/CM2	310 CM2	736 CM2
400/80-24 156A8 PIA TUBELESS BF GOODRICH	4,1 BAR	FRONT UNLADEN	2650 KG	KG/CM2	KG/CM2	CM2	CM2
		FRONT LADEN	6150 KG	KG/CM2	KG/CM2	CM2	CM2
		REAR UNLADEN	2400 KG	KG/CM2	KG/CM2	CM2	CM2
		REAR LADEN	650 KG	KG/CM2	KG/CM2	CM2	CM2
440/80-24 T37 158B TUBELESS DUNLOP	4,5 BAR	FRONT UNLADEN	2650 KG	8,69 KG/CM2	2,40 KG/CM2	305 CM2	1105 CM2
		FRONT LADEN	6150 KG	12,75 KG/CM2	3,50 KG/CM2	483 CM2	1758 CM2
		REAR UNLADEN	2400 KG	8,42 KG/CM2	2,34 KG/CM2	285 CM2	1025 CM2
		REAR LADEN	650 KG	5,72 KG/CM2	1,59 KG/CM2	113 CM2	407 CM2
15,5-25 12PR SGL DL 2A GOODYEAR	4,5 BAR	FRONT UNLADEN	2650 KG	6,95 KG/CM2	3,77 KG/CM2	381 CM2	703 CM2
		FRONT LADEN	6150 KG	8,48 KG/CM2	4,59 KG/CM2	725 CM2	1339 CM2
		REAR UNLADEN	2400 KG	6,81 KG/CM2	3,71 KG/CM2	353 CM2	648 CM2
		REAR LADEN	650 KG	4,64 KG/CM2	2,50 KG/CM2	140 CM2	260 CM2
15,5/80-24 SGI 16PR TUBELESS GOODYEAR	4,5 BAR	FRONT UNLADEN	2650 KG	10,49 KG/CM2	2,82 KG/CM2	253 CM2	939 CM2
		FRONT LADEN	6150 KG	14,06 KG/CM2	3,80 KG/CM2	438 CM2	1618 CM2
		REAR UNLADEN	2400 KG	10,00 KG/CM2	2,69 KG/CM2	240 CM2	892 CM2
		REAR LADEN	650 KG	8,77 KG/CM2	2,35 KG/CM2	74 CM2	277 CM2
445/70R24 IT510 151G TUBELESS GOODYEAR	4,1 BAR	FRONT UNLADEN	2650 KG	9,15 KG/CM2	3,05 KG/CM2	289 CM2	867 CM2
		FRONT LADEN	6150 KG	10,35 KG/CM2	3,41 KG/CM2	594 CM2	1804 CM2
		REAR UNLADEN	2400 KG	9,06 KG/CM2	3,01 KG/CM2	265 CM2	798 CM2
		REAR LADEN	650 KG	6,70 KG/CM2	2,24 KG/CM2	97 CM2	290 CM2
1200R24 X MINE D2 MICHELIN	6 BAR	FRONT UNLADEN	2650 KG	4,83 KG/CM2		549 CM2	
		FRONT LADEN	6150 KG	6,81 KG/CM2		904 CM2	
		REAR UNLADEN	2400 KG	4,59 KG/CM2		523 CM2	
		REAR LADEN	650 KG	1,88 KG/CM2		345 CM2	
15,5R25 XHA TUBELESS MICHELIN	4 BAR	FRONT UNLADEN	2650 KG	3,09 KG/CM2	1,44 KG/CM2	857 CM2	1839 CM2
		FRONT LADEN	6150 KG	3,68 KG/CM2	1,66 KG/CM2	1683 CM2	3729 CM2
		REAR UNLADEN	2400 KG	3,10 KG/CM2	1,45 KG/CM2	775 CM2	1661 CM2
		REAR LADEN	650 KG	1,53 KG/CM2	0,71 KG/CM2	436 CM2	931 CM2
18R19,5 XF TUBELESS MICHELIN	6,5 BAR	FRONT UNLADEN	2650 KG	3,56 KG/CM2	1,65 KG/CM2	716 CM2	1546 CM2
		FRONT LADEN	6150 KG	4,32 KG/CM2	2,00 KG/CM2	1419 CM2	3061 CM2
		REAR UNLADEN	2400 KG	3,49 KG/CM2	1,62 KG/CM2	663 CM2	1432 CM2
		REAR LADEN	650 KG	3,04 KG/CM2	1,41 KG/CM2	213 CM2	460 CM2

HYDRAULIC CIRCUIT

- Type of pump	Double gear pump with flow divider on the 2nd chamber	
	1st chamber	2nd chamber
. Capacity	41 cm3	28,5 cm3
. Max. rating capacity unladen	96 L/mn	67 L/mn
. Flow rate at 2300 rpm	94 L/mn	66 L/mn
. Flow rate at 1600 rpm	66 L/mn	46 L/mn
- Pressure		
. Telescoping circuit	260 Bar	160 Bar
. Lifting, tilting, stabilizer, tilting corrector, attachment circuit	260 Bar	
. Steering circuit		140 Bar
. Braking circuit		40 Bar
- Filtration		
. Return	10 µm	10 µm
. Suction		125 µm

SPECIFICATIONS

- Level of sound pressure in the driver's cab LpA (according to standard prEN 12053: 1995)	dB	
- Level of sound power in the LwA environment (according to directive 2000/14 CE guaranteed)	106 dB	
- Speed of movement of lift truck in standard configuration on horizontal ground (except particular conditions)		
. Forward unladen	27,6 km/h	
. Reverse unladen	27,6 km/h	
- Standard lift height	13000 mm	
- Rated capacity with standard attachment	4000 kg	
- Load center	500 mm	
- Weight of forks (each)	71 kg	
- Lifting motions (jib retracted)		
. Unladen lifting	11,8 s	30,3 m/mn
. Laden lifting	12,3 s	29,1 m/mn
. Unladen lowering	8,4 s	42,6 m/mn
. Laden lowering	7,9 s	45,3 m/mn
- Telescoping motions (lifting jib)		
. Unladen extending	17,0 s	25,9 m/mn
. Laden extending	17,0 s	25,9 m/mn
. Unladen retracting	14,0 s	31,5 m/mn
. Laden retracting	13,5 s	32,6 m/mn
- Reverse tilt time unladen	4,75 s	26,1 °/s
- Forward tilt time unladen	4,2 s	29,5 °/s
- Lift truck weight with standard attachment		
. Unladen	11180 kg	
. Rated load	15180 kg	
- Axle weight with attached equipment (transport position)		
. Front unladen	5350 kg	
rated load	13420 kg	
. Rear unladen	5830 kg	
rated load	1760 kg	
- Tensile strain at coupling hook		
. Unladen	7100 daN	
. Rated load	9400 daN	
- Break out force with bucket (according to standard iso 8313)	7000 daN	

CHARACTERISTICS

MT 1340 SL Turbo Série 3-E2

FRONT AND REAR TYRES

DIMENSIONS	PRESSURE	TYRE LOAD		PRESSURE ON THE CONTACT SURFACE		AREA OF THE CONTACT SURFACE	
				HARD GROUND	LIGHT GROUND	HARD GROUND	LIGHT GROUND
15,5R25 L2 1 VKT FIRE TUBELESS BRIDGESTONE	5,6 BAR	FRONT UNLADEN	2700 KG	8,28 KG/CM2	3,77 KG/CM2	325 CM2	714 CM2
		FRONT LADEN	6700 KG	10,34 KG/CM2	5,10 KG/CM2	651 CM2	1320 CM2
		REAR UNLADEN	2900 KG	8,29 KG/CM2	3,87 KG/CM2	350 CM2	750 CM2
		REAR LADEN	900 KG	6,60 KG/CM2	2,63 KG/CM2	137 CM2	345 CM2
440/80-24 T37 158B TUBELESS DUNLOP	4,5 BAR	FRONT UNLADEN	2700 KG	8,71 KG/CM2	2,41 KG/CM2	310 CM2	1120 CM2
		FRONT LADEN	6700 KG	13,15 KG/CM2	3,65 KG/CM2	510 CM2	1840 CM2
		REAR UNLADEN	2900 KG	8,92 KG/CM2	2,47 KG/CM2	325 CM2	1173 CM2
		REAR LADEN	900 KG	6,23 KG/CM2	1,73 KG/CM2	144 CM2	518 CM2
400/80-24 T37 156B TUBELESS DUNLOP	4,75 BAR	FRONT UNLADEN	2700 KG	9,91 KG/CM2	2,74 KG/CM2	273 CM2	985 CM2
		FRONT LADEN	6700 KG	14,74 KG/CM2	4,04 KG/CM2	455 CM2	1660 CM2
		REAR UNLADEN	2900 KG	10,06 KG/CM2	2,81 KG/CM2	288 CM2	1033 CM2
		REAR LADEN	900 KG	6,99 KG/CM2	1,95 KG/CM2	128 CM2	460 CM2
15,5-25 12PR SGL DL 2A GOODYEAR	4,5 BAR	FRONT UNLADEN	2700 KG	6,97 KG/CM2	3,78 KG/CM2	388 CM2	715 CM2
		FRONT LADEN	6700 KG	8,60 KG/CM2	4,67 KG/CM2	780 CM2	1435 CM2
		REAR UNLADEN	2900 KG	7,07 KG/CM2	3,82 KG/CM2	410 CM2	758 CM2
		REAR LADEN	900 KG	6,43 KG/CM2	3,46 KG/CM2	140 CM2	260 CM2
15,5/80-24 SGI 16PR TUBELESS GOODYEAR	4,5 BAR	FRONT UNLADEN	2700 KG	10,58 KG/CM2	2,85 KG/CM2	255 CM2	948 CM2
		FRONT LADEN	6700 KG	14,43 KG/CM2	3,95 KG/CM2	465 CM2	1700 CM2
		REAR UNLADEN	2900 KG	11,01 KG/CM2	2,96 KG/CM2	263 CM2	980 CM2
		REAR LADEN	900 KG	7,60 KG/CM2	2,08 KG/CM2	120 CM2	436 CM2
400/80R24 IT520 162A8 TUBELESS GOODYEAR	4,6 BAR	FRONT UNLADEN	2700 KG	KG/CM2	KG/CM2	CM2	CM2
		FRONT LADEN	6700 KG	KG/CM2	KG/CM2	CM2	CM2
		REAR UNLADEN	2900 KG	KG/CM2	KG/CM2	CM2	CM2
		REAR LADEN	900 KG	KG/CM2	KG/CM2	CM2	CM2
445/70R24 XM47 151G TUBELESS MICHELIN	4,1 BAR	FRONT UNLADEN	2700 KG	2,27 KG/CM2		1188 CM2	
		FRONT LADEN	6700 KG	3,52 KG/CM2		1906 CM2	
		REAR UNLADEN	2900 KG	2,36 KG/CM2		1230 CM2	
		REAR LADEN	900 KG	1,11 KG/CM2		806 CM2	
1200R24 X MINE D2 MICHELIN	6,5 BAR	FRONT UNLADEN	2700 KG	4,94 KG/CM2		546 CM2	
		FRONT LADEN	6700 KG	7,14 KG/CM2		939 CM2	
		REAR UNLADEN	2900 KG	5,13 KG/CM2		565 CM2	
		REAR LADEN	900 KG	2,43 KG/CM2		369 CM2	
15,5R25 XHA TUBELESS MICHELIN	4 BAR	FRONT UNLADEN	2700 KG	3,09 KG/CM2	1,44 KG/CM2	869 CM2	1866 CM2
		FRONT LADEN	6700 KG	3,78 KG/CM2	1,70 KG/CM2	1812 CM2	4026 CM2
		REAR UNLADEN	2900 KG	3,13 KG/CM2	1,45 KG/CM2	916 CM2	1974 CM2
		REAR LADEN	900 KG	1,76 KG/CM2	0,83 KG/CM2	482 CM2	1030 CM2
18R19,5 XF TUBELESS MICHELIN	6,5 BAR	FRONT UNLADEN	2700 KG	3,57 KG/CM2	1,66 KG/CM2	727 CM2	1568 CM2
		FRONT LADEN	6700 KG	4,50 KG/CM2	2,09 KG/CM2	1488 CM2	3209 CM2
		REAR UNLADEN	2900 KG	3,62 KG/CM2	1,68 KG/CM2	769 CM2	1660 CM2
		REAR LADEN	900 KG	3,56 KG/CM2	1,65 KG/CM2	252 CM2	544 CM2
15,5/80-24 TR-01 163A8 TUBELESS MITAS	4,9 BAR	FRONT UNLADEN	2700 KG	KG/CM2	KG/CM2	CM2	CM2
		FRONT LADEN	6700 KG	KG/CM2	KG/CM2	CM2	CM2
		REAR UNLADEN	2900 KG	KG/CM2	KG/CM2	CM2	CM2
		REAR LADEN	900 KG	KG/CM2	KG/CM2	CM2	CM2

HYDRAULIC CIRCUIT

- Type of pump	Double gear pump with flow divider on the 2nd chamber	
	1st chamber	2nd chamber
. Capacity	41 cm3	28,5 cm3
. Max. rating capacity unladen	96 L/mn	67 L/mn
. Flow rate at 2300 rpm	94 L/mn	66 L/mn
. Flow rate at 1600 rpm	66 L/mn	46 L/mn
- Pressure		
. Telescoping circuit	260 Bar	160 Bar
. Lifting, tilting, stabilizer, tilting corrector, attachment circuit	260 Bar	
. Steering circuit		140 Bar
. Braking circuit		40 Bar
- Filtration		
. Return	10 µm	10 µm
. Suction		125 µm

SPECIFICATIONS

- Level of sound pressure in the driver's cab LpA (according to standard prEN 12053: 1995)	dB	
- Level of sound power in the LwA environment (according to directive 2000/14 CE guaranteed)	106 dB	
- Speed of movement of lift truck in standard configuration on horizontal ground (except particular conditions)		
. Forward unladen	27,6 km/h	
. Reverse unladen	27,6 km/h	
- Standard lift height	13000 mm	
- Rated capacity with standard attachment	4000 kg	
- Load center	500 mm	
- Weight of forks (each)	71 kg	
- Lifting motions (jib retracted)		
. Unladen lifting	11,8 s	30,3 m/mn
. Laden lifting	12,3 s	29,1 m/mn
. Unladen lowering	8,4 s	42,6 m/mn
. Laden lowering	7,9 s	45,3 m/mn
- Telescoping motions (lifting jib)		
. Unladen extending	17,0 s	25,9 m/mn
. Laden extending	17,0 s	25,9 m/mn
. Unladen retracting	14,0 s	31,5 m/mn
. Laden retracting	13,5 s	32,6 m/mn
- Reverse tilt time unladen	4,75 s	26,1 °/s
- Forward tilt time unladen	4,2 s	29,5 °/s
- Lift truck weight with standard attachment		
. Unladen	11180 kg	
. Rated load	15180 kg	
- Axle weight with attached equipment (transport position)		
. Front unladen	5350 kg	
rated load	13420 kg	
. Rear unladen	5830 kg	
rated load	1760 kg	
- Tensile strain at coupling hook		
. Unladen	7100 daN	
. Rated load	9400 daN	
- Break out force with bucket (according to standard iso 8313)	7000 daN	

CHARACTERISTICS

MT 1340 SL Turbo ULTRA Série 3-E2

FRONT AND REAR TYRES

DIMENSIONS	PRESSURE	TYRE LOAD		PRESSURE ON THE CONTACT SURFACE		AREA OF THE CONTACT SURFACE	
				HARD GROUND	LIGHT GROUND	HARD GROUND	LIGHT GROUND
15,5R25 L2 1 VKT FIRE TUBELESS BRIDGESTONE	5,6 BAR	FRONT UNLADEN	2700 KG	8,28 KG/CM2	3,77 KG/CM2	325 CM2	714 CM2
		FRONT LADEN	6700 KG	10,34 KG/CM2	5,10 KG/CM2	651 CM2	1320 CM2
		REAR UNLADEN	2900 KG	8,29 KG/CM2	3,87 KG/CM2	350 CM2	750 CM2
		REAR LADEN	900 KG	6,60 KG/CM2	2,63 KG/CM2	137 CM2	345 CM2
440/80-24 T37 158B TUBELESS DUNLOP	4,5 BAR	FRONT UNLADEN	2700 KG	8,71 KG/CM2	2,41 KG/CM2	310 CM2	1120 CM2
		FRONT LADEN	6700 KG	13,15 KG/CM2	3,65 KG/CM2	510 CM2	1840 CM2
		REAR UNLADEN	2900 KG	8,92 KG/CM2	2,47 KG/CM2	325 CM2	1173 CM2
		REAR LADEN	900 KG	6,23 KG/CM2	1,73 KG/CM2	144 CM2	518 CM2
400/80-24 T37 156B TUBELESS DUNLOP	4,75 BAR	FRONT UNLADEN	2700 KG	9,91 KG/CM2	2,74 KG/CM2	273 CM2	985 CM2
		FRONT LADEN	6700 KG	14,74 KG/CM2	4,04 KG/CM2	455 CM2	1660 CM2
		REAR UNLADEN	2900 KG	10,06 KG/CM2	2,81 KG/CM2	288 CM2	1033 CM2
		REAR LADEN	900 KG	6,99 KG/CM2	1,95 KG/CM2	128 CM2	460 CM2
15,5-25 12PR SGL DL 2A GOODYEAR	4,5 BAR	FRONT UNLADEN	2700 KG	6,97 KG/CM2	3,78 KG/CM2	388 CM2	715 CM2
		FRONT LADEN	6700 KG	8,60 KG/CM2	4,67 KG/CM2	780 CM2	1435 CM2
		REAR UNLADEN	2900 KG	7,07 KG/CM2	3,82 KG/CM2	410 CM2	758 CM2
		REAR LADEN	900 KG	6,43 KG/CM2	3,46 KG/CM2	140 CM2	260 CM2
15,5/80-24 SGI 16PR TUBELESS GOODYEAR	4,5 BAR	FRONT UNLADEN	2700 KG	10,58 KG/CM2	2,85 KG/CM2	255 CM2	948 CM2
		FRONT LADEN	6700 KG	14,43 KG/CM2	3,95 KG/CM2	465 CM2	1700 CM2
		REAR UNLADEN	2900 KG	11,01 KG/CM2	2,96 KG/CM2	263 CM2	980 CM2
		REAR LADEN	900 KG	7,60 KG/CM2	2,08 KG/CM2	120 CM2	436 CM2
400/80R24 IT520 162A8 TUBELESS GOODYEAR	4,6 BAR	FRONT UNLADEN	2700 KG	KG/CM2	KG/CM2	CM2	CM2
		FRONT LADEN	6700 KG	KG/CM2	KG/CM2	CM2	CM2
		REAR UNLADEN	2900 KG	KG/CM2	KG/CM2	CM2	CM2
		REAR LADEN	900 KG	KG/CM2	KG/CM2	CM2	CM2
445/70R24 XM47 151G TUBELESS MICHELIN	4,1 BAR	FRONT UNLADEN	2700 KG	2,27 KG/CM2		1188 CM2	
		FRONT LADEN	6700 KG	3,52 KG/CM2		1906 CM2	
		REAR UNLADEN	2900 KG	2,36 KG/CM2		1230 CM2	
		REAR LADEN	900 KG	1,11 KG/CM2		806 CM2	
1200R24 X MINE D2 MICHELIN	6,5 BAR	FRONT UNLADEN	2700 KG	4,94 KG/CM2		546 CM2	
		FRONT LADEN	6700 KG	7,14 KG/CM2		939 CM2	
		REAR UNLADEN	2900 KG	5,13 KG/CM2		565 CM2	
		REAR LADEN	900 KG	2,43 KG/CM2		369 CM2	
15,5R25 XHA TUBELESS MICHELIN	4 BAR	FRONT UNLADEN	2700 KG	3,09 KG/CM2	1,44 KG/CM2	869 CM2	1866 CM2
		FRONT LADEN	6700 KG	3,78 KG/CM2	1,70 KG/CM2	1812 CM2	4026 CM2
		REAR UNLADEN	2900 KG	3,13 KG/CM2	1,45 KG/CM2	916 CM2	1974 CM2
		REAR LADEN	900 KG	1,76 KG/CM2	0,83 KG/CM2	482 CM2	1030 CM2
18R19,5 XF TUBELESS MICHELIN	6,5 BAR	FRONT UNLADEN	2700 KG	3,57 KG/CM2	1,66 KG/CM2	727 CM2	1568 CM2
		FRONT LADEN	6700 KG	4,50 KG/CM2	2,09 KG/CM2	1488 CM2	3209 CM2
		REAR UNLADEN	2900 KG	3,62 KG/CM2	1,68 KG/CM2	769 CM2	1660 CM2
		REAR LADEN	900 KG	3,56 KG/CM2	1,65 KG/CM2	252 CM2	544 CM2
15,5/80-24 TR-01 163A8 TUBELESS MITAS	4,9 BAR	FRONT UNLADEN	2700 KG	KG/CM2	KG/CM2	CM2	CM2
		FRONT LADEN	6700 KG	KG/CM2	KG/CM2	CM2	CM2
		REAR UNLADEN	2900 KG	KG/CM2	KG/CM2	CM2	CM2
		REAR LADEN	900 KG	KG/CM2	KG/CM2	CM2	CM2

HYDRAULIC CIRCUIT

- Type of pump	Double gear pump with flow divider on the 2nd chamber	
	1st chamber	2nd chamber
. Capacity	41 cm3	28,5 cm3
. Max. rating capacity unladen	96 L/mn	67 L/mn
. Flow rate at 2300 rpm	94 L/mn	66 L/mn
. Flow rate at 1600 rpm	66 L/mn	46 L/mn
- Pressure		
. Telescoping circuit	260 Bar	195 Bar
. Lifting, tilting ,stabilizer circuit	260 Bar	
. Tilting corrector, attachment circuit		195 Bar
. Steering circuit		140 Bar
. Braking circuit		40 Bar
- Filtration		
. Return	10 µm	10 µm
. Suction		125 µm
. Pressure	20 µm	20 µm

SPECIFICATIONS

- Level of sound pressure in the driver's cab LpA (according to standard prEN 12053: 1995)	dB	
- Level of sound power in the LwA environment (according to directive 2000/14 CE guaranteed)	106 dB	
- Speed of movement of lift truck in standard configuration on horizontal ground (except particular conditions)		
. Forward unladen	27,6 km/h	
. Reverse unladen	27,6 km/h	
- Standard lift height	13000 mm	
- Rated capacity with standard attachment	4000 kg	
- Load center	500 mm	
- Weight of forks (each)	71 kg	
- Lifting motions (jib retracted)		
. Unladen lifting	11,8 s	30,3 m/mn
. Laden lifting	12,3 s	29,1 m/mn
. Unladen lowering	8,4 s	42,6 m/mn
. Laden lowering	7,9 s	45,3 m/mn
- Telescoping motions (lifting jib)		
. Unladen extending	17,0 s	25,9 m/mn
. Laden extending	17,0 s	25,9 m/mn
. Unladen retracting	14,0 s	31,5 m/mn
. Laden retracting	13,5 s	32,6 m/mn
- Reverse tilt time unladen	4,8 s	26,1 °/s
- Forward tilt time unladen	4,2 s	29,5 °/s
- Lift truck weight with standard attachment		
. Unladen	11180 kg	
. Rated load	15180 kg	
- Axle weight with attached equipment (transport position)		
. Front unladen	5350 kg	
rated load	13420 kg	
. Rear unladen	5830 kg	
rated load	1760 kg	
- Tensile strain at coupling hook		
. Unladen	7100 daN	
. Rated load	9400 daN	
- Break out force with bucket (according to standard iso 8313)	7000 daN	

CHARACTERISTICS

MT 1435 SL Série 3-E2

FRONT AND REAR TYRES

DIMENSIONS	PRESSURE	TYRE LOAD		PRESSURE ON THE CONTACT SURFACE		AREA OF THE CONTACT SURFACE	
				HARD GROUND	LIGHT GROUND	HARD GROUND	LIGHT GROUND
18-19,5 16PR I224 TUBELESS ALLIANCE	5,5 BAR	FRONT UNLADEN	2600 KG	4,55 KG/CM2	1,93 KG/CM2	565 CM2	1332 CM2
		FRONT LADEN	6200 KG	7,52 KG/CM2	3,21 KG/CM2	826 CM2	1938 CM2
		REAR UNLADEN	2550 KG	4,51 KG/CM2	1,91 KG/CM2	562 CM2	1323 CM2
		REAR LADEN	650 KG	2,05 KG/CM2	0,86 KG/CM2	310 CM2	736 CM2
440/80-24 T37 158B TUBELESS DUNLOP	4,5 BAR	FRONT UNLADEN	2600 KG	8,67 KG/CM2	2,39 KG/CM2	300 CM2	1090 CM2
		FRONT LADEN	6200 KG	12,78 KG/CM2	3,51 KG/CM2	485 CM2	1765 CM2
		REAR UNLADEN	2550 KG	8,57 KG/CM2	2,36 KG/CM2	298 CM2	1080 CM2
		REAR LADEN	650 KG	5,72 KG/CM2	1,59 KG/CM2	113 CM2	407 CM2
445/70R24 IT510 151G TUBELESS GOODYEAR	4,1 BAR	FRONT UNLADEN	2600 KG	9,13 KG/CM2	3,04 KG/CM2	284 CM2	853 CM2
		FRONT LADEN	6200 KG	10,36 KG/CM2	3,41 KG/CM2	599 CM2	1818 CM2
		REAR UNLADEN	2550 KG	9,11 KG/CM2	3,04 KG/CM2	280 CM2	840 CM2
		REAR LADEN	650 KG	6,70 KG/CM2	2,24 KG/CM2	97 CM2	290 CM2
15,5/80-24 SGI 16PR TUBELESS GOODYEAR	5,5 BAR	FRONT UNLADEN	2600 KG	KG/CM2	KG/CM2	CM2	CM2
		FRONT LADEN	6200 KG	KG/CM2	KG/CM2	CM2	CM2
		REAR UNLADEN	2550 KG	KG/CM2	KG/CM2	CM2	CM2
		REAR LADEN	650 KG	KG/CM2	KG/CM2	CM2	CM2
1200R24 X MINE D2 MICHELIN	7,5 BAR	FRONT UNLADEN	2600 KG	KG/CM2	KG/CM2	CM2	CM2
		FRONT LADEN	6200 KG	KG/CM2	KG/CM2	CM2	CM2
		REAR UNLADEN	2550 KG	KG/CM2	KG/CM2	CM2	CM2
		REAR LADEN	650 KG	KG/CM2	KG/CM2	CM2	CM2
15,5R25 XHA TUBELESS MICHELIN	4,75 BAR	FRONT UNLADEN	2600 KG	KG/CM2	KG/CM2	CM2	CM2
		FRONT LADEN	6200 KG	KG/CM2	KG/CM2	CM2	CM2
		REAR UNLADEN	2550 KG	KG/CM2	KG/CM2	CM2	CM2
		REAR LADEN	650 KG	KG/CM2	KG/CM2	CM2	CM2
18R19,5 XF TUBELESS MICHELIN	8 BAR	FRONT UNLADEN	2600 KG	KG/CM2	KG/CM2	CM2	CM2
		FRONT LADEN	6200 KG	KG/CM2	KG/CM2	CM2	CM2
		REAR UNLADEN	2550 KG	KG/CM2	KG/CM2	CM2	CM2
		REAR LADEN	650 KG	KG/CM2	KG/CM2	CM2	CM2
15,5/80-24 TR-01 163A8 TUBELESS MITAS	4,9 BAR	FRONT UNLADEN	2600 KG	KG/CM2	KG/CM2	CM2	CM2
		FRONT LADEN	6200 KG	KG/CM2	KG/CM2	CM2	CM2
		REAR UNLADEN	2550 KG	KG/CM2	KG/CM2	CM2	CM2
		REAR LADEN	650 KG	KG/CM2	KG/CM2	CM2	CM2
400/80-24 162 A8 PI TL GOODRICH	4,8 BAR	FRONT UNLADEN	2600 KG	KG/CM2	KG/CM2	CM2	CM2
		FRONT LADEN	6200 KG	KG/CM2	KG/CM2	CM2	CM2
		REAR UNLADEN	2550 KG	KG/CM2	KG/CM2	CM2	CM2
		REAR LADEN	650 KG	KG/CM2	KG/CM2	CM2	CM2

HYDRAULIC SYSTEM

- Type of pump	Gear pump with flow splitter
. Capacity	43,8 cm3
. Max. rating capacity unladen	103 L/mn
. Flow rate at 2300 rpm	101 L/mn
. Flow rate at 1600 rpm	70 L/mn
- Pressure	
. Lifting, tilting, telescopic, tilt corrector, stabilizer and attachment system	260 Bar
. Steering circuit	140 Bar
. Braking circuit	40 Bar
- Filtration	
. Return	10 µm
. Inlet	125 µm

SPECIFICATIONS

- Level of acoustic pressure in the driver's cab LpA (according to standard prEN 12053: 1995)	79 dB	
Level of sound power in the LWA environment (according to directive 2000/14/EC modified by directive 2005/88/EC)	105 dB	
- Average weighted acceleration on driver's body (according to standard NF EN 13059)	m/s ²	
- The average weighted acceleration transmitted to the driver's hand/arm system (in accordance with ISO 5349-2) is less than 2.5 m/s ²		
- Speed of movement of lift truck in standard configuration on level ground (except particular conditions)		
. Forward unladen	28,3 km/h	
. Rear unladen	28,3 km/h	
- Standard lift height	13600 mm	
- Nominal capacity with standard attachment	3500 kg	
- Distance from center of gravity	500 mm	
- Weight of forks (each)	68 kg	
- Lifting motion (jib retracted)		
. Unladen lifting	10,8 s	34,3 m/min
. Laden lifting	11,3 s	32,8 m/min
. Unladen lowering	7,6 s	49,1 m/min
. Laden lowering	7,2 s	51,8 m/min
- Telescopic motion (lifting jib)		
. Unladen extending	16,9 s	25,5 m/min
. Laden extending	18 s	27,2 m/min
. Unladen retracting	14,5 s	31,7 m/min
. Laden retracting	13,8 s	33,4 m/min
- Reverse tilt time unladen	4,21 s	29,5 °/s
- Forward tilt time unladen	3,6 s	34,8 °/s
- Lift truck weight with standard attachment		
. Unladen	10210 kg	
. At rated load	13710 kg	
- Axle weight with standard attachment (transport position)		
. Front unladen	5160 kg	
at nominal load	1244 kg	
. Rear unladen	5050 kg	
at nominal load	1270 kg	
- Tensile force at coupling hook		
. Unladen	daN	
. At rated load	daN	
- Break out force with bucket (according to standard ISO 8313)	7600 daN	

CHARACTERISTICS

MT 1435 SL Turbo Série 3-E2

FRONT AND REAR TYRES

DIMENSIONS	PRESSURE	TYRE LOAD		PRESSURE ON THE CONTACT SURFACE		AREA OF THE CONTACT SURFACE	
				HARD GROUND	LIGHT GROUND	HARD GROUND	LIGHT GROUND
18-19,5 16PR I224 TUBELESS ALLIANCE	5,5 BAR	FRONT UNLADEN	2600 KG	4,55 KG/CM2	1,93 KG/CM2	565 CM2	1332 CM2
		FRONT LADEN	6200 KG	7,52 KG/CM2	3,21 KG/CM2	826 CM2	1938 CM2
		REAR UNLADEN	2550 KG	4,51 KG/CM2	1,91 KG/CM2	562 CM2	1323 CM2
		REAR LADEN	650 KG	2,05 KG/CM2	0,86 KG/CM2	310 CM2	736 CM2
440/80-24 T37 158B TUBELESS DUNLOP	4,5 BAR	FRONT UNLADEN	2600 KG	8,67 KG/CM2	2,39 KG/CM2	300 CM2	1090 CM2
		FRONT LADEN	6200 KG	12,78 KG/CM2	3,51 KG/CM2	485 CM2	1765 CM2
		REAR UNLADEN	2550 KG	8,57 KG/CM2	2,36 KG/CM2	298 CM2	1080 CM2
		REAR LADEN	650 KG	5,72 KG/CM2	1,59 KG/CM2	113 CM2	407 CM2
445/70R24 IT510 151G TUBELESS GOODYEAR	4,1 BAR	FRONT UNLADEN	2600 KG	9,13 KG/CM2	3,04 KG/CM2	284 CM2	853 CM2
		FRONT LADEN	6200 KG	10,36 KG/CM2	3,41 KG/CM2	599 CM2	1818 CM2
		REAR UNLADEN	2550 KG	9,11 KG/CM2	3,04 KG/CM2	280 CM2	840 CM2
		REAR LADEN	650 KG	6,70 KG/CM2	2,24 KG/CM2	97 CM2	290 CM2
15,5/80-24 SGI 16PR TUBELESS GOODYEAR	5,5 BAR	FRONT UNLADEN	2600 KG	KG/CM2	KG/CM2	CM2	CM2
		FRONT LADEN	6200 KG	KG/CM2	KG/CM2	CM2	CM2
		REAR UNLADEN	2550 KG	KG/CM2	KG/CM2	CM2	CM2
		REAR LADEN	650 KG	KG/CM2	KG/CM2	CM2	CM2
1200R24 X MINE D2 MICHELIN	7,5 BAR	FRONT UNLADEN	2600 KG	KG/CM2	KG/CM2	CM2	CM2
		FRONT LADEN	6200 KG	KG/CM2	KG/CM2	CM2	CM2
		REAR UNLADEN	2550 KG	KG/CM2	KG/CM2	CM2	CM2
		REAR LADEN	650 KG	KG/CM2	KG/CM2	CM2	CM2
15,5R25 XHA TUBELESS MICHELIN	4,75 BAR	FRONT UNLADEN	2600 KG	KG/CM2	KG/CM2	CM2	CM2
		FRONT LADEN	6200 KG	KG/CM2	KG/CM2	CM2	CM2
		REAR UNLADEN	2550 KG	KG/CM2	KG/CM2	CM2	CM2
		REAR LADEN	650 KG	KG/CM2	KG/CM2	CM2	CM2
18R19,5 XF TUBELESS MICHELIN	8 BAR	FRONT UNLADEN	2600 KG	KG/CM2	KG/CM2	CM2	CM2
		FRONT LADEN	6200 KG	KG/CM2	KG/CM2	CM2	CM2
		REAR UNLADEN	2550 KG	KG/CM2	KG/CM2	CM2	CM2
		REAR LADEN	650 KG	KG/CM2	KG/CM2	CM2	CM2
15,5/80-24 TR-01 163A8 TUBELESS MITAS	4,9 BAR	FRONT UNLADEN	2600 KG	KG/CM2	KG/CM2	CM2	CM2
		FRONT LADEN	6200 KG	KG/CM2	KG/CM2	CM2	CM2
		REAR UNLADEN	2550 KG	KG/CM2	KG/CM2	CM2	CM2
		REAR LADEN	650 KG	KG/CM2	KG/CM2	CM2	CM2
400/80-24 162 A8 PI TL GOODRICH	4,8 BAR	FRONT UNLADEN	2600 KG	KG/CM2	KG/CM2	CM2	CM2
		FRONT LADEN	6200 KG	KG/CM2	KG/CM2	CM2	CM2
		REAR UNLADEN	2550 KG	KG/CM2	KG/CM2	CM2	CM2
		REAR LADEN	650 KG	KG/CM2	KG/CM2	CM2	CM2

HYDRAULIC SYSTEM

- Type of pump	Double gear pump with flow splitter in the 2nd chamber	
	1st chamber	2nd chamber
. Capacity	41 cm3	28,5 cm3
. Max. rating capacity unladen	96 L/min	67 L/min
. Flow rate at 2300 rpm	94 L/min	66 L/min
. Flow rate at 1600 rpm	66 L/min	46 L/min
- Pressure		
. Telescopic system	260 Bar	160 Bar
. Lifting, tilting, stabilizer, tilt corrector and attachment system	260 Bar	
. Steering circuit		140 Bar
. Braking circuit		40 Bar
- Filtration		
. Return	10 µm	10 µm
. Inlet		125 µm

SPECIFICATIONS

- Level of acoustic pressure in the driver's cab LpA (according to standard prEN 12053: 1995)	83,6 dB	
Level of sound power in the LWA environment (according to directive 2000/14/EC modified by directive 2005/88/EC)	106 dB	
- Average weighted acceleration on driver's body (according to standard NF EN 13059)	m/s ²	
- The average weighted acceleration transmitted to the driver's hand/arm system (in accordance with ISO 5349-2) is less than 2.5 m/s ²		
- Speed of movement of lift truck in standard configuration on level ground (except particular conditions)		
. Forward unladen	28,3 km/h	
. Rear unladen	28,3 km/h	
- Standard lift height	13600 mm	
- Nominal capacity with standard attachment	3500 kg	
- Distance from center of gravity	500 mm	
- Weight of forks (each)	68 kg	
- Lifting motion (jib retracted)		
. Unladen lifting	10,8 s	34,3 m/min
. Laden lifting	11,3 s	32,8 m/min
. Unladen lowering	7,6 s	49,1 m/min
. Laden lowering	7,2 s	51,8 m/min
- Telescopic motion (lifting jib)		
. Unladen extending	16,9 s	25,5 m/min
. Laden extending	18 s	27,2 m/min
. Unladen retracting	14,5 s	31,7 m/min
. Laden retracting	13,8 s	33,4 m/min
- Reverse tilt time unladen	4,21 s	29,5 °/s
- Forward tilt time unladen	3,6 s	34,8 °/s
- Lift truck weight with standard attachment		
. Unladen	10210 kg	
. At rated load	13710 kg	
- Axle weight with standard attachment (transport position)		
. Front unladen	5160 kg	
at nominal load	12440 kg	
. Rear unladen	5050 kg	
at nominal load	1270 kg	
- Tensile force at coupling hook		
. Unladen	daN	
. At rated load	daN	
- Break out force with bucket (according to standard ISO 8313)	7600 daN	

CHARACTERISTICS

MT 1440 SL Série 3-E2

FRONT AND REAR TYRES

DIMENSIONS	PRESSURE	TYRE LOAD	PRESSURE ON THE CONTACT SURFACE		AREA OF THE CONTACT SURFACE	
			HARD GROUND	LIGHT GROUND	HARD GROUND	LIGHT GROUND
440/80-24 T37 158B TUBELESS DUNLOP	4,5 BAR	FRONT UNLADEN 2650 KG	8,69 KG/CM2	2,40 KG/CM2	305 CM2	1105 CM2
		FRONT LADEN 6800 KG	13,39 KG/CM2	3,65 KG/CM2	510 CM2	1870 CM2
		REAR UNLADEN 2900 KG	8,92 KG/CM2	2,47 KG/CM2	325 CM2	1173 CM2
		REAR LADEN 750 KG	5,93 KG/CM2	1,65 KG/CM2	126 CM2	452 CM2
400/80R24 IT520 162A8 TUBELESS GOODYEAR	4,6 BAR	FRONT UNLADEN 2650 KG	KG/CM2	KG/CM2	CM2	CM2
		FRONT LADEN 6800 KG	KG/CM2	KG/CM2	CM2	CM2
		REAR UNLADEN 2900 KG	KG/CM2	KG/CM2	CM2	CM2
		REAR LADEN 750 KG	KG/CM2	KG/CM2	CM2	CM2
15,5R25 XHA TUBELESS MICHELIN	4,75 BAR	FRONT UNLADEN 2650 KG	KG/CM2	KG/CM2	CM2	CM2
		FRONT LADEN 6800 KG	KG/CM2	KG/CM2	CM2	CM2
		REAR UNLADEN 2900 KG	KG/CM2	KG/CM2	CM2	CM2
		REAR LADEN 750 KG	KG/CM2	KG/CM2	CM2	CM2
18R19,5 XF TUBELESS MICHELIN	8 BAR	FRONT UNLADEN 2650 KG	KG/CM2	KG/CM2	CM2	CM2
		FRONT LADEN 6800 KG	KG/CM2	KG/CM2	CM2	CM2
		REAR UNLADEN 2900 KG	KG/CM2	KG/CM2	CM2	CM2
		REAR LADEN 750 KG	KG/CM2	KG/CM2	CM2	CM2
15,5/80-24 TR-01 163A8 TUBELESS MITAS	4,9 BAR	FRONT UNLADEN 2650 KG	KG/CM2	KG/CM2	CM2	CM2
		FRONT LADEN 6800 KG	KG/CM2	KG/CM2	CM2	CM2
		REAR UNLADEN 2900 KG	KG/CM2	KG/CM2	CM2	CM2
		REAR LADEN 750 KG	KG/CM2	KG/CM2	CM2	CM2

HYDRAULIC SYSTEM

- Type of pump	Double gear pump with flow splitter in the 2nd chamber	
	1st chamber	2nd chamber
. Capacity	41 cm3	28,5 cm3
. Max. rating capacity unladen	96 L/min	68 L/min
. Flow rate at 2300 rpm	94 L/min	66 L/min
. Flow rate at 1600 rpm	66 L/min	46 L/min
- Pressure		
. Telescopic system	260 Bar	160 Bar
. Lifting, tilting, stabilizer, tilt corrector and attachment system	260 Bar	
. Steering circuit		140 Bar
. Braking circuit		40 Bar
- Filtration		
. Return	10 µm	10 µm
. Inlet		125 µm

SPECIFICATIONS

- Level of acoustic pressure in the driver's cab LpA (according to standard prEN 12053: 1995)	79 dB	
Level of sound power in the LwA environment (according to directive 2000/14/EC modified by directive 2005/88/EC)	105 dB	
- Average weighted acceleration on driver's body (according to standard NF EN 13059)	m/s ²	
- The average weighted acceleration transmitted to the driver's hand/arm system (in accordance with ISO 5349-2) is less than 2.5 m/s ²		
- Speed of movement of lift truck in standard configuration on level ground (except particular conditions)		
. Forward unladen	28,3 km/h	
. Rear unladen	28,3 km/h	
- Standard lift height	13600 mm	
- Nominal capacity with standard attachment	4000 kg	
- Distance from center of gravity	500 mm	
- Weight of forks (each)	71 kg	
- Lifting motion (jib retracted)		
. Unladen lifting	11,9 s	31,3 m/min
. Laden lifting	12,4 s	30 m/min
. Unladen lowering	8,2 s	45,2 m/min
. Laden lowering	7,7 s	48,1 m/min
- Telescopic motion (lifting jib)		
. Unladen extending	17,4 s	25,1 m/min
. Laden extending	18,3 s	26,4 m/min
. Unladen retracting	15 s	30,6 m/min
. Laden retracting	14,5 s	31,6 m/min
- Reverse tilt time unladen	4,8 s	26,1 °/s
- Forward tilt time unladen	3,9 s	32 °/s
- Lift truck weight with standard attachment		
. Unladen	11070 kg	
. At rated load	15070 kg	
- Axle weight with standard attachment (transport position)		
. Front unladen	5310 kg	
at nominal load	13600 kg	
. Rear unladen	5760 kg	
at nominal load	1470 kg	
- Tensile force at coupling hook		
. Unladen	7800 daN	
. At rated load	10090 daN	
- Break out force with bucket (according to standard ISO 8313)	7400 daN	

CHARACTERISTICS

MT 1440 SL Turbo Série 3-E2

FRONT AND REAR TYRES

DIMENSIONS	PRESSURE	TYRE LOAD		PRESSURE ON THE CONTACT SURFACE		AREA OF THE CONTACT SURFACE	
				HARD GROUND	LIGHT GROUND	HARD GROUND	LIGHT GROUND
440/80-24 T37 158B TUBELESS DUNLOP	4,5 BAR	FRONT UNLADEN	2650 KG	8,69 KG/CM2	2,40 KG/CM2	305 CM2	1105 CM2
		FRONT LADEN	6800 KG	13,39 KG/CM2	3,65 KG/CM2	510 CM2	1870 CM2
		REAR UNLADEN	2900 KG	8,92 KG/CM2	2,47 KG/CM2	325 CM2	1173 CM2
		REAR LADEN	750 KG	5,93 KG/CM2	1,65 KG/CM2	126 CM2	452 CM2
400/80R24 IT520 162A8 TUBELESS GOODYEAR	4,6 BAR	FRONT UNLADEN	2650 KG	KG/CM2	KG/CM2	CM2	CM2
		FRONT LADEN	6800 KG	KG/CM2	KG/CM2	CM2	CM2
		REAR UNLADEN	2900 KG	KG/CM2	KG/CM2	CM2	CM2
		REAR LADEN	750 KG	KG/CM2	KG/CM2	CM2	CM2
15,5R25 XHA TUBELESS MICHELIN	4,75 BAR	FRONT UNLADEN	2650 KG	KG/CM2	KG/CM2	CM2	CM2
		FRONT LADEN	6800 KG	KG/CM2	KG/CM2	CM2	CM2
		REAR UNLADEN	2900 KG	KG/CM2	KG/CM2	CM2	CM2
		REAR LADEN	750 KG	KG/CM2	KG/CM2	CM2	CM2
18R19,5 XF TUBELESS MICHELIN	8 BAR	FRONT UNLADEN	2650 KG	KG/CM2	KG/CM2	CM2	CM2
		FRONT LADEN	6800 KG	KG/CM2	KG/CM2	CM2	CM2
		REAR UNLADEN	2900 KG	KG/CM2	KG/CM2	CM2	CM2
		REAR LADEN	750 KG	KG/CM2	KG/CM2	CM2	CM2
15,5/80-24 TR-01 163A8 TUBELESS MITAS	4,9 BAR	FRONT UNLADEN	2650 KG	KG/CM2	KG/CM2	CM2	CM2
		FRONT LADEN	6800 KG	KG/CM2	KG/CM2	CM2	CM2
		REAR UNLADEN	2900 KG	KG/CM2	KG/CM2	CM2	CM2
		REAR LADEN	750 KG	KG/CM2	KG/CM2	CM2	CM2

HYDRAULIC SYSTEM

- Type of pump	Double gear pump with flow splitter in the 2nd chamber	
	1st chamber	2nd chamber
. Capacity	41 cm3	28,5 cm3
. Max. rating capacity unladen	96 L/min	67 L/min
. Flow rate at 2300 rpm	94 L/min	66 L/min
. Flow rate at 1600 rpm	66 L/min	46 L/min
- Pressure		
. Telescopic system	260 Bar	160 Bar
. Lifting, tilting, stabilizer, tilt corrector and attachment system	260 Bar	
. Steering circuit		140 Bar
. Braking circuit		40 Bar
- Filtration		
. Return	10 µm	10 µm
. Inlet		125 µm

SPECIFICATIONS

- Level of acoustic pressure in the driver's cab LpA (according to standard prEN 12053: 1995)	83,6 dB	
Level of sound power in the LWA environment (according to directive 2000/14/EC modified by directive 2005/88/EC)	106 dB	
- Average weighted acceleration on driver's body (according to standard NF EN 13059)	m/s ²	
- The average weighted acceleration transmitted to the driver's hand/arm system (in accordance with ISO 5349-2) is less than 2.5 m/s ²		
- Speed of movement of lift truck in standard configuration on level ground (except particular conditions)		
. Forward unladen	28,3 km/h	
. Rear unladen	28,3 km/h	
- Standard lift height	13600 mm	
- Nominal capacity with standard attachment	4000 kg	
- Distance from center of gravity	500 mm	
- Weight of forks (each)	71 kg	
- Lifting motion (jib retracted)		
. Unladen lifting	11,9 s	31,3 m/min
. Laden lifting	12,4 s	30 m/min
. Unladen lowering	8,2 s	45,2 m/min
. Laden lowering	7,7 s	48,1 m/min
- Telescopic motion (lifting jib)		
. Unladen extending	17,4 s	25,1 m/min
. Laden extending	18,3 s	26,4 m/min
. Unladen retracting	15 s	30,6 m/min
. Laden retracting	14,5 s	31,6 m/min
- Reverse tilt time unladen	4,8 s	26,1 °/s
- Forward tilt time unladen	3,9 s	32 °/s
- Lift truck weight with standard attachment		
. Unladen	11070 kg	
. At rated load	15070 kg	
- Axle weight with standard attachment (transport position)		
. Front unladen	5310 kg	
at nominal load	13600 kg	
. Rear unladen	5760 kg	
at nominal load	1470 kg	
- Tensile force at coupling hook		
. Unladen	7800 daN	
. At rated load	10090 daN	
- Break out force with bucket (according to standard ISO 8313)	7400 daN	

CHARACTERISTICS

MT 1440 SL Turbo ULTRA Série 3-E2

FRONT AND REAR TYRES

DIMENSIONS	PRESSURE	TYRE LOAD		PRESSURE ON THE CONTACT SURFACE		AREA OF THE CONTACT SURFACE	
				HARD GROUND	LIGHT GROUND	HARD GROUND	LIGHT GROUND
440/80-24 T37 158B TUBELESS DUNLOP	4,5 BAR	FRONT UNLADEN	2650 KG	8,69 KG/CM2	2,40 KG/CM2	305 CM2	1105 CM2
		FRONT LADEN	6800 KG	13,39 KG/CM2	3,65 KG/CM2	510 CM2	1870 CM2
		REAR UNLADEN	2900 KG	8,92 KG/CM2	2,47 KG/CM2	325 CM2	1173 CM2
		REAR LADEN	750 KG	5,93 KG/CM2	1,65 KG/CM2	126 CM2	452 CM2
400/80R24 IT520 162A8 TUBELESS GOODYEAR	4,6 BAR	FRONT UNLADEN	2650 KG	KG/CM2	KG/CM2	CM2	CM2
		FRONT LADEN	6800 KG	KG/CM2	KG/CM2	CM2	CM2
		REAR UNLADEN	2900 KG	KG/CM2	KG/CM2	CM2	CM2
		REAR LADEN	750 KG	KG/CM2	KG/CM2	CM2	CM2
15,5R25 XHA TUBELESS MICHELIN	4,75 BAR	FRONT UNLADEN	2650 KG	KG/CM2	KG/CM2	CM2	CM2
		FRONT LADEN	6800 KG	KG/CM2	KG/CM2	CM2	CM2
		REAR UNLADEN	2900 KG	KG/CM2	KG/CM2	CM2	CM2
		REAR LADEN	750 KG	KG/CM2	KG/CM2	CM2	CM2
18R19,5 XF TUBELESS MICHELIN	8 BAR	FRONT UNLADEN	2650 KG	KG/CM2	KG/CM2	CM2	CM2
		FRONT LADEN	6800 KG	KG/CM2	KG/CM2	CM2	CM2
		REAR UNLADEN	2900 KG	KG/CM2	KG/CM2	CM2	CM2
		REAR LADEN	750 KG	KG/CM2	KG/CM2	CM2	CM2
15,5/80-24 TR-01 163A8 TUBELESS MITAS	4,9 BAR	FRONT UNLADEN	2650 KG	KG/CM2	KG/CM2	CM2	CM2
		FRONT LADEN	6800 KG	KG/CM2	KG/CM2	CM2	CM2
		REAR UNLADEN	2900 KG	KG/CM2	KG/CM2	CM2	CM2
		REAR LADEN	750 KG	KG/CM2	KG/CM2	CM2	CM2

HYDRAULIC SYSTEM

- Type of pump	Double gear pump with flow splitter in the 2nd chamber	
	1st chamber	2nd chamber
. Capacity	41 cm3	28,5 cm3
. Max. rating capacity unladen	96 L/min	67 L/min
. Flow rate at 2300 rpm	94 L/min	66 L/min
. Flow rate at 1600 rpm	66 L/min	46 L/min
- Pressure		
. Telescopic system	260 Bar	195 Bar
. Lifting, tilting and stabilizer system	260 Bar	
. Tilting corrector and attachment system		195 Bar
. Steering circuit		140 Bar
. Braking circuit		40 Bar
- Filtration		
. Return	10 µm	10 µm
. Inlet		125 µm
. Pressure	20 µm	20 µm

SPECIFICATIONS

- Level of acoustic pressure in the driver's cab LpA (according to standard prEN 12053: 1995)	83,6 dB	
Level of sound power in the LWA environment (according to directive 2000/14/EC modified by directive 2005/88/EC)	106 dB	
- Average weighted acceleration on driver's body (according to standard NF EN 13059)	m/s ²	
- The average weighted acceleration transmitted to the driver's hand/arm system (in accordance with ISO 5349-2) is less than 2.5 m/s ²		
- Speed of movement of lift truck in standard configuration on level ground (except particular conditions)		
. Forward unladen	28,3 km/h	
. Rear unladen	28,3 km/h	
- Standard lift height	13600 mm	
- Nominal capacity with standard attachment	4000 kg	
- Distance from center of gravity	500 mm	
- Weight of forks (each)	71 kg	
- Lifting motion (jib retracted)		
. Unladen lifting		
. Laden lifting	11,9 s	31,3 m/min
. Unladen lowering	12,4 s	30 m/min
. Laden lowering	8,2 s	45,2 m/min
	7,7 s	48,1 m/min
- Telescopic motion (lifting jib)		
. Unladen extending		
. Laden extending	17,4 s	25,1 m/min
. Unladen retracting	18,3 s	26,4 m/min
. Laden retracting	15 s	30,6 m/min
	14,5 s	31,6 m/min
- Reverse tilt time unladen	4,8 s	26,1 °/s
- Forward tilt time unladen	3,9 s	32 °/s
- Lift truck weight with standard attachment		
. Unladen		
. At rated load	11070 kg	
	15070 kg	
- Axle weight with standard attachment (transport position)		
. Front unladen		
at nominal load	5310 kg	
. Rear unladen	13600 kg	
at nominal load	5760 kg	
	1470 kg	
- Tensile force at coupling hook		
. Unladen		
. At rated load	7800 daN	
	10090 daN	
- Break out force with bucket (according to standard ISO 8313)	7400 daN	

CHARACTERISTICS

MT 1740 SL Turbo Série 3-E2

FRONT AND REAR TYRES

DIMENSIONS	PRESSURE	TYRE LOAD		PRESSURE ON THE CONTACT SURFACE		AREA OF THE CONTACT SURFACE	
				HARD GROUND	LIGHT GROUND	HARD GROUND	LIGHT GROUND
440/80-24 T37 158B TUBELESS DUNLOP	4,5 BAR	FRONT UNLADEN	2650 KG	8,69 KG/CM2	2,40 KG/CM2	305 CM2	1105 CM2
		FRONT LADEN	6700 KG	13,15 KG/CM2	3,65 KG/CM2	510 CM2	1840 CM2
		REAR UNLADEN	2950 KG	8,94 KG/CM2	2,49 KG/CM2	330 CM2	1187 CM2
		REAR LADEN	900 KG	6,23 KG/CM2	1,73 KG/CM2	144 CM2	518 CM2
16,5/85-24 SGI 14PR TUBELESS GOODYEAR	4,5 BAR	FRONT UNLADEN	2650 KG	KG/CM2	KG/CM2	CM2	CM2
		FRONT LADEN	6700 KG	KG/CM2	KG/CM2	CM2	CM2
		REAR UNLADEN	2950 KG	KG/CM2	KG/CM2	CM2	CM2
		REAR LADEN	900 KG	KG/CM2	KG/CM2	CM2	CM2
400/80R24 IT520 162A8 TUBELESS GOODYEAR	4,6 BAR	FRONT UNLADEN	2650 KG	KG/CM2	KG/CM2	CM2	CM2
		FRONT LADEN	6700 KG	KG/CM2	KG/CM2	CM2	CM2
		REAR UNLADEN	2950 KG	KG/CM2	KG/CM2	CM2	CM2
		REAR LADEN	900 KG	KG/CM2	KG/CM2	CM2	CM2
15,5R25 XHA TUBELESS MICHELIN	5 BAR	FRONT UNLADEN	2650 KG	KG/CM2	KG/CM2	CM2	CM2
		FRONT LADEN	6700 KG	KG/CM2	KG/CM2	CM2	CM2
		REAR UNLADEN	2950 KG	KG/CM2	KG/CM2	CM2	CM2
		REAR LADEN	900 KG	KG/CM2	KG/CM2	CM2	CM2
440/80-24 162 A8 PI TL GOODRICH	4,5 BAR	FRONT UNLADEN	2650 KG	KG/CM2	KG/CM2	CM2	CM2
		FRONT LADEN	6700 KG	KG/CM2	KG/CM2	CM2	CM2
		REAR UNLADEN	2950 KG	KG/CM2	KG/CM2	CM2	CM2
		REAR LADEN	900 KG	KG/CM2	KG/CM2	CM2	CM2

HYDRAULIC CIRCUIT

- Type of pump	Double gear pump with flow divider on the 2nd chamber	
	1st chamber	2nd chamber
. Capacity	41 cm3	41 cm3
. Max. rating capacity unladen	96 L/mn	96 L/mn
. Flow rate at 2300 rpm	94 L/mn	94 L/mn
. Flow rate at 1600 rpm	66 L/mn	66 L/mn
- Pressure		
. Telescoping circuit	260 Bar	160 Bar
. Lifting, tilting, stabilizer, tilting corrector, attachment circuit	260 Bar	
. Steering circuit		140 Bar
. Braking circuit		40 Bar
- Filtration		
. Return	10 µm	10 µm
. Suction		125 µm

SPECIFICATIONS

- Level of sound pressure in the driver's cab LpA (according to standard prEN 12053: 1995)	83,6 dB	
Level of sound power in the LWA environment (according to directive 2000/14/EC modified by directive 2005/88/EC)	106 dB	
- Average weighted acceleration on driver's body (according to standard NF EN 13059)	m/s ²	
- The average weighted acceleration transmitted to the driver's hand/arm system (in accordance with ISO 5349-2) is less than 2.5 m/s ²		
- Speed of movement of lift truck in standard configuration on horizontal ground (except particular conditions)		
. Forward unladen	27,6 km/h	
. Reverse unladen	27,6 km/h	
- Standard lift height	16650 mm	
- Rated capacity with standard attachment	4000 kg	
- Load center	500 mm	
- Weight of forks (each)	71 kg	
- Lifting motions (jib retracted)		
. Unladen lifting	15,0 s	25,8 m/mn
. Laden lifting	16,0 s	24,2 m/mn
. Unladen lowering	10,0 s	38,7 m/mn
. Laden lowering	9,0 s	43,0 m/mn
- Telescoping motions (lifting jib)		
. Extending of telescope I, unladen	13,9 s	14,8 m/mn
. Extending of telescope I, Laden	14,7 s	14,0 m/mn
. Retracting of telescope I, unladen	10,6 s	19,5 m/mn
. Retracting of telescope I, Laden	10,2 s	20,2 m/mn
. Extending of telescope II, unladen	7,96 s	25,9 m/mn
. Extending of telescope II, Laden	9,7 s	21,3 m/mn
. Retracting of telescope II, unladen	7,15 s	28,9 m/mn
. Retracting of telescope II, Laden	7,25 s	28,5 m/mn
. Extending of telescope III, unladen	10,4 s	19,85 m/mn
. Extending of telescope III, Laden	11,5 s	17,9 m/mn
. Retracting of telescope III, unladen	9,7 s	21,3 m/mn
. Retracting of telescope III, Laden	8,7 s	23,7 m/mn
- Reverse tilt time unladen	5,3 s	23,4 °/s
- Forward tilt time unladen	8,4 s	14,8 °/s
- Lift truck weight with standard attachment		
. Unladen	11220 kg	
. Rated load	15220 kg	
- Axle weight with attached equipment (transport position)		
. Front unladen	5340 kg	
rated load	13400 kg	
. Rear unladen	5880 kg	
rated load	1820 kg	
- Tensile strain at coupling hook		
. Unladen	8200 daN	
. Rated load	9700 daN	
- Break out force with bucket (according to standard iso 8313)	7000 daN	

CHARACTERISTICS

MT 1740 SL Turbo ULTRA Série 3-E2

FRONT AND REAR TYRES

DIMENSIONS	PRESSURE	TYRE LOAD		PRESSURE ON THE CONTACT SURFACE		AREA OF THE CONTACT SURFACE	
				HARD GROUND	LIGHT GROUND	HARD GROUND	LIGHT GROUND
440/80-24 T37 158B TUBELESS DUNLOP	4,5 BAR	FRONT UNLADEN	2650 KG	8,69 KG/CM2	2,40 KG/CM2	305 CM2	1105 CM2
		FRONT LADEN	6700 KG	13,15 KG/CM2	3,65 KG/CM2	510 CM2	1840 CM2
		REAR UNLADEN	2950 KG	8,94 KG/CM2	2,49 KG/CM2	330 CM2	1187 CM2
		REAR LADEN	900 KG	6,23 KG/CM2	1,73 KG/CM2	144 CM2	518 CM2
16,5/85-24 SGI 14PR TUBELESS GOODYEAR	4,5 BAR	FRONT UNLADEN	2650 KG	KG/CM2	KG/CM2	CM2	CM2
		FRONT LADEN	6700 KG	KG/CM2	KG/CM2	CM2	CM2
		REAR UNLADEN	2950 KG	KG/CM2	KG/CM2	CM2	CM2
		REAR LADEN	900 KG	KG/CM2	KG/CM2	CM2	CM2
400/80R24 IT520 162A8 TUBELESS GOODYEAR	4,6 BAR	FRONT UNLADEN	2650 KG	KG/CM2	KG/CM2	CM2	CM2
		FRONT LADEN	6700 KG	KG/CM2	KG/CM2	CM2	CM2
		REAR UNLADEN	2950 KG	KG/CM2	KG/CM2	CM2	CM2
		REAR LADEN	900 KG	KG/CM2	KG/CM2	CM2	CM2
15,5R25 XHA TUBELESS MICHELIN	5 BAR	FRONT UNLADEN	2650 KG	KG/CM2	KG/CM2	CM2	CM2
		FRONT LADEN	6700 KG	KG/CM2	KG/CM2	CM2	CM2
		REAR UNLADEN	2950 KG	KG/CM2	KG/CM2	CM2	CM2
		REAR LADEN	900 KG	KG/CM2	KG/CM2	CM2	CM2
440/80-24 162 A8 PI TL GOODRICH	4,5 BAR	FRONT UNLADEN	2650 KG	KG/CM2	KG/CM2	CM2	CM2
		FRONT LADEN	6700 KG	KG/CM2	KG/CM2	CM2	CM2
		REAR UNLADEN	2950 KG	KG/CM2	KG/CM2	CM2	CM2
		REAR LADEN	900 KG	KG/CM2	KG/CM2	CM2	CM2

HYDRAULIC CIRCUIT

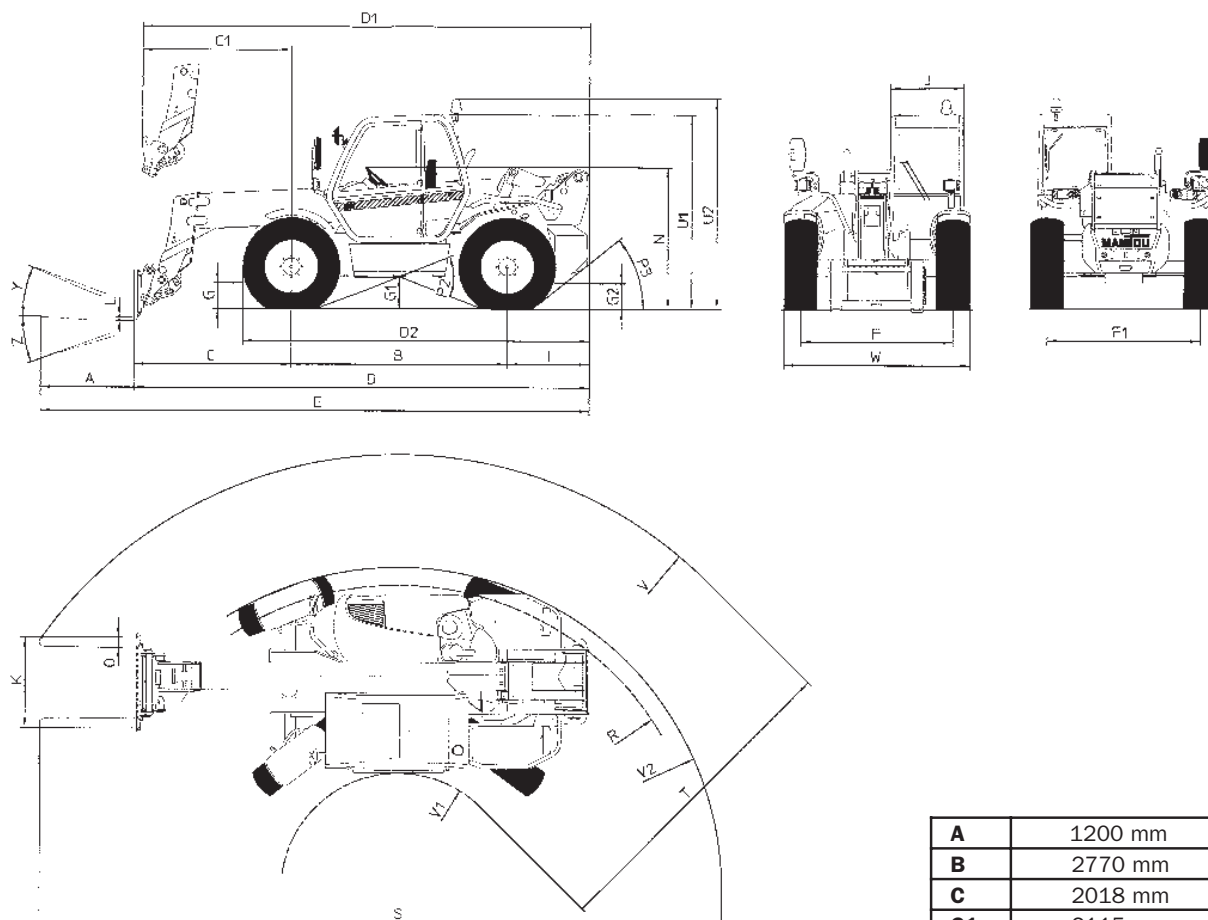
- Type of pump	Double gear pump with flow divider on the 2nd chamber	
	1st chamber	2nd chamber
. Capacity	41 cm3	41 cm3
. Max. rating capacity unladen	96 L/mn	96 L/mn
. Flow rate at 2300 rpm	94 L/mn	94 L/mn
. Flow rate at 1600 rpm	66 L/mn	66 L/mn
- Pressure		
. Telescoping circuit	260 Bar	195 Bar
. Lifting, tilting ,stabilizer circuit	260 Bar	
. Tilting corrector, attachment circuit		195 Bar
. Steering circuit		140 Bar
. Braking circuit		40 Bar
- Filtration		
. Return	10 µm	10 µm
. Suction		125 µm
. Pressure	20 µm	20 µm

SPECIFICATIONS

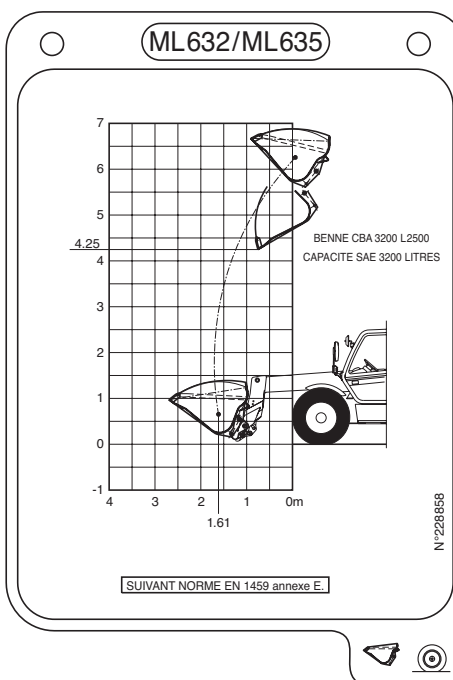
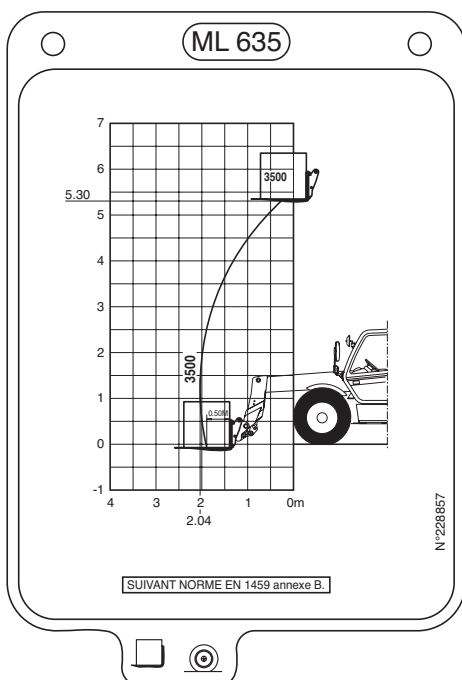
- Level of sound pressure in the driver's cab LpA (according to standard prEN 12053: 1995)	83,6 dB	
Level of sound power in the LWA environment (according to directive 2000/14/EC modified by directive 2005/88/EC)	106 dB	
- Average weighted acceleration on driver's body (according to standard NF EN 13059)	m/s ²	
- The average weighted acceleration transmitted to the driver's hand/arm system (in accordance with ISO 5349-2) is less than 2.5 m/s ²		
- Speed of movement of lift truck in standard configuration on horizontal ground (except particular conditions)		
. Forward unladen	27,6 km/h	
. Reverse unladen	27,6 km/h	
- Standard lift height	16650 mm	
- Rated capacity with standard attachment	4000 kg	
- Load center	500 mm	
- Weight of forks (each)	71 kg	
- Lifting motions (jib retracted)		
. Unladen lifting	15,0 s	25,8 m/mn
. Laden lifting	16,0 s	24,2 m/mn
. Unladen lowering	10,0 s	38,7 m/mn
. Laden lowering	9,0 s	43,0 m/mn
- Telescoping motions (lifting jib)		
. Extending of telescope I, unladen	13,9 s	14,8 m/mn
. Extending of telescope I, Laden	14,7 s	14,0 m/mn
. Retracting of telescope I, unladen	10,6 s	19,5 m/mn
. Retracting of telescope I, Laden	10,2 s	20,2 m/mn
. Extending of telescope II, unladen	7,96 s	25,9 m/mn
. Extending of telescope II, Laden	9,7 s	21,3 m/mn
. Retracting of telescope II, unladen	7,15 s	28,9 m/mn
. Retracting of telescope II, Laden	7,25 s	28,5 m/mn
. Extending of telescope III, unladen	10,4 s	19,85 m/mn
. Extending of telescope III, Laden	11,5 s	17,9 m/mn
. Retracting of telescope III, unladen	9,7 s	21,3 m/mn
. Retracting of telescope III, Laden	8,7 s	23,7 m/mn
- Reverse tilt time unladen	5,3 s	23,4 °/s
- Forward tilt time unladen	8,4 s	14,8 °/s
- Lift truck weight with standard attachment		
. Unladen	11220 kg	
. Rated load	15220 kg	
- Axle weight with attached equipment (transport position)		
. Front unladen	5340 kg	
rated load	13400 kg	
. Rear unladen	5880 kg	
rated load	1820 kg	
- Tensile strain at coupling hook		
. Unladen	8200 daN	
. Rated load	9700 daN	
- Break out force with bucket (according to standard iso 8313)	7000 daN	

DIMENSIONS AND LOAD CHART

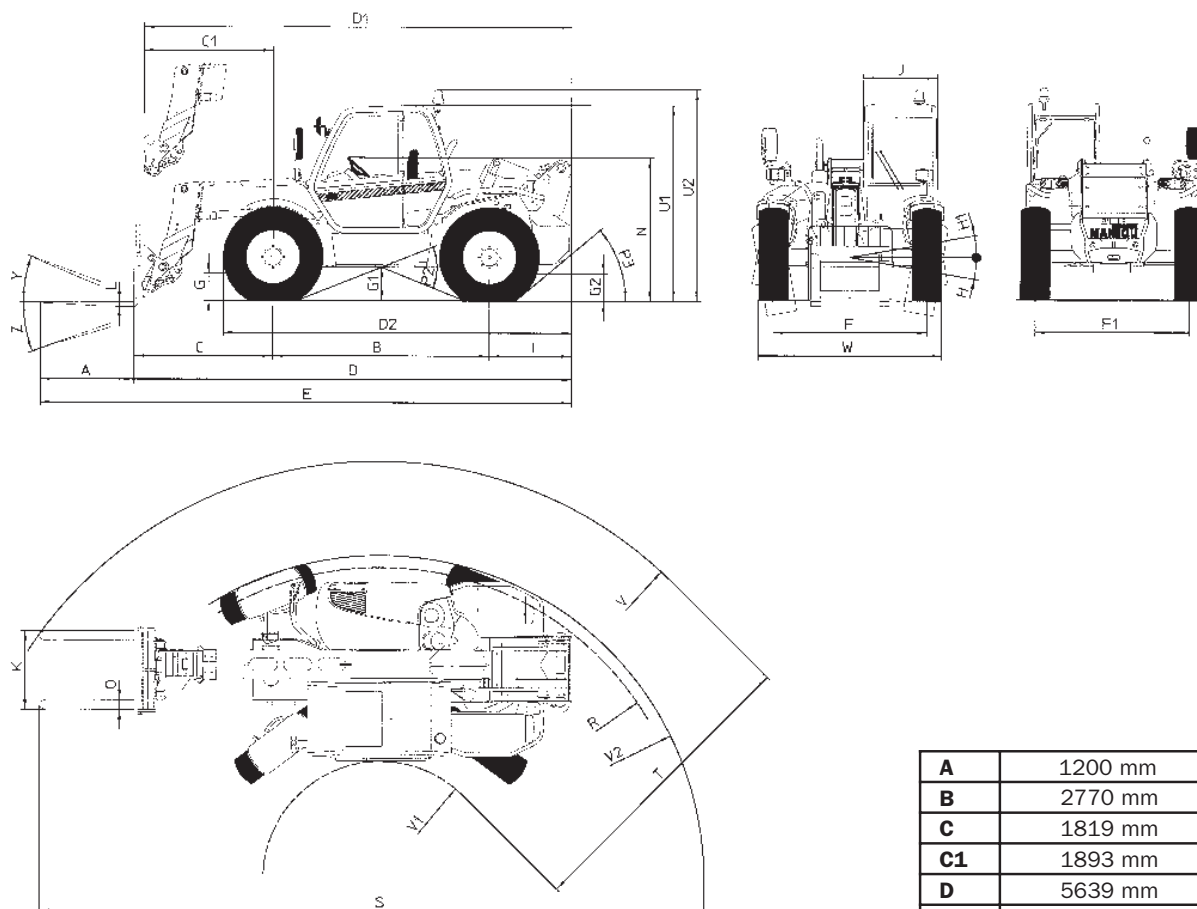
ML 635 Turbo Série 3-E2



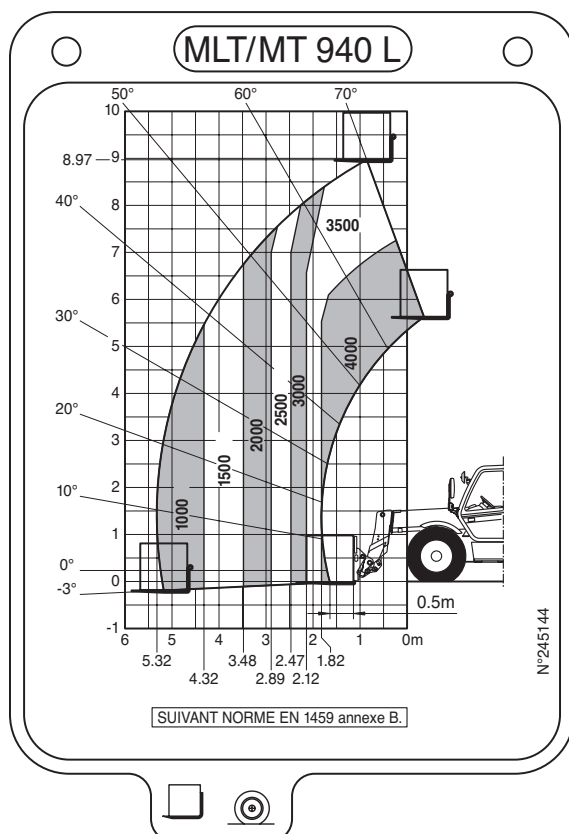
A	1200 mm
B	2770 mm
C	2018 mm
C1	2115 mm
D	5838 mm
D1	5935 mm
D2	4395 mm
E	7038 mm
F	1950 mm
F1	1950 mm
G	440 mm
G1	435 mm
G2	440 mm
I	1050 mm
J	950 mm
K	1260 mm
L	45 mm
N	1840 mm
O	125 mm
P2	43,5 °
P3	40 °
R	3930 mm
S	8755 mm
T	4185 mm
U1	2565 mm
U2	2745 mm
V	5655 mm
V1	1470 mm
V2	4153 mm
W	2395 mm
Y	12 °
Z	130 °



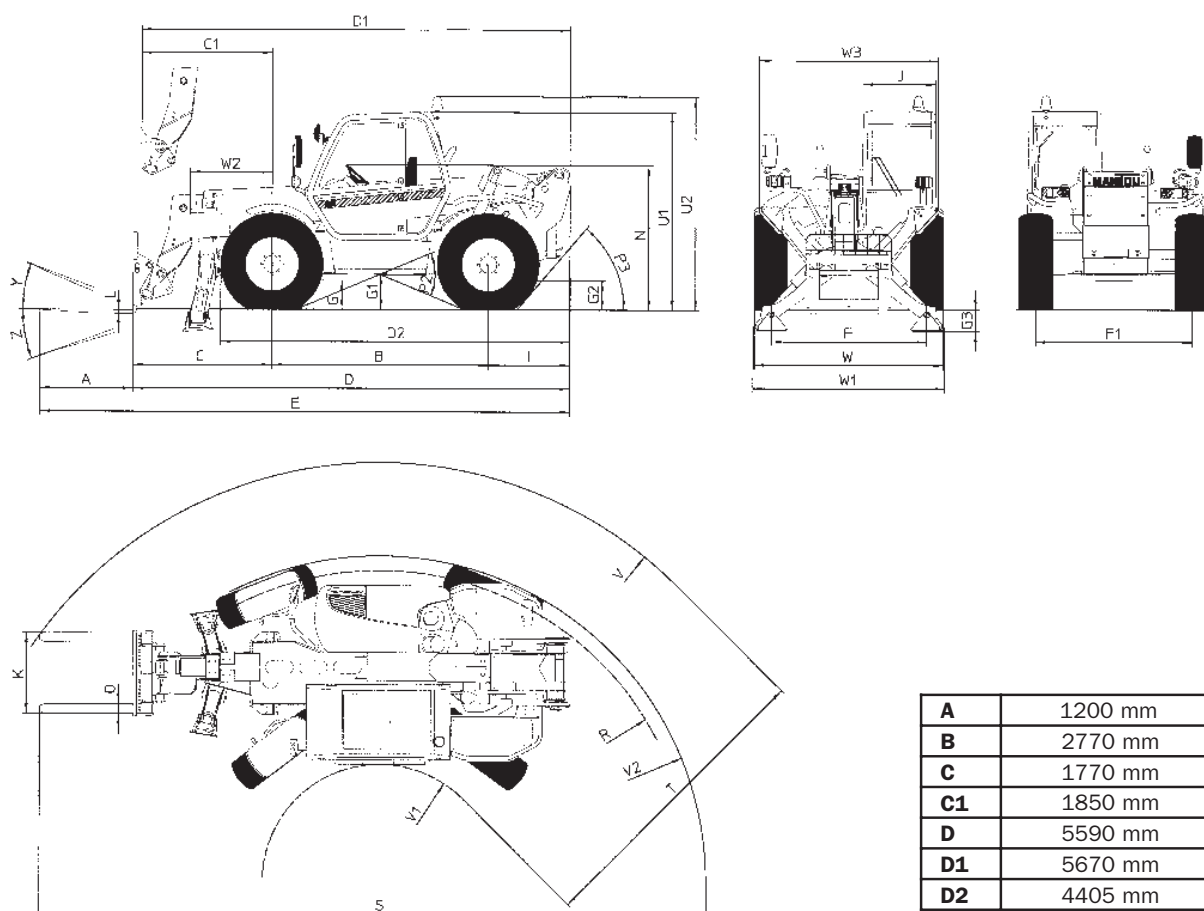
DIMENSIONS AND LOAD CHART MT 940 L Turbo Série 3-E2



A	1200 mm
B	2770 mm
C	1819 mm
C1	1893 mm
D	5639 mm
D1	5713 mm
D2	4420 mm
E	6839 mm
F	1990 mm
F1	1990 mm
G	465 mm
G1	460 mm
G2	465 mm
H	10 °
H1	10 °
I	1050 mm
J	950 mm
K	1040 mm
L	50 mm
N	1865 mm
O	125 mm
P2	43,5 °
P3	40 °
R	3950 mm
S	8554 mm
T	3960 mm
U1	2590 mm
U2	2770 mm
V	5430 mm
V1	1470 mm
V2	4150 mm
W	2390 mm
Y	11 °
Z	130 °

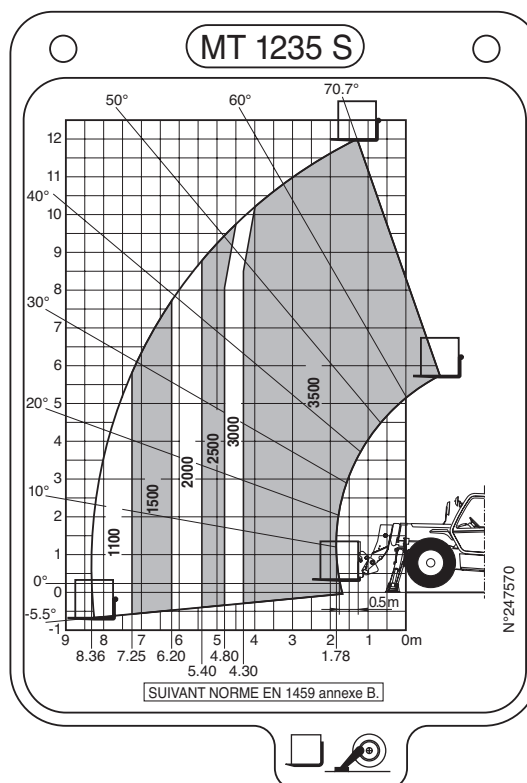
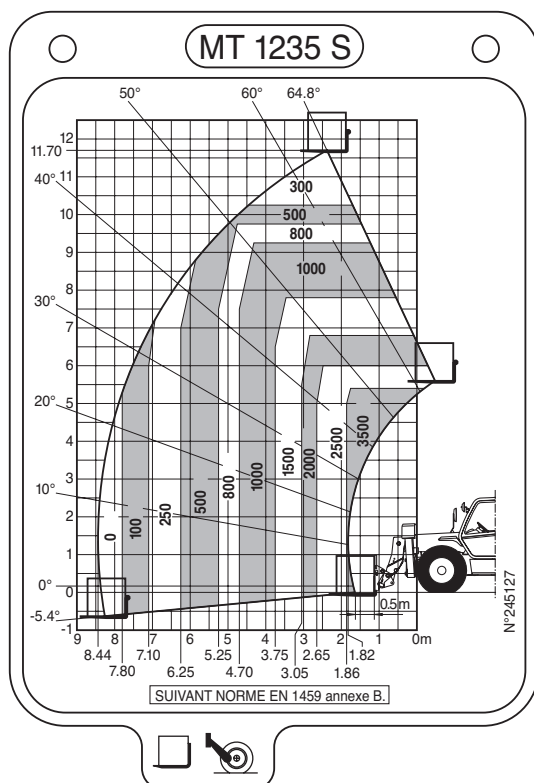


DIMENSIONS AND LOAD CHART MT 1235 S Série 3-E2

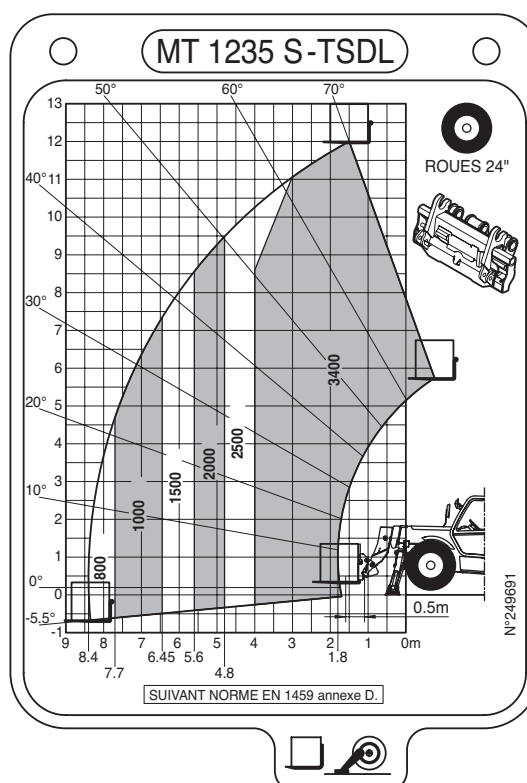
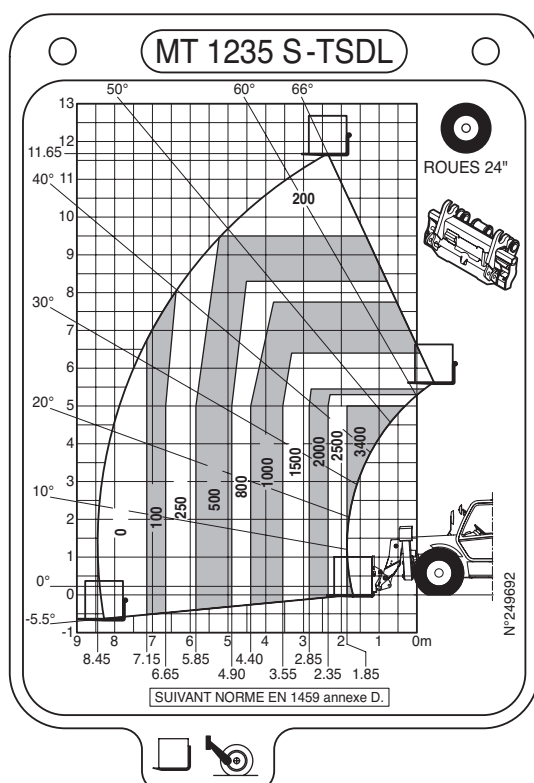


A	1200 mm
B	2770 mm
C	1770 mm
C1	1850 mm
D	5590 mm
D1	5670 mm
D2	4405 mm
E	6790 mm
F	1990 mm
F1	1990 mm
G	450 mm
G1	445 mm
G2	450 mm
G3	275 mm
I	1050 mm
J	950 mm
K	1040 mm
L	45 mm
N	1850 mm
O	125 mm
P2	43,5 °
P3	40 °
R	3950 mm
S	8513 mm
T	3920 mm
U1	2575 mm
U2	2755 mm
V	5390 mm
V1	1470 mm
V2	4158 mm
W	2405 mm
W1	2320 mm
W2	1125 mm
W3	2035 mm
Y	12 °
Z	112 °

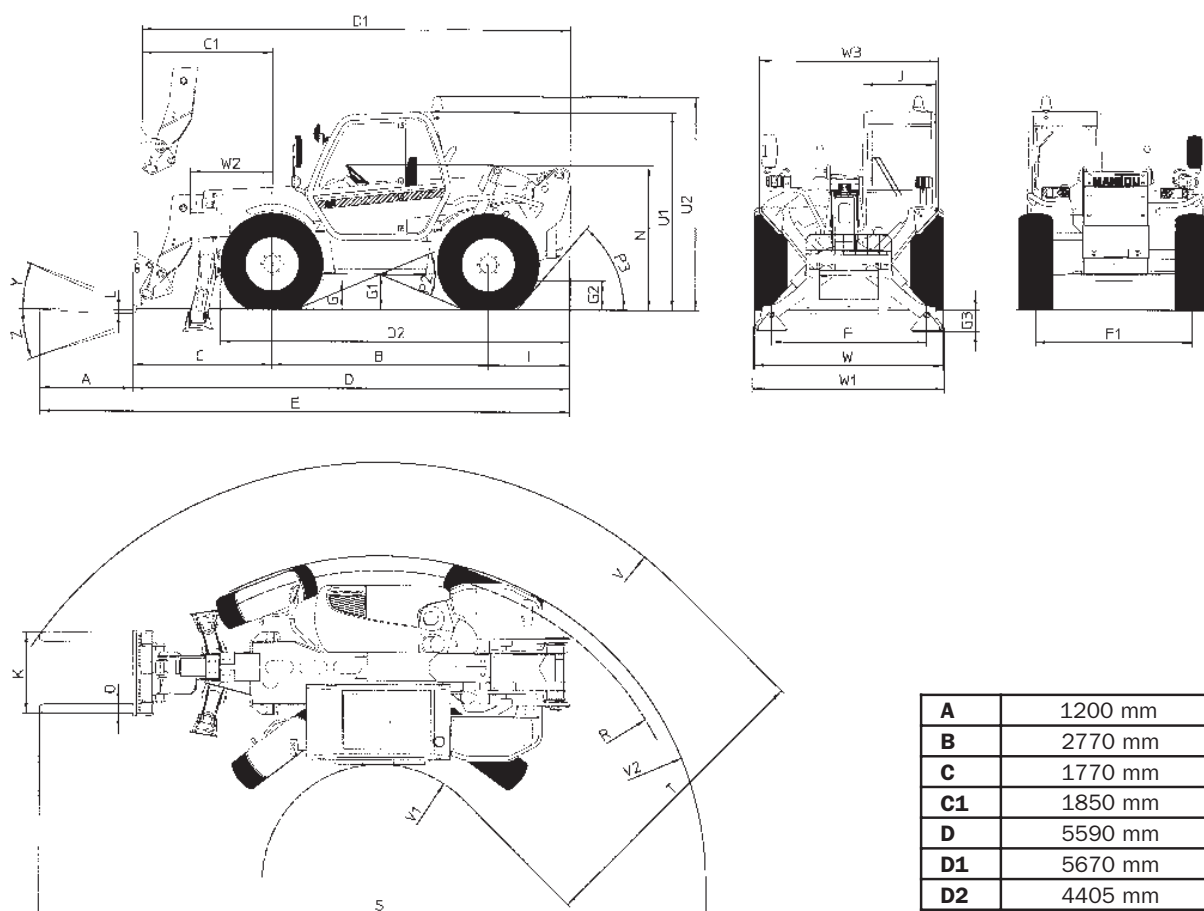
WITH SINGLE CARRIAGE



WITH SINGLE SIDE-SHIFT CARRIAGE

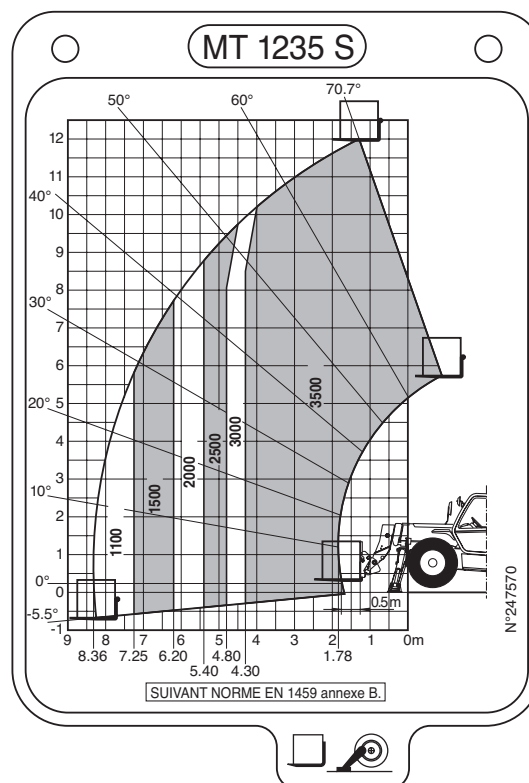
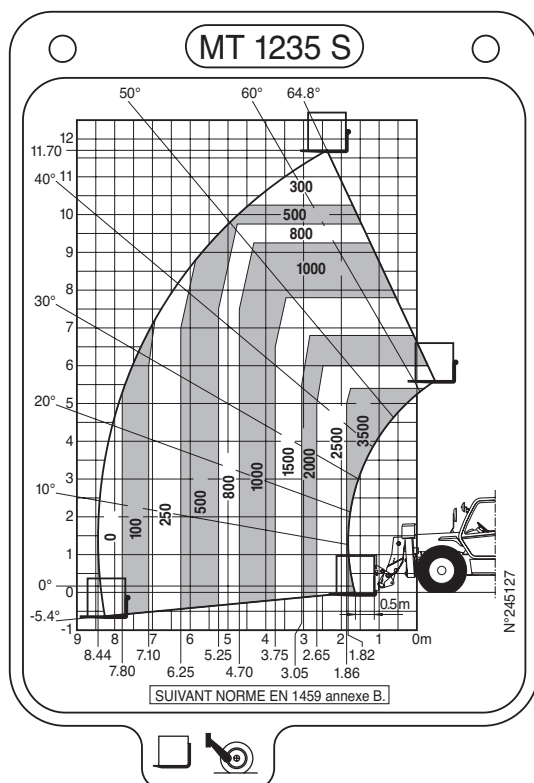


DIMENSIONS AND LOAD CHART MT 1235 S Turbo Série 3-E2

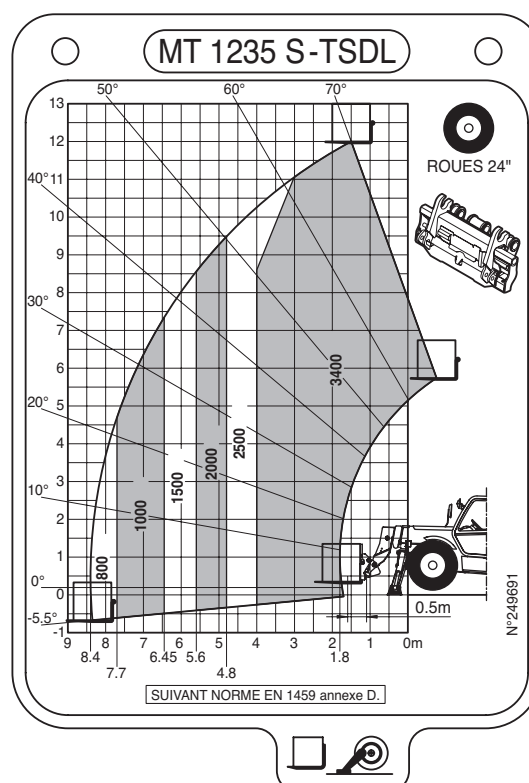
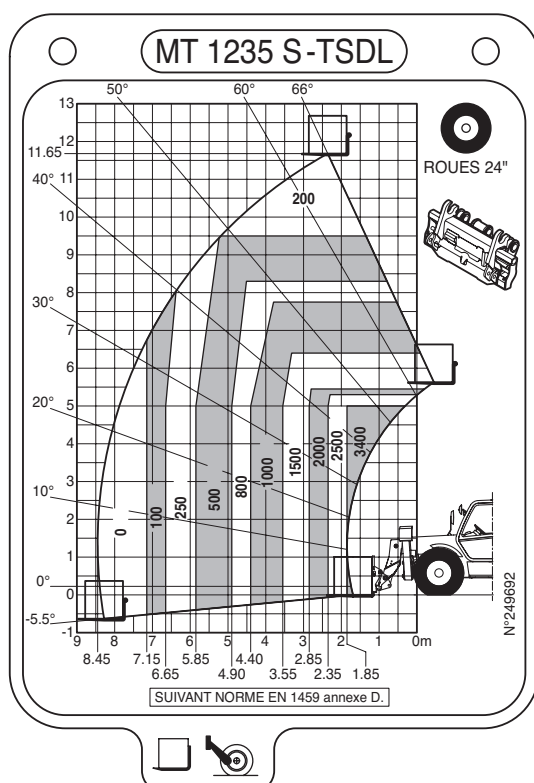


A	1200 mm
B	2770 mm
C	1770 mm
C1	1850 mm
D	5590 mm
D1	5670 mm
D2	4405 mm
E	6790 mm
F	1990 mm
F1	1990 mm
G	450 mm
G1	445 mm
G2	450 mm
G3	275 mm
I	1050 mm
J	950 mm
K	1040 mm
L	45 mm
N	1850 mm
O	125 mm
P2	43,5 °
P3	40 °
R	3950 mm
S	8513 mm
T	3920 mm
U1	2575 mm
U2	2755 mm
V	5390 mm
V1	1470 mm
V2	4158 mm
W	2405 mm
W1	2320 mm
W2	1125 mm
W3	2035 mm
Y	12 °
Z	112 °

WITH SINGLE CARRIAGE

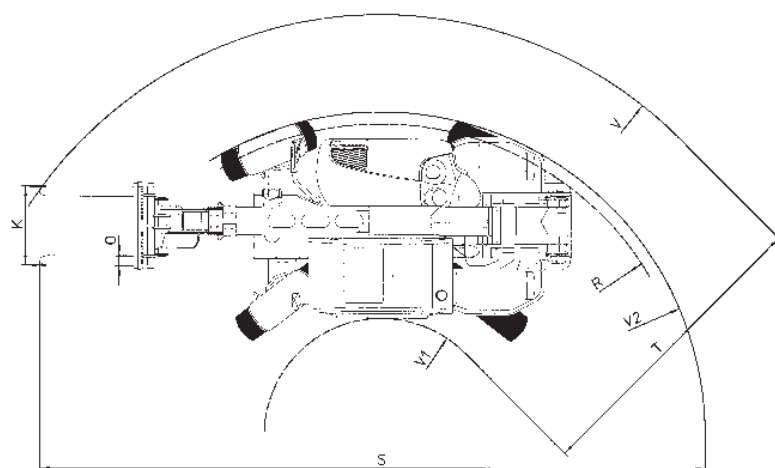
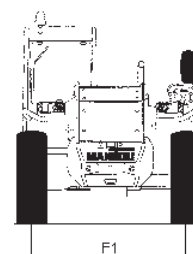
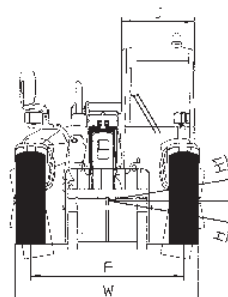
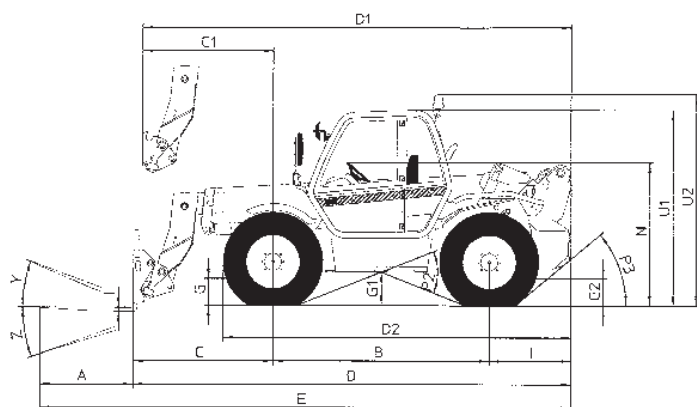


WITH SINGLE SIDE-SHIFT CARRIAGE

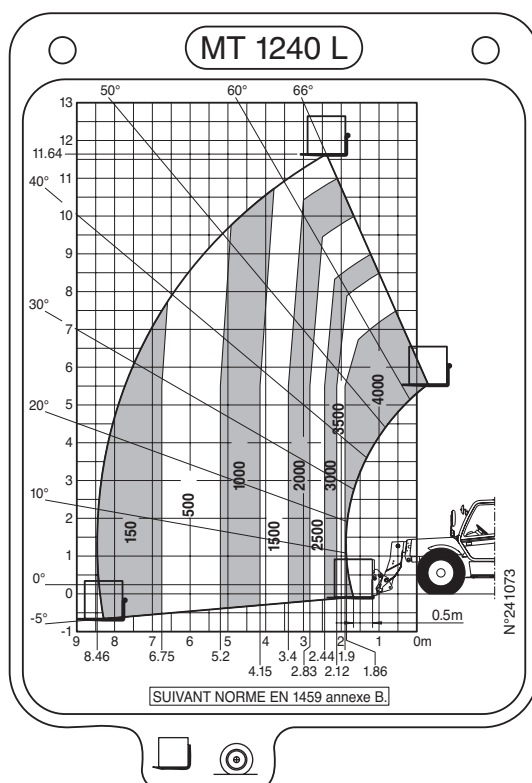


DIMENSIONS AND LOAD CHART

MT 1240 L Turbo Série 3-E2



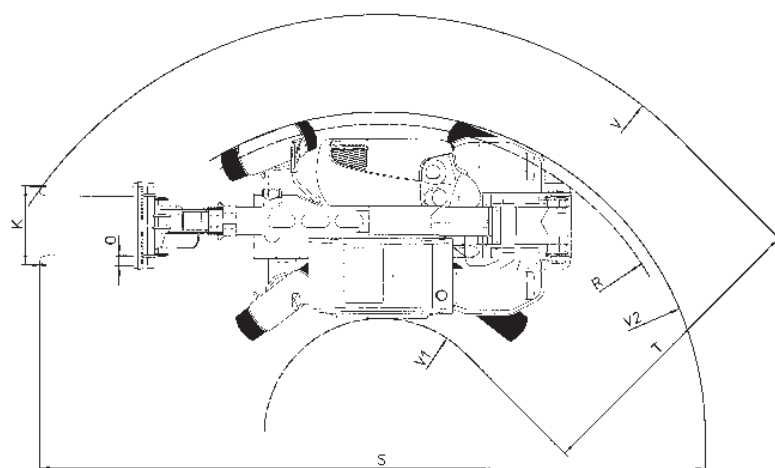
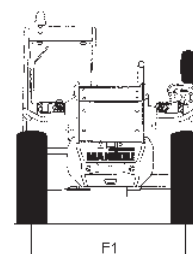
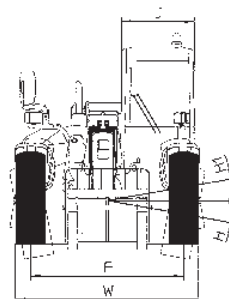
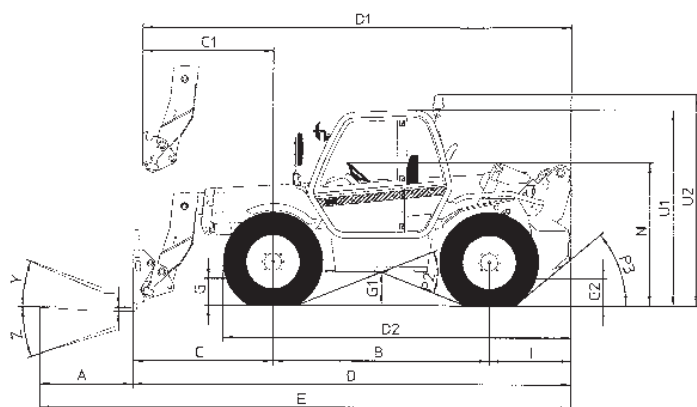
WITH SINGLE CARRIAGE



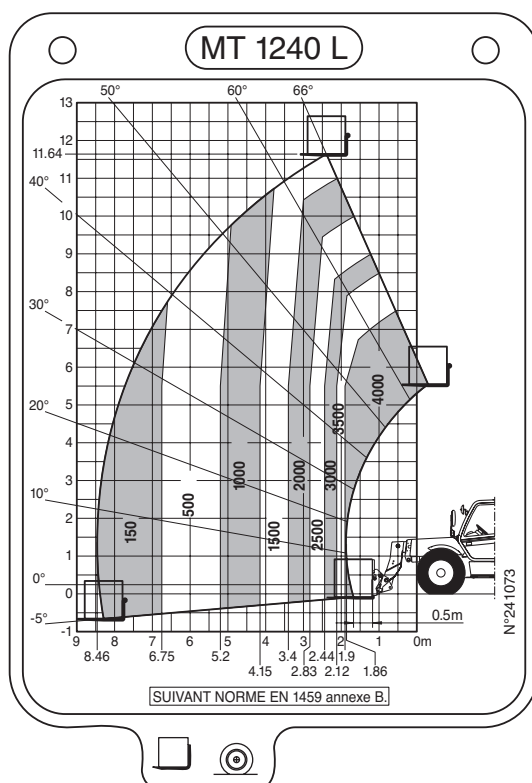
A	1200 mm
B	2770 mm
C	1785 mm
C1	1850 mm
D	5605 mm
D1	5670 mm
D2	4420 mm
E	6805 mm
F	1990 mm
F1	1990 mm
G	465 mm
G1	460 mm
G2	465 mm
H	10 °
H1	10 °
I	1050 mm
J	950 mm
K	1040 mm
L	50 mm
N	1865 mm
O	125 mm
P2	43,5 °
P3	40 °
R	3950 mm
S	8520 mm
T	3932 mm
U1	2590 mm
U2	2770 mm
V	5402 mm
V1	1470 mm
V2	4150 mm
W	2390 mm
Y	12 °
Z	112 °

DIMENSIONS AND LOAD CHART

MT 1240 L Turbo ULTRA Série 3-E2

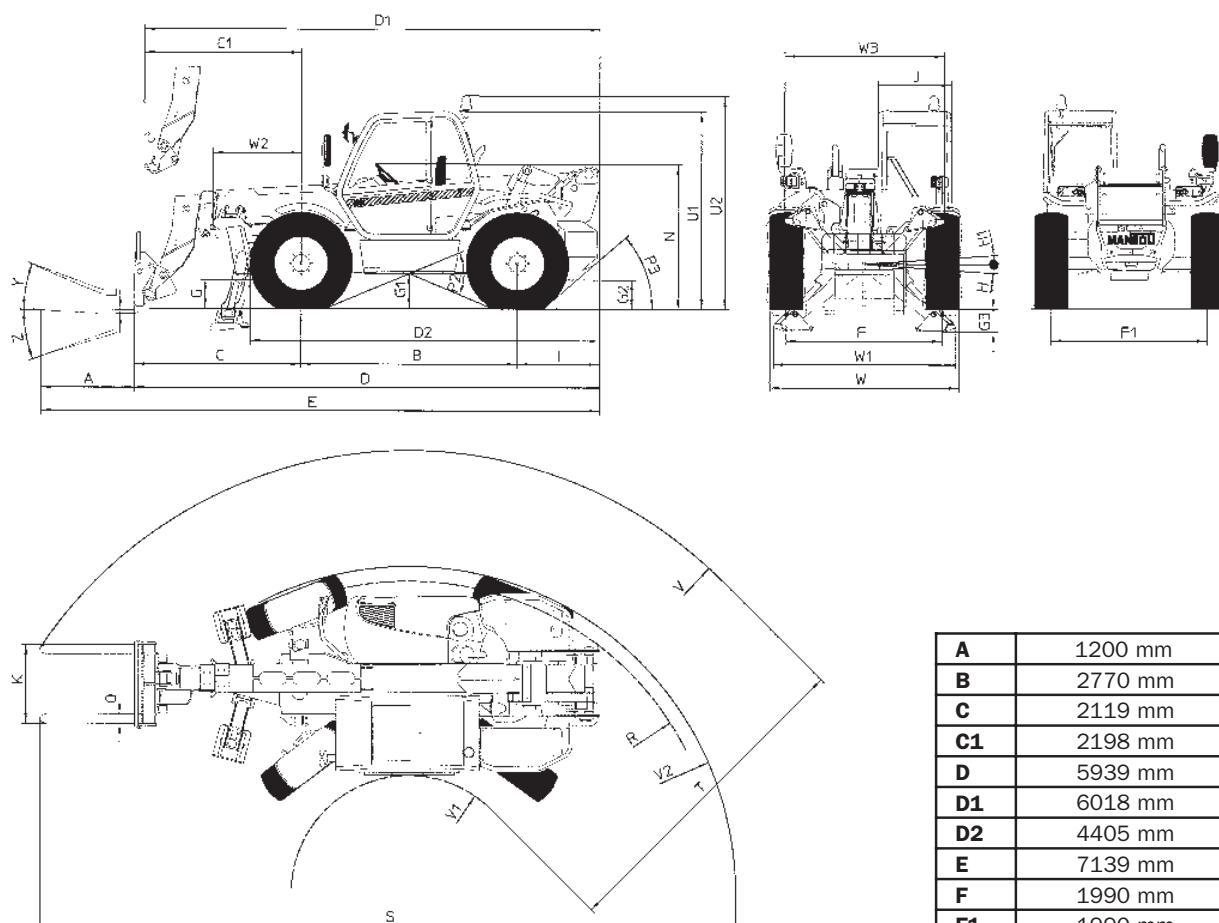


WITH SINGLE CARRIAGE



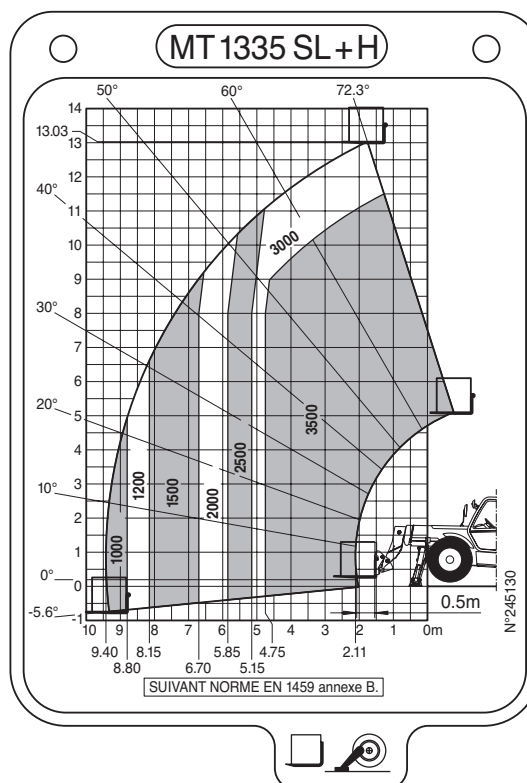
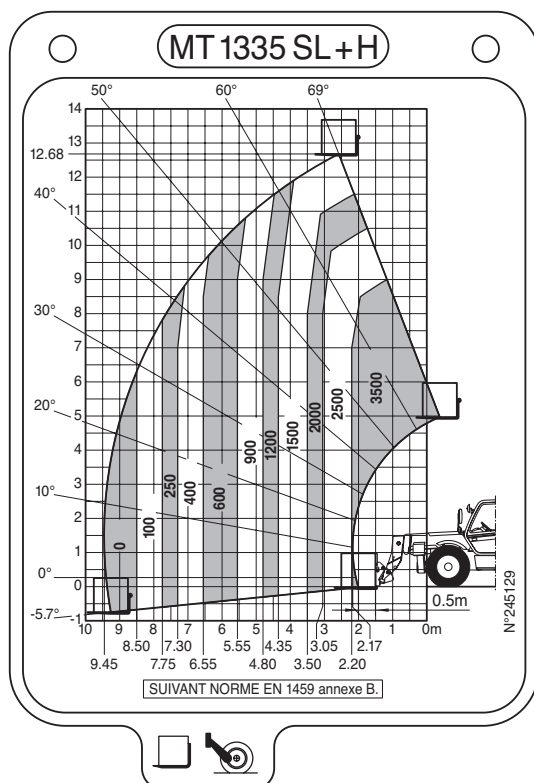
A	1200 mm
B	2770 mm
C	1785 mm
C1	1850 mm
D	5605 mm
D1	5670 mm
D2	4420 mm
E	6805 mm
F	1990 mm
F1	1990 mm
G	465 mm
G1	460 mm
G2	465 mm
H	10 °
H1	10 °
I	1050 mm
J	950 mm
K	1040 mm
L	50 mm
N	1875/1925 mm
O	125 mm
P2	43,5 °
P3	40 °
R	3950 mm
S	8520 mm
T	3932 mm
U1	2590 mm
U2	2770 mm
V	5402 mm
V1	1470 mm
V2	4150 mm
W	2390 mm
Y	12 °
Z	112 °

DIMENSIONS AND LOAD CHART MT 1335 SL Série 3-E2

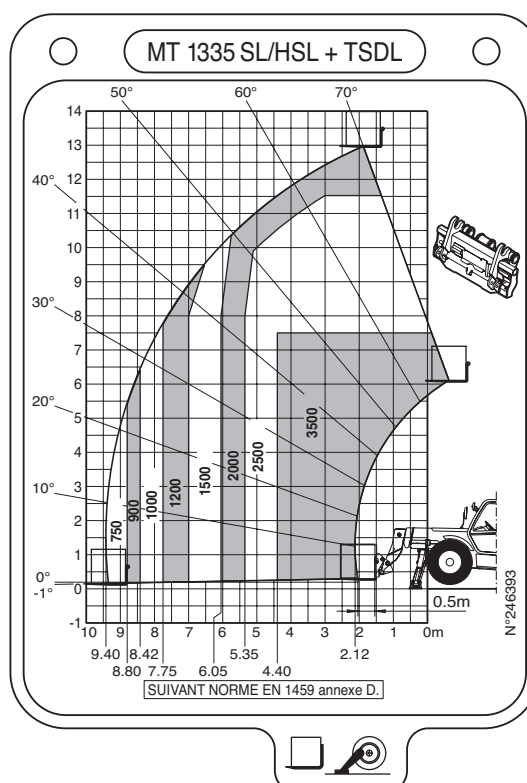
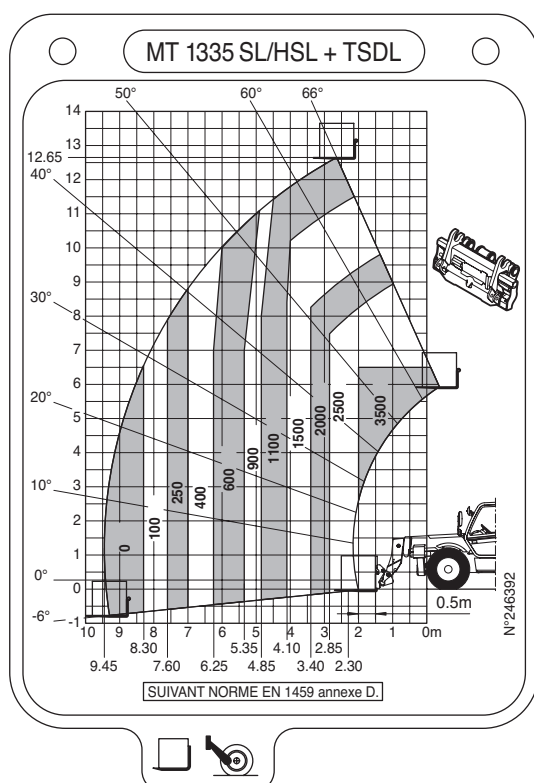


A	1200 mm
B	2770 mm
C	2119 mm
C1	2198 mm
D	5939 mm
D1	6018 mm
D2	4405 mm
E	7139 mm
F	1990 mm
F1	1990 mm
G	450 mm
G1	445 mm
G2	450 mm
G3	275 mm
H	7 °
H1	7 °
I	1050 mm
J	950 mm
K	1040 mm
L	45 mm
N	1850 mm
O	125 mm
P2	43,5 °
P3	40 °
R	3950 mm
S	8862 mm
T	4205 mm
U1	2575 mm
U2	2755 mm
V	5675 mm
V1	1470 mm
V2	4158 mm
W	2405 mm
W1	2320 mm
W2	1125 mm
W3	2035 mm
Y	12 °
Z	112 °

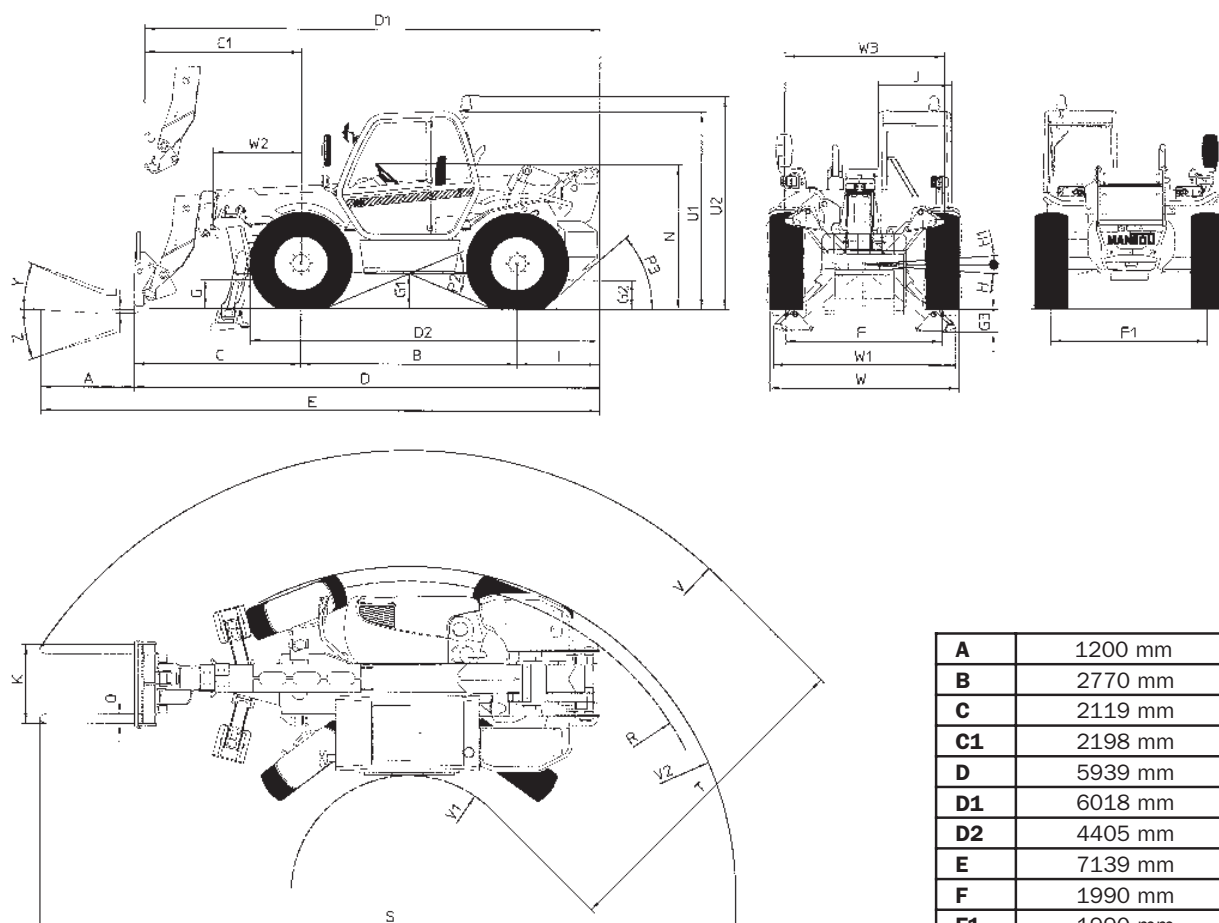
WITH SINGLE CARRIAGE



WITH SINGLE SIDE-SHIFT CARRIAGE

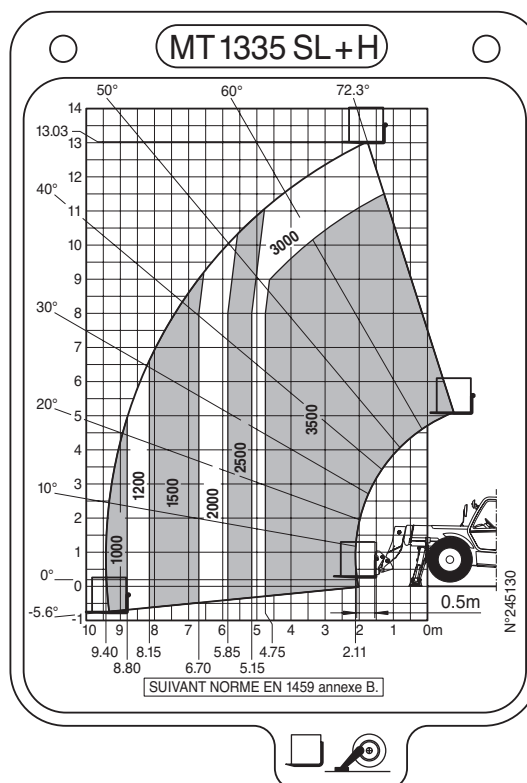
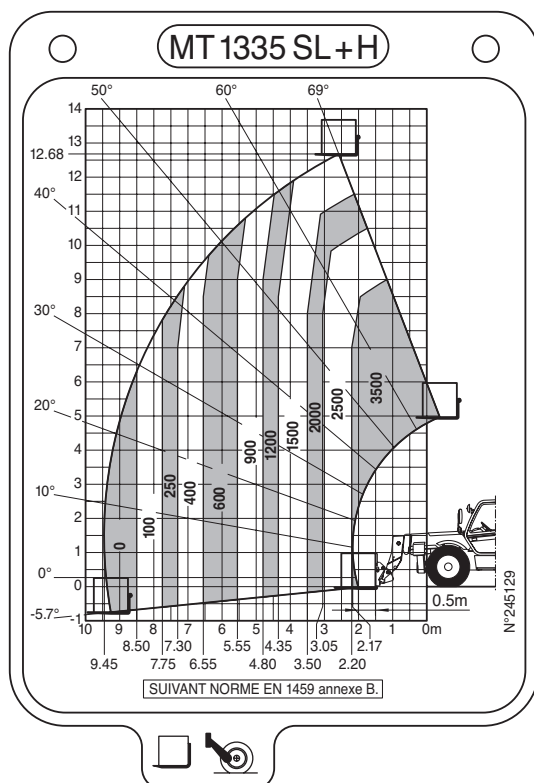


DIMENSIONS AND LOAD CHART MT 1335 SL Turbo Série 3-E2

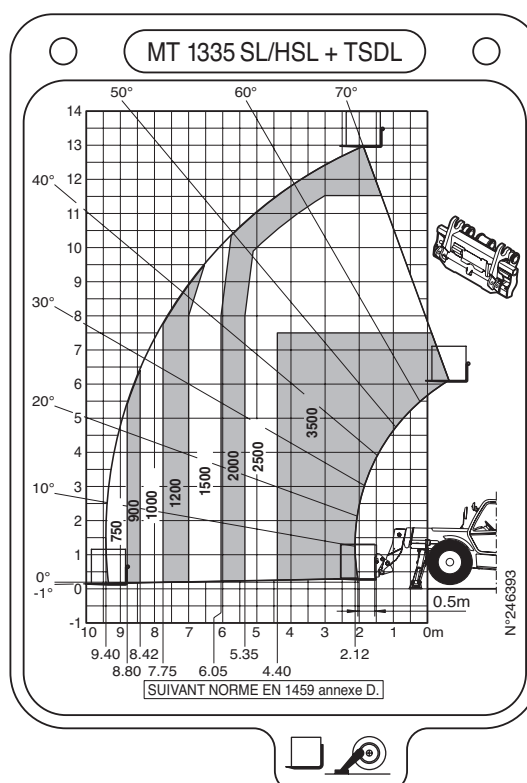
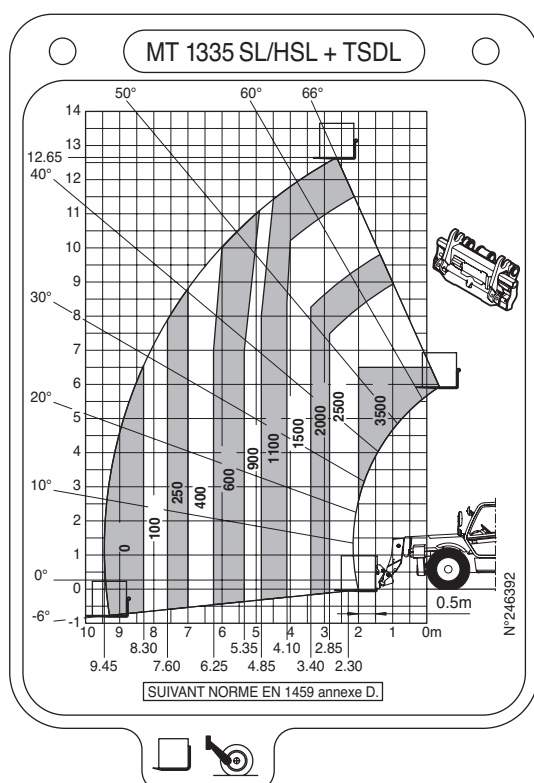


A	1200 mm
B	2770 mm
C	2119 mm
C1	2198 mm
D	5939 mm
D1	6018 mm
D2	4405 mm
E	7139 mm
F	1990 mm
F1	1990 mm
G	450 mm
G1	445 mm
G2	450 mm
G3	275 mm
H	7 °
H1	7 °
I	1050 mm
J	950 mm
K	1040 mm
L	45 mm
N	1850 mm
O	125 mm
P2	43,5 °
P3	40 °
R	3950 mm
S	8862 mm
T	4205 mm
U1	2575 mm
U2	2755 mm
V	5675 mm
V1	1470 mm
V2	4158 mm
W	2405 mm
W1	2320 mm
W2	1125 mm
W3	2035 mm
Y	12 °
Z	112 °

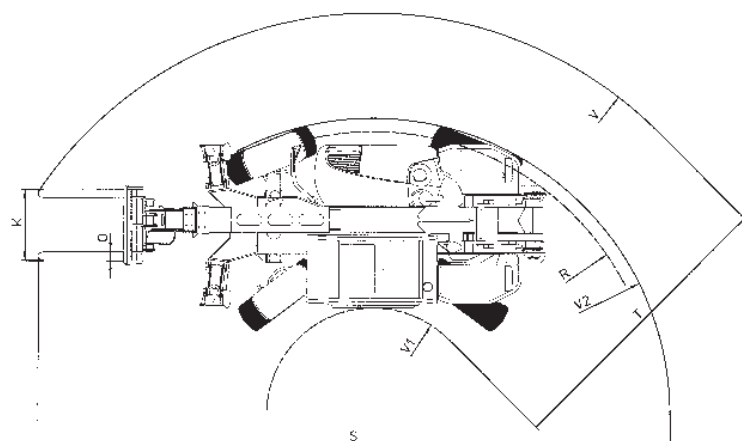
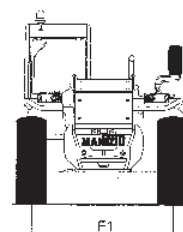
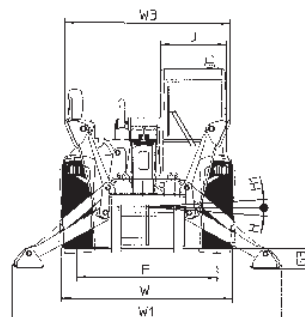
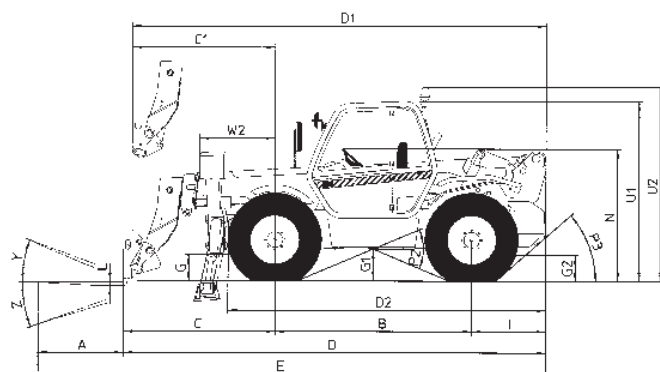
WITH SINGLE CARRIAGE



WITH SINGLE SIDE-SHIFT CARRIAGE

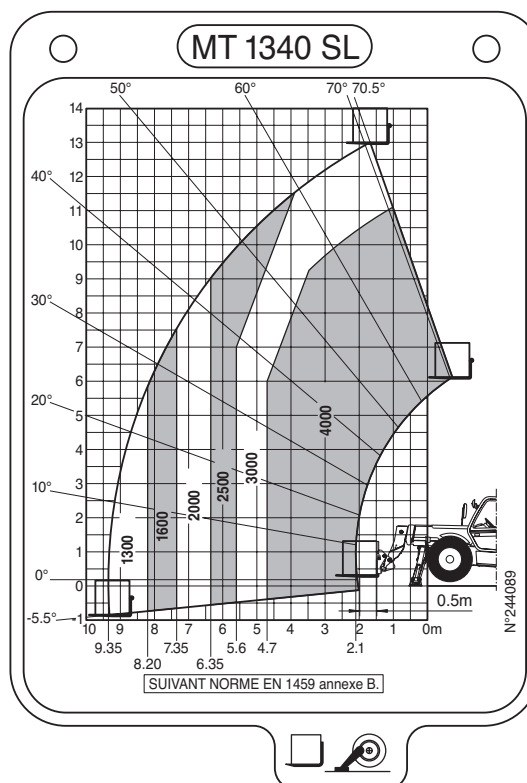
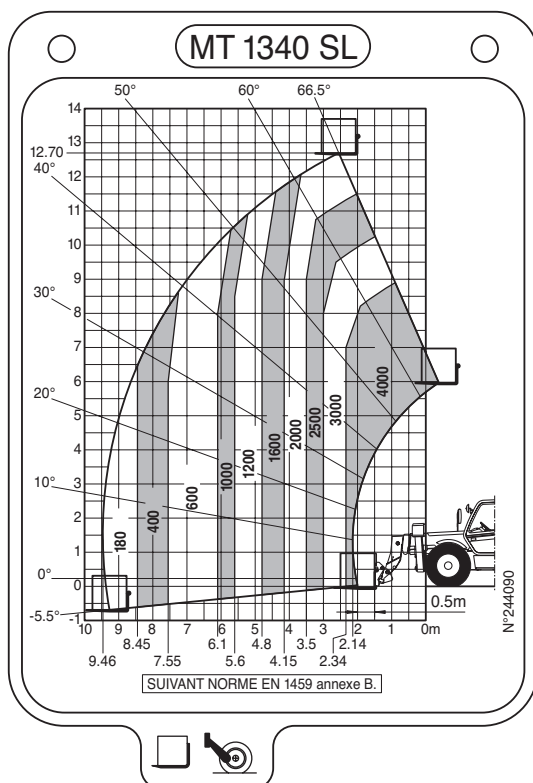


DIMENSIONS AND LOAD CHART MT 1340 SL Turbo Série 3-E2

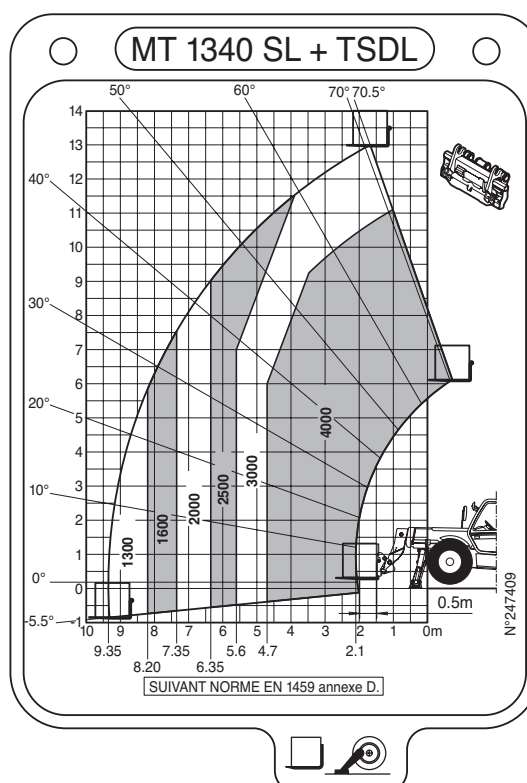
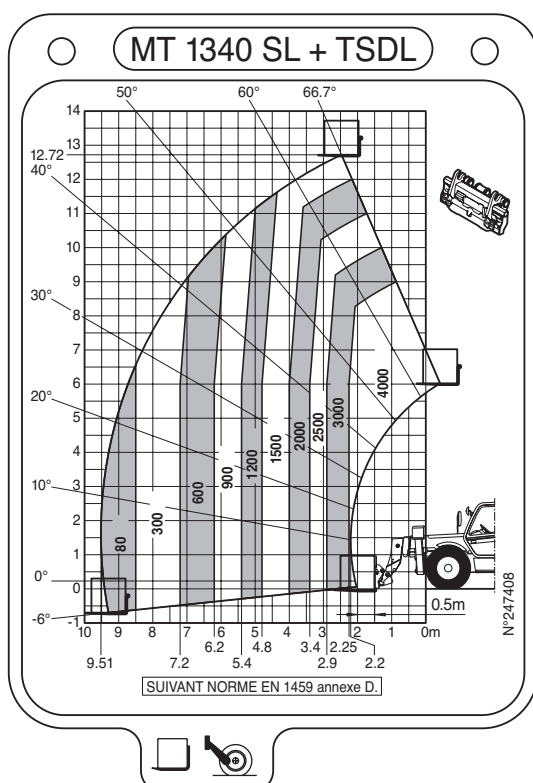


A	1200 mm
B	2770 mm
C	2134 mm
C1	2198 mm
D	5954 mm
D1	6018 mm
D2	4435 mm
E	7154 mm
F	1990 mm
F1	1990 mm
G	480 mm
G1	475 mm
G2	480 mm
G3	290 mm
H	7 °
H1	7 °
I	1050 mm
J	950 mm
K	1040 mm
L	50 mm
N	1880 mm
O	125 mm
P2	45,5 °
P3	50 °
R	3950 mm
S	8887 mm
T	4220 mm
U1	2605 mm
U2	2785 mm
V	5690 mm
V1	1470 mm
V2	4168 mm
W	2425 mm
W1	3820 mm
W2	1050 mm
W3	2350 mm
Y	12 °
Z	112 °

WITH SINGLE CARRIAGE

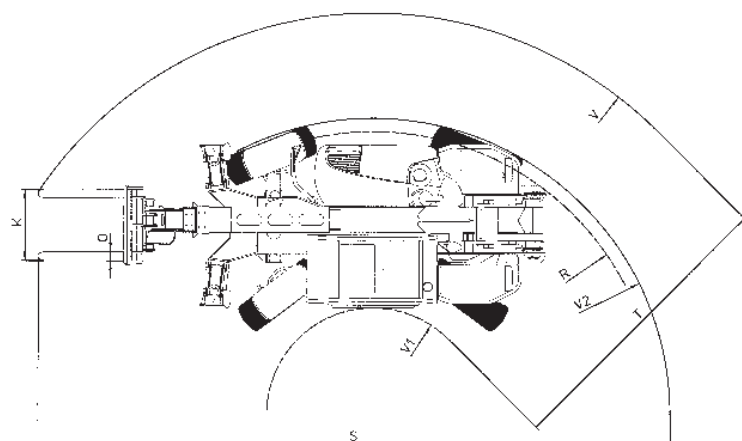
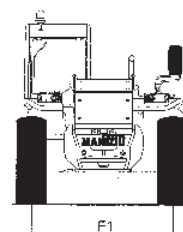
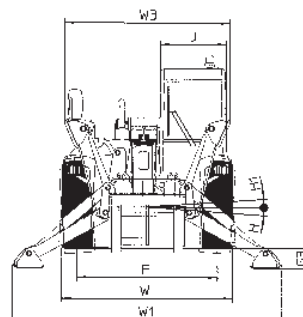
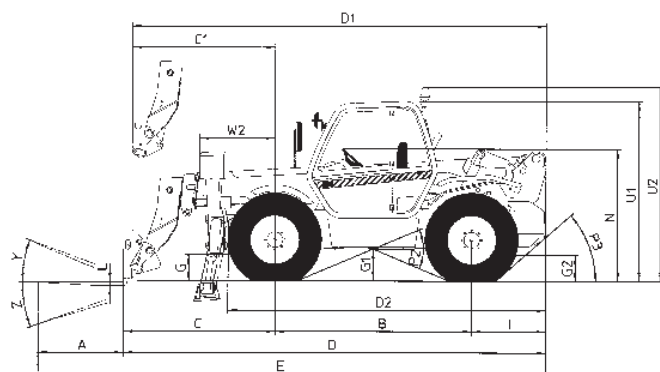


WITH SINGLE SIDE-SHIFT CARRIAGE



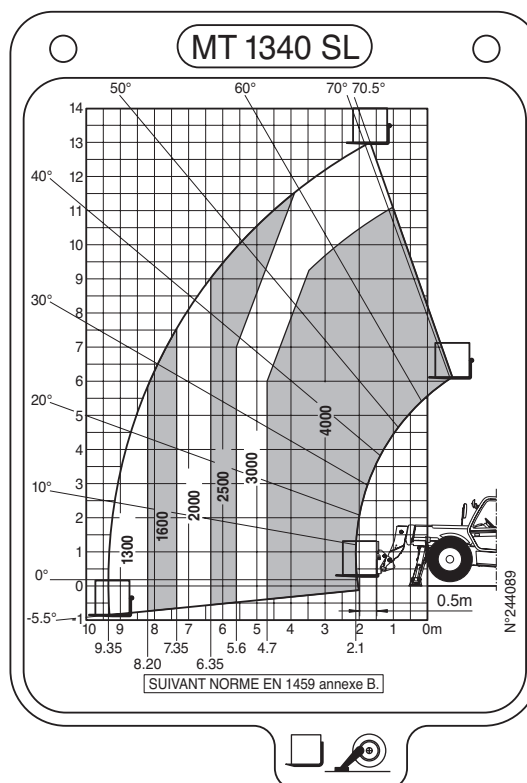
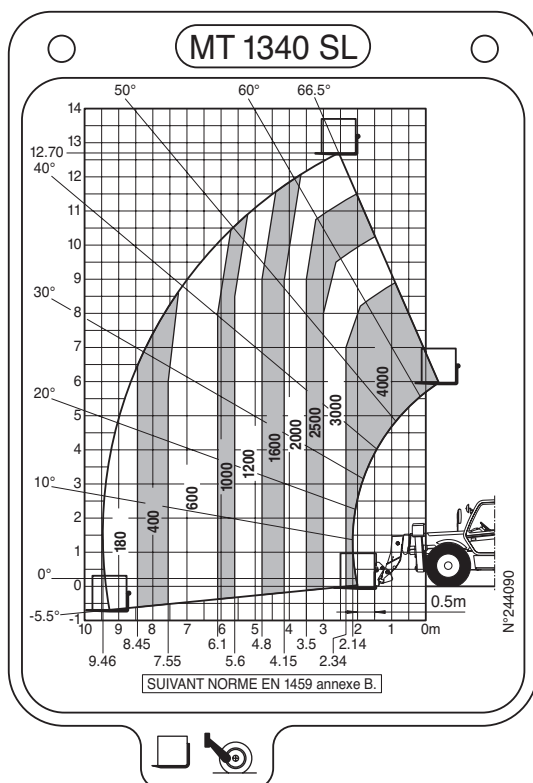
DIMENSIONS AND LOAD CHART

MT 1340 SL Turbo ULTRA Série 3-E2

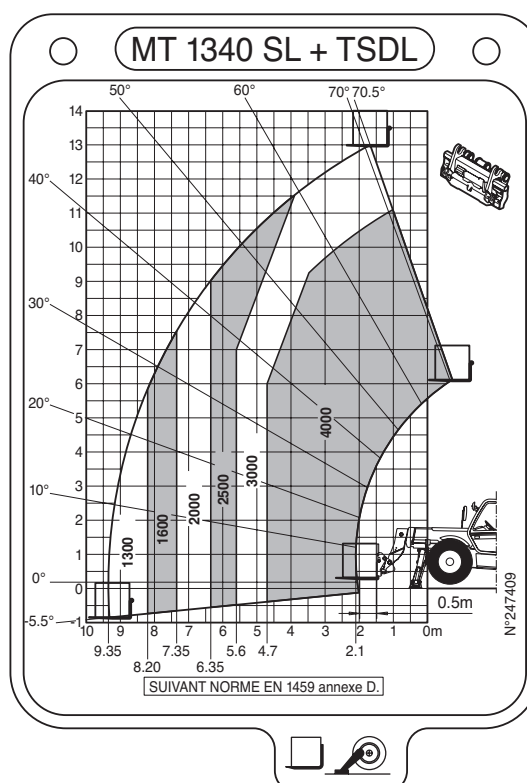
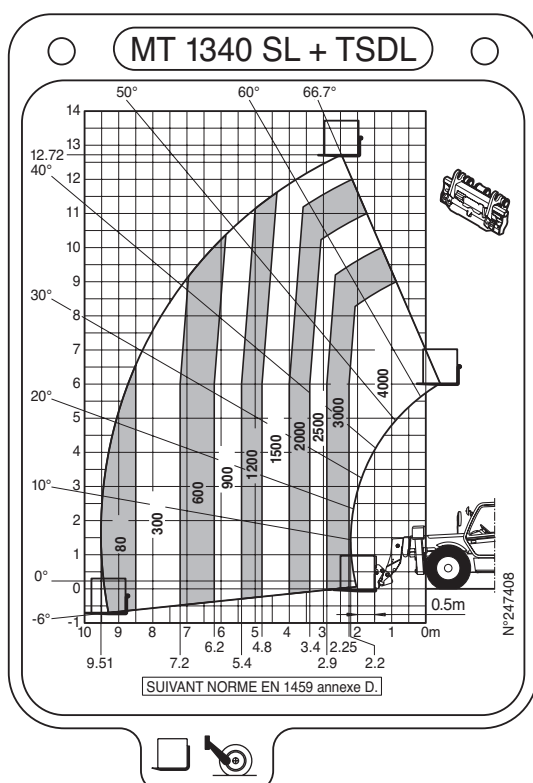


A	1200 mm
B	2770 mm
C	2134 mm
C1	2198 mm
D	5954 mm
D1	6018 mm
D2	4435 mm
E	7154 mm
F	1990 mm
F1	1990 mm
G	480 mm
G1	475 mm
G2	480 mm
G3	290 mm
H	7 °
H1	7 °
I	1050 mm
J	950 mm
K	1040 mm
L	50 mm
N	1890/1940 mm
O	125 mm
P2	45,5 °
P3	50 °
R	3950 mm
S	8887 mm
T	4220 mm
U1	2605 mm
U2	2785 mm
V	5690 mm
V1	1470 mm
V2	4168 mm
W	2425 mm
W1	3820 mm
W2	1050 mm
W3	2350 mm
Y	12 °
Z	112 °

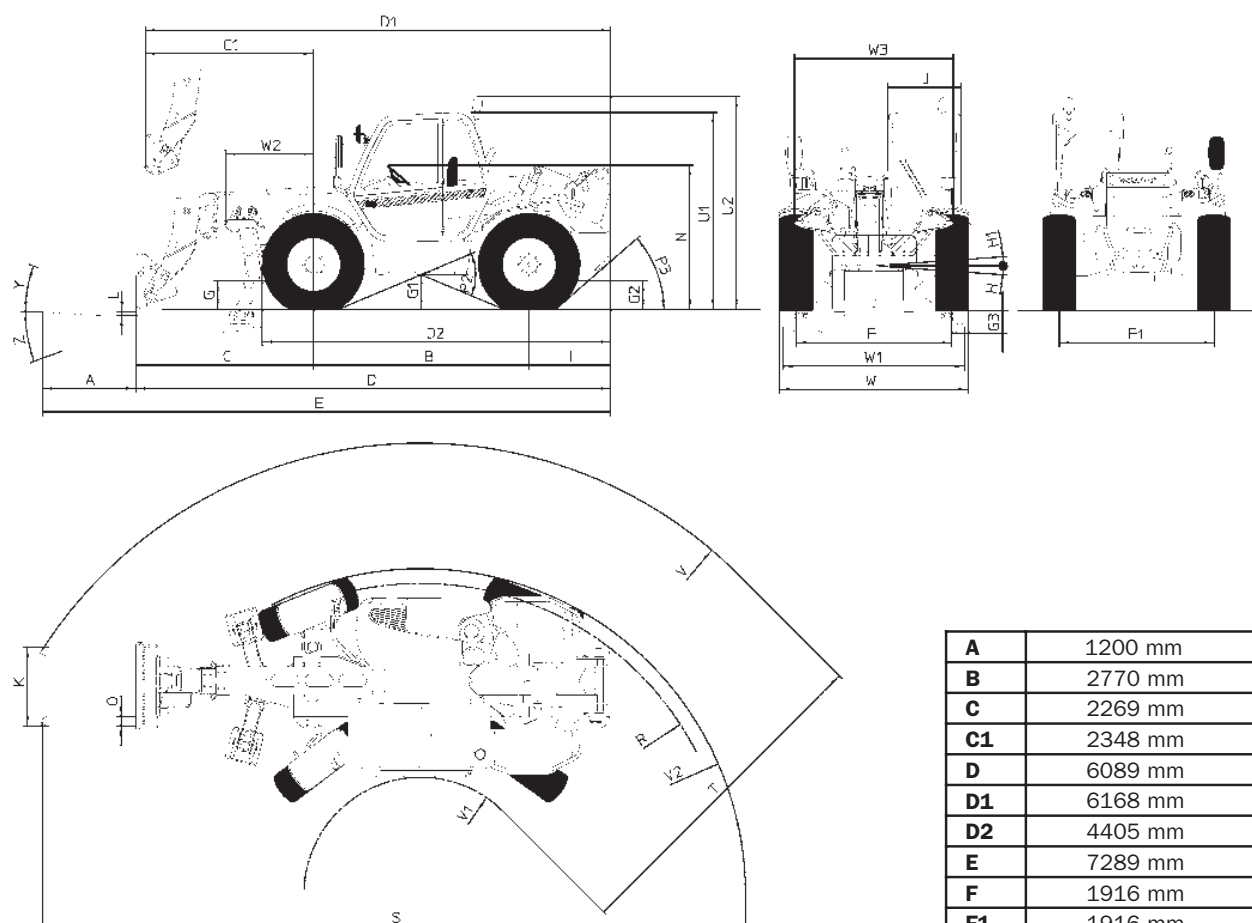
WITH SINGLE CARRIAGE



WITH SINGLE SIDE-SHIFT CARRIAGE

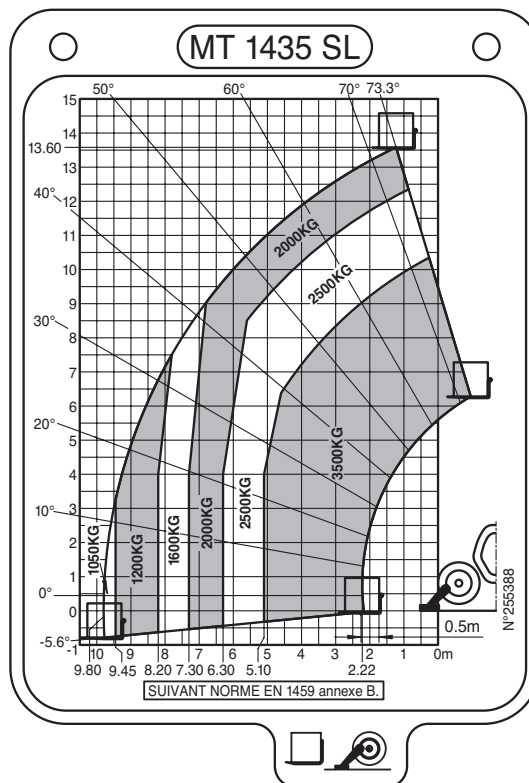
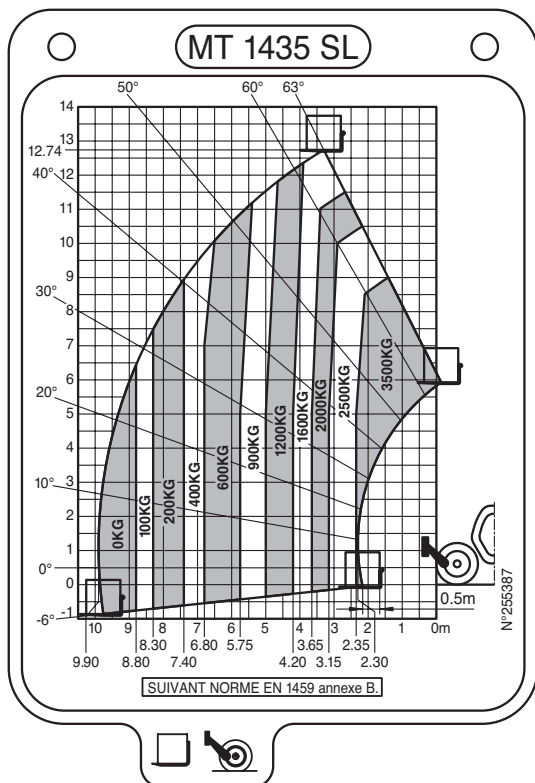


DIMENSIONS AND LOAD CHART MT 1435 SL Série 3-E2

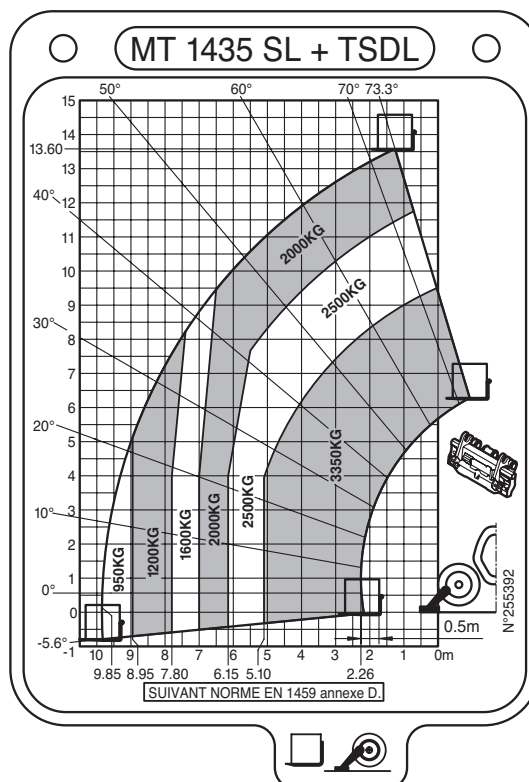
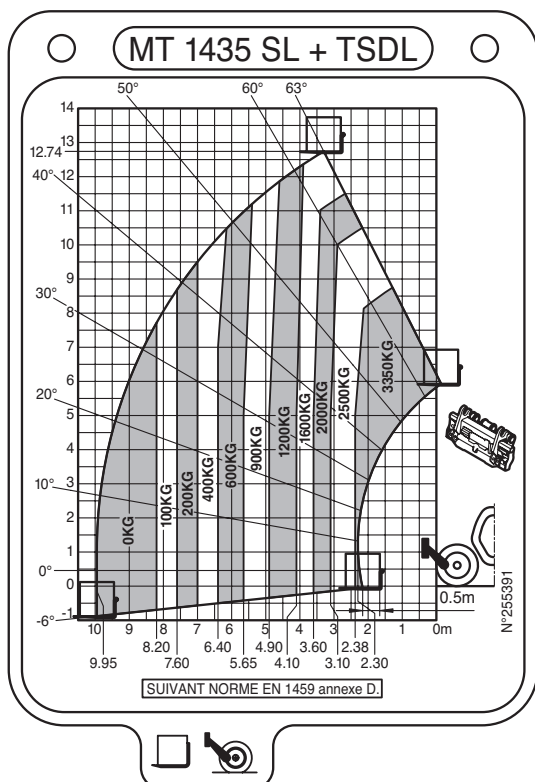


A	1200 mm
B	2770 mm
C	2269 mm
C1	2348 mm
D	6089 mm
D1	6168 mm
D2	4405 mm
E	7289 mm
F	1916 mm
F1	1916 mm
G	450 mm
G1	445 mm
G2	450 mm
G3	275 mm
H	7 °
H1	7 °
I	1050 mm
J	950 mm
K	1040 mm
L	45 mm
N	1850 mm
O	125 mm
P2	43,5 °
P3	40 °
R	3950 mm
S	9010 mm
T	4355 mm
U1	2575 mm
U2	2755 mm
V	5825 mm
V1	1470 mm
V2	4157 mm
W	2330 mm
W1	2320 mm
W2	1125 mm
W3	2035 mm
Y	12 °
Z	112 °

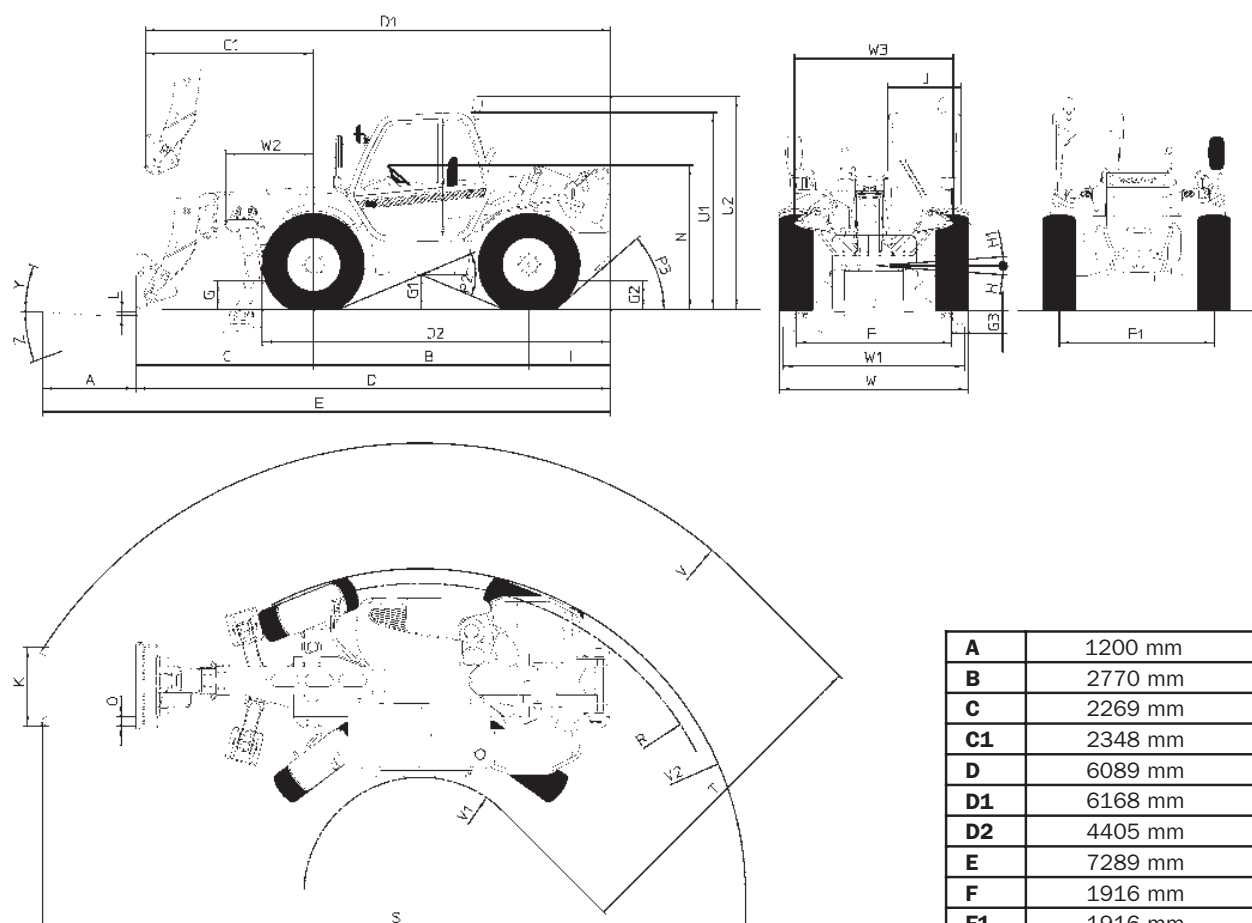
WITH SINGLE CARRIAGE



WITH SINGLE SIDE-SHIFT CARRIAGE

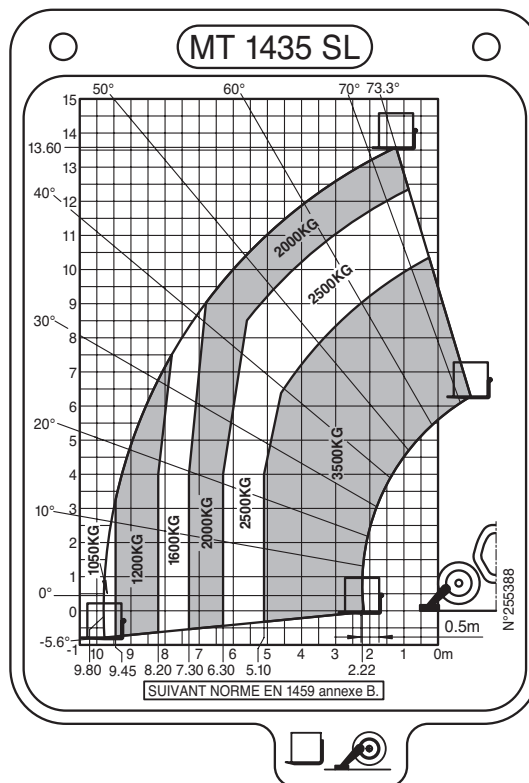
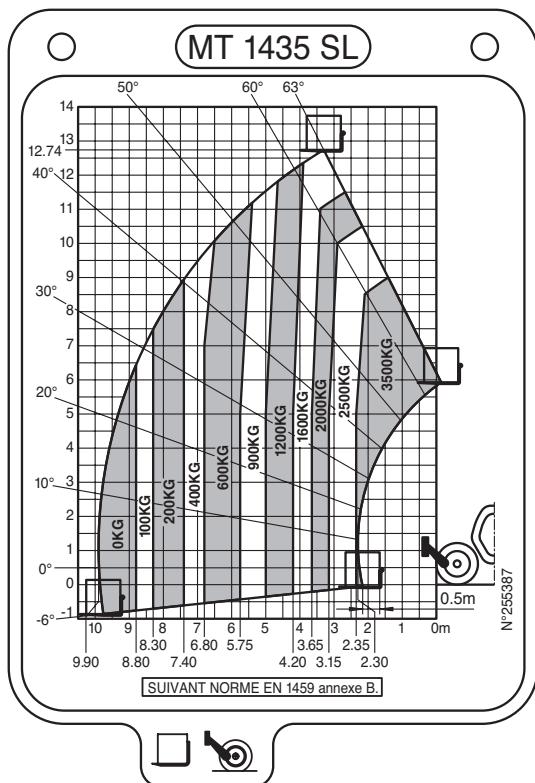


DIMENSIONS AND LOAD CHART MT 1435 SL Turbo Série 3-E2

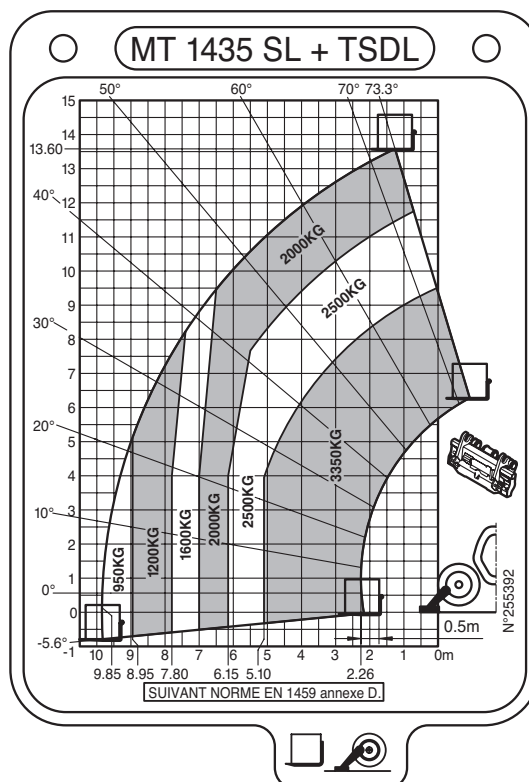
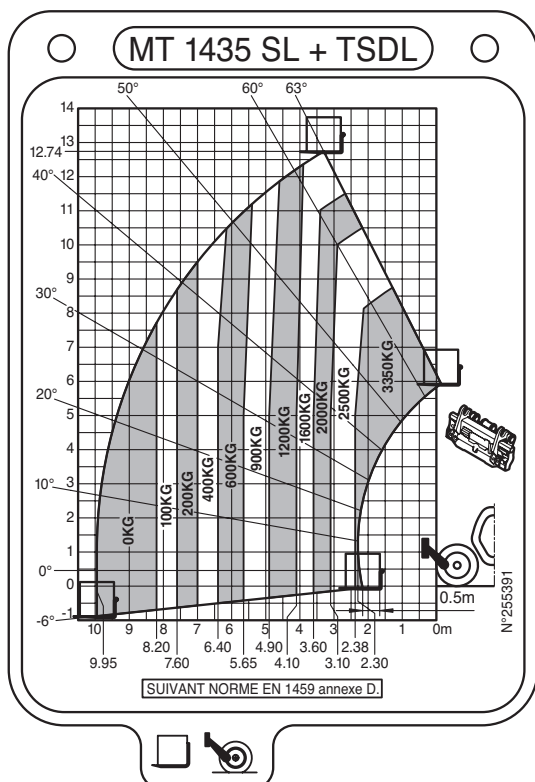


A	1200 mm
B	2770 mm
C	2269 mm
C1	2348 mm
D	6089 mm
D1	6168 mm
D2	4405 mm
E	7289 mm
F	1916 mm
F1	1916 mm
G	450 mm
G1	445 mm
G2	450 mm
G3	275 mm
H	7 °
H1	7 °
I	1050 mm
J	950 mm
K	1040 mm
L	45 mm
N	1850 mm
O	125 mm
P2	43,5 °
P3	40 °
R	3950 mm
S	9010 mm
T	4355 mm
U1	2575 mm
U2	2755 mm
V	5825 mm
V1	1470 mm
V2	4157 mm
W	2330 mm
W1	2320 mm
W2	1125 mm
W3	2035 mm
Y	12 °
Z	112 °

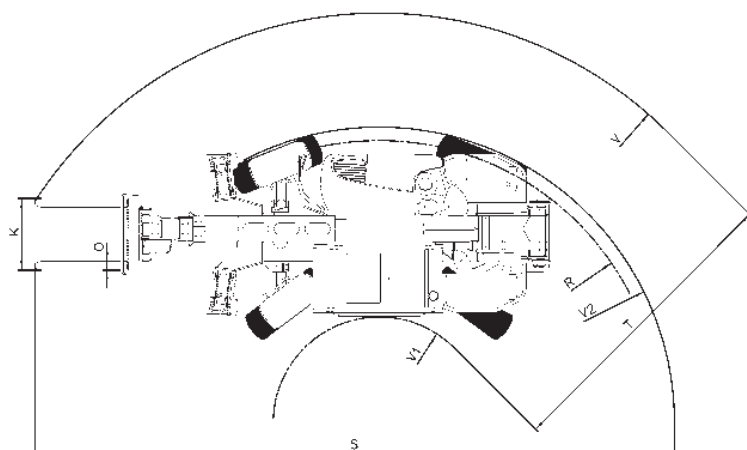
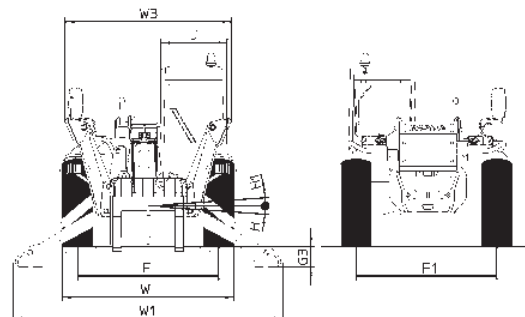
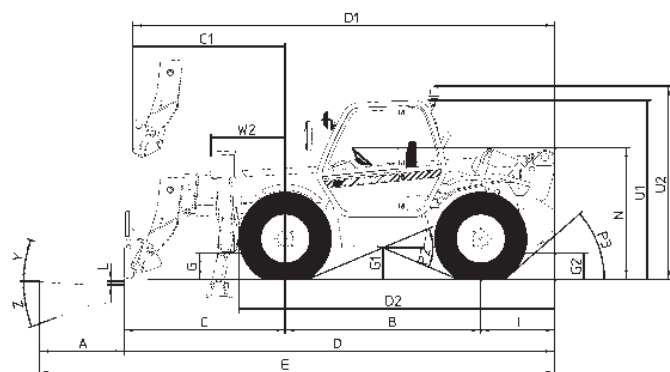
WITH SINGLE CARRIAGE



WITH SINGLE SIDE-SHIFT CARRIAGE

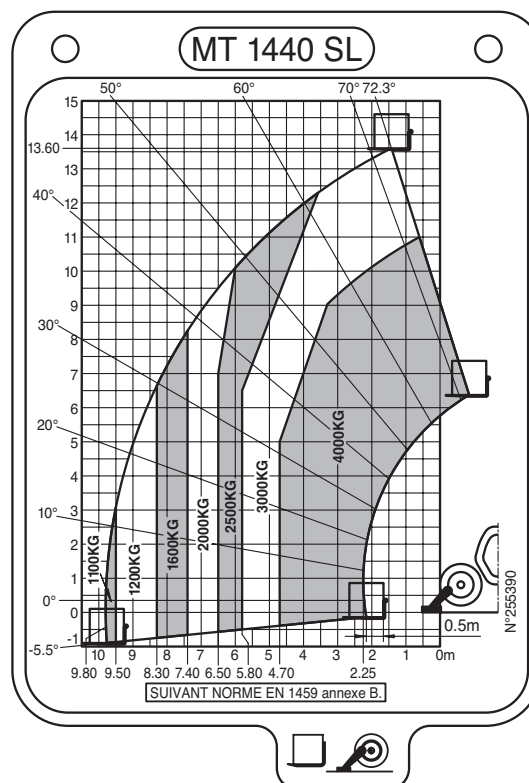
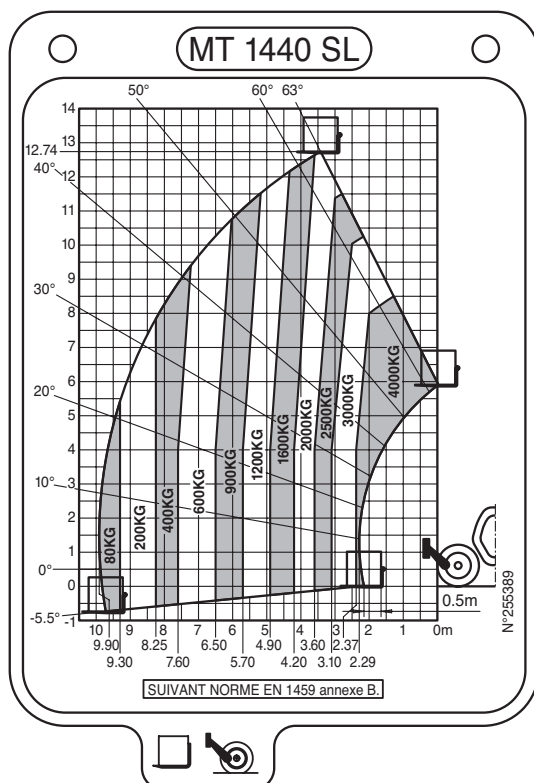


DIMENSIONS AND LOAD CHART MT 1440 SL Série 3-E2

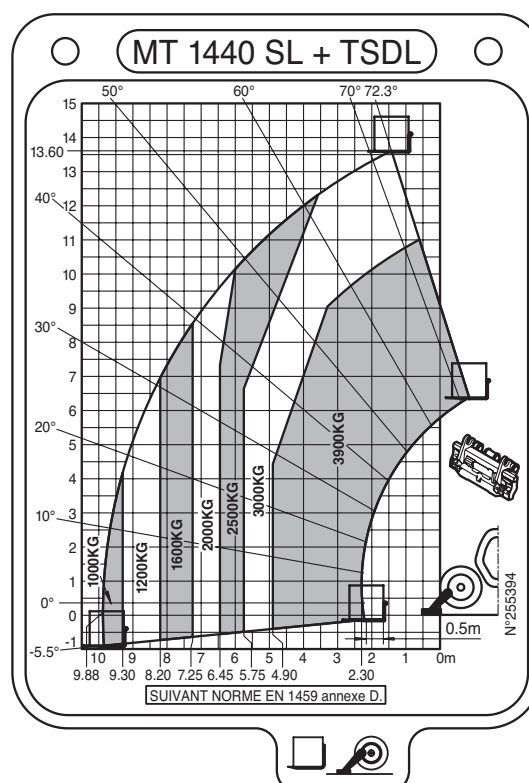
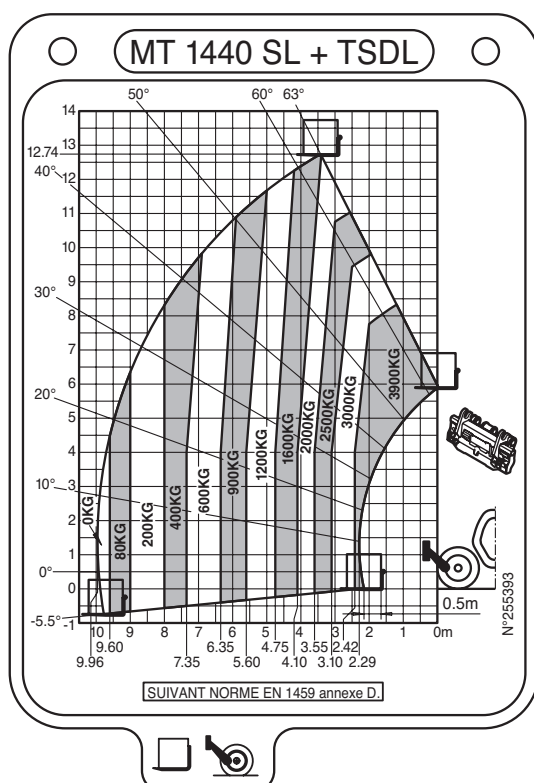


A	1200 mm
B	2770 mm
C	2270 mm
C1	2348 mm
D	6090 mm
D1	6168 mm
D2	4405 mm
E	7290 mm
F	1990 mm
F1	1990 mm
G	480 mm
G1	475 mm
G2	480 mm
G3	290 mm
H	7 °
H1	7 °
I	1050 mm
J	950 mm
K	1040 mm
L	50 mm
N	1880 mm
O	125 mm
P2	45,5 °
P3	50 °
R	3950 mm
S	9010 mm
T	4370 mm
U1	2605 mm
U2	2785 mm
V	5840 mm
V1	1470 mm
V2	4157 mm
W	2405 mm
W1	3820 mm
W2	1050 mm
W3	2350 mm
Y	12 °
Z	112 °

WITH SINGLE CARRIAGE

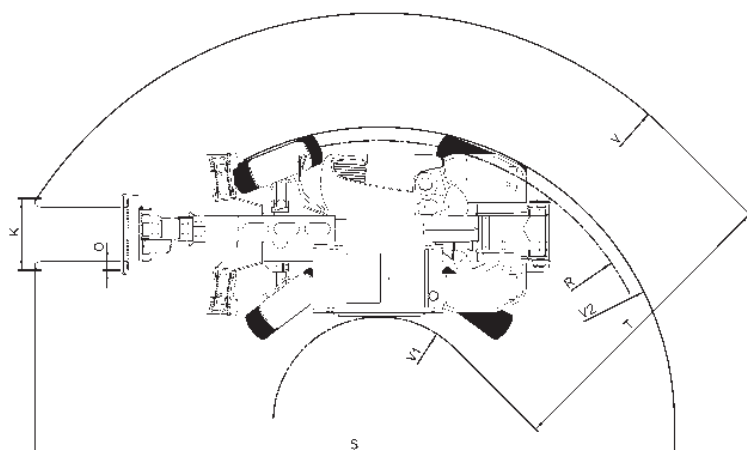
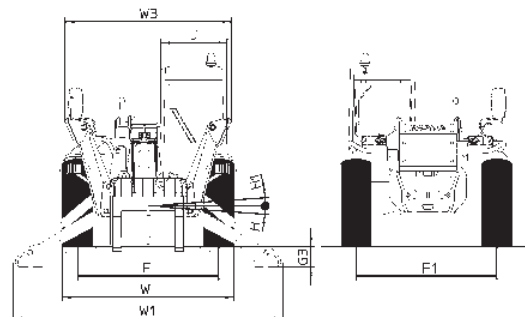
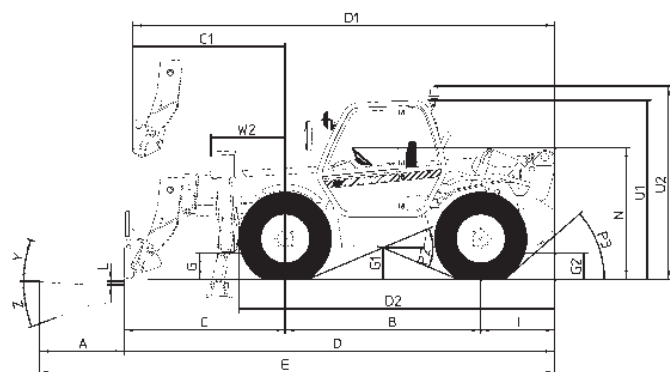


WITH SINGLE SIDE-SHIFT CARRIAGE



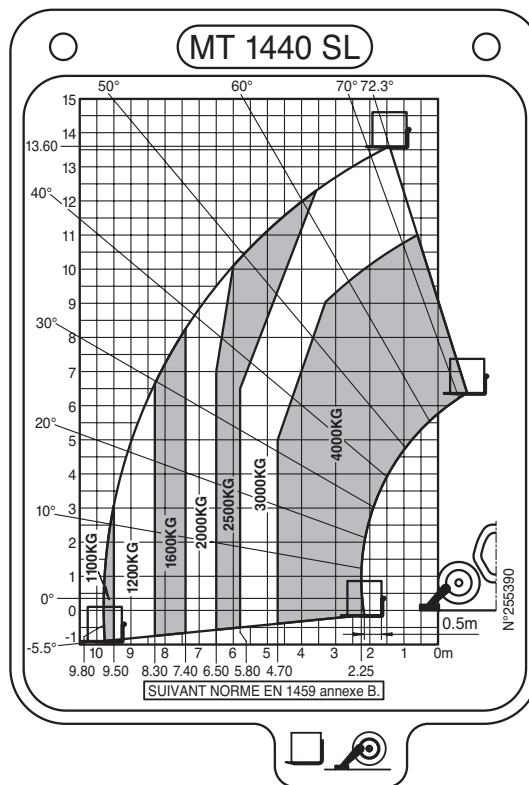
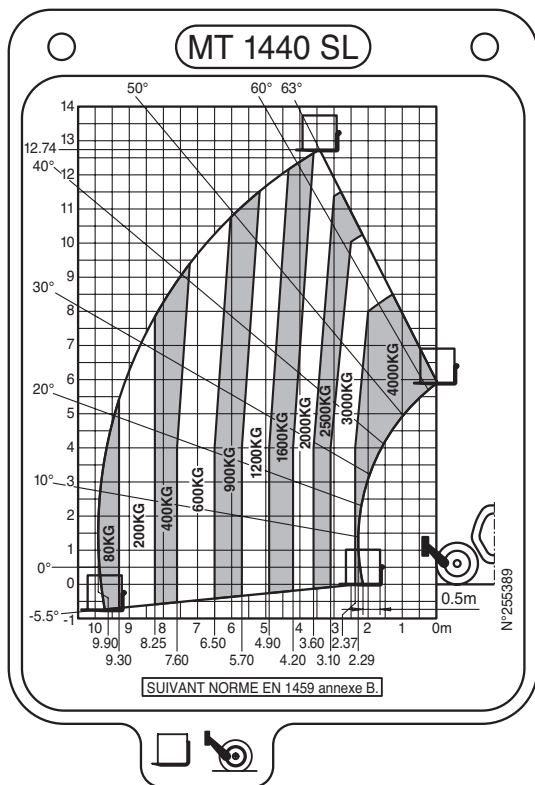
DIMENSIONS AND LOAD CHART

MT 1440 SL Turbo Série 3-E2

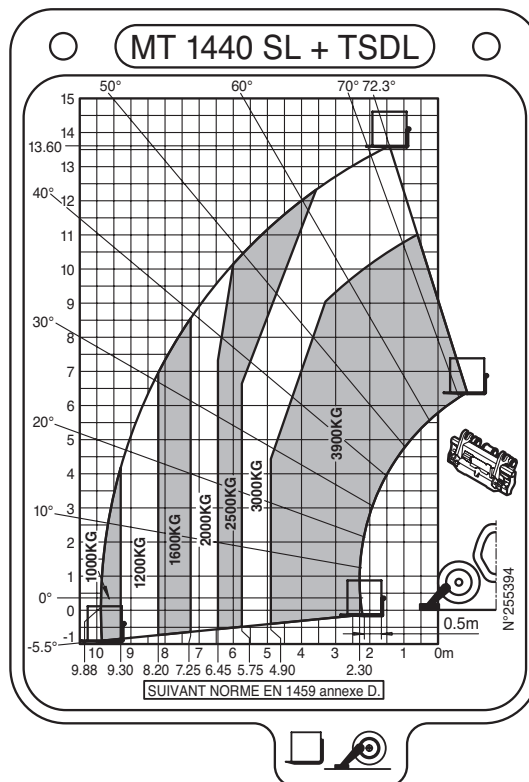
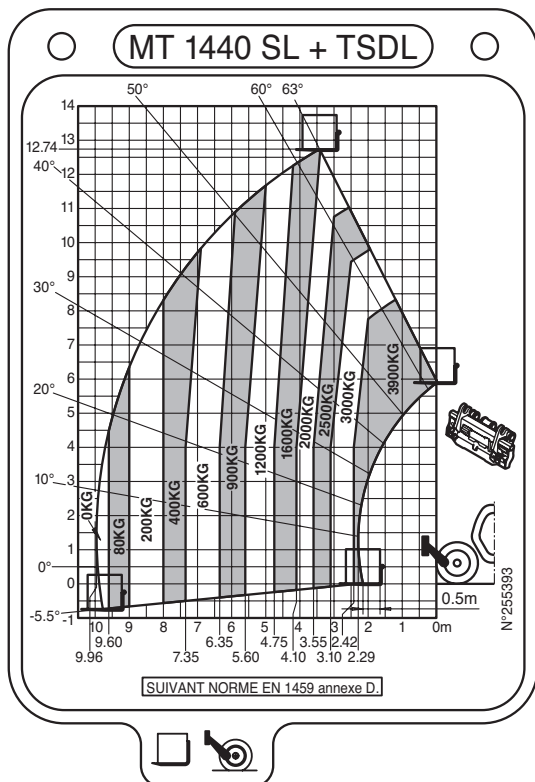


A	1200 mm
B	2770 mm
C	2270 mm
C1	2348 mm
D	6090 mm
D1	6168 mm
D2	4405 mm
E	7290 mm
F	1990 mm
F1	1990 mm
G	480 mm
G1	475 mm
G2	480 mm
G3	290 mm
H	7 °
H1	7 °
I	1050 mm
J	950 mm
K	1040 mm
L	50 mm
N	1880 mm
O	125 mm
P2	45,5 °
P3	50 °
R	3950 mm
S	9010 mm
T	4370 mm
U1	2605 mm
U2	2785 mm
V	5840 mm
V1	1470 mm
V2	4157 mm
W	2405 mm
W1	3820 mm
W2	1050 mm
W3	2350 mm
Y	12 °
Z	112 °

WITH SINGLE CARRIAGE

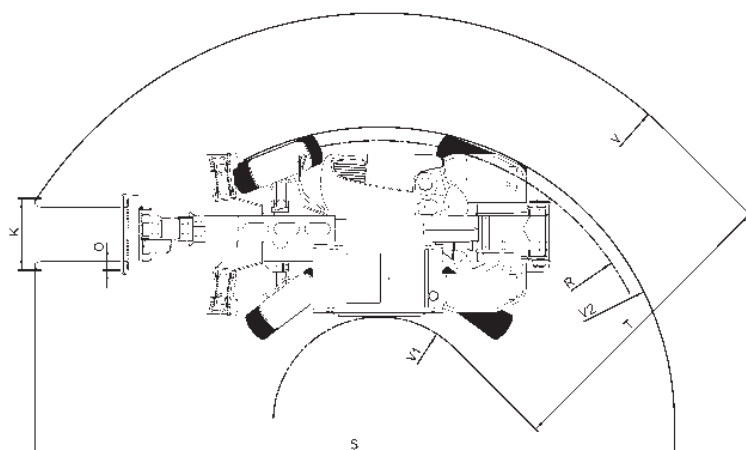
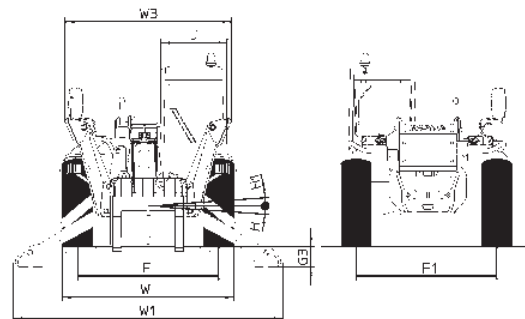
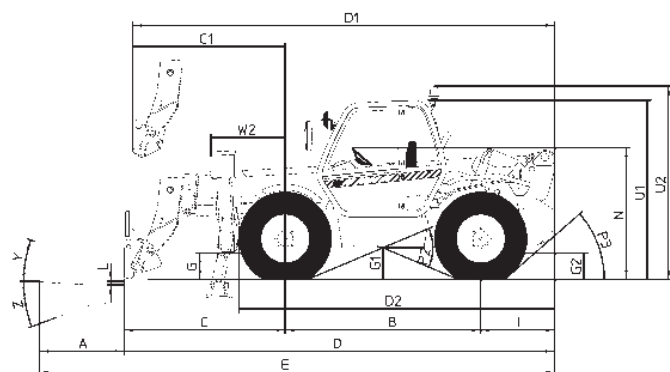


WITH SINGLE SIDE-SHIFT CARRIAGE



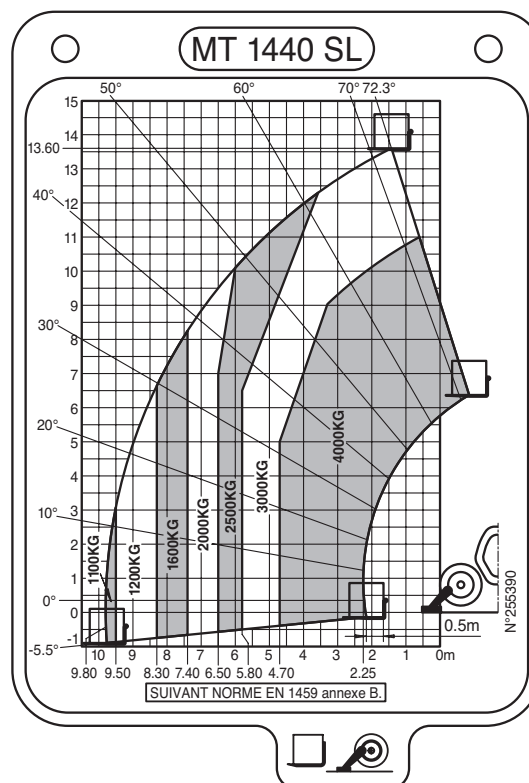
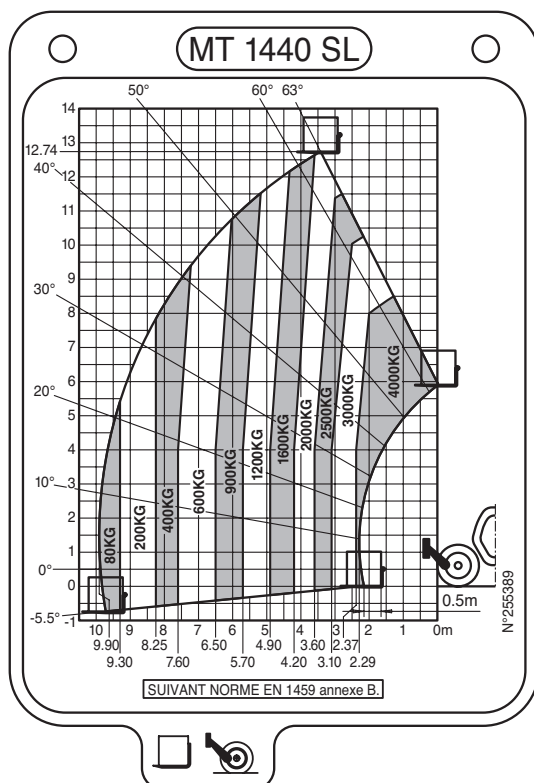
DIMENSIONS AND LOAD CHART

MT 1440 SL Turbo ULTRA Série 3-E2

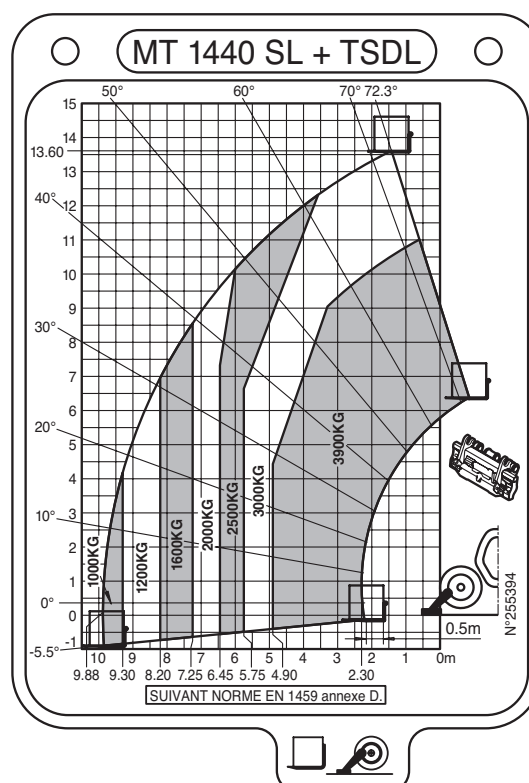
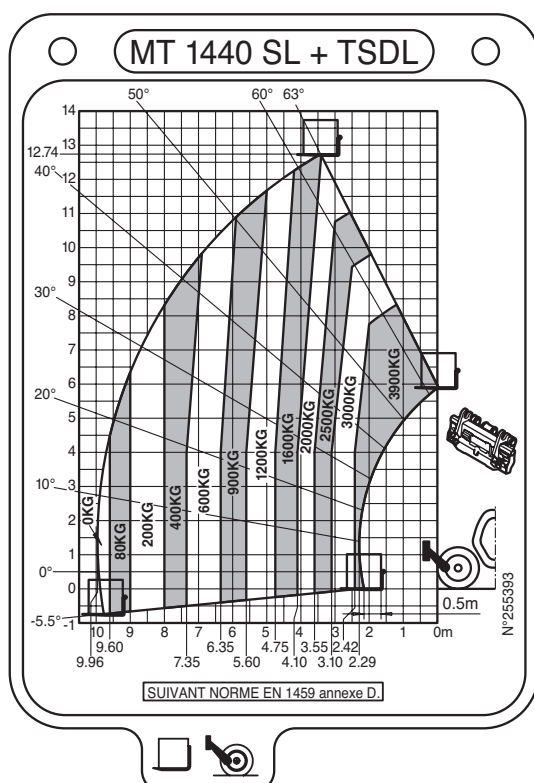


A	1200 mm
B	2770 mm
C	2270 mm
C1	2348 mm
D	6090 mm
D1	6168 mm
D2	4405 mm
E	7290 mm
F	1990 mm
F1	1990 mm
G	480 mm
G1	475 mm
G2	480 mm
G3	290 mm
H	7 °
H1	7 °
I	1050 mm
J	950 mm
K	1040 mm
L	50 mm
N	1890/1940 mm
O	125 mm
P2	45,5 °
P3	50 °
R	3950 mm
S	9010 mm
T	4370 mm
U1	2605 mm
U2	2785 mm
V	5840 mm
V1	1470 mm
V2	4157 mm
W	2405 mm
W1	3820 mm
W2	1050 mm
W3	2350 mm
Y	12 °
Z	112 °

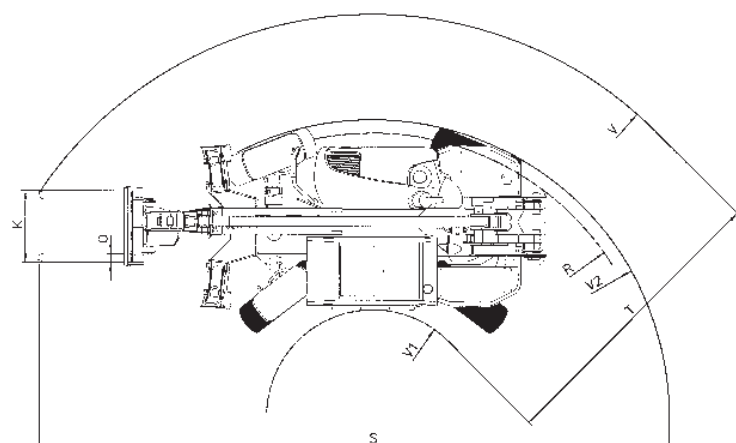
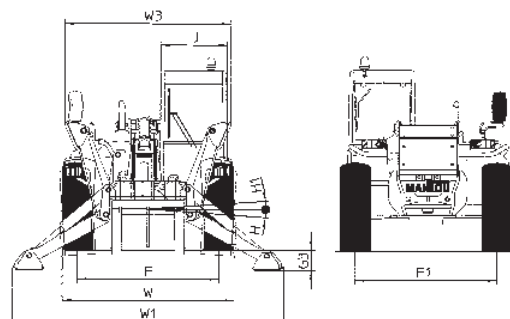
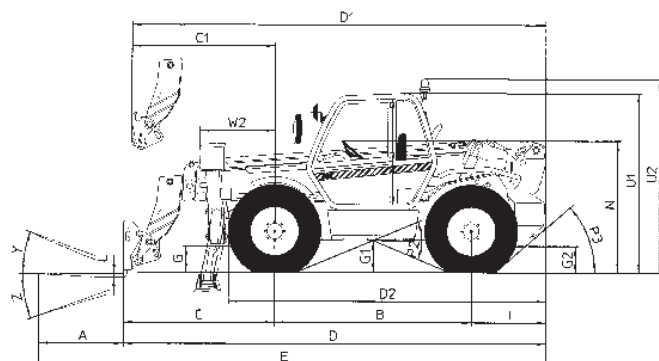
WITH SINGLE CARRIAGE



WITH SINGLE SIDE-SHIFT CARRIAGE

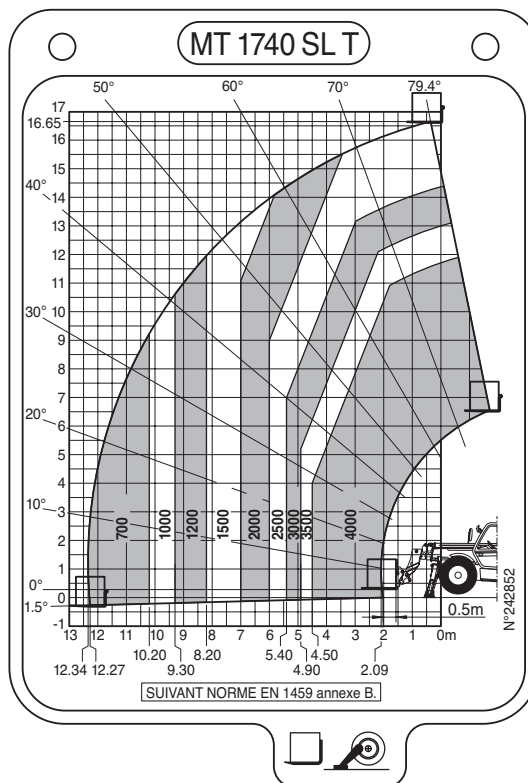
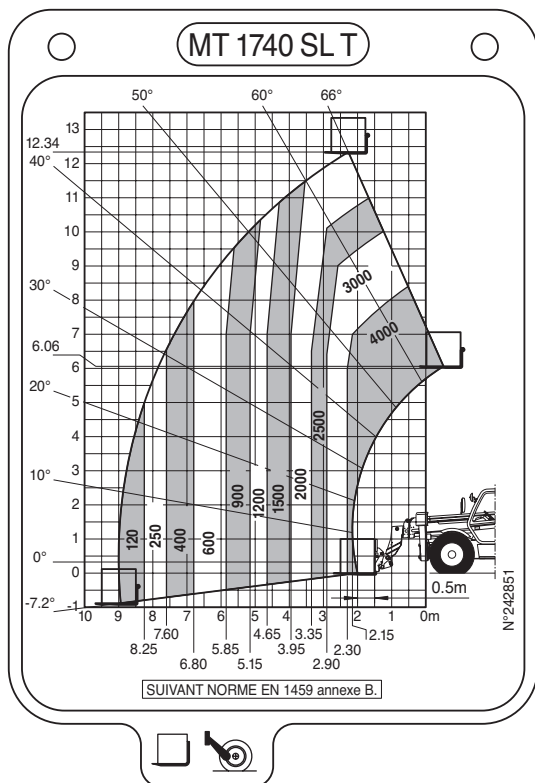


DIMENSIONS AND LOAD CHART MT 1740 SL Turbo Série 3-E2

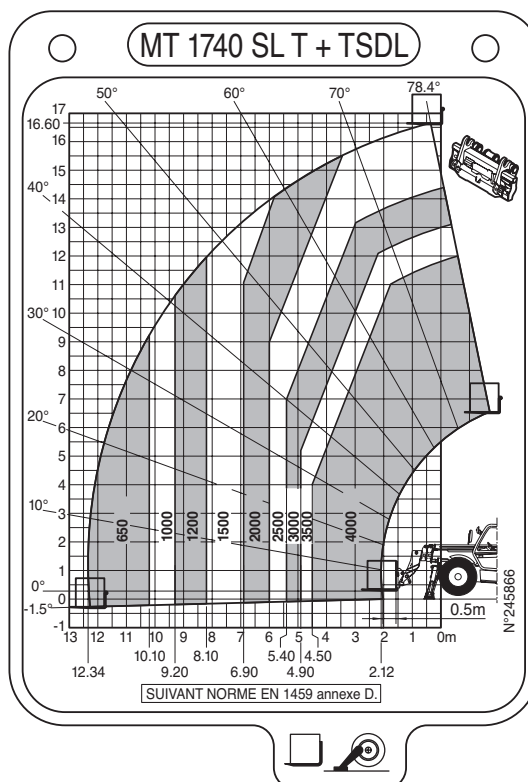
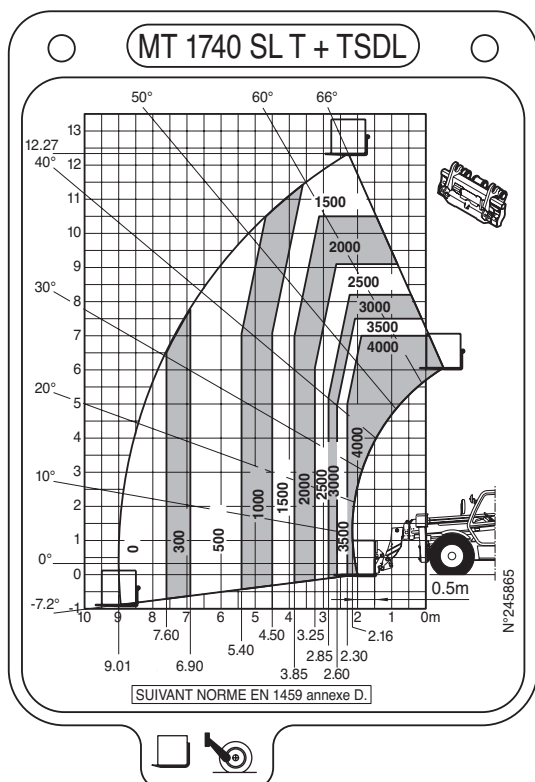


A	1200 mm
B	2770 mm
C	2160 mm
C1	2232 mm
D	5980 mm
D1	6052 mm
D2	4435 mm
E	7180 mm
F	1990 mm
F1	1990 mm
G	480 mm
G1	475 mm
G2	480 mm
G3	290 mm
H	7 °
H1	7 °
I	1050 mm
J	950 mm
K	1040 mm
L	50 mm
N	1880 mm
O	125 mm
P2	45,5 °
P3	50 °
R	3950 mm
S	8912 mm
T	4239 mm
U1	2605 mm
U2	2785 mm
V	5709 mm
V1	1470 mm
V2	4168 mm
W	2425 mm
W1	3820 mm
W2	1050 mm
W3	2350 mm
Y	12 °
Z	112 °

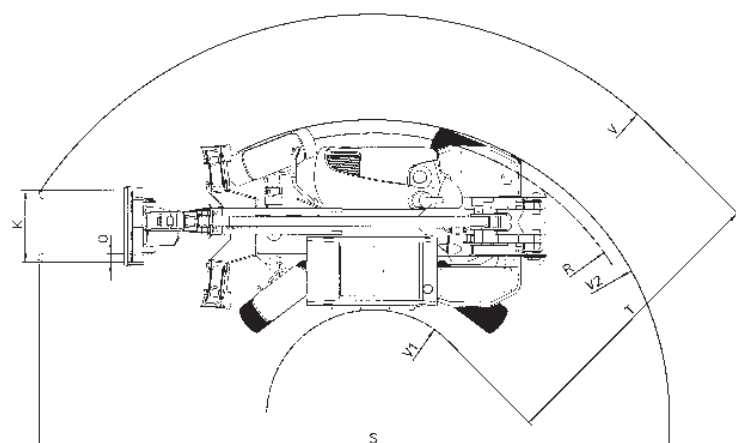
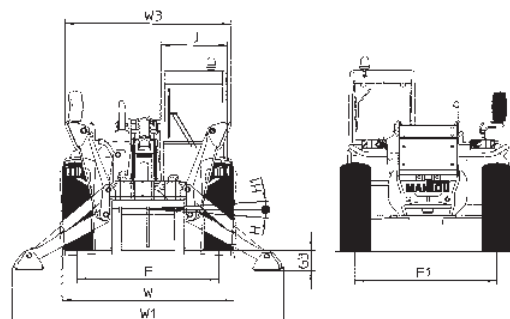
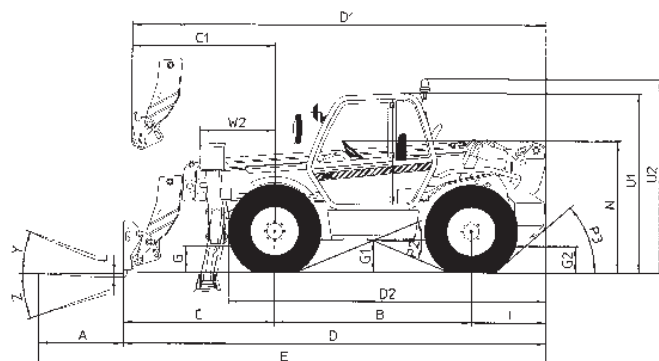
WITH SINGLE CARRIAGE



WITH SINGLE SIDE-SHIFT CARRIAGE

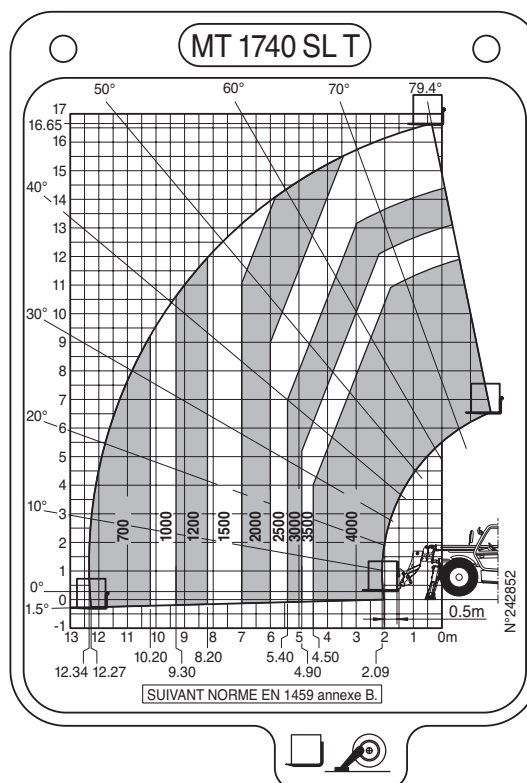
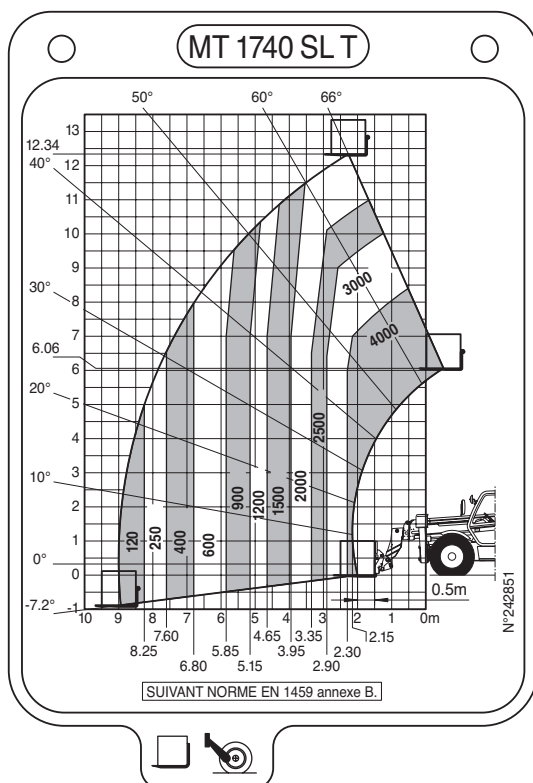


DIMENSIONS AND LOAD CHART MT 1740 SL Turbo ULTRA Série 3-E2

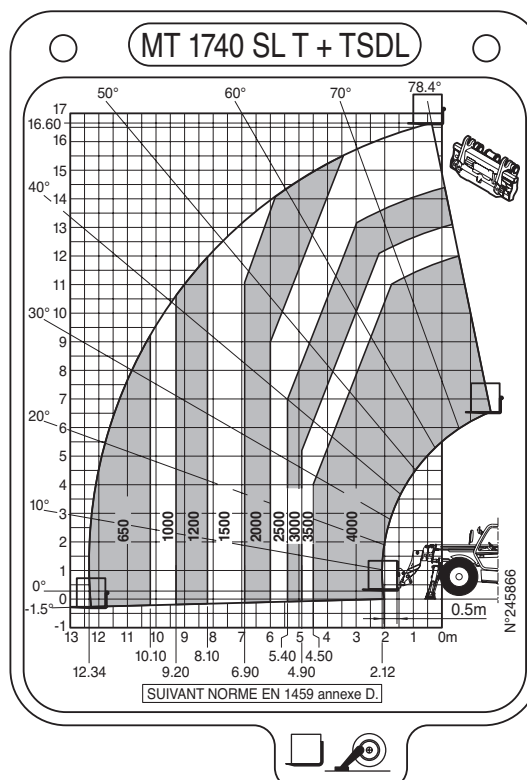
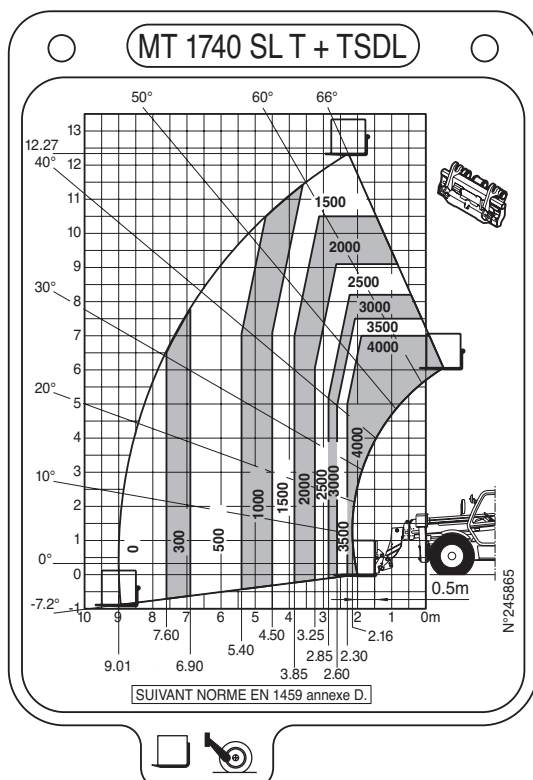


A	1200 mm
B	2770 mm
C	2160 mm
C1	2232 mm
D	5980 mm
D1	6052 mm
D2	4435 mm
E	7180 mm
F	1990 mm
F1	1990 mm
G	480 mm
G1	475 mm
G2	480 mm
G3	290 mm
H	7 °
H1	7 °
I	1050 mm
J	950 mm
K	1040 mm
L	50 mm
N	1890/1940 mm
O	125 mm
P2	45,5 °
P3	50 °
R	3950 mm
S	8912 mm
T	4239 mm
U1	2605 mm
U2	2785 mm
V	5709 mm
V1	1470 mm
V2	4168 mm
W	2425 mm
W1	3820 mm
W2	1050 mm
W3	2350 mm
Y	12 °
Z	112 °

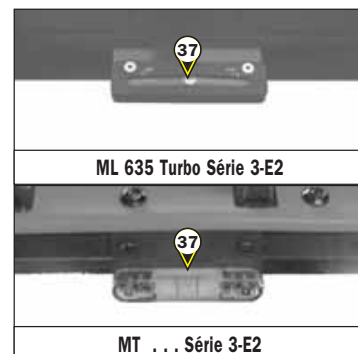
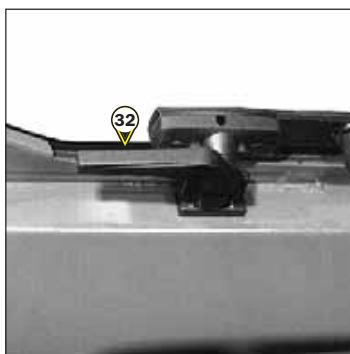
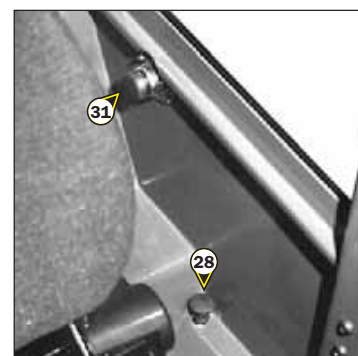
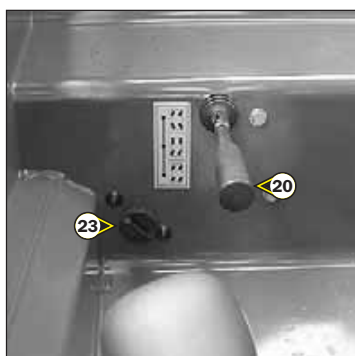
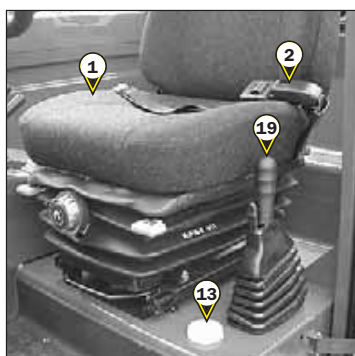
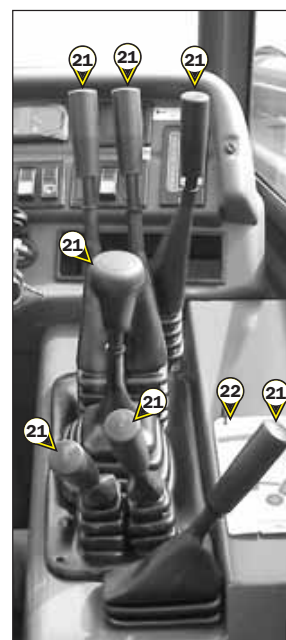
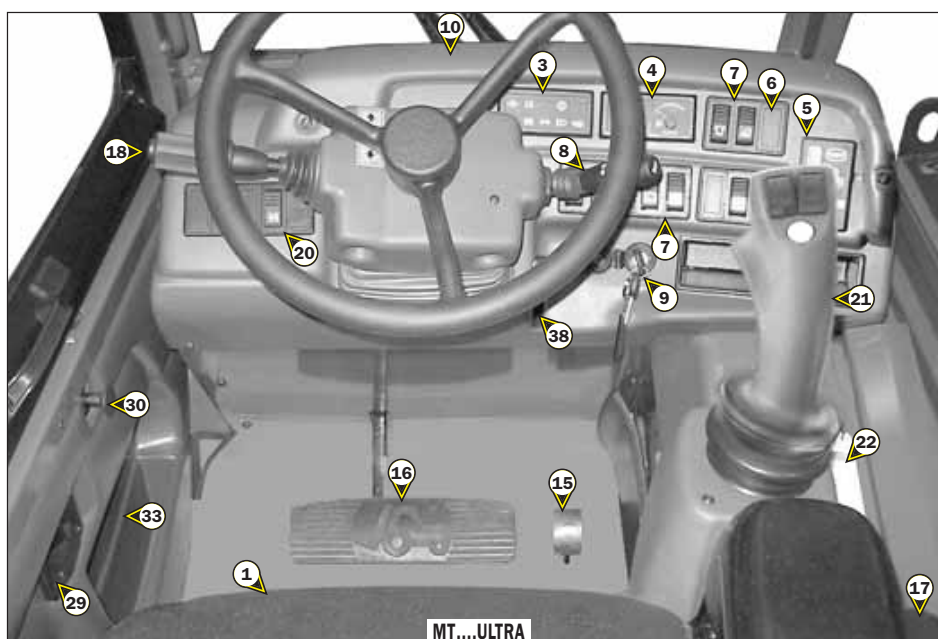
WITH SINGLE CARRIAGE



WITH SINGLE SIDE-SHIFT CARRIAGE



INSTRUMENTS AND CONTROLS



DESCRIPTION

- 1 - DRIVER'S SEAT
- 2 - SAFETY BELT
- 3 - SIGNAL LIGHTS PANEL
- 4 - FUEL LEVEL AND HOURMETER
- 5 - LONGITUDINAL STABILITY ALARM
- 6 - CUTTING OFF "SIMPLE" HYDRAULIC MOVEMENTS
- 6 - CUTTING OFF "AGGRAVATING" HYDRAULIC MOVEMENTS
- 7 - SWITCHES PANEL
- 8 - LIGHT SWITCH, HORN AND INDICATOR SWITCH
- 9 - IGNITION SWITCH
- 10 - BRAKING OIL TANK, FUSES AND RELAY ACCESS PANEL
- 11 - BRAKING OIL TANK
- 12 - FUSE AND RELAY
- 13 - WINDSCREEN WASHER TANK
- 14 - ROOF LIGHT
- 15 - ACCELERATOR PEDAL
- 16 - SERVICE BRAKE PEDAL AND TRANSMISSION CUT-OFF
- 17 - GEAR LEVER AND TRANSMISSION CUT-OFF
- 18 - REVERSING GEAR
- 19 - PARKING BRAKE
- 20 - STEERING SELECTION
- 21 - HYDRAULIC CONTROLS
- 22 - LOAD CHARTS FILE
- 23 - HEATER CONTROL
- 24 - AIR CONDITIONING CONTROLS (OPTION AIR CONDITIONING)
- 25 - RECYCLING INTAKES (OPTION AIR CONDITIONING)
- 26 - WINDSCREEN DEMIST VENTS
- 27 - HEATING VENTS
- 28 - OPENING BUTTON FOR ACCESS PANEL HYDRAULIC OIL AND FUEL FILLING
- 29 - DOOR LOCK
- 30 - LOCKING HANDLE FOR UPPER HALF DOOR
- 31 - RELEASING BUTTON FOR UPPER HALF DOOR
- 32 - HANDLE FOR REAR WINDOW OPENING
- 33 - DOCUMENT HOLDER
- 34 - FRONT LIGHTS (NOT ILLUSTRATED)
- 35 - REAR LIGHTS (NOT ILLUSTRATED)
- 36 - FLASHING LIGHT (NOT ILLUSTRATED)
- 37 - SPIRIT LEVEL
- 38 - STEERING WHEEL REGULATING HANDLE
- 39 - TILTING CORRECTOR INDICATOR (NOT ILLUSTRATED)

NOTE: All the terms such as: RIGHT, LEFT, FRONT, REAR are meant for an observer seated on driver's seat and looking in front of him.

1 - DRIVER'S SEAT

STANDARD	MT 1235 S Série 3-E2 MT 1335 SL Série 3-E2 - MT 1435 SL Série 3-E2 MT 1440 SL Série 3-E2
OPTION	ML 635 Turbo Série 3-E2 MT 940 L Turbo Série 3-E2 MT 1235 S Turbo Série 3-E2 MT 1240 L Turbo Série 3-E2 MT 1240 L Turbo ULTRA Série 3-E2 MT 1335 SL Turbo Série 3-E2 - MT 1435 SL Turbo Série 3-E2 MT 1340 SL Turbo Série 3-E2 - MT 1440 SL Turbo Série 3-E2 MT 1340 SL Turbo ULTRA Série 3-E2 - MT 1440 SL Turbo ULTRA Série 3-E2 MT 1740 SL Turbo Série 3-E2 MT 1740 SL Turbo ULTRA Série 3-E2

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

LONGITUDINAL ADJUSTMENT

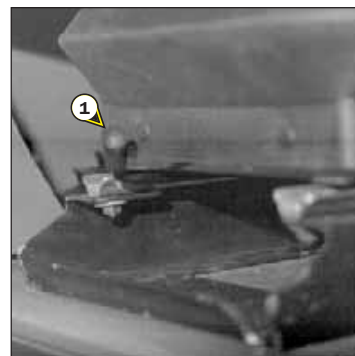
- Pull locking lever 1 towards the right.
- Slide the seat to the required position.
- Release the lever and be sure it returns to the lock position.

SEAT SUSPENSION ADJUSTMENT

- Refer to the seat's graduation.
- Turn handle 2 depending on the driver's weight.

ADJUSTMENT OF THE ANGLE OF THE BACK-REST

- Pull locking lever 3 upwards.
- Slide the back-rest to the required position.
- Release the lever and be sure it returns to the lock position.



1 - DRIVER'S SEAT

STANDARD	ML 635 Turbo Série 3-E2 MT 940 L Turbo Série 3-E2 MT 1235 S Turbo Série 3-E2 MT 1240 L Turbo Série 3-E2 MT 1240 L Turbo ULTRA Série 3-E2 MT 1335 SL Turbo Série 3-E2 - MT 1435 SL Turbo Série 3-E2 MT 1340 SL Turbo Série 3-E2 - MT 1440 SL Turbo Série 3-E2 MT 1340 SL Turbo ULTRA Série 3-E2 - MT 1440 SL Turbo ULTRA Série 3-E2 MT 1740 SL Turbo Série 3-E2 MT 1740 SL Turbo ULTRA Série 3-E2
OPTION	MT 1235 S Série 3-E2 MT 1335 SL Série 3-E2 - MT 1435 SL Série 3-E2 MT 1440 SL Série 3-E2

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

LONGITUDINAL ADJUSTMENT

- Pull the locking lever 1 upwards.
- Slide the seat to the desired position.
- Release the lever and ensure it returns to the lock position.

SEAT CUSHION ADJUSTMENT

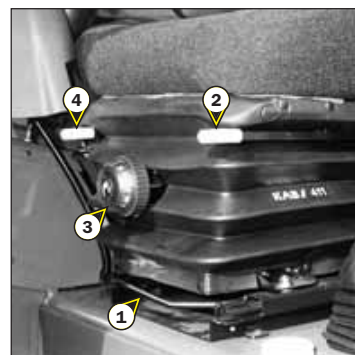
- The front and the back of the seat cushion can be adjusted separately.
- To adjust the front, push the lever 2 downwards.
 - Release it into one of the five possible positions.
 - Same procedure to adjust the back by pulling the lever 2 upwards.

SEAT SUSPENSION ADJUSTMENT

- Turn the button 3 and adjust according to your weight.

ANGLE ADJUSTMENT OF THE BACK-REST

- Lean the back against the back-rest.
- Pull the lever 4 and place the back-rest into one of the possible positions.



1 - PNEUMATIC DRIVER'S SEAT (OPTION)

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

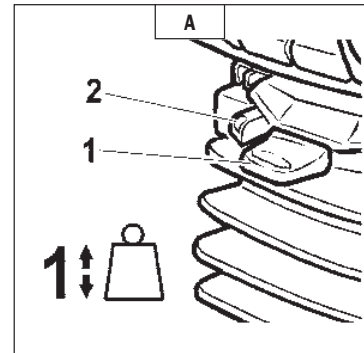
WEIGHT AND SEAT HEIGHT ADJUSTMENT

WEIGHT ADJUSTMENT (FIG. A)

It is advised that you adjust the seat according to your weight when sitting.

- Switch on lift truck ignition.
- Push or pull lever 1 until green appears in display 2 indicating correct adjustment according to your weight.

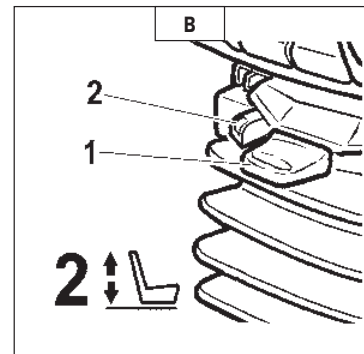
NOTE: To avoid any health problems, it is recommended that the weight should be checked and adjusted before starting up the lift truck.



SEAT HEIGHT ADJUSTMENT (FIG. B)

When weight adjustment has been carried out, you can then modify seat height.

- Keep the ignition switched on.
- Push or pull lever 1 until green appears and adjust the height of the seat while checking that the green in display 2 remains visible.

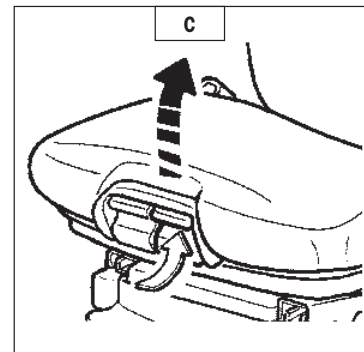


⚠ To avoid causing any damage, do not activate the compressor for over 1 minute.

SEAT BACK-REST ANGLE ADJUSTMENT (FIG. C)

The back-rest angle of the seat may be adjusted to suit the individual.

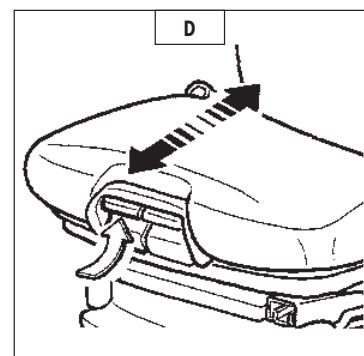
- Press the left-hand button while pushing on the seat or relaxing pressure on the seat to find a comfortable position.



SEAT DEPTH ADJUSTMENT (FIG. D)

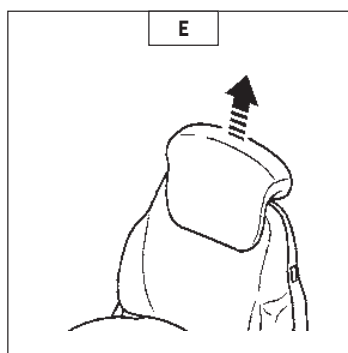
The depth of the seat may be adjusted to suit the individual.

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



EXTENDING THE HEAD-REST (FIG. E)

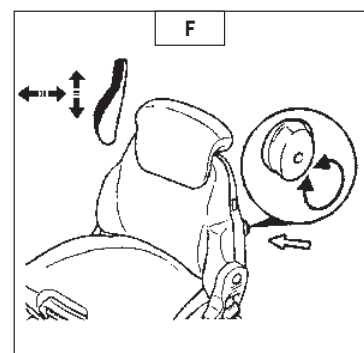
- The height of the back-rest can be adjusted by pulling it upwards (the notches will click) up to the stop.
- The head-rest can be removed by applying sufficient pressure to pull it off the stop.



LUMBAR ADJUSTMENT (FIG. F)

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

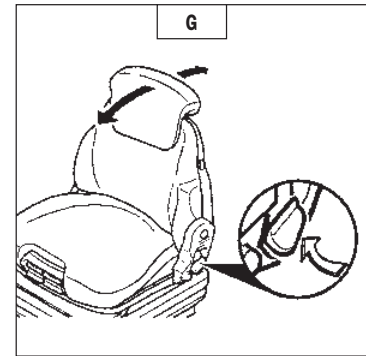
- Turn the handle either left or right to adjust the height or depth of the lumbar support.



ADJUSTMENT OF THE ANGLE OF THE BACK-REST (FIG. G)

- Support the back-rest, pull the lever and position the back-rest to find the desired position.

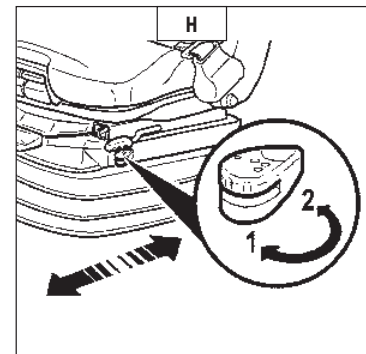
! *If you do not support the back-rest when making adjustments, it swings completely forwards.*



HORIZONTAL SHOCK ABSORBER (FIG. H)

In certain conditions (e.g. driving with a trailer) it is advised that a horizontal shock absorber be used. The driver's seat is thus better able to absorb jerks in the direction of travel.

- Position 1: Horizontal shock absorber fitted.
- Position 2: Horizontal shock absorber removed.



LONGITUDINAL ADJUSTMENT (FIG. I)

- Adjust the locking lever until you reach the position required. This then locks and the seat will not shift into another position.

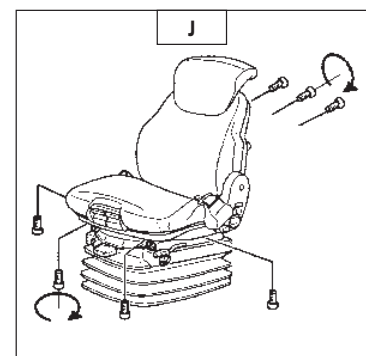
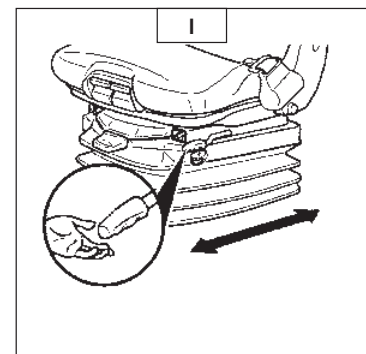
MAINTENANCE (FIG. J)

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

- To clean or change the cushions, simply remove them from the seat frame.

! *A rocking head-rest increases the risk of an accident!*

Avoid wetting the cushion fabric when cleaning. Check the resistance of the fabric on a small hidden area before using any fabric or plastic cleaner.



2 - SAFETY BELT

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

! *In no event should the lift truck be used if the seat belt is defective (fixing, locking, cuts, tears, etc.). Repair or replace the seat belt immediately.*

3 - SIGNAL LIGHTS PANEL

When activating the electrical system of the lift truck, all the red lamps and the panel's buzzer must light to indicate their good working order. If one of the red lamps or the buzzer does not function, carry out the necessary repairs.

A - RED I.C. ENGINE OIL PRESSURE LAMP

If the lamp and the buzzer come on when the lift truck is running, stop the I.C. engine immediately and look for the cause (see oil level in I.C. engine crankcase).

B - RED I.C. ENGINE WATER TEMPERATURE LAMP

If the lamp and the buzzer come on when the lift truck is running, stop the I.C. engine immediately and investigate the cooling system for the cause of the malfunction.

C - RED TRANSMISSION OIL PRESSURE LAMP

The lamp and the buzzer come on when the pressure in the transmission, when driving forward, is abnormally low. Stop the lift truck and look for the cause (insufficient transmission oil level, internal leak in the transmission, etc.).

NOTE: The signal light operates in forward travel conditions only, the signal should not be taken into account when the I.C. engine is running at idle or is stopped.

D - RED AIR FILTER CLOGGED LAMP

The lamp and the buzzer come on when the air filter cartridge is clogged up. Stop the lift truck and carry out the necessary repairs (see cleaning and replacement requirements in chapter: 3 - MAINTENANCE: FILTERS CARTRIDGES AND BELTS).

E - RED TRANSMISSION OIL TEMPERATURE LAMP

The lamp and the buzzer come on when the converter oil temperature is abnormally high. Stop the lift truck and look for the cause of this overheating.

F - RED ALTERNATOR CHARGE LAMP

If the lamps B - C - D - E - F - J and the buzzer come on, when the lift truck is running, stop the I.C. engine immediately and check the electrical circuit as well as the alternator belt.

G - RED PARKING BRAKE LAMP

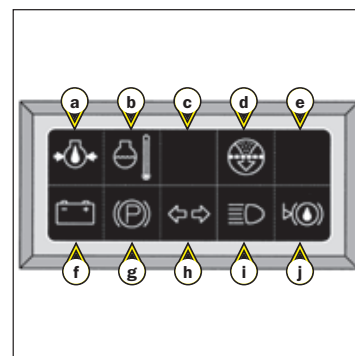
This lamp comes on when the parking brake is applied.

H - GREEN INDICATOR LAMP

I - BLUE MAIN BEAM LAMP

J - RED BRAKING OIL LEVEL LAMP

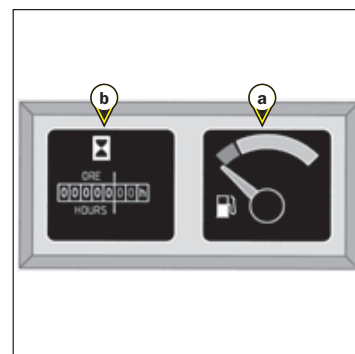
If the lamp and the buzzer come on, when the lift truck is running, stop the I.C. engine immediately and check the braking oil level. In the event of an abnormal dropping of the level, consult your dealer.



4 - FUEL LEVEL AND HOURMETER

A - FUEL LEVEL

B - HOURMETER



5 - LONGITUDINAL STABILITY ALARM

This device warns the operator that the lift truck is approaching the limit of longitudinal stability. However, lateral stability can reduce the load chart in the upper part, and this reduction is not detected by the longitudinal stability alarm.



The operator must always respect the lift truck load chart.

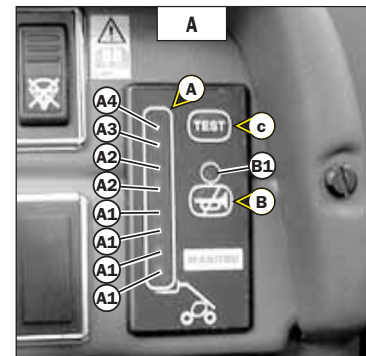
OPERATION

When the lift truck is switched on a control test is automatically carried out.

- Correct operation: All leds and the sound alarm function continuously for 2 seconds.
- Faulty operation: All leds and sound alarm function intermittently (stop the lift truck and consult your dealer, never attempt a repair yourself).

A - LEDS (VISUAL ALARM) (FIG. A)

- A1 - 4 green leds: There is a large reserve of longitudinal stability.
- A2 - 2 yellow leds: The lift truck is approaching the limit of longitudinal stability, move carefully.
- A3 - 1 red led: The lift truck is very near at the limit of longitudinal stability. The alarm sounds simultaneously with a slow intermittent sound. Move very carefully.
- A4 - 1 red led: The lift truck is at the authorized limit of longitudinal stability. The alarm sounds simultaneously with a speed intermittent sound. Only make de-aggravating hydraulic movements in the following order ; retract and raise the jib.



B - SOUND ALARM SWITCH (FIG. A)

Used to switch off the sound alarm when using the lift truck with loading and earth moving buckets. When it is switched off, the red led B1 indicates that the sound alarm has been cut off and only the visual alarm is working. Under other operating conditions, the sound alarm must be switched on.

C - TEST SWITCH (FIG. A)

Press the switch to verify at any time that the longitudinal stability alarm is working.

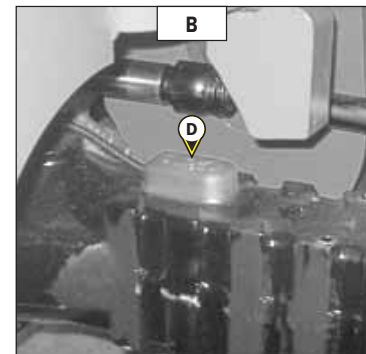
NOTE: This test does not verify that the alarm is correctly set ; this must be checked at every periodic service.

- Correct operation: All leds and the sound alarm function continuously.
- Faulty operation: All leds and the sound alarm function intermittently (stop the lift truck and consult your dealer, never attempt a repair yourself).

D - STRAIN GAUGE (FIG. B)



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



6 - CUTTING OFF "SIMPLE" HYDRAULIC MOVEMENTS

MT 1235 S Série 3-E2

MT 1235 S Turbo Série 3-E2

MT 1240 L Turbo Série 3-E2

MT 1335 SL Série 3-E2 - MT 1435 SL Série 3-E2

MT 1335 SL Turbo Série 3-E2 - MT 1435 SL Turbo Série 3-E2

MT 1440 SL Série 3-E2

MT 1340 SL Turbo Série 3-E2 - MT 1440 SL Turbo Série 3-E2

MT 1740 SL Turbo Série 3-E2

The function which cuts hydraulic movements is used to automatically stop dangerous movement of the jib when you are close to the limit of longitudinal stability. However, lateral stability can reduce the load chart in its upper part and this reduction is not detected by the longitudinal stability alarm.



The operator must respect the lift truck's load chart.



All attachments with a suspended load (winch, crane jib, crane jib with winch, hook, etc.) MUST be used with a lift truck equipped with a working hydraulic movement cut-out device.

1st FITTING

FUNCTIONING

Switch A allows you to cut off "SIMPLE" hydraulic movements or not.



WITH CUT-OUT OF "SIMPLE" HYDRAULIC MOVEMENTS: SWITCH A IN POSITION A2 (VISUAL INDICATOR OFF):



Led B4 indicates that the lift truck has reached the authorized limit of longitudinal stability and all hydraulic movements are neutralised.



The sound alarm goes off at the same time.

- To restart hydraulic movement, proceed as follows:
- Hold switch A in position A1.
- Only perform de-aggravating hydraulic movements in the following order ; jib retracted and raised.
- Reset switch A to position A2.

NOTE: When the jib is retracted, the function for switching off "SIMPLE" hydraulic movements is disconnected.



WITHOUT CUTTING OUT "SIMPLE" HYDRAULIC MOVEMENTS: SWITCH A IN POSITION A1 (VISUAL INDICATOR ON):

To allow the use of loading or earth moving buckets, for example.



In this case, the user is only informed by the longitudinal stability alarm system B (see: 2 - DESCRIPTION: 5 - LONGITUDINAL STABILITY ALARM SYSTEM).



Hydraulic movements are not cut off.



The sound alarm is disconnected.



See operator's manual for use and description.

2nd FITTING

FUNCTIONING

Switch A allows you to cut off "SIMPLE" hydraulic movements or not. The cutting-off of "SIMPLE" hydraulic movements is automatically enabled when the lift truck is started-up.

WITH CUT-OUT OF "SIMPLE" HYDRAULIC MOVEMENTS: VISUAL INDICATOR A1 OFF:

- Led B4 indicates that the lift truck has reached the authorized limit of longitudinal stability and all hydraulic movements are neutralized.
- The sound alarm goes off at the same time.
- To restart hydraulic movement, proceed as follows:
- Press the bottom of switch A, visual indicator A1 comes on and indicates that the hydraulic movement cut-out is disabled.
- Only perform de-aggravating hydraulic movements in the following order ; jib retracted and raised.
- Re-enable the hydraulic movement cut-out by pressing the top of switch A, visual indicator A1 will go out.

NOTE: When the jib is retracted, the function for switching off "SIMPLE" hydraulic movements is disconnected.



WITHOUT CUTTING-OUT "SIMPLE" HYDRAULIC MOVEMENTS: VISUAL INDICATOR A1 ON:

- To allow the use of loading or earth moving buckets, for example.
- In this case, the user is only informed by the longitudinal stability alarm system B (see: 2 - DESCRIPTION: 5 - LONGITUDINAL STABILITY ALARM SYSTEM).

6 - CUTTING OFF "AGGRAVATING" HYDRAULIC MOVEMENTS

MT 1240 L Turbo ULTRA Série 3-E2

MT 1340 SL Turbo ULTRA Série 3-E2 - MT 1440 SL Turbo ULTRA Série 3-E2

MT 1740 SL Turbo ULTRA Série 3-E2

The function which cuts hydraulic movements is used to automatically stop dangerous movement of the jib when you are close to the limit of longitudinal stability. However, lateral stability can reduce the load chart in its upper part and this reduction is not detected by the longitudinal stability alarm.



The operator must respect the lift truck's load chart.



All attachments with a suspended load (winch, crane jib, crane jib with winch, hook, etc.) MUST be used with a lift truck equipped with a working hydraulic movement cut-out device.

1st FITTING

FUNCTIONING

Switch A allows you to cut off "AGGRAVATING" hydraulic movements or not.



WITH CUT-OUT OF "AGGRAVATING" HYDRAULIC MOVEMENTS: SWITCH A IN POSITION A2 (VISUAL INDICATOR OFF):



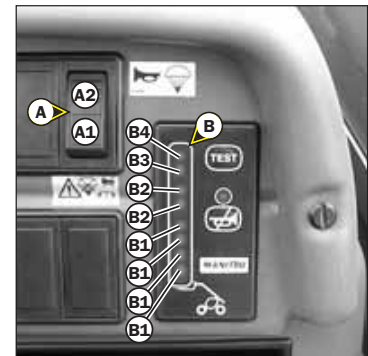
Led B4 indicates that the lift truck has reached the authorized limit of longitudinal stability and all aggravating hydraulic movements are neutralised.



The sound alarm goes off at the same time.

- To restart hydraulic movements, only perform de-aggravating hydraulic movements in the following order; jib retracted and raised.

NOTE: When the jib is retracted, the function for switching off "AGGRAVATING" hydraulic movements is disconnected.



WITHOUT CUTTING-OUT "AGGRAVATING" HYDRAULIC MOVEMENTS: SWITCH A IN POSITION A1 (VISUAL INDICATOR ON):

To allow the use of loading or earth moving buckets, for example.



In this case, the user is only informed by the longitudinal stability alarm system B (see: 2 - DESCRIPTION: 5 - LONGITUDINAL STABILITY ALARM SYSTEM).



Hydraulic movements are not cut off.



The sound alarm is disconnected.



See operator's manual for use and description.

2nd FITTING

FUNCTIONING

Switch A allows you to cut-off "AGGRAVATING" hydraulic movements or not. The cutting-off of "AGGRAVATING" hydraulic movements is automatically enabled when the lift truck is started-up.

WITH CUT-OUT OF "AGGRAVATING" HYDRAULIC MOVEMENTS: VISUAL INDICATOR A1 OFF:

- Led B4 indicates that the lift truck has reached the authorized limit of longitudinal stability and all aggravating hydraulic movements are neutralized.

- The sound alarm goes off at the same time.

- To restart hydraulic movements, only perform de-aggravating hydraulic movements in the following order; jib retracted and raised.

NOTE: When the jib is retracted, the function for switching off "AGGRAVATING" hydraulic movements is disconnected.



WITHOUT CUTTING-OUT "AGGRAVATING" HYDRAULIC MOVEMENTS: VISUAL INDICATOR A1 ON:

- To allow the use of loading or earth moving buckets, for example.

- In this case, the user is only informed by the longitudinal stability alarm system B (see: 2 - DESCRIPTION: 5 - LONGITUDINAL STABILITY ALARM SYSTEM).

7 - SWITCHES PANEL

A - HEATER BLOWER

This two speed switch allows warm or cold air to pass through the heating ventilators.

B - WARNING LIGHTS

This switch enables the L.H. and R.H. Indicators to be switched on simultaneously, with the ignition off. The signal light indicates that the switch is being used.

C - OPTION WORKING HEAD LIGHT

D - FRONT WINDSCREEN WIPER AND WINDSCREEN WASHER

This switch, when set on on the "intermediate" position, the windscreen wiper to be operated and the "down" position and simultaneously pressed, the windscreen-washer to be operated.

E - REAR WINDSCREEN WIPER + OPTION ROOF WINDSCREEN WIPER

F - FLASHING LIGHT

G - OPTIONAL FRONT WORKING LIGHT

H - OPTIONAL

ML 635 Turbo Série 3-E2

H - OPTIONAL CUTTING OFF HYDRAULIC MOVEMENTS

MT 940 L Turbo Série 3-E2

See: 2 - DESCRIPTION: DESCRIPTION AND USE OF ELECTRIC AND HYDRAULIC OPTIONS.

H - CUTTING OFF "SIMPLE" HYDRAULIC MOVEMENTS

MT 1235 S Série 3-E2 + Turbo

MT 1240 L Turbo Série 3-E2

MT 1335 SL Série 3-E2 + Turbo - MT 1435 SL Série 3-E2 + Turbo

MT 1440 SL Série 3-E2

MT 1340 SL Turbo Série 3-E2 - MT 1440 SL Turbo Série 3-E2

MT 1740 SL Turbo Série 3-E2

See: 2 - DESCRIPTION: 6 - CUTTING OFF "SIMPLE" HYDRAULIC MOVEMENTS.

H - OPTIONAL CUTTING OFF "AGGRAVATING" HYDRAULIC MOVEMENTS

MT 1235 S Série 3-E2 + Turbo

MT 1240 L Turbo Série 3-E2

MT 1335 SL Série 3-E2 + Turbo - MT 1435 SL Série 3-E2 + Turbo

MT 1440 SL Série 3-E2

MT 1340 SL Turbo Série 3-E2 - MT 1440 SL Turbo Série 3-E2

MT 1740 SL Turbo Série 3-E2

See: 2 - DESCRIPTION: DESCRIPTION AND USE OF ELECTRIC AND HYDRAULIC OPTIONS.

H - CUTTING OFF "AGGRAVATING" HYDRAULIC MOVEMENTS

MT 1240 L Turbo ULTRA Série 3-E2

MT 1340 SL Turbo ULTRA Série 3-E2 - MT 1440 SL Turbo ULTRA Série 3-E2

MT 1740 SL Turbo ULTRA Série 3-E2

See: 2 - DESCRIPTION: 6 - CUTTING OFF "AGGRAVATING" HYDRAULIC MOVEMENTS.

I - OPTIONAL

ML 635 Turbo Série 3-E2

MT 940 L Série 3-E2 Turbo (up to machine no. 203419)

MT 1235 S Série 3-E2 + Turbo

MT 1240 L Turbo Série 3-E2

MT 1240 L Turbo ULTRA Série 3-E2

MT 1335 SL Série 3-E2 + Turbo - MT 1435 SL Série 3-E2 + Turbo

MT 1440 SL Série 3-E2

MT 1340 SL Turbo Série 3-E2 - MT 1440 SL Turbo Série 3-E2

MT 1340 SL Turbo ULTRA Série 3-E2 - MT 1440 SL Turbo ULTRA Série 3-E2

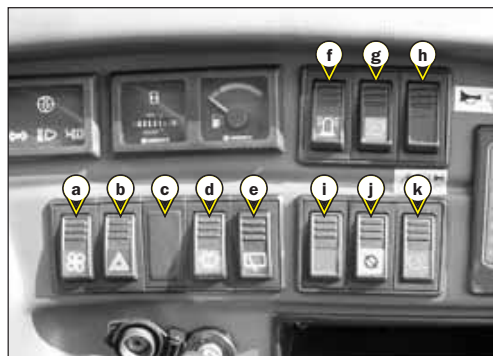
MT 1740 SL Turbo Série 3-E2

MT 1740 SL Turbo ULTRA Série 3-E2

I - PARKING BRAKE

MT 940 L Série 3-E2 Turbo (from machine no. 203420)

See: 2 - DESCRIPTION: 19 - PARKING BRAKE.

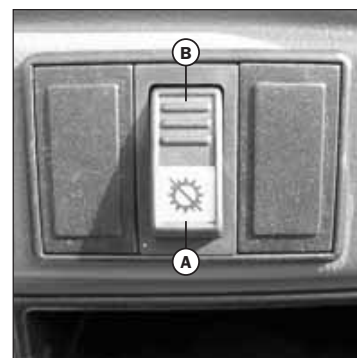
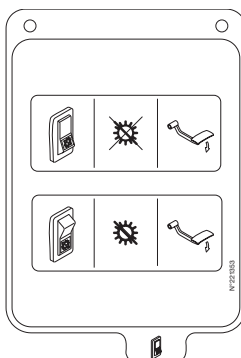


J - TRANSMISSION CUT-OFF

ML 635 Turbo Série 3-E2
MT 940 L Turbo Série 3-E2
MT 1235 S Série 3-E2 + Turbo (up to machine no.)
MT 1240 L Turbo Série 3-E2
MT 1240 L Turbo ULTRA Série 3-E2
MT 1335 SL Série 3-E2 + Turbo
MT 1340 SL Turbo Série 3-E2
MT 1340 SL Turbo ULTRA Série 3-E2 - MT 1440 SL Turbo ULTRA Série 3-E2
MT 1740 SL Turbo Série 3-E2
MT 1740 SL Turbo ULTRA Série 3-E2

This switch does or does not allow the transmission to be cut-off on the service brake pedal.

- Position A: The signal light on, there is transmission cut-off.
- Position B: The signal light off, there is no transmission cut-off.



NOTE: In all cases transmission cut-off can be effected using the gear lever.

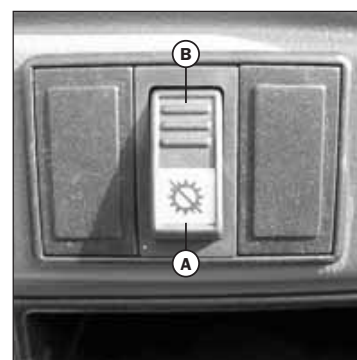
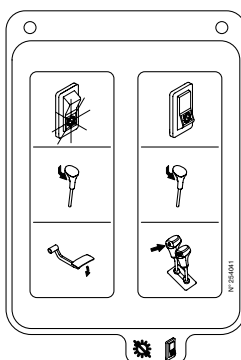
J - TRANSMISSION CUT-OFF

MT 1235 S Série 3-E2 + Turbo (from machine no.)
MT 1435 SL Série 3-E2 + Turbo
MT 1440 SL Série 3-E2 + Turbo

The switch selects transmission cut-off to the service brake pedal or the hydraulic controls lever.

Position A: With the indicator light on, transmission cut-off is by means of the service brake pedal.

Position B: With the indicator light off, transmission cut-off is by means of the hydraulic control lever.



NOTE: In all cases transmission cut-off can be effected using the gear lever.

USE OF TRANSMISSION CUT-OFF

Transmission cut-off to brake pedal (position A).

- When loading.

Transmission cut-off to hydraulic control lever (position B).

- When driving.
- For inching and continuous stopping and starting (delicate handling). In order to optimize hydraulic movements, cut off transmission to the hydraulic controls lever.
- Starting on a slope.

K - OPTION WORKING TAIL LIGHT

K - OPTIONAL SELF-CLEANING FAN

MT 1235 S Turbo Série 3-E2
MT 1240 L Turbo Série 3-E2
MT 1240 L Turbo ULTRA Série 3-E2
MT 1335 SL Turbo Série 3-E2 - MT 1435 SL Turbo Série 3-E2
MT 1340 SL Turbo Série 3-E2 - MT 1440 SL Turbo Série 3-E2
MT 1340 SL Turbo ULTRA Série 3-E2 - MT 1440 SL Turbo ULTRA Série 3-E2

See: 2 - DESCRIPTION: DESCRIPTION AND USE OF ELECTRIC AND HYDRAULIC OPTIONS.

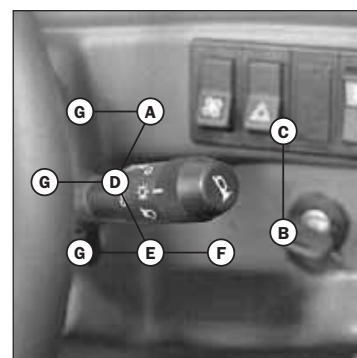
8 - LIGHT SWITCH, HORN AND FLASHING INDICATORS

The switch controls the visual and acoustic alarms.

- A - All lights are off, the direction indicators do not operate.
- B - The right hand direction indicators flash.
- C - The left hand direction indicators flash.
- D - The sidelights and the rear lights are on.
- E - The dipped headlights and the rear lights are on.
- F - The main beam headlights and the rear lights are on.
- G - Headlight selection.

Pressing the end of the switch operates the horn.

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



9 - IGNITION SWITCH

The key switch has five positions:

- P - Ignition off, parking position.
- O - Ignition switched off and engine stopped.
- I - Ignition on.
- II - Preheating.
- III - The engine starts, and returns to position 1 as soon as the key is released.

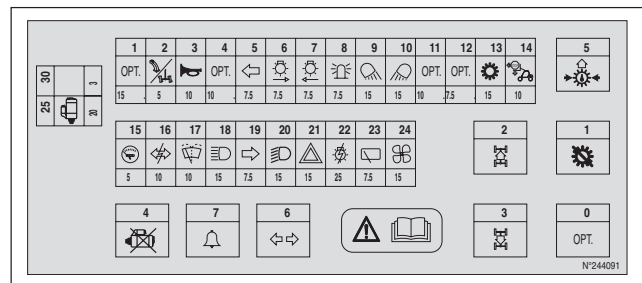
10 - BRAKE FLUID RESERVOIR, FUSES AND RELAY ACCESS PANEL

11 - BRAKE FLUID RESERVOIR

See: 3 - MAINTENANCE: B - EVERY 50 HOURS OF SERVICE.

12 - FUSES AND RELAYS

A sticker on the protective cover gives you a rapid view of how to use the components of the panel described below.

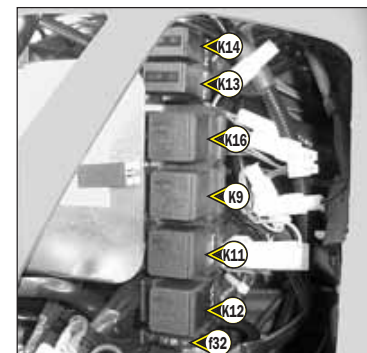


- K0 - OPTIONAL.
- K1 - Transmission cut-off relay.
- K2 - Forward gear relay.
- K3 - Reverse gear relay.
- K4 - Safety starting system relay.
- K5 - Transmission oil pressure relay.
- K6 - Flasher unit.
- K7 - Buzzer.
- K9 - OPTIONAL Hydraulic movements cut-off relay. (A)
- Hydraulic movements cut-off relay. (B C D E G H I K L M N P)
- K10 - Engine preheating relay.
- K11 - Jib retracted relay. (K L M N P)
- K12 - Tilt safety relay. (K L M N P)
- K13 - Lift safety relay. (K L M N P)
- K14 - Lifting speed safety relay. (P Q)
- K15 - OPTIONAL Diesel defreezer.
- K16 - Relay switch cutting off hydraulic movements. (B C D E G H I K L M N P)

NOTE: Replace a used fuse with a new fuse of the same type and rating. Never reuse a repaired fuse.

- F1 - (15A MAX.) - Electric hydraulic movement controls (15A). (F J O Q)
- OPTIONAL Pneumatic seat (15A).
- F2 - (7,5A MAX.) - Wheel alignment (5A).
- F3 - (10A MAX.) - Acoustic alarm (10A).
- Stop switch (10A).
- F4 - (10A MAX.) - OPTIONAL Jib working light (10A).
- OPTIONAL Electrovalve on jib head (10A).
- OPTIONAL Electrical provision on jib (10A). (A B C D E F G H I J K L M N O P Q)
- OPTIONAL Anti-theft device provision (10A).
- OPTIONAL Anti-theft system (10A).
- OPTIONAL Anti-start system (10A).
- OPTIONAL Self-cleaning fan (10A). (C L N O)
- F5 - (10A MAX.) - Left flashing indicators (7,5A).
- F6 - (10A MAX.) - Right sidelights (7,5A).
- Fuel gauge lighting (7,5A).
- Hour meter lighting (7,5A).
- OPTIONAL Number plate lighting (7,5A).
- F7 - (10A MAX.) - Left sidelights (7,5A).
- F8 - (10A MAX.) - Flashing light (7,5A).
- F9 - (10A MAX.) - OPTIONAL Working tail light (10A).
- F10 - (10A MAX.) - OPTIONAL Front working head light (10A).
- F11 - (10A MAX.) - OPTIONAL Insulation of the compensation cylinders (7,5A). (B)
- OPTIONAL Air conditioning (7,5A).

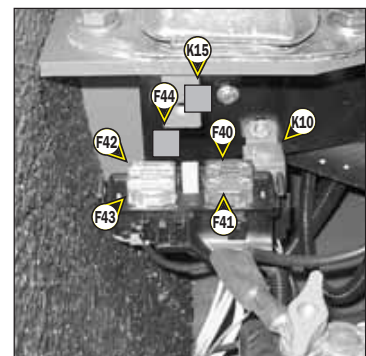
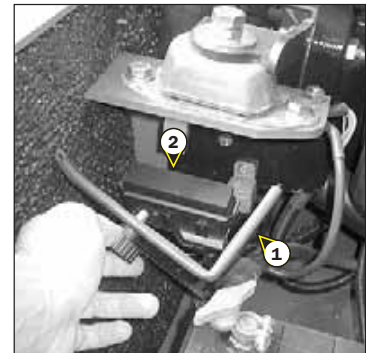
- A: ML 635 Turbo Série 3-E2
- B: MT 940 L Turbo Série 3-E2
- C: MT 1235 S Série 3-E2
- D: MT 1235 S Turbo Série 3-E2
- E: MT 1240 L Turbo Série 3-E2
- F: MT 1240 L Turbo ULTRA Série 3-E2
- G: MT 1335 SL Série 3-E2
- H: MT 1335 SL Turbo Série 3-E2
- I: MT 1340 SL Turbo Série 3-E2
- J: MT 1340 SL Turbo ULTRA Série 3-E2
- K: MT 1435 SL Série 3-E2
- L: MT 1435 SL Turbo Série 3-E2
- M: MT 1440 SL Série 3-E2
- N: MT 1440 SL Turbo Série 3-E2
- O: MT 1440 SL Turbo ULTRA Série 3-E2
- P: MT 1740 SL Turbo Série 3-E2
- Q: MT 1740 SL Turbo ULTRA Série 3-E2



- F12 - (7,5A MAX.) - OPTIONAL. (A)
 - Tilt safety corrector (7,5A). (B E F)
 - Parking brake (7,5A). (B) (from machine no. 203420)
 - Stabilizer safety (7,5A). (C D)
 - Electrical controls for hydraulic tilting movements (7,5A). (F J O Q)
 - Stabilizer safety and tilting corrector (7,5A). (G H I J K L M N O P Q)
- F13 - (15A MAX.) - Gear reverser (15A).
 - Transmission cut-off (15A).
 - Reversing lights (15A).
 - Reversing acoustic alarm (15A).
- F14 - (15A MAX.) - Longitudinal stability alarm (10A).
 - Telescope III safety (10A). (P Q)
 - Hydraulic movements cut-off (10A). (C D E F G H I J K L M N O P Q)
 - OPTIONAL Hydraulic movements cut-off (10A). (B)
- F15 - (10A MAX.) - Indicator lamp panel (5A).
 - Fuel gauge (5A).
 - Hour meter (5A).
- F16 - (10A MAX.) - Flashing indicator power supply (10A).
- F17 - (10A MAX.) - Front windscreen wiper and windscreen washer (10A).
- F18 - (15A MAX.) - Main beam (15A).
 - Main beam lamp (15A).
- F19 - (10A MAX.) - Right flashing indicators (7,5A).
- F20 - (15A MAX.) - Dipped beam (15A).
- F21 - (15A MAX.) - Hazard warning lights power supply (15A).
 - Roof light (15A).
 - OPTIONAL (+)permanent (15A).
- F22 - (25A MAX.) - Light, horn and flashing indicators switch power supply (25A).
- F23 - (10A MAX.) - Rear windscreen wiper (7,5A).
 - OPTIONAL Roof windscreen wiper (7,5A).
- F24 - (15A MAX.) - Heating (15A).
- F25 - (20A MAX.) - Starter (20A).
- F30 - (3A MAX.) - Not used.
- F32 - (10A MAX.) - Lift safety (10A). (K L M N O P Q)

Remove casing 1 and cover 2 for access to fuses F40 to F44 and to relays K10 and K15.

- F40 - (40A MAX.) - Lift truck electrical equipment (40A).
 F41 - (40A MAX.) - Lift truck electrical equipment (40A).
 F42 - (80A MAX.) - Engine preheating (80A).
 F43 - (80A MAX.) - Alternator (80A).
 F44 - (15A MAX.) - OPTIONAL Diesel defreezer (15A).



13 - WINDSCREEN WASHER TANK

See: 3 - MAINTENANCE: B - EVERY 50 HOURS SERVICE.

14 - ROOF LIGHT

15 - ACCELERATOR PEDAL

16 - SERVICE BRAKE PEDAL AND TRANSMISSION CUT-OFF

The pedal applies on the front and rear wheels by an hydraulic brake system, and allows the lift truck to be slowed down and stopped. Depending on the position of the transmission cut-off switch, it enables the free travel to cut off transmission (see: 2 - DESCRIPTION: 7 - SWITCHES PANEL).

17 - GEAR LEVER AND TRANSMISSION CUT-OFF

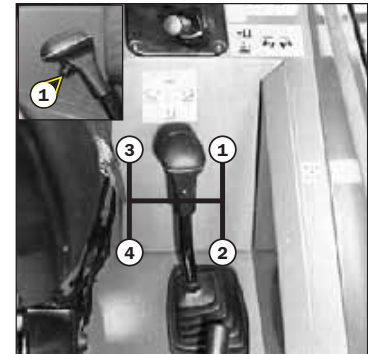
In order to change speeds, it is necessary to cut the transmission by pressing the button 1 on the lever.

- 1st gear: To the right, forwards.
- 2nd gear: To the right, backwards.
- 3rd gear: To the left, forwards.
- 4th gear: To the left, backwards.

USING THE GEARS ON THE GEARBOX

- On these lift trucks with a torque converter, it is not necessary to automatically start up in 1st speed and progress up the gears.

⚠ The choice of gear ratio should be made carefully according to the nature of the work being carried out. A poor choice may result in the extremely rapid elevation of the transmission oil temperature through excessive slipping of the converter, which could lead to serious damage to the transmission (it is essential to stop and change the working conditions if the transmission oil temperature indicator light comes on). This poor choice may also result in a reduction in the lift truck's performance in forward speed. When the forward force increases, the forward speed in the r gear (for example 3rd gear) may be lower than the forward speed that could be obtained with the r-1 gear (in 2nd instead of the 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 go up to 4th if the conditions and state of the road permit it. In hilly areas, set off in 2nd gear and go up to 3rd if the conditions and state of the road permit it.
- With a trailer on the road: Set off in 2nd gear and go up to 3rd if the conditions and state of the road permit it.
- Handling: 3rd gear.
2nd gear in restricted spaces.
- Earth moving: 1st gear.
- Loading (reclaiming with bucket, manure fork, etc.): 2nd gear.

18 - REVERSING GEAR

ML 635 Turbo Série 3-E2
MT 940 L Turbo Série 3-E2
MT 1235 S Série 3-E2 + Turbo (up to machine no.)
MT 1240 L Turbo Série 3-E2
MT 1240 L Turbo ULTRA Série 3-E2
MT 1335 SL Série 3-E2 + Turbo
MT 1340 SL Turbo Série 3-E2
MT 1340 SL Turbo ULTRA Série 3-E2 - MT 1440 SL Turbo ULTRA Série 3-E2
MT 1740 SL Turbo Série 3-E2
MT 1740 SL Turbo ULTRA Série 3-E2

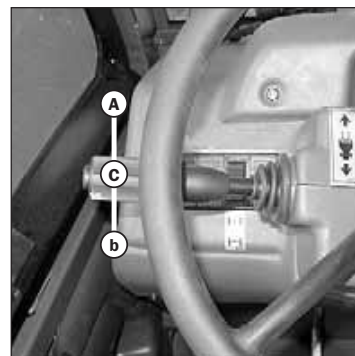
When operating this control, the lift truck should be traveling at slow speed and not accelerating. When the reverser is in the neutral position a mechanical lock prevents accidental selection of forward or reverse gear.

FORWARD: Lift slightly and push the lever forwards (position A).

REVERSE: Lift slightly and pull the lever backwards (position B).

NEUTRAL: To start the lift truck, the lever must be in the neutral (position C).

NOTE: The reverse lights and an acoustic reversing alarm indicate that the lift truck is running in reverse.



ML 635 Série 3-E2 Turbo (from machine no. 211883)
MT 940 L Série 3-E2 Turbo (from machine no. 211883)
MT 1240 L Série 3-E2 Turbo (from machine no. 211883)
MT 1240 L Série 3-E2 ULTRA Turbo (from machine no. 211883)
MT 1440 SL Série 3-E2 ULTRA Turbo
MT 1740 SL Série 3-E2 Turbo (from la machine no. 211883)
MT 1740 SL Série 3-E2 ULTRA Turbo (from machine no. 211883)

SAFETY WHEN MOVING THE LIFT TRUCK

Authorization to move the lift truck is controlled by an electronic unit. The operator must observe the following sequence to move the truck forwards or backwards:

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

To stop the lift truck, he must observe the following sequence:

- 1 - set the gear reverser to neutral,
- 2 - apply the parking brake,
- 3 - get out of the lift truck.

If these sequences are not observed (for example, leaving the driver's seat without applying the parking brake), an acoustic alarm sounds. You must then return the reversing gear to the neutral position and repeat the sequence.

18 - REVERSING GEAR

MT 1235 S Série 3-E2 + Turbo (from machine no.)
MT 1435 SL Série 3-E2 + Turbo
MT 1440 SL Série 3-E2 + Turbo

When operating this control, the lift truck should be traveling at slow speed and not accelerating.

FORWARD GEAR: Push the switch forward (position A).

REVERSE GEAR: Pull the switch backwards (position B).

NEUTRAL: The knob must be in the intermediate position to start the lift truck (position C).

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



SAFETY WHEN MOVING THE LIFT TRUCK

Authorization to move the lift truck is controlled by an electronic unit. The operator must observe the following sequence to move the truck forwards or backwards:

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

To stop the lift truck, he must observe the following sequence:

- 1 - set the gear reverser to neutral,
- 2 - apply the parking brake,
- 3 - get out of the lift truck.

If these sequences are not observed (for example, leaving the driver's seat without applying the parking brake), an acoustic alarm sounds. You must then return the reversing gear to the neutral position and repeat the sequence.

19 - PARKING BRAKE

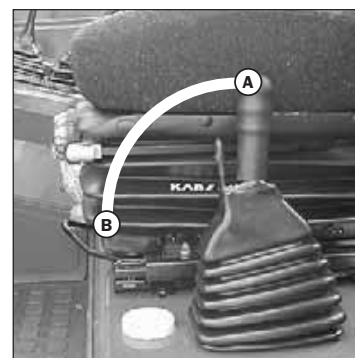
ML 635 Turbo Série 3-E2
MT 940 L Turbo Série 3-E2 (up to machine Nr 203419)
MT 1235 S Série 3-E2
MT 1235 S Turbo Série 3-E2
MT 1240 L Turbo Série 3-E2
MT 1240 L Turbo ULTRA Série 3-E2
MT 1335 SL Série 3-E2 - MT 1435 SL Série 3-E2
MT 1335 SL Turbo Série 3-E2 - MT 1435 SL Turbo Série 3-E2
MT 1440 SL Série 3-E2
MT 1340 SL Turbo Série 3-E2 - MT 1440 SL Turbo Série 3-E2
MT 1340 SL Turbo ULTRA Série 3-E2 - MT 1440 SL Turbo ULTRA Série 3-E2
MT 1740 SL Turbo Série 3-E2
MT 1740 SL Turbo ULTRA Série 3-E2

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

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

MT 940 L Turbo Série 3-E2 (from machine Nr 203420)

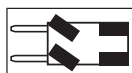
- Lower the button 1 and press the bottom of the switch to connect the parking brake. The signal lamp shows it is being used.
- Press the top of the switch to disconnect the parking brake.



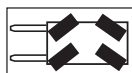
20 - STEERING SELECTION

Before selecting one of the three possible steering positions, bring the 4 wheels into alignment, i.e., in the straight ahead position.

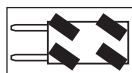
A - STEERING SELECTION LEVER



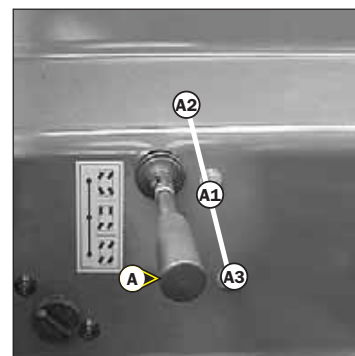
A1 - Front wheel steer (highway traffic).



A2 - Front and rear wheels steer in opposite direction (4 wheel steer).



A3 - Front and rear wheels steer in the same direction (crab steer).



B - GREEN LAMPS FOR ALIGNMENT OF THE WHEELS

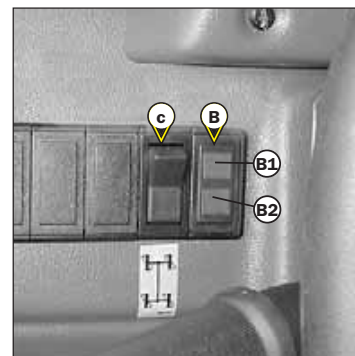
These lamps come on to indicate the alignment of the wheels, in relation to the axle of the lift truck. The lamp B1 for the front wheels and the lamp B2 for the rear wheels.

C - SWITCH FOR ALIGNMENT OF THE WHEELS

This switch enables the use or not of the device for alignment of the wheels. The indicator light indicates its use.

WHEEL ALIGNMENT PROCEDURE

- Connect the switch (signal light ON).
- Shift the distributor control lever for steering selection A in position A2 (4 wheel steering).
- Turn the steering wheel and bring the rear wheels into alignment until the lamp B2 is on.
- Shift the distributor control lever for steering selection A in position A1 (highway traffic).
- Turn the steering wheel and bring the front wheels into alignment until the lamp B1 is on.



! Before driving on roads, it is necessary to check the alignment of the rear wheels and to drive in front wheel steer. The control of the alignment of the rear wheels must be regularly done with the help of the green lamps, while driving the lift truck. In case of anomalies, consult your dealer.

21 - HYDRAULIC CONTROLS

! Do not attempt to alter the hydraulic system pressure by interfering with the pressure regulating valve. In the event of suspected malfunction, contact your dealer. ANY ALTERATION MAY RENDER THE WARRANTY NULL AND VOID.

! Use the hydraulic controls carefully without jerking, to avoid accidents caused by shaking the lift truck.

NOTE: If necessary use the steering to reset the hydraulic control steering accumulator.

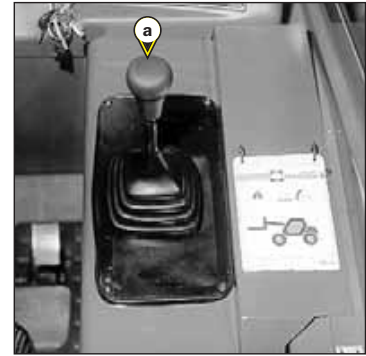
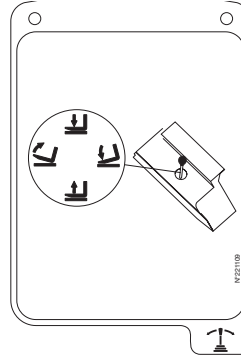
ML 635 Turbo Série 3-E2

LIFTING OF THE LOAD

- The lever A backwards when lifting.
- The lever A forwards when lowering.

TILT OF THE CARRIAGE

- The lever A to the left for reverse tilt.
- The lever A to the right for forward tilt.



MT 940 L Turbo Série 3-E2

MT 1240 L Turbo Série 3-E2

LIFTING OF THE LOAD

- The lever A backwards when lifting.
- The lever A forwards when lowering.

TILT OF THE CARRIAGE

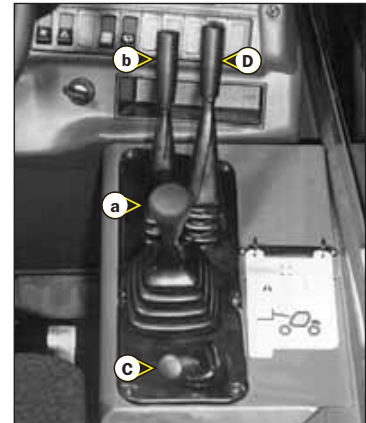
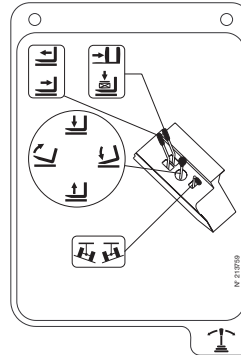
- The lever A to the left for reverse tilt.
- The lever A to the right for forward tilt.

TELESCOPING

- The lever B forwards for the extension.
- The lever B backwards for the retraction.

MT 1240 L Turbo Série 3-E2

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



TILTING CORRECTOR

- The lever C to the left when tilting the lift truck on the left.
- The lever C to the right when tilting the lift truck on the right.

NOTE: Tilt can be corrected up to the carriage articulation axle height of 3m50 from the ground, with the jib retracted.

ATTACHMENT

- The lever D forwards or backwards.

MT 1235 S Série 3-E2 (up to machine Nr)

MT 1235 S Turbo Série 3-E2 (up to machine Nr)

LIFTING OF THE LOAD

- The lever A backwards when lifting.
- The lever A forwards when lowering.

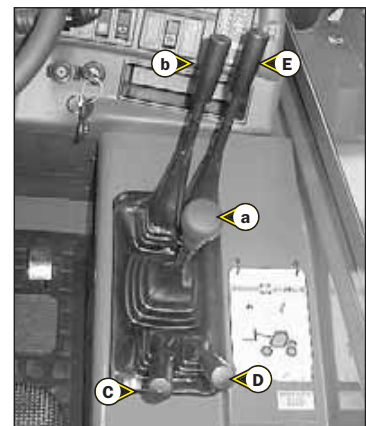
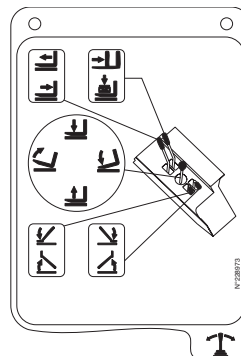
TILT OF THE CARRIAGE

- The lever A to the left for reverse tilt.
- The lever A to the right for forward tilt.

TELESCOPING

- The lever B forwards for the extension.
- The lever B backwards for the retraction.

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



L.H. STABILIZER

- The lever C forwards when lowering.
- The lever C backwards when lifting.

R.H. STABILISER

- The lever D forwards when lowering.
- The lever D backwards when lifting.

NOTE: The stabilisers can only be lifted after the jib have been retracted.

ATTACHMENT

- The lever E forwards or backwards.

MT 1235 S Série 3-E2 (from machine no.)
MT 1235 S Série 3-E2 Turbo (from machine no.)

LIFTING THE LOAD

- Move lever A or B backwards to lift.
- Move lever A or B forwards to lower.

TILT OF THE CARRIAGE

- Move the lever B to the left to excavate.
- Move the lever B to the right to tip.

TELESCOPING

- Move lever A to the right to extend.
- Move lever A to the left to retract.

NOTE: When completely retracting the telescopes, keep operating the control until the telescopes are fully retracted.

LEFT STABILIZER

- Move the lever C forwards to lower.
- Move lever C backwards for lifting.

RIGHT STABILIZER

- Move lever D forwards for lowering.
- Move lever D backwards for lifting.

NOTE: The stabilizers can only be raised after the telescopes have been fully retracted.

ATTACHMENT

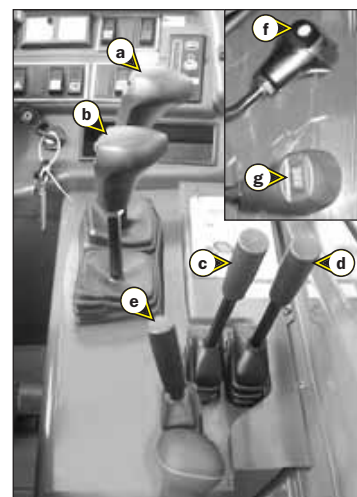
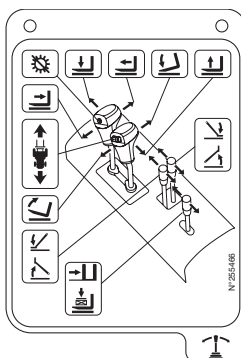
- Move lever E fully forward or back.

TRANSMISSION CUT-OFF

- Buttons F (see: 2 - DESCRIPTION: 5 - SWITCH PANEL).

REVERSING GEAR

- Buttons G (see: 2 - DESCRIPTION: 18 - REVERSING GEAR).



MT 1335 SL Série 3-E2
MT 1335 SL Turbo Série 3-E2
MT 1340 SL Turbo Série 3-E2

LIFTING THE LOAD

- Lever A backwards for raising.
- Lever A forwards for lowering.

TILT OF THE CARRIAGE

- The lever A to the left for reverse tilt.
- Lever A to the right for forward tilt.

TELESCOPING

- Lever B forwards for extension.
- Lever B backwards for retraction.

NOTE: When completely retracting the telescopes, keep operating the control until the telescopes are fully retracted.

LEFT STABILIZER

- Move the lever C forwards to lower.
- Move the lever C backwards to lift.

RIGHT STABILIZER

- Move Lever D forwards to lower.
- Move Lever D backwards to lift.

NOTE: The stabilizers can only be raised after the telescopes have been fully retracted.

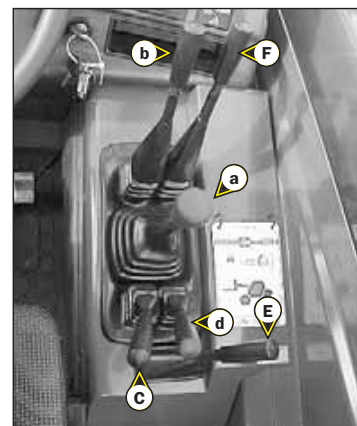
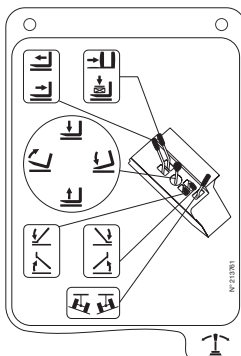
TILT CORRECTOR

- Move lever E to the left to tilt the lift truck to the left.
- Move lever E to the right to tilt the lift truck to the right.

NOTE: Tilt can be corrected up to a carriage articulation axle height of 3,50 m from the ground, with the jib retracted.

ATTACHMENT

- Move lever F forwards or backwards.



MT 1435 SL Série 3-E2
MT 1435 SL Turbo Série 3-E2
MT 1440 SL Série 3-E2
MT 1440 SL Turbo Série 3-E2

LIFTING THE LOAD

- Move lever A or B backwards to lift.
- Move lever A or B forwards to lower.

LIFTING SAFETY DEVICES

- On tires
 - Jib lifting angle limited to 63°.

TILT OF THE CARRIAGE

- Move the lever B to the left to excavate.
- Move the lever B to the right to tip.

TELESCOPING

- Move lever A to the right to extend.
- Move lever A to the left to retract.

NOTE: When completely retracting the telescopes, keep operating the control until the telescopes are fully retracted.

LEFT STABILIZER

- Move the lever C forwards to lower.
- Move lever C backwards for lifting.

RIGHT STABILIZER

- Move lever D forwards for lowering.
- Move lever D backwards for lifting.

NOTE: The stabilizers can only be raised after the telescopes have been fully retracted.

TILT CORRECTOR

- Move lever E to the left to tilt the lift truck to the left.
- Move lever E to the right to tilt the lift truck to the right.

NOTE: Tilt can be corrected up to a carriage articulation axle height of 3,50 m from the ground, with the jib retracted.

ATTACHMENT

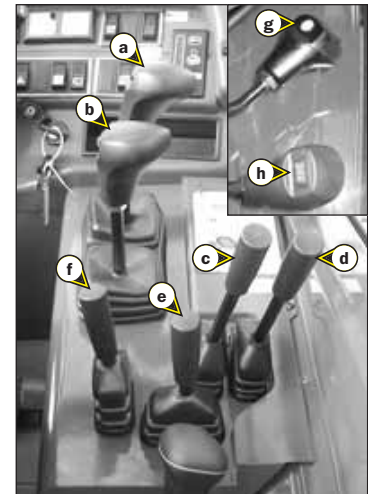
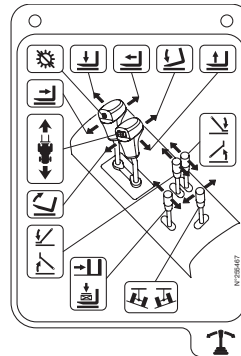
- Move lever F forwards or backwards.

TRANSMISSION CUT-OFF

- Buttons G (see: 2 - DESCRIPTION: 5 - SWITCH PANEL).

REVERSING GEAR

- Buttons H (see: 2 - DESCRIPTION: 18 - REVERSING GEAR).



MT 1740 SL Turbo Série 3-E2

LIFTING OF THE LOAD

- The lever A backwards when lifting.
- The lever A forwards when lowering.

SECURITY LIFTING

- On tyres
 - Jib lifting limited to an angle of 67°.
- On stabilizers
 - Jib lifting speed reduced beyond an angle of 67°.

TILT OF THE CARRIAGE

- The lever A to the left for reverse tilt.
- The lever A to the right for forward tilt.

TELESCOPING OF THE TELESCOPES I AND II

- The lever B forwards for the extension.
- The lever B backwards for the retraction.

TELESCOPING OF THE TELESCOPE III

- The lever C forwards for the extension.
- The lever C backwards for the retraction.

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



The telescoping of the telescope III can only be carried out with the stabilizers extended in lower position. For safety reasons, the telescope III should be the last to be extended and the first to be retracted.

L.H. STABILIZER

- The lever D forwards when lowering.
- The lever D backwards when lifting.

R.H. STABILISER

- The lever E forwards when lowering.
- The lever E backwards when lifting.

NOTE: The stabilizers can only be raised after the telescopes have been fully retracted.

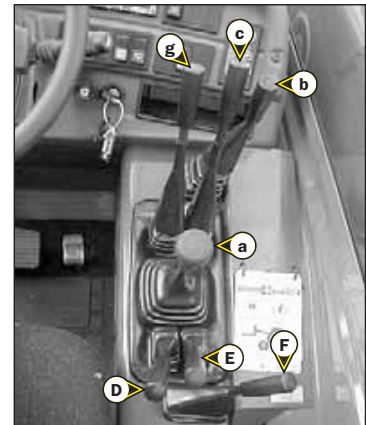
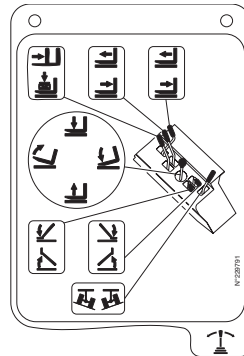
TILTING CORRECTOR

- The lever F to the left when tilting the lift truck on the left.
- The lever F to the right when tilting the lift truck on the right.

NOTE: Tilt can be corrected up to the carriage articulation axle height of 3m50 from the ground, with the jib retracted.

ATTACHMENT

- The lever G forwards or backwards.



21 - HYDRAULIC CONTROLS

! Do not attempt to alter the hydraulic system pressure by interfering with the pressure regulating valve. In the event of suspected malfunction, contact your dealer. ANY ALTERATION MAY RENDER THE WARRANTY NULL AND VOID.

! Use the hydraulic controls carefully without jerking, to avoid accidents caused by shaking the lift truck.

NOTE: If necessary use the steering to reset the hydraulic control steering accumulator.

MT 1240 L Turbo ULTRA Série 3-E2

LIFTING OF THE LOAD

- The lever A backwards when lifting.
- The lever A forwards when lowering.

TILT OF THE CARRIAGE

- The lever A to the left for reverse tilt.
- The lever A to the right for forward tilt.

TELESCOPING

- The button B up for the extension.
- The button B down for the retraction.

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

TILTING CORRECTOR

- Hold button D down and move the lever A to the left when tilting the lift truck on the left.
- Hold button D down and move the lever A to the right when tilting the lift truck on the right.

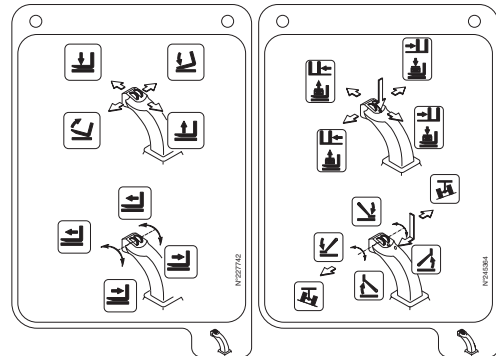
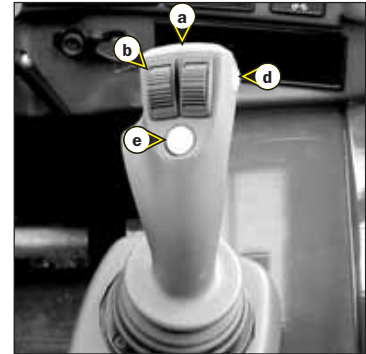
NOTE: Tilt can be corrected up to the carriage articulation axle height of 3m50 from the ground, with the jib retracted.

ATTACHMENT

- Hold button E down and move the lever A forwards or backwards.

OPTION JIB HEAD ELECTROVALVE

- Button E (see: 2 - DESCRIPTION: DESCRIPTION AND USE OF ELECTRIC AND HYDRAULIC OPTIONS).



MT 1340 SL Turbo ULTRA Série 3-E2

LIFTING OF THE LOAD

- The lever A backwards when lifting.
- The lever A forwards when lowering.

TILT OF THE CARRIAGE

- The lever A to the left for reverse tilt.
- The lever A to the right for forward tilt.

TELESCOPING

- The button B up for the extension.
- The button B down for the retraction.

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

L.H. STABILIZER

- Hold button D down and move button B up when lifting.
- Hold button D down and move button B down when lowering.

R.H. STABILIZER

- Hold button D down and move button C up when lifting.
- Hold button D down and move button C down when lowering.

NOTE: The stabilizers can only be raised after the telescopes have been fully retracted.

TILTING CORRECTOR

- Hold button D down and move the lever A to the left when tilting the lift truck on the left.
- Hold button D down and move the lever A to the right when tilting the lift truck on the right.

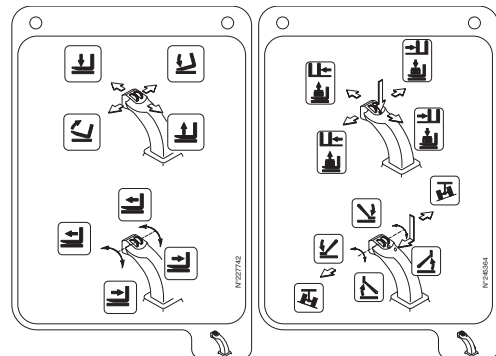
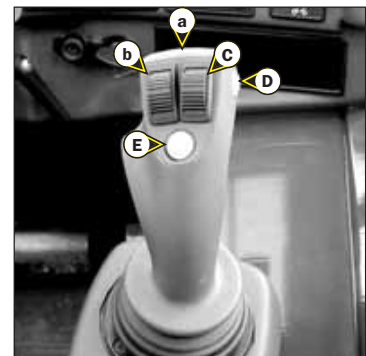
NOTE: Tilt can be corrected up to the carriage articulation axle height of 3m50 from the ground, with the jib retracted.

ATTACHMENT

- Hold button E down and move the lever A forwards or backwards.

OPTION JIB HEAD ELECTROVALVE

- Button E (see: 2 - DESCRIPTION: DESCRIPTION AND USE OF ELECTRIC AND HYDRAULIC OPTIONS).



MT 1440 SL Turbo ULTRA Série 3-E2

LIFTING THE LOAD

LIFTING SAFETY DEVICES

- On tires
 - Jib lifting angle limited to 63°.
 - Lever A backwards for raising.
 - Lever A forwards for lowering.

TILT OF THE CARRIAGE

- The lever A to the left for reverse tilt.
- Lever A to the right for forward tilt.

TELESCOPING

- Button B up for extension.
- Button B down for retraction.

NOTE: When completely retracting the telescopes, keep operating the control until the telescopes are fully retracted.

LEFT STABILIZER

- Hold down button D and move button B up for lifting.
- Hold down button D and move button B down for lowering.

RIGHT STABILIZER

- Hold down button D and move button C up for lifting.
- Hold button down D and move button C down for lowering.

NOTE: The stabilizers can only be raised after the telescopes have been fully retracted.

TILT CORRECTOR

- Hold down button D and move lever A to the left to tilting the lift truck to the left.
- Hold down button D and move lever A to the right to tilting the lift truck to the right.

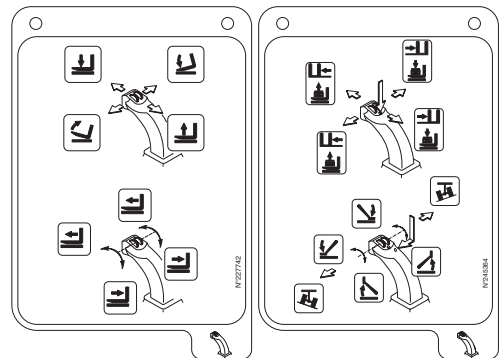
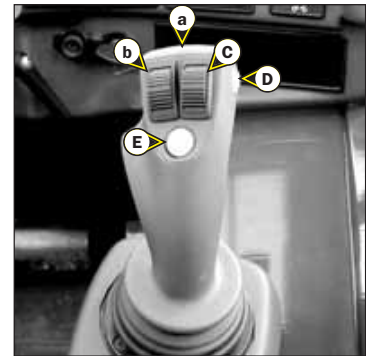
NOTE: Tilt can be corrected up to a carriage articulation axle height of 3,50 m from the ground, with the jib retracted.

ATTACHMENT

- Hold down button E and move the lever A forwards or backwards.

OPTIONAL JIB HEAD ELECTROVALVE

- Button E (see: 2 - DESCRIPTION: DESCRIPTION AND USE OF ELECTRIC AND HYDRAULIC OPTIONS).



MT 1740 SL Turbo ULTRA Série 3-E2

LIFTING OF THE LOAD

SECURITY LIFTING

- On tyres
 - Jib lifting limited to an angle of 67°.
- On stabilizers
 - Jib lifting speed reduced beyond an angle of 67°.
- The lever A backwards when lifting.
- The lever A forwards when lowering.

TILT OF THE CARRIAGE

- The lever A to the left for reverse tilt.
- The lever A to the right for forward tilt.

TELESCOPING OF THE TELESCOPES I AND II

- The button B up for the extension.
- The button B down for the retraction.

TELESCOPING OF THE TELESCOPE III

! *The telescoping of the telescope III can only be carried out with the stabilizers extended in lower position. For safety reasons, the telescope III should be the last to be extended and the first to be retracted.*

- The button C up for the extension.
- The button C down for the retraction.

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

L.H. STABILIZER

- Hold button D down and move button B up when lifting.
- Hold button D down and move button B down when lowering.

R.H. STABILIZER

- Hold button D down and move button C up when lifting.
- Hold button D down and move button C down when lowering.

NOTE: The stabilizers can only be raised after the telescopes have been fully retracted.

TILTING CORRECTOR

- Hold button D down and move the lever A to the left when tilting the lift truck on the left.
- Hold button D down and move the lever A to the right when tilting the lift truck on the right.

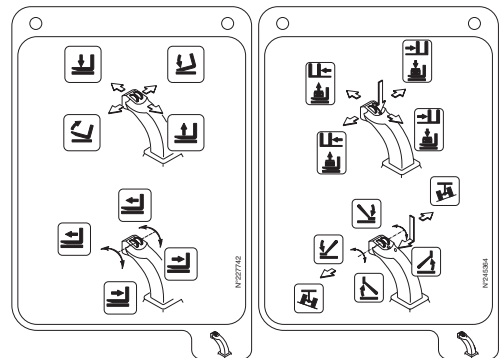
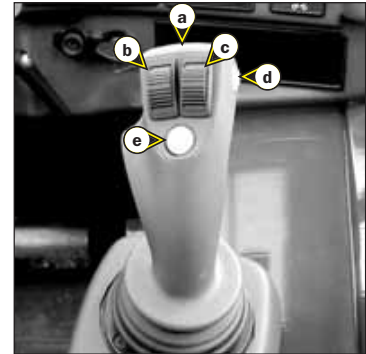
NOTE: Tilt can be corrected up to the carriage articulation axle height of 3m50 from the ground, with the jib retracted.

ATTACHMENT

- Hold button E down and move the lever A forwards or backwards.

OPTION JIB HEAD ELECTROVALVE

- Button E (see: 2 - DESCRIPTION: DESCRIPTION AND USE OF ELECTRIC AND HYDRAULIC OPTIONS).



22 - LOAD CHARTS FILE

This file includes the description of the hydraulic controls and the load charts of the attachments used on the lift truck.

23 - HEATER CONTROL

A - HEATING FAN CONTROL

This 2-speed control regulates warm or cold air through the heating ventilators.

In position 0, the fan is off.

In position 1, the fan is set to minimum speed.

In position 2, the fan is set to maximum speed.

B - HEATING TEMPERATURE CONTROL

Allows the temperature inside the cab to be adjusted.

In position 1, the valve is close, the fan delivers fresh air.

In position 2, the valve is open completely, the fan delivers warm air.

The intermediate positions allow the temperature to be adjusted.



24 - AIR CONDITIONING CONTROLS (OPTION AIR CONDITIONING)

Except ML 635 Turbo Série 3-E2

! The air conditioning only comes on when the forklift truck has been started up. When using your air conditioning, you must work with the doors and windows closed.

In winter: So as to ensure correct operation and complete efficiency of the air conditioning unit, start up the compressor once a week, if only for a short spell, so as to lubricate the internal seals.

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

! If your air conditioning does not seem to be working regularly, have it examined by your dealer (see: 3 - MAINTENANCE: H - EVERY TWO YEARS "OPTION AIR CONDITIONING"). Never try to repair any anomalies yourself.



C - CONDITIONED AIR TEMPERATURE CONTROL

Allows the temperature inside the cab to be adjusted.

In position 0, the air-conditioning system is switched off.

In position 1, the air-conditioning system runs on minimum.

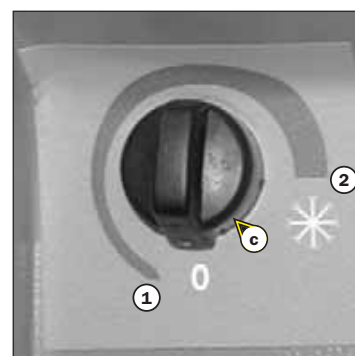
In position 2, the air-conditioning system runs on maximum.

The intermediate positions allow the temperature to be adjusted.

NOTE: Possible losses of water under the lift truck are due to condensate discharges caused by the drying effect of the installation, especially with high outside temperatures and high relative humidity.

For the air conditioning to perform properly, the air intakes must not be blocked by frost, snow or leaves.

When the facility is running, at least one of the cab air grilles must be open so as to avoid any risk of freezing to the evaporator.



CONDITIONED AIR MODE

The controls must be adjusted in the following way:

A - At the required position 1 or 2.

B - At the position 1 (heater valve closed).

C - At the required temperature.

DEMISTING MODE

The controls must be adjusted in the following way:

A - At the required position 1 or 2.

B - At the required temperature.

C - At the required temperature.

25 - RECYCLING INTAKES (OPTION AIR CONDITIONING)

Except ML 635 Turbo Série 3-E2

26 - WINDSCREEN DEMIST VENTS

For optimum effectiveness, close the heating ventilators.

27 - HEATING VENTS

These heating vents enable the air to be directed to the interior of the cabin and onto the side windows.

28 - OPENING BUTTON FOR ACCESS PANEL HYDRAULIC OIL AND FUEL FILLING

- Push the button to open the access panel.
- Push the panel to close it.

29 - DOOR LOCK

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

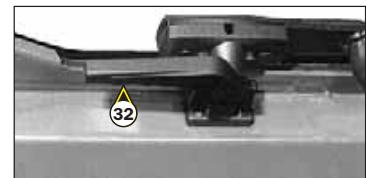
30 - LOCKING HANDLE FOR UPPER HALF DOOR

31 - RELEASING BUTTON FOR UPPER HALF DOOR

32 - HANDLE FOR REAR WINDOW OPENING

EMERGENCY EXIT

Use the rear window as an emergency exit, if it is impossible to leave the cab by the door.



33 - DOCUMENT HOLDER

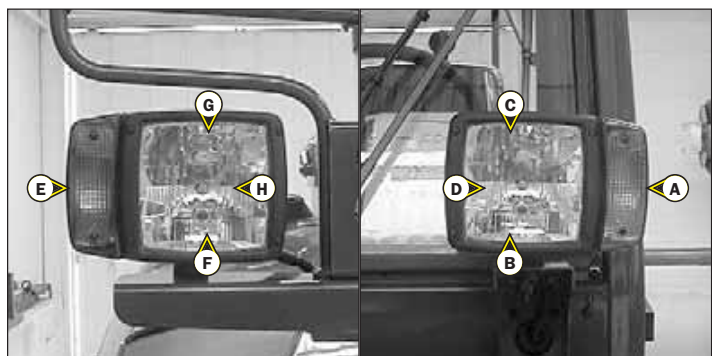
Ensure that the operator's manual is in its place in the document holder.

NOTE: There is an OPTIONAL waterproof document holder and an OPTIONAL tool box.

34 - FRONT LIGHTS

ML 635 Turbo Série 3-E2
MT 940 L Turbo Série 3-E2
MT 1235 S Série 3-E2
MT 1235 S Turbo Série 3-E2
MT 1240 L Turbo Série 3-E2
MT 1240 L Turbo ULTRA Série 3-E2
MT 1335 SL Série 3-E2
MT 1335 SL Turbo Série 3-E2
MT 1435 SL Série 3-E2
MT 1435 SL Turbo Série 3-E2

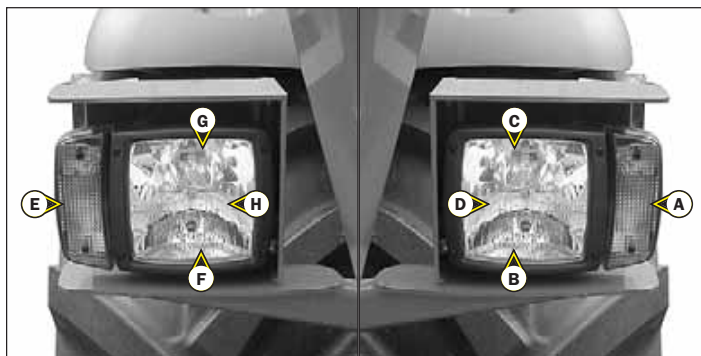
- A - Left front indicator.
- B - Left front dipped headlight.
- C - Left front main beam.
- D - Left front sidelight.
- E - Right front indicator.
- F - Right front dipped headlight.
- G - Right front main beam.
- H - Right front sidelight.



34 - FRONT LIGHTS

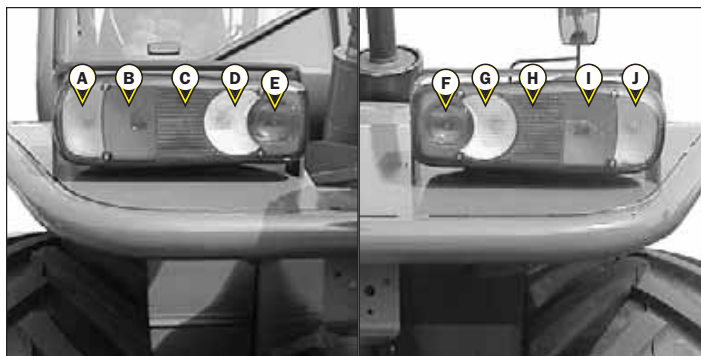
MT 1340 SL Turbo Série 3-E2
MT 1340 SL Turbo ULTRA Série 3-E2
MT 1440 SL Série 3-E2
MT 1440 SL Turbo Série 3-E2
MT 1440 SL Turbo ULTRA Série 3-E2
MT 1740 SL Turbo Série 3-E2
MT 1740 SL Turbo ULTRA Série 3-E2

A - Left front indicator.
B - Left front dipped headlight.
C - Left front main beam.
D - Left front sidelight.
E - Right front indicator.
F - Right front dipped headlight.
G - Right front main beam.
H - Right front sidelight.



35 - REAR LIGHTS

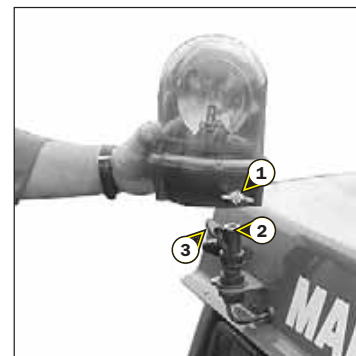
A - Left rear indicator.
B - Left rear stoplight.
C - Left tail light.
D - Left rear reverse light.
E - Left rear fog light.
F - Right rear fog light.
G - Right rear reverse light.
H - Right tail light.
I - Right rear stoplight.
J - Right rear indicator.



36 - REVOLVING LIGHT

The flashing light is dismountable to make it possible, for example, to reduce the height of the lift truck or to avoid being stolen.

- Unscrew the screw 1 and lay down the flashing light.
- Protect the bracket 2 with the cap 3.



37 - SPIRIT LEVEL

ML 635 Turbo Série 3-E2

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



37 - SPIRIT LEVEL

MT 940 L Turbo Série 3-E2
MT 1235 S Série 3-E2
MT 1235 S Turbo Série 3-E2
MT 1240 L Turbo Série 3-E2
MT 1240 L Turbo ULTRA Série 3-E2
MT 1335 SL Série 3-E2 - MT 1435 SL Série 3-E2
MT 1335 SL Turbo Série 3-E2 - MT 1435 SL Turbo Série 3-E2
MT 1440 SL Série 3-E2
MT 1340 SL Turbo Série 3-E2 - MT 1440 SL Turbo Série 3-E2
MT 1340 SL Turbo ULTRA Série 3-E2 - MT 1440 SL Turbo ULTRA Série 3-E2
MT 1740 SL Turbo Série 3-E2
MT 1740 SL Turbo ULTRA Série 3-E2



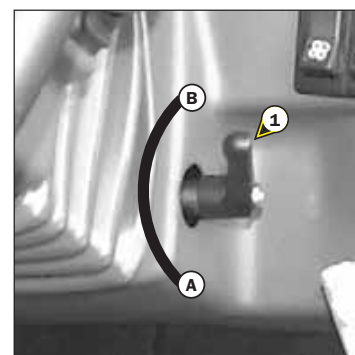
Enables the operator to check that the lift truck is in the horizontal position.

38 - STEERING WHEEL REGULATING HANDLE

MT 1240 L Turbo ULTRA Série 3-E2
MT 1340 SL Turbo ULTRA Série 3-E2
MT 1440 SL Turbo ULTRA Série 3-E2
MT 1740 SL Turbo ULTRA Série 3-E2

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

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



39 - TILTING INDICATOR

MT 940 L Turbo Série 3-E2
MT 1240 L Turbo Série 3-E2
MT 1240 L Turbo ULTRA Série 3-E2
MT 1335 SL Série 3-E2
MT 1335 SL Turbo Série 3-E2
MT 1340 SL Turbo Série 3-E2
MT 1340 SL Turbo ULTRA Série 3-E2
MT 1740 SL Turbo Série 3-E2
MT 1740 SL Turbo ULTRA Série 3-E2

The indicator informs the user about the tilting given to the lift truck.

- The tip of the retracted indicator indicates the tilting towards the left.
- The tip of the extended indicator indicates the tilting towards the right.



TOWING PIN AND HOOK

Located at the rear of the lift truck, this device is used to attach a trailer. Its capacity is limited for each lift truck by the authorised gross vehicle weight, tractive effort and maximum vertical force on the coupling point. This information is given on the manufacturer's plate fixed to each lift truck (see: 2 - DESCRIPTION: IDENTIFICATION OF THE LIFT TRUCK).

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

! Do not tow a trailer or attachment which is not in perfect working order. Using a trailer in poor condition may effect the lift truck's steering and braking, and hence safety.

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

NOTE: There is an OPTIONAL rear-view mirror which allows the lift truck to be approached more closely to the trailer ring.

A - TOWING PIN (STANDARD)

ML 635 Turbo Série 3-E2
MT 940 L Turbo Série 3-E2
MT 1240 L Turbo Série 3-E2
MT 1240 L Turbo ULTRA Série 3-E2
MT 1335 SL Série 3-E2 - MT 1435 SL Série 3-E2
MT 1335 SL Turbo Série 3-E2 - MT 1435 SL Turbo Série 3-E2
MT 1440 SL Série 3-E2
MT 1340 SL Turbo Série 3-E2 - MT 1440 SL Turbo Série 3-E2
MT 1340 SL Turbo ULTRA Série 3-E2 - MT 1440 SL Turbo ULTRA Série 3-E2
MT 1740 SL Turbo Série 3-E2
MT 1740 SL Turbo ULTRA Série 3-E2



COUPLING AND UNCOUPLING THE TRAILER

- To couple the trailer, position the lift truck as close as possible to the trailer ring.
- Put the handbrake on and switch off the I.C. engine.
- Remove the clip 1, lift the trailer pin 2 and place or remove the trailer ring.

! Be careful not to get your fingers caught or crushed during this operation.
Do not forget to put clip 1 back in place.
When uncoupling, make sure that the trailer is supported independently.

B - PROJECTING HOOK (STANDARD)

MT 1235 S Série 3-E2
MT 1235 S Turbo Série 3-E2

COUPLING AND UNCOUPLING THE TRAILER

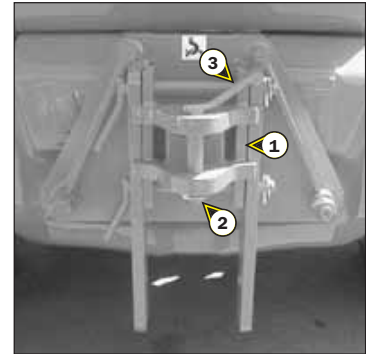
- To couple the trailer, position the lift truck as close as possible to the trailer ring.
- Put the handbrake on and switch off the I.C. engine.
- Remove the clip 1, lift the trailer pin 2 and place or remove the trailer ring.

! Be careful not to get your fingers caught or crushed during this operation.
Do not forget to put clip 1 back in place.
When uncoupling, make sure that the trailer is supported independently.



C - ADJUSTABLE PROJECTING HOOK (OPTION)

ML 635 Turbo Série 3-E2
MT 940 L Turbo Série 3-E2
MT 1240 L Turbo Série 3-E2
MT 1240 L Turbo ULTRA Série 3-E2
MT 1335 SL Série 3-E2 - MT 1435 SL Série 3-E2
MT 1335 SL Turbo Série 3-E2 - MT 1435 SL Turbo Série 3-E2
MT 1440 SL Série 3-E2
MT 1340 SL Turbo Série 3-E2 - MT 1440 SL Turbo Série 3-E2
MT 1340 SL Turbo ULTRA Série 3-E2 - MT 1440 SL Turbo ULTRA Série 3-E2
MT 1740 SL Turbo Série 3-E2
MT 1740 SL Turbo ULTRA Série 3-E2



COUPLING AND UNCOUPLING THE TRAILER

- To couple the trailer, position the lift truck as close as possible to the trailer ring.
- Put the handbrake on and switch off the I.C. engine.
- Set the coupling fitting 1 according to the height of the trailer ring.



Do not forget to put rods and clip back in place.

- Remove pin 2, lift the towing pin 3 and insert or remove the trailer ring.



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

Do not forget to put clip 2 back in place.

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

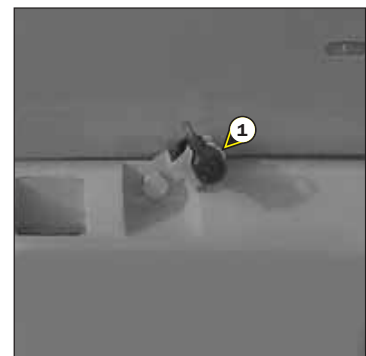
D - ELECTRICAL CONNECTION (OPTION)

- Connect the male plug to the female socket 1 on the lift truck and make sure the trailer lights work properly.



E - CONNECTING THE BRAKING SYSTEM (OPTION)

- Connect the brake hose to the provided brake unit 1 on the lift truck.
- Make sure the trailer brakes are working properly and test the effects of braking before taking the trailer onto the public highway.

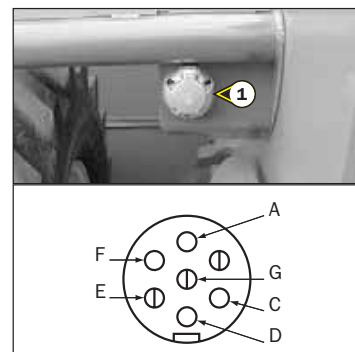


DESCRIPTION AND USE OF ELECTRIC AND HYDRAULIC OPTIONS

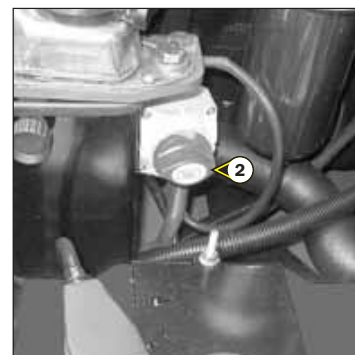
1 - REAR ELECTRIC SOCKET

Enables power supply connection for a trailer (see: 2 - DESCRIPTION: TOWING PIN AND HOOK) or signalling bar.

- A - Left rear indicator.
- C - Earth.
- D - Right rear indicator.
- E - Right tail light.
- F - Rear stoplight.
- G - Left tail light.

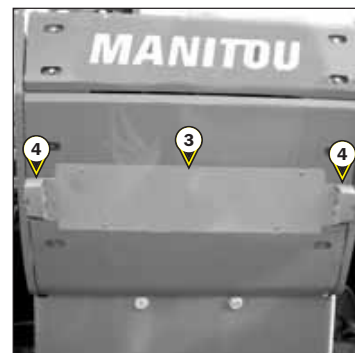


2 - BATTERY CUT-OFF



3 - NUMBER PLATE

4 - NUMBER PLATE LIGHTING



5 - PREHEATING ROD

Enables the motor unit to be kept warm during prolonged periods of stoppage and thus, ensures the improved start-up of the I.C. engine.

SUPPLY CHARACTERISTICS OF PREHEATING SYSTEM:

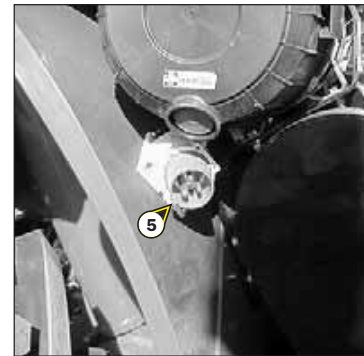
- Rated range of power: 220-240V ; 50-60Hz
- Current consumed: 4,5A
- Equipment in class 1
- Equipment connectable only on feeder circuit TT or TN
- Category of insulation 2

ENVIRONMENTAL CONDITIONS IN USE:

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

CONDITIONS FOR CONNECTION AND USE OF PREHEATING:

- The preheating system should not be used for an external ambient temperature higher than + 25° C.
- It is essential that the power supply to the preheating system is:
 - Effected with a cable that conforms to the installation standards in force and contains a protective earth conductor.
 - Contains an appropriate sectioning system.
 - Incorporates an appropriate safety system against short circuits (fuses or circuit breaker) and a differential circuit breaker with 30mA sensitivity.
- Only connect to and disconnect from the power supply while the unit is off and the I.C. engine is stopped.



6 - DIGICODE ANTI-THEFT SYSTEM

FUNCTIONING

- Switch on the lift truck: LED A flashes red.
- Enter your user code followed by "VAL": LED A goes out.
- The entry of each figure in your code is confirmed by LED A lighting up green. If you make an error, press the "ANN" key and re-enter your code completely.
- Start the lift truck within the next 30 seconds ; otherwise the anti-theft system will react and LED A flashes red.

NOTE: You can restart the lift truck within 12 seconds of stopping it: after this time, the anti-theft system reacts and LED A flashes red.

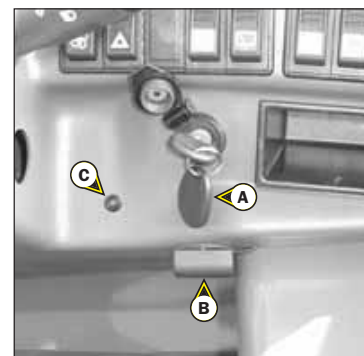


7 - FINTRONIC ANTI-START SYSTEM

FUNCTIONING

- Switch on the lift truck and set the black key A next to the antenna B (maximum 80 mm).
- Wait a few seconds for red LED C to go out before starting the lift truck.

NOTE: You can restart the lift truck within 20 seconds of stopping it: after this time, the anti-start system reacts and LED C flashes red.



8 - CLEANFIX SELF-CLEANING FAN

This system, operated by switch 1, cleans the radiator core and the grille of the engine cover by reversing the air flow.

 **When in use, beware of the risk of projection into the eyes.**

Position A: The indicator light is on, the fan operates in self-cleaning mode for a few seconds once every 3 minutes.

Position B: The indicator light is off, the fan is in normal operating mode.



9 - ELECTRICAL PROVISION ON JIB

Enables an electrical function to be used at the head of the jib foot.

OPERATION

- MT 940 L Turbo Série 3-E2
- MT 1235 S Série 3-E2 (up to machine no.)
- MT 1235 S Série 3-E2 Turbo (up to machine no.)
- MT 1240 L Turbo Série 3-E2
- MT 1335 SL Série 3-E2
- MT 1335 SL Turbo Série 3-E2
- MT 1340 SL Turbo Série 3-E2
- MT 1740 SL Turbo Série 3-E2

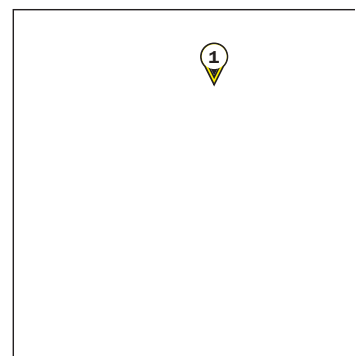
- Hold down button 1 and move the lever forwards or backwards.



OPERATION

- MT 1235 S Série 3-E2 (from machine no.)
- MT 1235 S Série 3-E2 Turbo (from machine no.)
- MT 1435 SL Série 3-E2
- MT 1435 SL Turbo Série 3-E2
- MT 1440 SL Série 3-E2
- MT 1440 SL Turbo Série 3-E2

- Hold down button 1 and move the lever forwards or backwards.

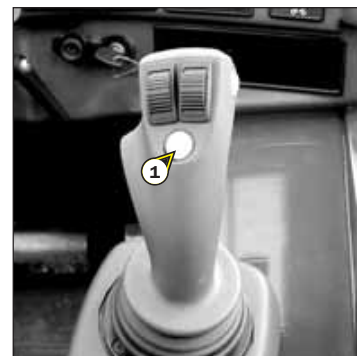


OPERATION

MT 1240 L Turbo ULTRA Série 3-E2

MT 1340 SL Turbo ULTRA Série 3-E2 - MT 1440 SL Turbo ULTRA Série 3-E2

- Hold down button 1 and move the lever forwards or backwards.



10 - INTERNAL LEAK RETURN

MT 1235 S Série 3-E2

MT 1235 S Turbo Série 3-E2

MT 1240 L Turbo Série 3-E2

MT 1240 L Turbo ULTRA Série 3-E2

MT 1335 SL Série 3-E2 - MT 1435 SL Série 3-E2

MT 1335 SL Turbo Série 3-E2 - MT 1435 SL Turbo Série 3-E2

MT 1440 SL Série 3-E2

MT 1340 SL Turbo Série 3-E2 - MT 1440 SL Turbo Série 3-E2

MT 1340 SL Turbo ULTRA Série 3-E2 - MT 1440 SL Turbo ULTRA Série 3-E2

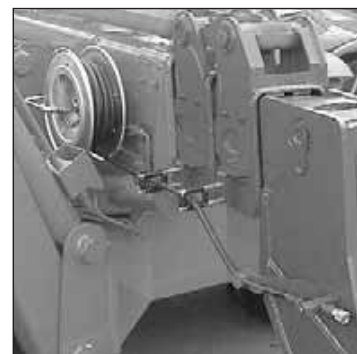
Enables connection of an attachment for which leak return is required.



11 - EXTERNAL LEAK RETURN

Except for ML 635 Série 3-E2 Turbo

Enables connection of an attachment for which leak return is required.



12 - HYDRAULIC ATTACHMENT LOCKING

Except for ML 635 Série 3-E2 Turbo

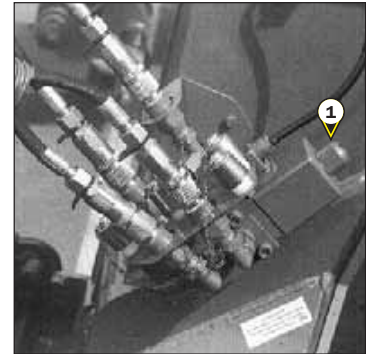
Enables locking of attachment to the carriage to be controlled and the use of a hydraulic attachment on the same hydraulic system (see: 4 - ADAPTABLE ATTACHMENTS OPTIONAL ON THE RANGE: PICKING UP THE ATTACHMENTS).



13 - JIB HEAD ELECTROVALVE

Enables use of two hydraulic functions on the attachment circuit.

⚠ To facilitate connection of the rapid connectors, release the pressure in the hydraulic system by pressing button 1 on the electrovalve.



OPERATION

MT 940 L Turbo Série 3-E2
MT 1235 S Série 3-E2 (up to machine no.)
MT 1235 S Série 3-E2 Turbo (up to machine no.)
MT 1240 L Turbo Série 3-E2
MT 1335 SL Série 3-E2
MT 1335 SL Turbo Série 3-E2
MT 1340 SL Turbo Série 3-E2
MT 1740 SL Turbo Série 3-E2

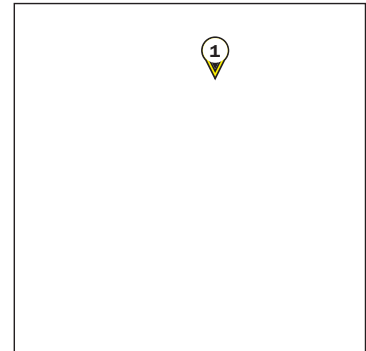
- Without pressing button 1, the lever controls a hydraulic function.
- Hold down button 1, the lever controls another hydraulic function.



OPERATION

MT 1235 S Série 3-E2 (from machine no.)
MT 1235 S Série 3-E2 Turbo (from machine no.)
MT 1435 SL Série 3-E2
MT 1435 SL Turbo Série 3-E2
MT 1440 SL Série 3-E2
MT 1440 SL Turbo Série 3-E2

- Without pressing button 1, the lever controls a hydraulic function.
- Hold down button 1, the lever controls another hydraulic function.



OPERATION

MT 1240 L Turbo ULTRA Série 3-E2
MT 1340 SL Turbo ULTRA Série 3-E2 - MT 1440 SL Turbo ULTRA Série 3-E2
MT 1740 SL Turbo ULTRA Série 3-E2

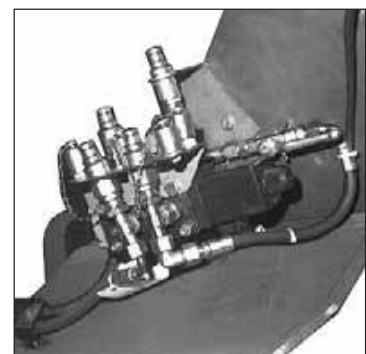
- Hold down button 1 and move the lever forwards or backwards to control a hydraulic function.
- Hold down button 1 and move the lever to the left or right to control another hydraulic function.



14 - JIB HEAD ELECTROVALVE + HYDRAULIC ATTACHMENT LOCKING

Except for ML 635 Série 3-E2 Turbo

The addition of these two options enables of several hydraulic functions to be combined.



15 - CUTTING OFF "SIMPLE" HYDRAULIC MOVEMENTS

MT 940 L Turbo Série 3-E2

The function which cuts hydraulic movements is used to automatically stop dangerous movement of the jib when you are close to the limit of longitudinal stability. However, lateral stability can reduce the load chart in its upper part and this reduction is not detected by the longitudinal stability alarm.



The operator must respect the lift truck's load chart.



All attachments with a suspended load (winch, crane jib, crane jib with winch, hook, etc.) MUST be used with a lift truck equipped with a working hydraulic movement cut-out device.

1st FITTING

FUNCTIONING

Switch A allows you to cut off "SIMPLE" hydraulic movements or not.



WITH CUT-OUT OF "SIMPLE" HYDRAULIC MOVEMENTS: SWITCH A IN POSITION A2 (VISUAL INDICATOR OFF):



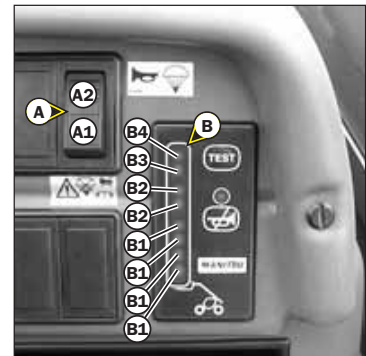
Led B4 indicates that the lift truck has reached the authorized limit of longitudinal stability and all hydraulic movements are neutralised.



The sound alarm goes off at the same time.

- To restart hydraulic movement, proceed as follows:
- Hold switch A in position A1.
- Only perform de-aggravating hydraulic movements in the following order ; jib retracted and raised.
- Reset switch A to position A2.

NOTE: When the jib is retracted, the function for switching off "SIMPLE" hydraulic movements is disconnected.



WITHOUT CUTTING OUT "SIMPLE" HYDRAULIC MOVEMENTS: SWITCH A IN POSITION A1 (VISUAL INDICATOR ON):

To allow the use of loading or earth moving buckets, for example.



In this case, the user is only informed by the longitudinal stability alarm system B (see: 2 - DESCRIPTION: 5 - LONGITUDINAL STABILITY ALARM SYSTEM).



Hydraulic movements are not cut off.



The sound alarm is disconnected.



See operator's manual for use and description.

2nd FITTING

FUNCTIONING

Switch A allows you to cut off "SIMPLE" hydraulic movements or not. The cutting-off of "SIMPLE" hydraulic movements is automatically enabled when the lift truck is started-up.

WITH CUT-OUT OF "SIMPLE" HYDRAULIC MOVEMENTS: VISUAL INDICATOR A1 OFF:

- Led B4 indicates that the lift truck has reached the authorized limit of longitudinal stability and all hydraulic movements are neutralized.
- The sound alarm goes off at the same time.
- To restart hydraulic movement, proceed as follows:
- Press the bottom of switch A, visual indicator A1 comes on and indicates that the hydraulic movement cut-out is disabled.
- Only perform de-aggravating hydraulic movements in the following order ; jib retracted and raised.
- Re-enable the hydraulic movement cut-out by pressing the top of switch A, visual indicator A1 will go out.

NOTE: When the jib is retracted, the function for switching off "SIMPLE" hydraulic movements is disconnected.



WITHOUT CUTTING-OUT "SIMPLE" HYDRAULIC MOVEMENTS: VISUAL INDICATOR A1 ON:

- To allow the use of loading or earth moving buckets, for example.
- In this case, the user is only informed by the longitudinal stability alarm system B (see: 2 - DESCRIPTION: 5 - LONGITUDINAL STABILITY ALARM SYSTEM).

16 - CUTTING OFF "AGGRAVATING" HYDRAULIC MOVEMENTS

MT 1235 S Série 3-E2

MT 1235 S Turbo Série 3-E2

MT 1240 L Turbo Série 3-E2

MT 1335 SL Série 3-E2 - MT 1435 SL Série 3-E2

MT 1335 SL Turbo Série 3-E2 - MT 1435 SL Turbo Série 3-E2

MT 1440 SL Série 3-E2

MT 1340 SL Turbo Série 3-E2 - MT 1440 SL Turbo Série 3-E2

MT 1740 SL Turbo Série 3-E2

The function which cuts hydraulic movements is used to automatically stop dangerous movement of the jib when you are close to the limit of longitudinal stability. However, lateral stability can reduce the load chart in its upper part and this reduction is not detected by the longitudinal stability alarm.



The operator must respect the lift truck's load chart.



All attachments with a suspended load (winch, crane jib, crane jib with winch, hook, etc.) MUST be used with a lift truck equipped with a working hydraulic movement cut-out device.

1st FITTING

FUNCTIONING

Switch A allows you to cut off "AGGRAVATING" hydraulic movements or not.



WITH CUT-OUT OF "AGGRAVATING" HYDRAULIC MOVEMENTS: SWITCH A IN POSITION A2 (VISUAL INDICATOR OFF):



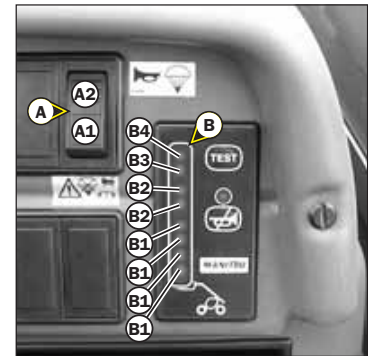
Led B4 indicates that the lift truck has reached the authorized limit of longitudinal stability and all aggravating hydraulic movements are neutralised.



The sound alarm goes off at the same time.

- To restart hydraulic movements, only perform de-aggravating hydraulic movements in the following order; jib retracted and raised.

NOTE: When the jib is retracted, the function for switching off "AGGRAVATING" hydraulic movements is disconnected.



WITHOUT CUTTING-OUT "AGGRAVATING" HYDRAULIC MOVEMENTS: SWITCH A IN POSITION A1 (VISUAL INDICATOR ON):

To allow the use of loading or earth moving buckets, for example.



In this case, the user is only informed by the longitudinal stability alarm system B (see: 2 - DESCRIPTION: 5 - LONGITUDINAL STABILITY ALARM SYSTEM).



Hydraulic movements are not cut off.



The sound alarm is disconnected.



See operator's manual for use and description.

2nd FITTING

FUNCTIONING

Switch A allows you to cut-off "AGGRAVATING" hydraulic movements or not. The cutting-off of "AGGRAVATING" hydraulic movements is automatically enabled when the lift truck is started-up.

WITH CUT-OUT OF "AGGRAVATING" HYDRAULIC MOVEMENTS: VISUAL INDICATOR A1 OFF:

- Led B4 indicates that the lift truck has reached the authorized limit of longitudinal stability and all aggravating hydraulic movements are neutralized.

- The sound alarm goes off at the same time.

- To restart hydraulic movements, only perform de-aggravating hydraulic movements in the following order; jib retracted and raised.

NOTE: When the jib is retracted, the function for switching off "AGGRAVATING" hydraulic movements is disconnected.



WITHOUT CUTTING-OUT "AGGRAVATING" HYDRAULIC MOVEMENTS: VISUAL INDICATOR A1 ON:

- To allow the use of loading or earth moving buckets, for example.

- In this case, the user is only informed by the longitudinal stability alarm system B (see: 2 - DESCRIPTION: 5 - LONGITUDINAL STABILITY ALARM SYSTEM).

17 - QUICK-RELEASE COUPLER ON ATTACHMENT CIRCUIT



18 - PREARRANGED TRAILER LOCKING

Enables the hydraulic connection of a braked trailer (see: 2 - DESCRIPTION: TOWING PIN AND HOOK).

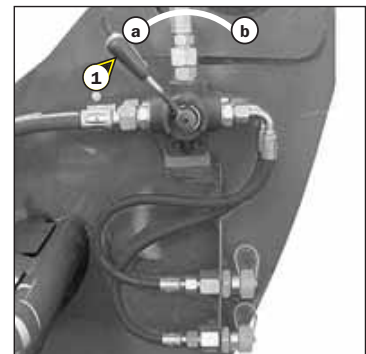


19 - SINGLE OR DUAL EFFECT REAR HYDRAULIC CONTROL PREDISPOSITION

Except ML 635 Turbo Série 3-E2

Enables the use of a hydraulic rear hook or of a trailer with hydraulic tipping.

- Single or double effect rear hydraulic control functions with hydraulic control of the additional attachment (see: 2 - DESCRIPTION: 21 - HYDRAULIC CONTROLS) according to the position of tap 1.
 - Position A: Hydraulic control of the additional attachment at the front of the lift truck.
 - Position B: Hydraulic control of the additional attachment at the rear of the lift truck.



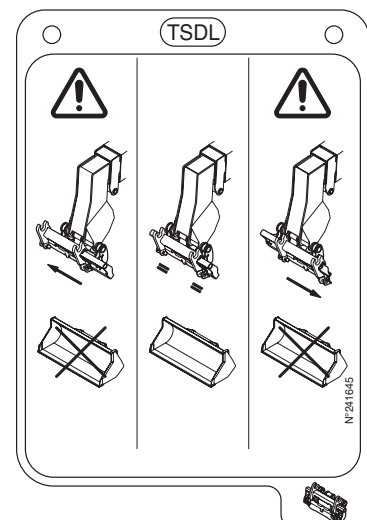
20 - SINGLE SIDE-SHIFT CARRIAGE (TSDL)

MT 1235 S Série 3-E2
MT 1235 S Turbo Série 3-E2
MT 1240 L Turbo Série 3-E2
MT 1240 L Turbo ULTRA Série 3-E2
MT 1335 SL Série 3-E2 - MT 1435 SL Série 3-E2
MT 1335 SL Turbo Série 3-E2 - MT 1435 SL Turbo Série 3-E2
MT 1440 SL Série 3-E2
MT 1340 SL Turbo Série 3-E2 - MT 1440 SL Turbo Série 3-E2
MT 1340 SL Turbo ULTRA Série 3-E2 - MT 1440 SL Turbo ULTRA Série 3-E2
MT 1740 SL Turbo Série 3-E2
MT 1740 SL Turbo ULTRA Série 3-E2

! The single side-shift carriage (TSDL) is only compatible with the following attachments:

- floating fork carriage (TFF)
- tilting fork carriage (PFB)
- loading bucket (CBR)
- concrete bucket (BB, BBG)
- spout bucket (GL)
- crane jib and crane jib with winch (P, PT, PO, PC)
- winch (H)
- fixed platform, swivelling platform, roofer's platform.

It is prohibited to use any other attachments on the TSDL.



! If it is being used with a loading bucket (CBR), the single side-shift carriage MUST be centred and no side-shift operations performed.

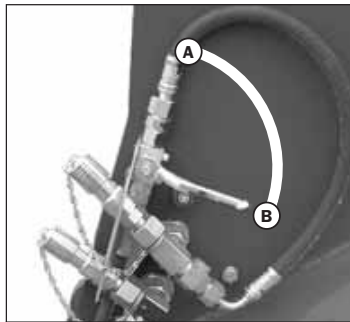
WHIT COUPLER ON JIB HEAD

SINGLE SIDE-SHIFT CARRIAGE

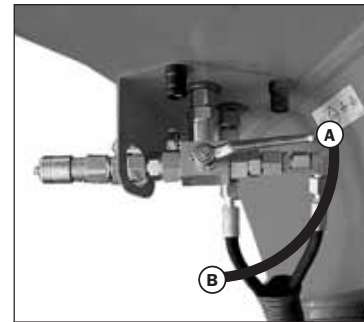
- Put the valve in position A, and used hydraulic control of the attachment of the lift truck.

ATTACHMENTS

- Put the valve in position B, and used hydraulic control of the attachment of the lift truck.



MT 1235/1240/1335/1340/1435/1440 ...



MT 1740

WITH JIB HEAD ELECTROVALVE

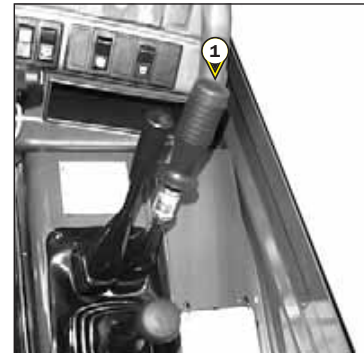
- MT 1235 S Série 3-E2 (up to machine no.)
- MT 1235 S Série 3-E2 Turbo (up to machine no.)
- MT 1240 L Turbo Série 3-E2
- MT 1335 SL Série 3-E2
- MT 1335 SL Turbo Série 3-E2
- MT 1340 SL Turbo Série 3-E2
- MT 1740 SL Turbo Série 3-E2

SINGLE SIDE-SHIFT CARRIAGE

- Move the lever forwards or backwards.

ATTACHMENT

- Hold down button 1 and move the lever forwards or backwards.



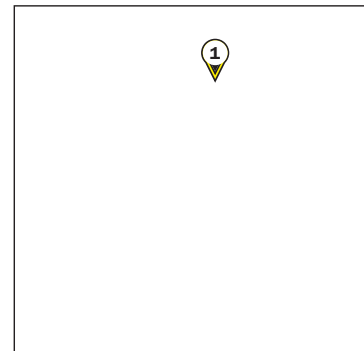
- MT 1235 S Série 3-E2 (from machine no.)
- MT 1235 S Série 3-E2 Turbo (from machine no.)
- MT 1435 SL Série 3-E2
- MT 1435 SL Turbo Série 3-E2
- MT 1440 SL Série 3-E2
- MT 1440 SL Turbo Série 3-E2

SINGLE SIDE-SHIFT CARRIAGE

- Move the lever forwards or backwards.

ATTACHMENT

- Hold down button 1 and move the lever forwards or backwards.



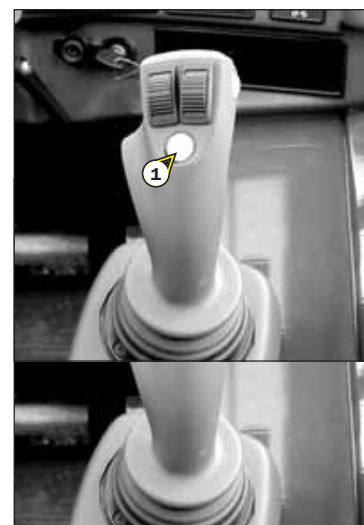
- MT 1240 L Turbo ULTRA Série 3-E2
- MT 1340 SL Turbo ULTRA Série 3-E2
- MT 1440 SL Turbo ULTRA Série 3-E2
- MT 1740 SL Turbo ULTRA Série 3-E2

SINGLE SIDE-SHIFT CARRIAGE

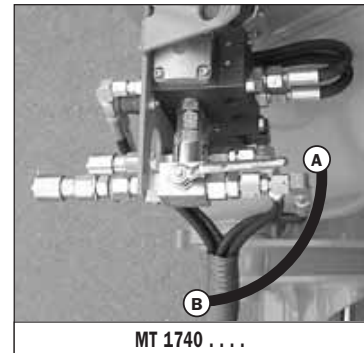
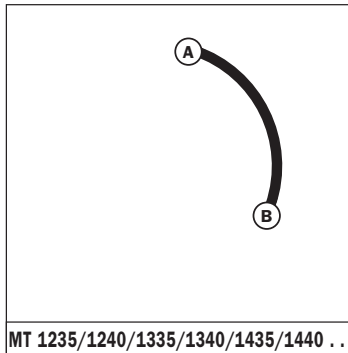
- Hold down button 1 and move the lever forwards or backwards.

ATTACHMENT

- Hold down button 1 and move the lever to left or right.



WITH JIB HEAD ELECTROVALVE + HYDRAULIC ATTACHMENT LOCKING



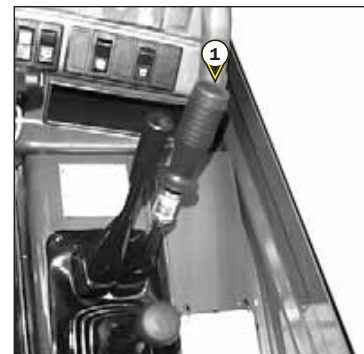
MT 1235 S Série 3-E2 (up to machine no.)
MT 1235 S Série 3-E2 Turbo (up to machine no.)
MT 1240 L Turbo Série 3-E2
MT 1335 SL Série 3-E2
MT 1335 SL Turbo Série 3-E2
MT 1340 SL Turbo Série 3-E2
MT 1740 SL Turbo Série 3-E2

SINGLE SIDE-SHIFT CARRIAGE

- Move the lever forwards or backwards.

ATTACHMENT

- Set the valve to position A, hold down button 1 and move the lever forwards or backwards.



HYDRAULIC ATTACHMENT LOCKING

- Set the valve to position B, hold down button 1 and move the lever forwards or backwards.

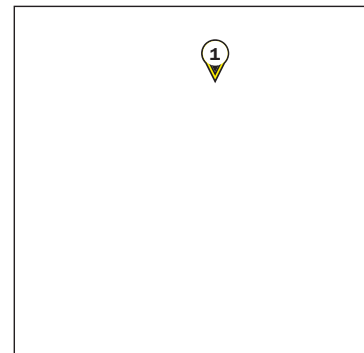
MT 1235 S Série 3-E2 (from machine no.)
MT 1235 S Série 3-E2 Turbo (from machine no.)
MT 1435 SL Série 3-E2
MT 1435 SL Turbo Série 3-E2
MT 1440 SL Série 3-E2
MT 1440 SL Turbo Série 3-E2

SINGLE SIDE-SHIFT CARRIAGE

- Move the lever forwards or backwards.

ATTACHMENT

- Set the valve to position A, hold down button 1 and move the lever forwards or backwards.



HYDRAULIC ATTACHMENT LOCKING

- Set the valve to position B, hold down button 1 and move the lever forwards or backwards.

MT 1240 L Turbo ULTRA Série 3-E2
MT 1340 SL Turbo ULTRA Série 3-E2
MT 1440 SL Turbo ULTRA Série 3-E2
MT 1740 SL Turbo ULTRA Série 3-E2

SINGLE SIDE-SHIFT CARRIAGE

- Hold down button 1 and move the lever forwards or backwards.

ATTACHMENT

- Set the valve to position A, hold down button 1 and move the lever to left or right.

HYDRAULIC ATTACHMENT LOCKING

- Set the valve to position B, hold down button 1 and move the lever to left or right.



3 - MAINTENANCE

TABLE OF CONTENTS

MANITOU ORIGINAL SPARE PARTS AND EQUIPMENT **3 - 5**

FILTERS CARTRIDGES AND BELTS **3 - 6**

ML 635 Turbo Série 3-E2	3 - 6
MT 940 L Turbo Série 3-E2	3 - 7
MT 1235 S Série 3-E2	3 - 8
MT 1235 S Turbo Série 3-E2	3 - 10
MT 1240 L Turbo Série 3-E2	3 - 14
MT 1240 L Turbo ULTRA Série 3-E2	3 - 12
MT 1335 SL Série 3-E2	3 - 8
MT 1335 SL Turbo Série 3-E2	3 - 13
MT 1340 SL Turbo Série 3-E2	3 - 13
MT 1340 SL Turbo ULTRA Série 3-E2	3 - 12
MT 1435 SL Série 3-E2	3 - 8
MT 1435 SL Turbo Série 3-E2	3 - 13
MT 1440 SL Série 3-E2	3 - 9
MT 1440 SL Turbo Série 3-E2	3 - 14
MT 1440 SL Turbo ULTRA Série 3-E2	3 - 12
MT 1740 SL Turbo Série 3-E2	3 - 11
MT 1740 SL Turbo ULTRA Série 3-E2	3 - 15

LUBRICANTS AND FUEL **3 - 16**

SERVICING SCHEDULE **3 - 20**

A - DAILY OR EVERY 10 HOURS SERVICE **3 - 22**

B - EVERY 50 HOURS SERVICE **3 - 26**

C - EVERY 250 HOURS SERVICE **3 - 36**

D - EVERY 500 HOURS SERVICE **3 - 40**

E - EVERY 1000 HOURS SERVICE **3 - 46**

F - EVERY 2000 HOURS SERVICE **3 - 52**

G - OCCASIONAL MAINTENANCE **3 - 54**

H - EVERY TWO YEARS (OPTION AIR CONDITIONING) **3 - 60**

MANITOU ORIGINAL SPARE PARTS AND EQUIPMENT

OUR LIFT TRUCKS MUST BE SERVICED USING ORIGINAL MANITOU PARTS.

IF YOU USE PARTS WHICH ARE NOT ORIGINAL MANITOU PARTS,

YOU RISK

- Legally - to be held responsible in the event of an accident.
- Technically - to generate operating failure or shorten the life of the lift truck.

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

BY USING ORIGINAL MANITOU PARTS FOR MAINTENANCE OPERATIONS,

YOU BENEFIT EXPERTISE

THROUGH ITS NETWORK, MANITOU PROVIDES THE USER WITH

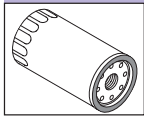
- Know-how and competence.
- The guarantee of high-quality work.
- Original replacement components.
- Help with preventive maintenance.
- Efficient help with diagnosis.
- Improvements due to experience feedback.
- Operator training.
- Only the MANITOU network has detailed knowledge of the design of the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

ORIGINAL REPLACEMENT PARTS ARE DISTRIBUTED EXCLUSIVELY BY MANITOU AND ITS DEALER NETWORK.
The dealer network list is available on MANITOU web site www.manitou.com

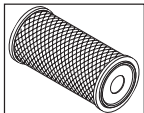
FILTERS CARTRIDGES AND BELTS

ML 635 Turbo Série 3-E2

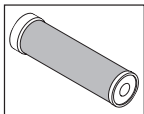
I.C. ENGINE



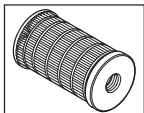
I.C. ENGINE OIL FILTER
Part number: 476954
Change: 500 H



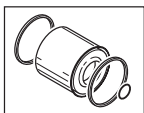
DRY AIR FILTER CARTRIDGE
Part number: 563416
Clean: 50 H*
Change: 500 H*



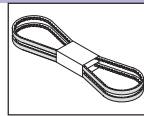
SAFETY DRY AIR FILTER CARTRIDGE
Part number: 563415
Change: 1000 H*



FUEL FILTER CARTRIDGE
Part number: 605013
Change: 500 H



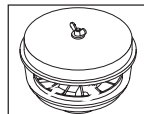
FUEL PRE-FILTER CARTRIDGE
Part number: 706497
Change: 500 H
From machine no 236906



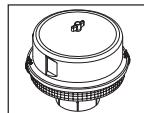
ALTERNATOR BELT
Part number: 605041



FAN BELT
Part number: 257524



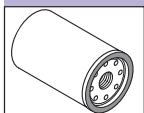
CYCLONIC PRE-FILTER
Part number: 224713
Clean: 10 H



AUTOMATIC VACUUM-CLEANING PRE-FILTER (OPTION)
Part number: 226611

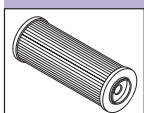
*: This periodicity is given for information only (see: 3 - MAINTENANCE: SERVICING SCHEDULE) for cleaning and changing.

TRANSMISSION

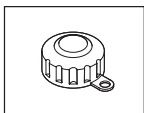


TRANSMISSION OIL FILTER
Part number: 561749
Change: 500 H

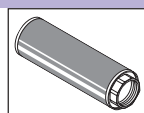
HYDRAULICS



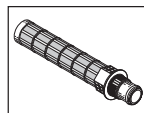
HYDRAULIC RETURN OIL FILTER CARTRIDGE
Part number: 221174
Change: 500 H



FILTER CAP FOR HYDRAULIC OIL TANK
Part number: 62415
Change: 1000 H

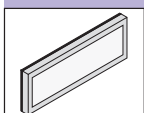


SUCTION STRAINER FOR HYDRAULIC OIL TANK
Part number: 77402
Clean: 1000 H
Up to machine no 230822



SUCTION STRAINER FOR HYDRAULIC OIL TANK
Part number: 257603
Clean: 1000 H
From machine no. 230823

CAB

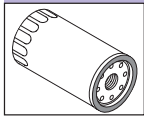


CAB VENTILATION FILTER
Part number: 552552
Clean: 500 H

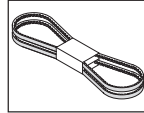
FILTERS CARTRIDGES AND BELTS

MT 940 L Turbo Série 3-E2

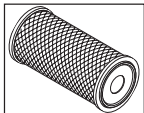
I.C. ENGINE



I.C. ENGINE OIL FILTER
Part number: 476954
Change: 500 H



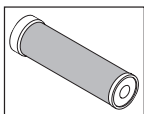
ALTERNATOR BELT
Part number: 605041



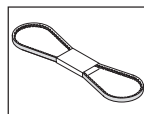
DRY AIR FILTER CARTRIDGE
Part number: 563416
Clean: 50 H*
Change: 500 H*



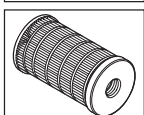
FAN BELT
Part number: 257524



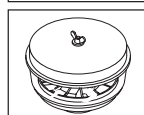
SAFETY DRY AIR FILTER CARTRIDGE
Part number: 563415
Change: 1000 H*



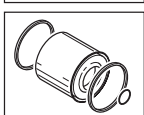
COMPRESSOR BELT
(OPTION AIR CONDITIONING)
Part number: 244237



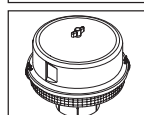
FUEL FILTER CARTRIDGE
Part number: 605013
Change: 500 H



CYCLONIC PRE-FILTER
Part number: 224713
Clean: 10 H



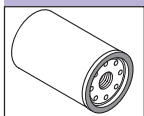
FUEL PRE-FILTER CARTRIDGE
Part number: 706497
Change: 500 H
From machine no 236906



AUTOMATIC VACUUM-CLEANING PRE-FILTER (OPTION)
Part number: 226611

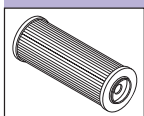
*: This periodicity is given for information only (see: 3 - MAINTENANCE: SERVICING SCHEDULE) for cleaning and changing.

TRANSMISSION

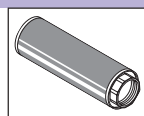


TRANSMISSION OIL FILTER
Part number: 561749
Change: 500 H

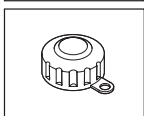
HYDRAULICS



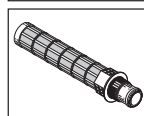
HYDRAULIC RETURN OIL FILTER CARTRIDGE
Part number: 221174
Change: 500 H



SUCTION STRAINER FOR HYDRAULIC OIL TANK
Part number: 77402
Clean: 1000 H
Up to machine no 230822

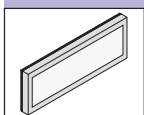


FILTER CAP FOR HYDRAULIC OIL TANK
Part number: 62415
Change: 1000 H



SUCTION STRAINER FOR HYDRAULIC OIL TANK
Part number: 257603
Clean: 1000 H
From machine no. 230823

CAB



CAB VENTILATION FILTER (OPTION AIR CONDITIONING)
Part number: 552552
Clean: 50 H
Change: 250 H

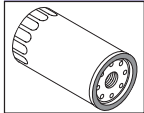
FILTERS CARTRIDGES AND BELTS

MT 1235 S Série 3-E2

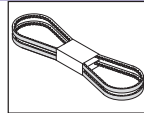
MT 1335 SL Série 3-E2

MT 1435 SL Série 3-E2

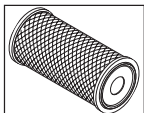
I.C. ENGINE



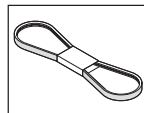
I.C. ENGINE OIL FILTER
Part number: 476954
Change: 500 H



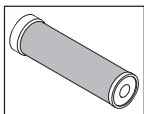
ALTERNATOR BELT
Part number: 605041



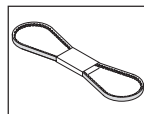
DRY AIR FILTER CARTRIDGE
Part number: 563416
Clean: 50 H*
Change: 500 H*



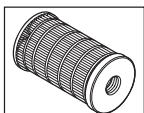
FAN BELT
Part number: 238795



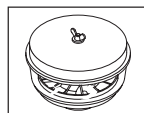
SAFETY DRY AIR FILTER CARTRIDGE
Part number: 563415
Change: 1000 H*



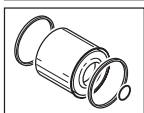
COMPRESSOR BELT
(OPTION AIR CONDITIONING)
Part number: 244237



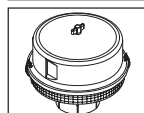
FUEL FILTER CARTRIDGE
Part number: 605013
Change: 500 H



CYCLONIC PRE-FILTER
Part number: 224713
Clean: 10 H



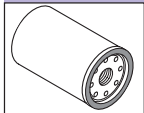
FUEL PRE-FILTER CARTRIDGE
Part number: 706497
Change: 500 H
From machine no 236906



AUTOMATIC VACUUM-CLEANING PRE-FILTER (OPTION)
Part number: 226611

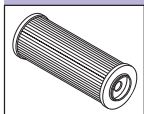
*: This periodicity is given for information only (see: 3 - MAINTENANCE: SERVICING SCHEDULE) for cleaning and changing.

TRANSMISSION

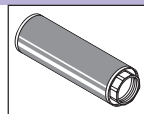


TRANSMISSION OIL FILTER
Part number: 561749
Change: 500 H

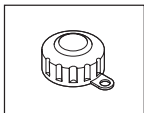
HYDRAULICS



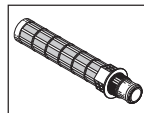
HYDRAULIC RETURN OIL FILTER CARTRIDGE
Part number: 221174 (Qty: 2)
Change: 500 H



SUCTION STRAINER FOR HYDRAULIC OIL TANK
Part number: 77402
Clean: 1000 H
Up to machine no 230822

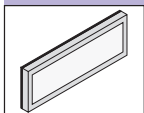


FILTER CAP FOR HYDRAULIC OIL TANK
Part number: 62415
Change: 1000 H



SUCTION STRAINER FOR HYDRAULIC OIL TANK
Part number: 257603
Clean: 1000 H
From machine no. 230823

CAB

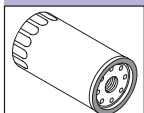


CAB VENTILATION FILTER (OPTION AIR CONDITIONING)
Part number: 552552
Clean: 50 H
Change: 250 H

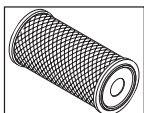
FILTERS CARTRIDGES AND BELTS

MT 1440 SL Série 3-E2

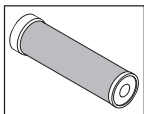
I.C. ENGINE



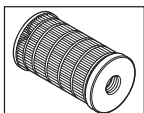
I.C. ENGINE OIL FILTER
Part number: 476954
Change: 500 H



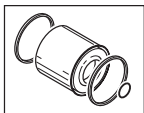
DRY AIR FILTER CARTRIDGE
Part number: 563416
Clean: 50 H*
Change: 500 H*



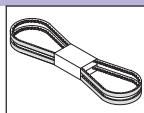
SAFETY DRY AIR FILTER CARTRIDGE
Part number: 563415
Change: 1000 H*



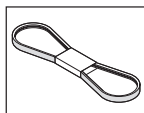
FUEL FILTER CARTRIDGE
Part number: 605013
Change: 500 H



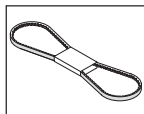
FUEL PRE-FILTER CARTRIDGE
Part number: 706497
Change: 500 H
From machine no 236906



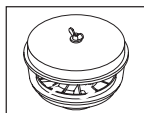
ALTERNATOR BELT
Part number: 605041



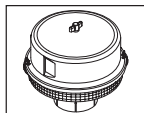
FAN BELT
Part number: 238795



COMPRESSOR BELT
(OPTION AIR CONDITIONING)
Part number: 244237



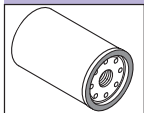
CYCLONIC PRE-FILTER
Part number: 224713
Clean: 10 H



AUTOMATIC VACUUM-CLEANING PRE-FILTER (OPTION)
Part number: 226611

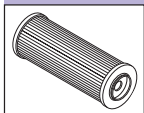
*: This periodicity is given for information only (see: 3 - MAINTENANCE: SERVICING SCHEDULE) for cleaning and changing.

TRANSMISSION

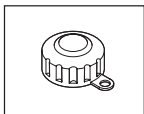


TRANSMISSION OIL FILTER
Part number: 561749
Change: 500 H

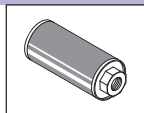
HYDRAULICS



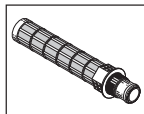
HYDRAULIC RETURN OIL FILTER CARTRIDGE
Part number: 221174 (Qty: 2)
Change: 500 H



FILTER CAP FOR HYDRAULIC OIL TANK
Part number: 62415
Change: 1000 H

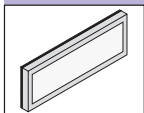


SUCTION STRAINER FOR HYDRAULIC OIL TANK
Part number: 19910
Clean: 1000 H
Up to machine no 230822



SUCTION STRAINER FOR HYDRAULIC OIL TANK
Part number: 257603 (Qty: 2)
Clean: 1000 H
From machine no. 230823

CAB

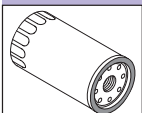


CAB VENTILATION FILTER (OPTION AIR CONDITIONING)
Part number: 552552
Clean: 50 H
Change: 250 H

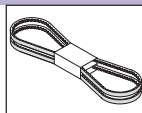
FILTERS CARTRIDGES AND BELTS

MT 1235 S Turbo Série 3-E2

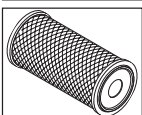
I.C. ENGINE



I.C. ENGINE OIL FILTER
Part number: 476954
Change: 500 H



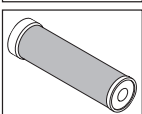
ALTERNATOR BELT
Part number: 605041



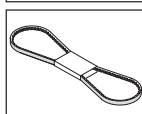
DRY AIR FILTER CARTRIDGE
Part number: 563416
Clean: 50 H*
Change: 500 H*



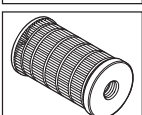
FAN BELT
Part number: 257524



SAFETY DRY AIR FILTER CARTRIDGE
Part number: 563415
Change: 1000 H*



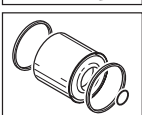
COMPRESSOR BELT
(OPTION AIR CONDITIONING)
Part number: 244237



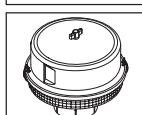
FUEL FILTER CARTRIDGE
Part number: 605013
Change: 500 H



CYCLONIC PRE-FILTER
Part number: 224713
Clean: 10 H



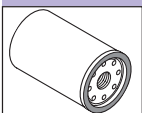
FUEL PRE-FILTER CARTRIDGE
Part number: 706497
Change: 500 H
From machine no 236906



AUTOMATIC VACUUM-CLEANING PRE-FILTER (OPTION)
Part number: 226611

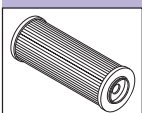
*: This periodicity is given for information only (see: 3 - MAINTENANCE: SERVICING SCHEDULE) for cleaning and changing.

TRANSMISSION

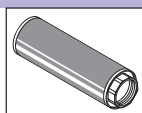


TRANSMISSION OIL FILTER
Part number: 561749
Change: 500 H

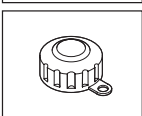
HYDRAULICS



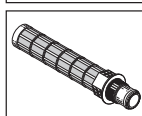
HYDRAULIC RETURN OIL FILTER CARTRIDGE
Part number: 221174 (Qty: 2)
Change: 500 H



SUCTION STRAINER FOR HYDRAULIC OIL TANK
Part number: 77402
Clean: 1000 H
Up to machine no 230822

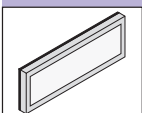


FILTER CAP FOR HYDRAULIC OIL TANK
Part number: 62415
Change: 1000 H



SUCTION STRAINER FOR HYDRAULIC OIL TANK
Part number: 257603
Clean: 1000 H
From machine no. 230823

CAB

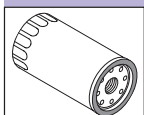


CAB VENTILATION FILTER (OPTION AIR CONDITIONING)
Part number: 552552
Clean: 50 H
Change: 250 H

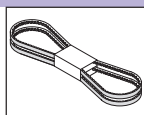
FILTERS CARTRIDGES AND BELTS

MT 1740 SL Turbo Série 3-E2

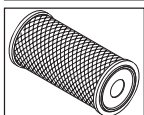
I.C. ENGINE



I.C. ENGINE OIL FILTER
Part number: 476954
Change: 500 H



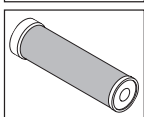
ALTERNATOR BELT
Part number: 605041



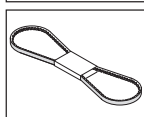
DRY AIR FILTER CARTRIDGE
Part number: 563416
Clean: 50 H*
Change: 500 H*



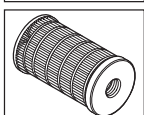
FAN BELT
Part number: 257524



SAFETY DRY AIR FILTER CARTRIDGE
Part number: 563415
Change: 1000 H*



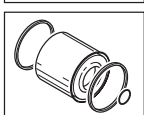
COMPRESSOR BELT
(OPTION AIR CONDITIONING)
Part number: 244237



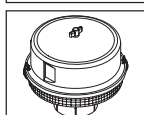
FUEL FILTER CARTRIDGE
Part number: 605013
Change: 500 H



CYCLONIC PRE-FILTER
Part number: 224713
Clean: 10 H



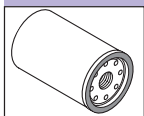
FUEL PRE-FILTER CARTRIDGE
Part number: 706497
Change: 500 H
From machine no 236906



AUTOMATIC VACUUM-CLEANING PRE-FILTER (OPTION)
Part number: 226611

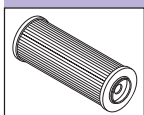
*: This periodicity is given for information only (see: 3 - MAINTENANCE: SERVICING SCHEDULE) for cleaning and changing.

TRANSMISSION

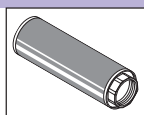


TRANSMISSION OIL FILTER
Part number: 561749
Change: 500 H

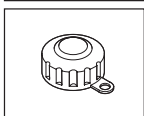
HYDRAULICS



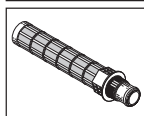
HYDRAULIC RETURN OIL FILTER CARTRIDGE
Part number: 221174 (Qty: 2)
Change: 500 H



SUCTION STRAINER FOR HYDRAULIC OIL TANK
Part number: 77402
Clean: 1000 H
Up to machine no 230822

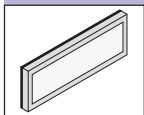


FILTER CAP FOR HYDRAULIC OIL TANK
Part number: 62415
Change: 1000 H



SUCTION STRAINER FOR HYDRAULIC OIL TANK
Part number: 257603 (Qty: 2)
Clean: 1000 H
From machine no. 230823

CAB



CAB VENTILATION FILTER (OPTION AIR CONDITIONING)
Part number: 552552
Clean: 50 H
Change: 250 H

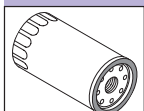
FILTERS CARTRIDGES AND BELTS

MT 1240 L Turbo ULTRA Série 3-E2

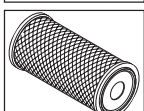
MT 1340 SL Turbo ULTRA Série 3-E2

MT 1440 SL Turbo ULTRA Série 3-E2

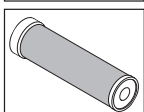
I.C. ENGINE



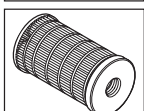
I.C. ENGINE OIL FILTER
Part number: 476954
Change: 500 H



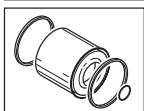
DRY AIR FILTER CARTRIDGE
Part number: 563416
Clean: 50 H*
Change: 500 H*



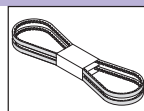
SAFETY DRY AIR FILTER CARTRIDGE
Part number: 563415
Change: 1000 H*



FUEL FILTER CARTRIDGE
Part number: 605013
Change: 500 H



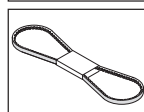
FUEL PRE-FILTER CARTRIDGE
Part number: 706497
Change: 500 H
From machine no 236906



ALTERNATOR BELT
Part number: 605041



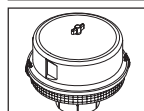
FAN BELT
Part number: 257524



COMPRESSOR BELT
(OPTION AIR CONDITIONING)
Part number: 244237



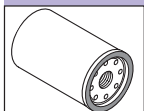
CYCLONIC PRE-FILTER
Part number: 224713
Clean: 10 H



AUTOMATIC VACUUM-CLEANING PRE-FILTER (OPTION)
Part number: 226611

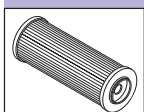
*: This periodicity is given for information only (see: 3 - MAINTENANCE: SERVICING SCHEDULE) for cleaning and changing.

TRANSMISSION

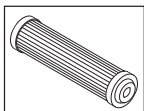


TRANSMISSION OIL FILTER
Part number: 561749
Change: 500 H

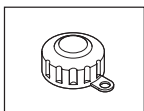
HYDRAULICS



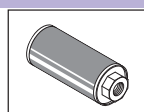
HYDRAULIC RETURN OIL FILTER CARTRIDGE
Part number: 221174 (Qty: 2)
Change: 500 H



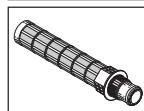
HYDRAULIC PRESSURE OIL FILTER CARTRIDGE
Part number: 194412 (Qty: 2)
Change: 500 H



FILTER CAP FOR HYDRAULIC OIL TANK
Part number: 62415
Change: 1000 H

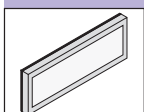


SUCTION STRAINER FOR HYDRAULIC OIL TANK
Part number: 19910
Clean: 1000 H
Up to machine no 230822



SUCTION STRAINER FOR HYDRAULIC OIL TANK
Part number: 257603 (Qty: 2)
Clean: 1000 H
From machine no. 230823

CAB



CAB VENTILATION FILTER (OPTION AIR CONDITIONING)
Part number: 552552
Clean: 50 H
Change: 250 H

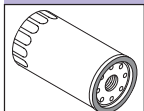
FILTERS CARTRIDGES AND BELTS

MT 1335 SL Turbo Série 3-E2

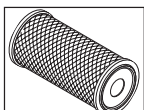
MT 1340 SL Turbo Série 3-E2

MT 1435 SL Turbo Série 3-E2

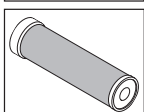
I.C. ENGINE



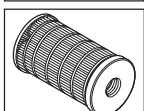
I.C. ENGINE OIL FILTER
Part number: 476954
Change: 500 H



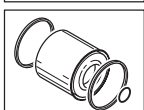
DRY AIR FILTER CARTRIDGE
Part number: 563416
Clean: 50 H*
Change: 500 H*



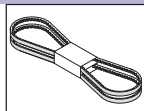
SAFETY DRY AIR FILTER CARTRIDGE
Part number: 563415
Change: 1000 H*



FUEL FILTER CARTRIDGE
Part number: 605013
Change: 500 H



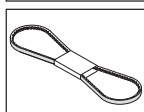
FUEL PRE-FILTER CARTRIDGE
Part number: 706497
Change: 500 H
From machine no 236906



ALTERNATOR BELT
Part number: 605041



FAN BELT
Part number: 257524



COMPRESSOR BELT
(OPTION AIR CONDITIONING)
Part number: 244237



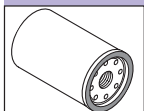
CYCLONIC PRE-FILTER
Part number: 224713
Clean: 10 H



AUTOMATIC VACUUM-CLEANING PRE-FILTER (OPTION)
Part number: 226611

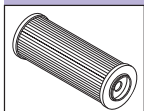
*: This periodicity is given for information only (see: 3 - MAINTENANCE: SERVICING SCHEDULE) for cleaning and changing.

TRANSMISSION

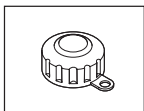


TRANSMISSION OIL FILTER
Part number: 561749
Change: 500 H

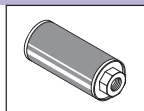
HYDRAULICS



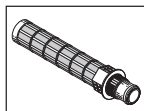
HYDRAULIC RETURN OIL FILTER CARTRIDGE
Part number: 221174 (Qty: 2)
Change: 500 H



FILTER CAP FOR HYDRAULIC OIL TANK
Part number: 62415
Change: 1000 H

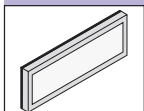


SUCTION STRAINER FOR HYDRAULIC OIL TANK
Part number: 19910
Clean: 1000 H
Up to machine no 230822



SUCTION STRAINER FOR HYDRAULIC OIL TANK
Part number: 257603 (Qty: 2)
Clean: 1000 H
From machine no. 230823

CAB

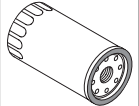
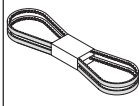
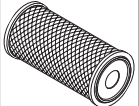
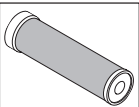
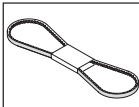
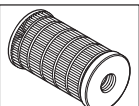
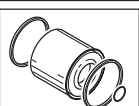


CAB VENTILATION FILTER (OPTION AIR CONDITIONING)
Part number: 552552
Clean: 50 H
Change: 250 H

FILTERS CARTRIDGES AND BELTS

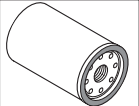
MT 1240 L Turbo Série 3-E2
MT 1440 SL Turbo Série 3-E2

I.C. ENGINE

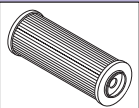
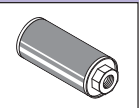
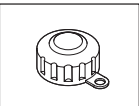
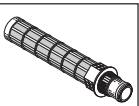
	I.C. ENGINE OIL FILTER Part number: 476954 Change: 500 H		ALTERNATOR BELT Part number: 605041
	DRY AIR FILTER CARTRIDGE Part number: 563416 Clean: 50 H* Change: 500 H*		FAN BELT Part number: 257524
	SAFETY DRY AIR FILTER CARTRIDGE Part number: 563415 Change: 1000 H*		COMPRESSOR BELT (OPTION AIR CONDITIONING) Part number: 244237
	FUEL FILTER CARTRIDGE Part number: 605013 Change: 500 H		CYCLONIC PRE-FILTER Part number: 224713 Clean: 10 H
	FUEL PRE-FILTER CARTRIDGE Part number: 706497 Change: 500 H From machine no 236906		AUTOMATIC VACUUM-CLEANING PRE-FILTER (OPTION) Part number: 226611

*: This periodicity is given for information only (see: 3 - MAINTENANCE: SERVICING SCHEDULE) for cleaning and changing.

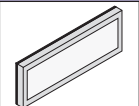
TRANSMISSION

	TRANSMISSION OIL FILTER Part number: 561749 Change: 500 H
---	---

HYDRAULICS

	HYDRAULIC RETURN OIL FILTER CARTRIDGE Part number: 221174 (Qty: 2) Change: 500 H		SUCTION STRAINER FOR HYDRAULIC OIL TANK Part number: 19910 Clean: 1000 H Up to machine no 230822
	FILTER CAP FOR HYDRAULIC OIL TANK Part number: 62415 Change: 1000 H		SUCTION STRAINER FOR HYDRAULIC OIL TANK Part number: 257603 (Qty: 2) Clean: 1000 H From machine no. 230823

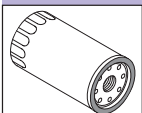
CAB

	CAB VENTILATION FILTER (OPTION AIR CONDITIONING) Part number: 552552 Clean: 50 H Change: 250 H
---	---

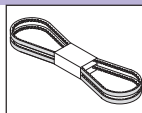
FILTERS CARTRIDGES AND BELTS

MT 1740 SL Turbo ULTRA Série 3-E2

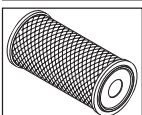
I.C. ENGINE



I.C. ENGINE OIL FILTER
Part number: 476954
Change: 500 H



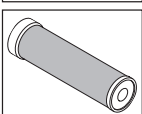
ALTERNATOR BELT
Part number: 605041



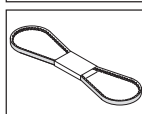
DRY AIR FILTER CARTRIDGE
Part number: 563416
Clean: 50 H*
Change: 500 H*



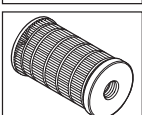
FAN BELT
Part number: 257524



SAFETY DRY AIR FILTER CARTRIDGE
Part number: 563415
Change: 1000 H*



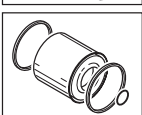
COMPRESSOR BELT
(OPTION AIR CONDITIONING)
Part number: 244237



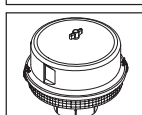
FUEL FILTER CARTRIDGE
Part number: 605013
Change: 500 H



CYCLONIC PRE-FILTER
Part number: 224713
Clean: 10 H



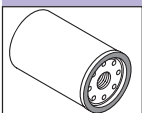
FUEL PRE-FILTER CARTRIDGE
Part number: 706497
Change: 500 H
From machine no 236906



AUTOMATIC VACUUM-CLEANING PRE-FILTER (OPTION)
Part number: 226611

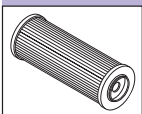
*: This periodicity is given for information only (see: 3 - MAINTENANCE: SERVICING SCHEDULE) for cleaning and changing.

TRANSMISSION

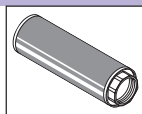


TRANSMISSION OIL FILTER
Part number: 561749
Change: 500 H

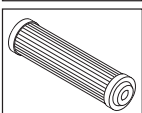
HYDRAULICS



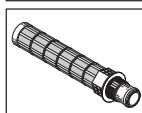
HYDRAULIC RETURN OIL FILTER CARTRIDGE
Part number: 221174 (Qty: 2)
Change: 500 H



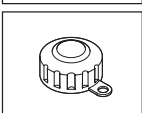
SUCTION STRAINER FOR HYDRAULIC OIL TANK
Part number: 77402
Clean: 1000 H
Up to machine no 230822



HYDRAULIC PRESSURE OIL FILTER CARTRIDGE
Part number: 194412 (Qty: 2)
Change: 500 H

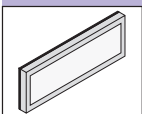


SUCTION STRAINER FOR HYDRAULIC OIL TANK
Part number: 257603 (Qty: 2)
Clean: 1000 H
From machine no. 230823



FILTER CAP FOR HYDRAULIC OIL TANK
Part number: 62415
Change: 1000 H

CAB



CAB VENTILATION FILTER (OPTION AIR CONDITIONING)
Part number: 552552
Clean: 50 H
Change: 250 H

LUBRICANTS AND FUEL



USE THE RECOMMENDED LUBRICANTS AND FUEL:

- For topping up, oils may not be mix together.
- For oil changes, MANITOU oils are perfectly suitable.

DIAGNOSTIC ANALYSIS OF OILS

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

(*) FUEL CHARACTERISTICS

Use a high-quality fuel to obtain optimum engine performance.

CHARACTERISTICS OF RECOMMENDED FUEL:

- DERV at EN590
- BS2869 Class A2
- ASTM D975 - 91 Class 2D
- JIS K2204 (1992) Grades 1, 2, 3 and Special Grade 3.

ENGINE				
PARTS TO BE LUBRICATED	CAPACITY	RECOMMENDATION	PACKAGING	PART NUMBER
ENGINE	11 Liters	MANITOU oil API CH4	5 L.	661706
			20 L.	582357
			55 L.	582358
			209 L.	582359
COOLING SYSTEM	18,5 Liters	Cooling fluid (protection - 30°)	2 L.	473076
			5 L.	470077
			20 L.	470078
		Cooling fluid (protection - 25°)	2 L.	554002
			5 L.	554003
			20 L.	554004
FUEL TANK	135 Liters	Diesel fuel (*)		

TRANSMISSION				
PARTS TO BE LUBRICATED	CAPACITY	RECOMMENDATION	PACKAGING	PART NUMBER
TRANSMISSION	15,1 Litres	MANITOU oil Automatic transmission	1 L.	62148
			20 L.	546332
			55 L.	546217
			209 L.	546195
ANGLE GEAR BOX	2,2 Liters	MANITOU oil SAE80W90 Mechanical transmission	2 L.	499237
			20 L.	546330
			55 L.	546221
			209 L.	546220
TRANSMISSION UNIVERSAL JOINT		MANITOU grease Multipurpose HD NLGI 2	400 g.	161589
			1 Kg.	554973
			5 Kg.	554974
			20 Kg.	499233
			50 Kg.	489670

JIB			
PARTS TO BE LUBRICATED	RECOMMENDATION	PACKAGING	PART NUMBER
JIB PADS Except for ML 635 Série 3-E2 Turbo	MANITOU grease Multipurpose NLGI 2	400 g. 1 Kg. 50 Kg.	545996 161590 499235
GREASING THE JIB	MANITOU grease Multipurpose HD NLGI 2	400 g. 1 Kg. 5 Kg. 20 Kg. 50 Kg.	161589 554973 554974 499233 489670
OPTIONAL GREASING OF THE SINGLE SIDE-SHIFT CARRIAGE MT 1235 S Série 3-E2 MT 1235 S Turbo Série 3-E2 MT 1240 L Turbo Série 3-E2 MT 1240 L Turbo ULTRA Série 3-E2 MT 1335 SL Série 3-E2 MT 1335 SL Turbo Série 3-E2 MT 1340 SL Turbo Série 3-E2 MT 1340 SL Turbo ULTRA Série 3-E2 MT 1435 SL Série 3-E2 MT 1435 SL Turbo Série 3-E2 MT 1440 SL Série 3-E2 MT 1440 SL Turbo Série 3-E2 MT 1440 SL Série 3-E2 ULTRA Turbo MT 1740 SL Turbo Série 3-E2 MT 1740 SL Turbo ULTRA Série 3-E2	MANITOU grease Multipurpose HD NLGI 2	400 g. 1 Kg. 5 Kg. 20 Kg. 50 Kg.	161589 554973 554974 499233 489670
OPTIONAL CENTRAL GREASING OF THE JIB ML 635 Turbo Série 3-E2	See instructions for central greasing		

HYDRAULICS				
PARTS TO BE LUBRICATED	CAPACITY	RECOMMENDATION	PACKAGING	PART NUMBER
HYDRAULIC OIL TANK ML 635 Turbo Série 3-E2 MT 940 L Turbo Série 3-E2 MT 1235 S Série 3-E2 MT 1235 S Turbo Série 3-E2 MT 1240 L Turbo Série 3-E2 MT 1240 L Turbo ULTRA Série 3-E2 MT 1335 SL Série 3-E2 MT 1335 SL Turbo Série 3-E2 MT 1340 SL Turbo Série 3-E2 MT 1340 SL Turbo ULTRA Série 3-E2 MT 1435 SL Série 3-E2 MT 1435 SL Turbo Série 3-E2 MT 1440 SL Série 3-E2 MT 1440 SL Turbo Série 3-E2 MT 1440 SL Série 3-E2 ULTRA Turbo MT 1740 SL Turbo Série 3-E2 MT 1740 SL Turbo ULTRA Série 3-E2	110 Litres 120 Liters 120 Liters 120 Liters 120 Liters 120 Liters 120 Liters 120 Liters 126 Liters 126 Liters 120 Liters 120 Liters 126 Liters 126 Liters 126 Liters 126 Liters 175 Liters	MANITOU oil Hydraulic ISO 46	5 L. 20 L. 55 L. 209 L.	545500 582297 546108 546109

BRAKING			
PARTS TO BE LUBRICATED	RECOMMENDATION	PACKAGING	PART NUMBER
BRAKE SYSTEM	MANITOU oil Mineral brake fluid	1 L.	490408

CAB			
PARTS TO BE LUBRICATED	RECOMMENDATION	PACKAGING	PART NUMBER
CAB DOOR	MANITOU grease Multipurpose HD NLGI 2	400 g. 1 Kg. 5 Kg. 20 Kg. 50 Kg.	161589 554973 554974 499233 489670
WINDSCREEN WASHER RESERVOIR	Windscreen washer fluid	1 L. 5 L.	490402 486424

FRONT AXLE				
PARTS TO BE LUBRICATED	CAPACITY	RECOMMENDATION	PACKAGING	PART NUMBER
FRONT AXLE DIFFERENTIAL ML 635 Turbo Série 3-E2 MT 940 L Turbo Série 3-E2 (up to machine no. 203419) (from machine no 203420) MT 1235/1240/1335/1340/1435/1440/1740 ...	7,2 Liters 7,2 Liters 6,7 Liters 7,2 Liters	MANITOU oil Special immersed brakes	5 L. 20 L. 209 L.	545976 582391 546222
FRONT WHEEL REDUCTION GEAR ML 635 Turbo Série 3-E2 MT 940 L Turbo Série 3-E2 (up to machine no. 203419) (from machine no 203420) MT 1235/1240/1335/1340/1435/1440/1740 ...	0,75 Liters 0,75 Liters 1,80 Litres 0,75 Liters	MANITOU oil SAE80W90 Mechanical transmission	2 L. 20 L. 55 L. 209 L.	499237 546330 546221 546220
FRONT WHEEL REDUCTION GEAR PIVOTS		MANITOU grease Multipurpose NLGI 2	400 g. 1 Kg. 50 Kg.	545996 161590 499235
FRONT AXLE OSCILLATION MT 940 L Turbo Série 3-E2 MT 1240 L Turbo Série 3-E2 MT 1240 L Turbo ULTRA Série 3-E2 MT 1335 SL Série 3-E2 MT 1335 SL Turbo Série 3-E2 MT 1340 SL Turbo Série 3-E2 MT 1340 SL Turbo ULTRA Série 3-E2 MT 1435 SL Série 3-E2 MT 1435 SL Turbo Série 3-E2 MT 1440 SL Série 3-E2 MT 1440 SL Turbo Série 3-E2 MT 1440 SL Série 3-E2 ULTRA Turbo MT 1740 SL Turbo Série 3-E2 MT 1740 SL Turbo ULTRA Série 3-E2		MANITOU grease Multipurpose HD NLGI 2	400 g. 1 Kg. 5 Kg. 20 Kg. 50 Kg.	161589 554973 554974 499233 489670

REAR AXLE				
PARTS TO BE LUBRICATED	CAPACITY	RECOMMENDATION	PACKAGING	PART NUMBER
REAR AXLE DIFFERENTIAL ML 635 Turbo Série 3-E2 MT 940 L Turbo Série 3-E2 (up to machine no. 203419) (from machine no 203420) MT 1235/1240/1335/1340/1435/1440/1740 ...	7,2 Liters 7,2 Liters 7,3 Liters 7,2 Liters	MANITOU oil Special immersed brakes	5 L. 20 L. 209 L.	545976 582391 546222
REAR WHEEL REDUCTION GEAR ML 635 Turbo Série 3-E2 MT 940 L Turbo Série 3-E2 (up to machine no. 203419) (from machine no 203420) MT 1235/1240/1335/1340/1435/1440/1740 ...	0,75 Liters 0,75 Liters 1,80 Litres 0,75 Liters	MANITOU oil SAE80W90 Mechanical transmission	2 L. 20 L. 55 L. 209 L.	499237 546330 546221 546220
REAR WHEEL REDUCTION GEAR PIVOTS		MANITOU grease Multipurpose NLGI 2	400 g. 1 Kg. 50 Kg.	545996 161590 499235
REAR AXLE OSCILLATION		MANITOU grease Multipurpose HD NLGI 2	400 g. 1 Kg. 5 Kg. 20 Kg. 50 Kg.	161589 554973 554974 499233 489670

CHASSIS			
PARTS TO BE LUBRICATED	RECOMMENDATION	PACKAGING	PART NUMBER
TILT CORRECTOR MT 940 L Turbo Série 3-E2 MT 1240 L Turbo Série 3-E2 MT 1240 L Turbo ULTRA Série 3-E2 MT 1335 SL Série 3-E2 MT 1335 SL Turbo Série 3-E2 MT 1340 SL Turbo Série 3-E2 MT 1340 SL Turbo ULTRA Série 3-E2 MT 1435 SL Série 3-E2 MT 1435 SL Turbo Série 3-E2 MT 1440 SL Série 3-E2 MT 1440 SL Turbo Série 3-E2 MT 1440 SL Série 3-E2 ULTRA Turbo MT 1740 SL Turbo Série 3-E2 MT 1740 SL Turbo ULTRA Série 3-E2	MANITOU grease Multipurpose HD NLGI 2	400 g. 1 Kg. 5 Kg. 20 Kg. 50 Kg.	161589 554973 554974 499233 489670
STABILIZERS MT 1235 S Série 3-E2 MT 1235 S Turbo Série 3-E2 MT 1335 SL Série 3-E2 MT 1335 SL Turbo Série 3-E2 MT 1340 SL Turbo Série 3-E2 MT 1340 SL Turbo ULTRA Série 3-E2 MT 1435 SL Série 3-E2 MT 1435 SL Turbo Série 3-E2 MT 1440 SL Série 3-E2 MT 1440 SL Turbo Série 3-E2 MT 1440 SL Série 3-E2 ULTRA Turbo MT 1740 SL Turbo Série 3-E2 MT 1740 SL Turbo ULTRA Série 3-E2	MANITOU grease Multipurpose HD NLGI 2	400 g. 1 Kg. 5 Kg. 20 Kg. 50 Kg.	161589 554973 554974 499233 489670

SERVICING SCHEDULE

A = ADJUST
C = CHECK
D = DESCALE
G = GREASE

N = CLEAN
P = BLEED
R = CHANGE
V = DRAIN

After the first 50 hours	Day or 10 hours	50 hours	250 hours	1 year or 500 hours	1 year or 1000 hours	2000 hours	4000 hours
-----------------------------------	--------------------------	-------------	--------------	------------------------------	-------------------------------	---------------	---------------

I.C. ENGINE

I.C. engine oil level	C	<<	<<	<<	<<	<<	<<	PAGE 3-22
Cooling liquid level	C	<<	<<	<<	<<	<<	<<	3-22
Fuel level	C	<<	<<	<<	<<	<<	<<	3-22
Fuel pre-filter	C	<<	<<	<<	<<	<<	<<	3-24
Cyclonic prefilter	N	<<	<<	<<	<<	<<	<<	3-23
Dry air filter cartridge		N	<<	R	<<	<<	<<	3-26/3-41
Radiator core		N	<<	<<	<<	<<	<<	3-26
Condenser core (OPTION Air conditioning)		N	<<	<<	<<	<<	<<	3-26
Fan belt tension	A		A	<<	<<	<<	<<	3-36
Alternator/crankshaft belt tension	A		A	<<	<<	<<	<<	3-36
Compressor belt tension (OPTION Air conditioning)			A	<<	<<	<<	<<	3-37
I.C. engine oil	V			V	<<	<<	<<	3-40
I.C. engine oil filter	R			R	<<	<<	<<	3-40
Fuel pre-filter cartridge	R			R	<<	<<	<<	3-41
Fuel filter cartridge	R			R	<<	<<	<<	3-41
Fuel tank					N	<<	<<	3-46
Safety dry air filter cartridge					R	<<	<<	3-46
I.C. engine silent blocks					C**	<<	<<	
I.C. engine rates					C**	<<	<<	
Valves clearances	C**				C**	<<	<<	
Cooling liquid						V	<<	3-52
Radiator						N/D**	<<	
Water pump and the thermostat						C**	<<	
Alternator and the starter motor						C**	<<	
Turbocompressor						C**	<<	
Bleed the fuel system							<<	3-52

TRANSMISSION

Transmission oil level	C	<<	<<	<<	<<	<<	<<	3-23
Transmission universal joint		G	<<	<<	<<	<<	G/C**	3-33
Angle gear box oil level			C	<<	<<	<<	<<	3-37
Transmission oil filter	R			R	<<	<<	<<	3-42
Transmission oil	V				V	<<	<<	3-47
Transmission housing strainer					N	<<	<<	3-47
Angle gear box oil	V				V	<<	<<	3-48
Transmission silent blocks					C**	<<	<<	
Transmission controls					C**	<<	<<	
Transmission pressures						C**	<<	
Converter pressure						C**	<<	

TYRES

Tyres pressure	C	<<	<<	<<	<<	<<	<<	3-23
Wheel nuts torque	C	<<	<<	<<	<<	<<	<<	3-23
Condition of wheels and tyres					C**	<<	<<	
Change a wheel							<<	3-54

JIB

Jib pads	G*							3-23
Jib	G	<<	<<	<<	<<	<<	<<	3-27
Single side-shift carriage (OPTION)	G	<<	<<	<<	<<	<<	<<	3-30
Jib pads wear					C**	<<	<<	
Condition of jib unit						C**	<<	
Bearings and articulation rings						C**	<<	

HYDRAULICS

Hydraulic oil level	C	<<	<<	<<	<<	<<	<<	3-30
Hydraulic return oil filter cartridge	R			R	<<	<<	<<	3-42
Hydraulic pressure oil filters cartridges	R			R	<<	<<	<<	3-43
Balancing valve	C			C	<<	<<	<<	3-43
Hydraulic oil					V	<<	<<	3-49
Suction strainer for hydraulic oil tank					N	<<	<<	3-49
Filter cap for hydraulic oil tank					R	<<	<<	3-49
Speeds of hydraulic movements					C**	<<	<<	
Hydraulic pump pipe filter					N**	<<	<<	
Condition of hoses and flexibles pipes					C**	<<	<<	
Condition of cylinders (leakage, shafts)					C**	<<	<<	
Hydraulic circuit pressures						C**	<<	
Hydraulic circuit outputs						C**	<<	
Hydraulic oil tank						N**	<<	

A = AJUST	N = CLEAN
C = CHECK	P = BLEED
D = DESCALE	R = CHANGE
G = GREASE	V = DRAIN

After the first 50 hours	Day or 10 hours	50 hours	250 hours	1 year or 500 hours	1 year or 1000 hours	2000 hours	4000 hours
-----------------------------------	--------------------------	-------------	--------------	------------------------------	-------------------------------	---------------	---------------

BRAKE

Brake oil level	C	<<	<<	<<	<<	<<	3-31
Parking brake	A	<<	<<	<<	<<	<<	3-38
Parking brake lever mechanism	G	<<	<<	<<	<<	<<	3-44
Brake oil				V**	<<	<<	
Brake circuit				P**	<<	<<	
Brake circuit pressure				C**	<<	<<	
Brake				A**	<<	<<	

STEERING

Steering						C**	<<
Steering swivel joints						C**	

CAB

Windscreen washer liquid level	C	<<	<<	<<	<<	<<	3-31
Cab door	G	<<	<<	<<	<<	<<	3-31
Cab ventilation filter (OPTION Air conditioning)	N	R	<<	<<	<<	<<	3-31/3-37
Cab ventilation filter (ML 635 Turbo Série 3-E2)			N	<<	<<	<<	3-44
Seat belt				C	<<	<<	3-50
Condition of the rear view mirrors				C**	<<	<<	
Structure				C**	<<	<<	
OPTION Air conditioning							3-60

ELECTRICITY

Battery electrolyte level	C	<<	<<	<<	<<	<<	3-32
Battery electrolyte density			C	<<	<<	<<	3-45
Longitudinal stability alarm				C**	<<	<<	
Condition of wiring harness and cables				C**	<<	<<	
Lights and signals				C**	<<	<<	
Warning indicators				C**	<<	<<	
Adjust the front headlamps							3-58

FRONT AXLE

Front wheels reducers pivots	G	<<	<<	<<	<<	G/C**	3-32
Front axle oscillation	G	<<	<<	<<	G/C**	<<	3-32
Front axle differential oil level			C	<<	<<	<<	3-39
Front wheels reducers oil level			C	<<	<<	<<	3-39
Front axle differential oil	V			V	<<	<<	3-45
Front wheels reducers oil	V				V	<<	3-50
Wearing of front axle brake discs						C**	
Front wheels reducers universal joint						C**	
Front wheels reducers clearance						C**	

REAR AXLE

Rear wheels reducers pivots	G	<<	<<	<<	<<	G/C**	3-32
Rear axle oscillation	G	<<	<<	<<	G/C**	<<	3-33
Rear axle differential oil level			C	<<	<<	<<	3-39
Rear wheels reducers oil level			C	<<	<<	<<	3-39
Rear axle differential oil	V			V	<<	<<	3-45
Rear wheels reducers oil	V				V	<<	3-50
Wearing of rear axle brake discs						C**	
Rear wheels reducers universal joint						C**	
Rear wheels reducers clearance						C**	

CHASSIS

Tilting corrector	G	<<	<<	<<	<<	<<	3-34
Stabilizers	G	<<	<<	<<	<<	<<	3-34
Structure				C**	<<	<<	
Bearings and articulation rings					C**	<<	

ATTACHMENTS

Forks wear				C**	<<	<<	<<
Attachment carriage					C**	<<	<<
Condition of attachments					C**	<<	<<

LIFT TRUCK

Tow the lift truck							3-55/3-56
Sling the lift truck							3-56
Transport the lift truck on a platform							3-57

(*): Every 10 hours during the first 50 hours, then once at 250 hours.

(**): Consult your dealer.

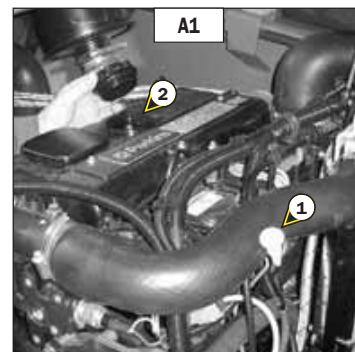
A - DAILY OR EVERY 10 HOURS SERVICE

A1 - I.C. ENGINE OIL LEVEL

CHECK

Place the lift truck on level ground with the I.C. engine stopped, and let the oil drain into the sump.

- Open the I.C. engine bonnet.
- Remove the dipstick 1 (fig. A1).
- Clean the dipstick and check the correct level between the two notches.
- If necessary, add oil (see: 3 - MAINTENANCE: LUBRICANTS AND FUEL) by the filler port 2 (fig. A1).
- Check visually that there is no leakage or seepage of oil in the I.C. engine.

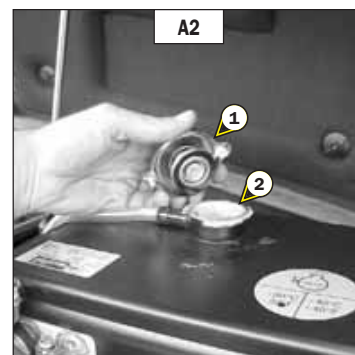


A2 - COOLING LIQUID LEVEL

CHECK

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

- Open the I.C. engine bonnet.
- Slowly turn the cap of the radiator 1 (fig. A2) anticlockwise up to the safety stop.
- Allow the pressure and vapour to escape.
- Press down and turn the cap so as to release the cap.
- If necessary, add cooling liquid (see: 3 - MAINTENANCE: LUBRICANTS AND FUEL) in order to top up the level to 12 mm below the filler port 2 (fig. A2).
- Lubricate slightly the filler neck in order to facilitate the setting and the removal of the radiator cap.
- Check visually that there is no leakage in the radiator and pipes.



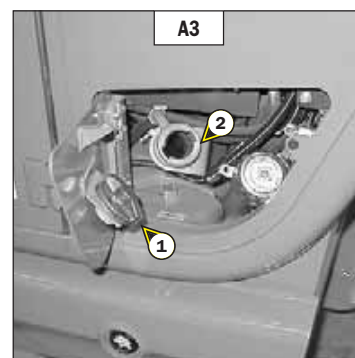
⚠ To avoid any risk of spraying or burning, wait until the I.C. engine has cooled down before removing the cooling circuit filler plug. If the cooling liquid is very hot, add only hot cooling liquid (80°C). In an emergency, you can use water as a cooling liquid, then change the cooling circuit liquid as soon as possible (see: 3 - MAINTENANCE: F1 - COOLING LIQUID).

A3 - FUEL LEVEL

CHECK

Keep the fuel tank full, to reduce as much as possible any condensation due to the atmospheric conditions.

- Open the access panel for fuel filling.
- Remove cap 1 (fig. A3).
- Fill the fuel tank with clean fuel (see: 3 - MAINTENANCE: LUBRICANTS AND FUEL), filtered through a strainer or a clean, lint free cloth, through filler port 2 (fig. A3).
- Put the cap back 1 (fig. A3) and close the access panel for fuel filling.
- Check visually that there is no leakage in the tank and pipes.



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

⚠ The fuel tank is degassed via the filler plug. When changing it, always use an original part, with degassing hole.

A4 - CYCLONIC PREFILTER

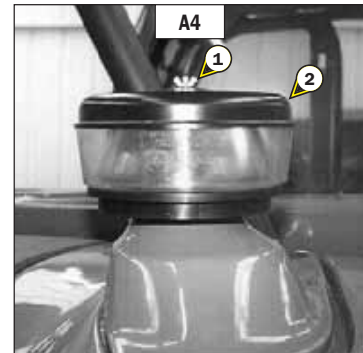
CLEAN

The cleaning interval is given as a guide, however the prefilter must be emptied as soon as impurities reach the MAXI level on the tank.

- Loosen nut 1 (fig. A4), remove cover 2 (fig. A4) and empty the tank.
- Clean the prefilter unit with a clean dry cloth and reassemble the unit.



When cleaning, take care not to let impurities into the dry air filter.

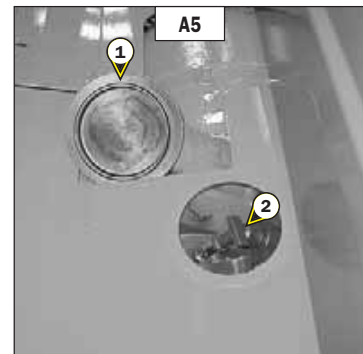


A5 - TRANSMISSION OIL LEVEL

CHECK

Park the lift truck on level ground with the jib raised, the I.C. engine cold and stopped. Carry out the control within 5 minutes of the I.C. engine being stopped.

- Remove the plastic cap 1 (fig. A5).
- Remove the dipstick 2 (fig. A5).
- Wipe the dipstick and check the correct level between the two MIN and MAX marks.
- If necessary, add oil (see: 3 - MAINTENANCE: E3 - TRANSMISSION OIL).
- Check visually that there is no leakage or seepage of oil in the transmission.



A6 - TYRES PRESSURE AND WHEEL NUTS TORQUE

CHECK

- Check the condition of the tyres, to detect cuts, protuberances, wear, etc.
- Check the torque load of the wheel nuts. Non compliance with this instruction can cause damage and rupture to the wheel bolts and distortion to the wheels.

Wheel nuts tightening torque

- Front tyres: 630 N.m $\pm$ 15 %
- Rear tyres: 630 N.m $\pm$ 15 %

- Check and adjust the tyre pressures if necessary (see: 2 - DESCRIPTION: CHARACTERISTICS).



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

NOTE: There is an OPTIONAL straw deflector and self-cleaning system of radiator core.

A7 - JIB PADS

CLEAN - GREASE

Except ML 635 Turbo Série 3-E2

To be carried out every 10 hours during the first 50 hours service, then once at 250 hours.

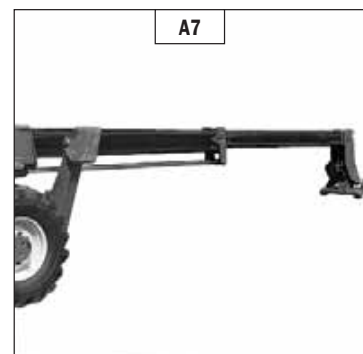
- Extend the jib completely.
- With a brush, apply a coat of grease (see: 3 - MAINTENANCE: LUBRICANTS AND FUEL) on the 4 sides of the telescope(s) (fig. A7).
- Telescope the jib several times in order to spread the coat of grease evenly.
- Remove the surplus of grease.



If the lift truck is used in an abrasive environment (dust, sand, coal...) Use lubricating varnish (MANITOU reference: 483536). In this respect, consult your dealer.

MT 940 L Turbo Série 3-E2
MT 1235 S Série 3-E2
MT 1235 S Turbo Série 3-E2
MT 1240 L Turbo Série 3-E2
MT 1240 L Turbo ULTRA Série 3-E2
MT 1335 SL Série 3-E2
MT 1335 SL Turbo Série 3-E2
MT 1340 SL Turbo Série 3-E2
MT 1340 SL Turbo ULTRA Série 3-E2
MT 1435 SL Série 3-E2 + Turbo

NOTE: A jib sealing kit is available as an OPTION.

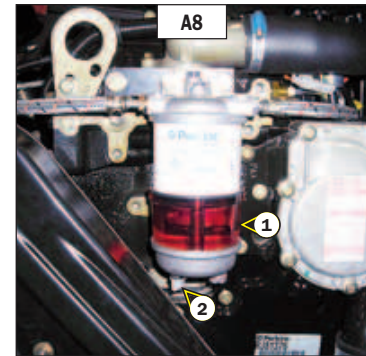


A8 - FUEL PRE-FILTER

(from machine 236906)

CHECK

- Open the I.C. engine bonnet.
- Check for the presence of water in the pre-filter bowl 1 (fig. A8) and empty it out if necessary.
- Place a receptacle under the drain plug 2 (fig. A8) and loosen it in two to three thread turns.
- Allow the diesel fuel to flow out until it is free from impurities and water.
- Retighten the drain plug while the diesel fuel is flowing out.



B - EVERY 50 HOURS SERVICE

Carry out the operations described previously as well as the following operations.

B1 - DRY AIR FILTER CARTRIDGE

CHECK - CLEAN

In case of use in a heavily dust laden atmosphere, there are pre-filtration cartridges (see: 3 - MAINTENANCE: FILTERS CARTRIDGES AND BELTS). Also, the checking and cleaning periodicity of the cartridge must be reduced.

⚠ *If the clogging indicator light comes on, this operation must be carried out as quickly as possible (1 hour maximum). The cartridge must not be cleaned more than seven times, after which the cartridge must be changed.*

- For the disassembly and reassembly of the cartridge, see: 3 - MAINTENANCE: D3 - DRY AIR FILTER CARTRIDGE.
- Clean the filter cartridge using a compressed air jet (max. pressure 3 bar) directed from the top to the bottom and from the inside towards the outside at a minimum distance of 30 mm from the cartridge wall.
- Cleaning is completed when there is no more dust on the cartridge.

⚠ *Respect the safety distance of 30 mm between the air jet and the cartridge to avoid tearing or making a hole in the cartridge. The cartridge must not be blown anywhere near the air filter box. Never clean the cartridge by tapping it against a hard surface. Your eyes must be protected during this intervention.*

- Clean the cartridge seal surfaces with a damp, clean lint-free cloth and grease with a silicone lubricant (MANITOU reference: 479292).
- Check visually the outer condition of the air filter and its mounts. Verify the condition of the hoses and their mounts also.

⚠ *Do not clean the dry air filter cartridge by washing it in liquid. Do not clean by any means the safety cartridge located inside the filter cartridge, change it for a new one if it is dirty or damaged.*

B2 - RADIATOR CORE

CLEAN

⚠ *In a polluting atmosphere, clean the radiator core every day. Do not use a water jet or high-pressure steam as this could damage the radiator fins.*

- Open the I.C. engine bonnet.
- In order to prevent the radiator becoming clogged, clean the radiator with a compressed air jet directed from inside to outside. This is the only way to clean the core of debris.
- If necessary, clean the suction grid on the engine bonnet.

NOTE: There is an OPTIONAL straw deflector and self-cleaning system of radiator core.

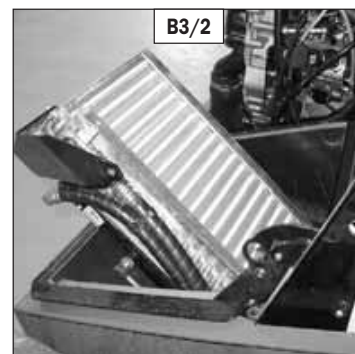
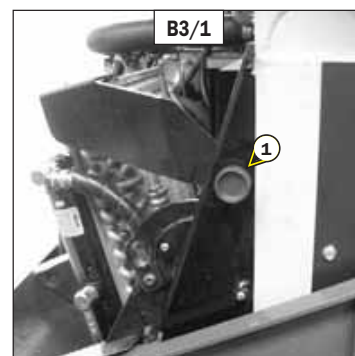
B3 - CONDENSER CORE (OPTION AIR CONDITIONING)

CLEAN

Except ML 635 Turbo Série 3-E2

⚠ *In a polluting atmosphere, clean the radiator core every day. Do not use a water jet or high-pressure steam as this could damage the radiator fins.*

- Open the I.C. engine bonnet.
- Loosen the knurled screw 1 (fig. B3/1) and swing round the filter and condenser unit.
- Clean the core with a blast of compressed air aimed from the inside towards the outside (fig. B3/2). This is the only effective way of removing the impurities.



B4 - JIB

GREASE

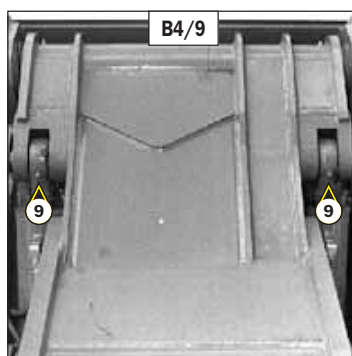
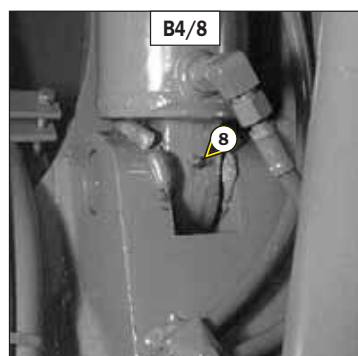
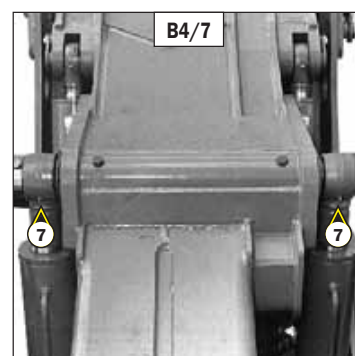
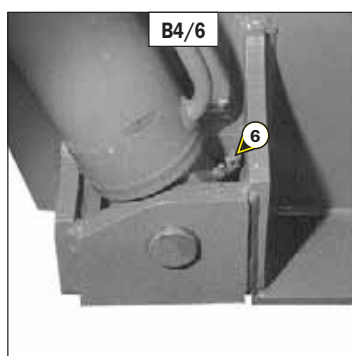
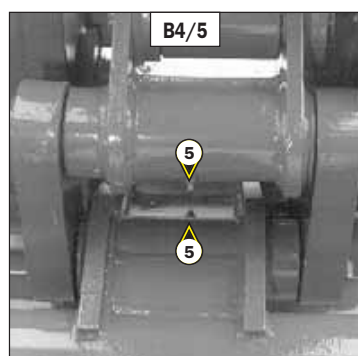
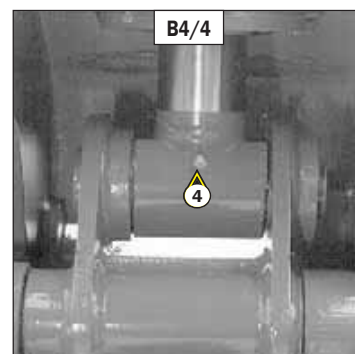
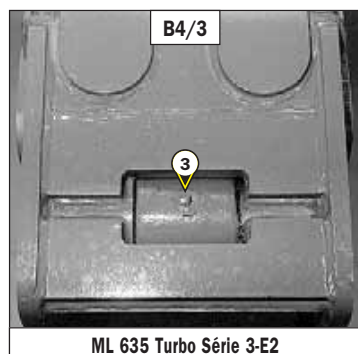
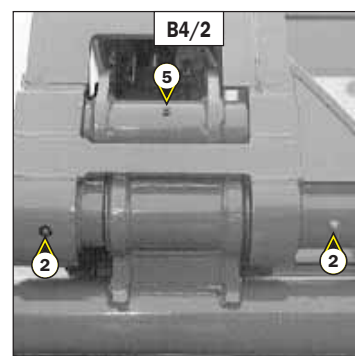
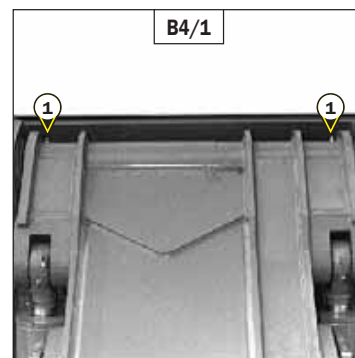
ML 635 Turbo Série 3-E2
MT 940 L Turbo Série 3-E2

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

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

Clean and lubricate the following points with grease (see: 3 - MAINTENANCE: LUBRICANTS AND FUEL) and remove the surplus of grease.

- 1 - Lubricators of the jib axle (2 lubricators) (fig. B4/1).
- 2 - Lubricators of the carriage axle (2 lubricators) (fig. B4/2).
- 3 - Lubricator of the tilt cylinder foot axle (1 lubricator) (fig. B4/3).
- 4 - Lubricator of the tilt cylinder head axle (1 lubricator) (fig. B4/4).
- 5 - Lubricators of the carriage connecting rod axle (5 lubricators) (fig. B4/2 and B4/5).
- 6 - Lubricators of the lifting cylinder foot axle (2 lubricators) (fig. B4/6).
- 7 - Lubricators of the lifting cylinder head axle (2 lubricators) (fig. B4/7).
- 8 - Lubricators of the compensation cylinder foot axle (2 lubricators) (fig. B4/8).
- 9 - Lubricators of the compensation cylinder head axle (2 lubricators) (fig. B4/9).



B4 - JIB

GREASE

MT 1235 S Série 3-E2
MT 1235 S Turbo Série 3-E2
MT 1240 L Turbo Série 3-E2
MT 1240 L Turbo ULTRA Série 3-E2
MT 1335 SL Série 3-E2
MT 1335 SL Turbo Série 3-E2
MT 1340 SL Turbo Série 3-E2
MT 1340 SL Turbo ULTRA Série 3-E2
MT 1740 SL Turbo Série 3-E2
MT 1740 SL Turbo ULTRA Série 3-E2

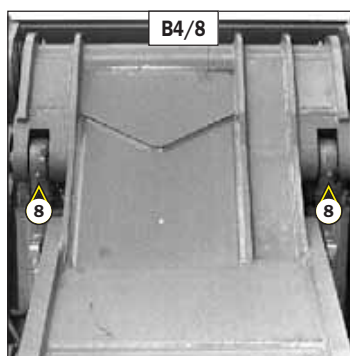
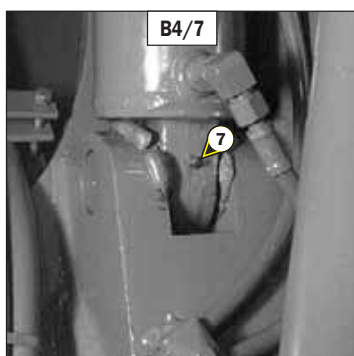
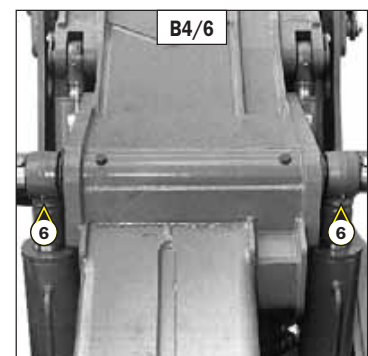
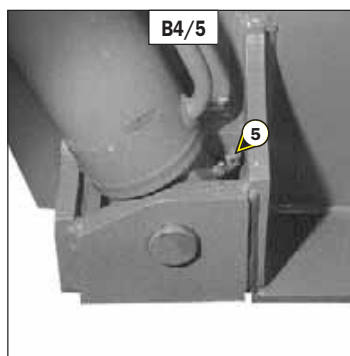
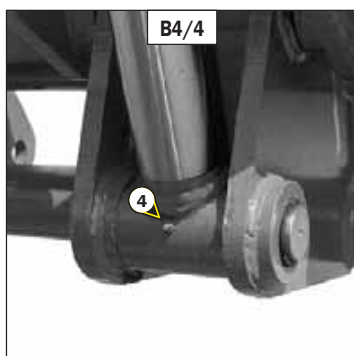
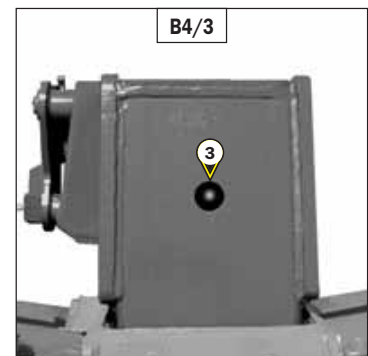
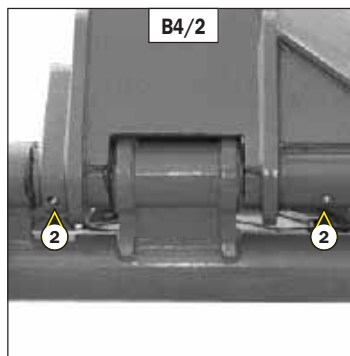
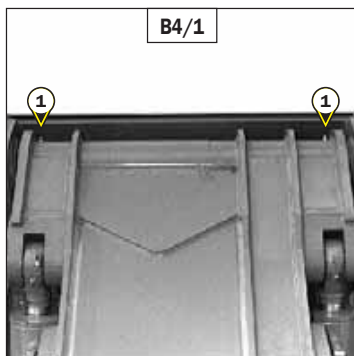
To be carried out weekly, if the lift truck has been operated for less than 50 hours during the week.



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

Clean and lubricate the following points with grease (see: 3 - MAINTENANCE: LUBRICANTS AND FUEL) and remove the surplus of grease.

- 1 - Lubricators of the jib axle (2 lubricators) (fig. B4/1).
- 2 - Lubricators of the carriage axle (2 lubricators) (fig. B4/2).
- 3 - Lubricator of the tilt cylinder foot axle (1 lubricator) (fig. B4/3).
- 4 - Lubricator of the tilt cylinder head axle (1 lubricator) (fig. B4/4).
- 5 - Lubricators of the lifting cylinder foot axle (2 lubricators) (fig. B4/5).
- 6 - Lubricators of the lifting cylinder head axle (2 lubricators) (fig. B4/6).
- 7 - Lubricators of the compensation cylinder foot axle (2 lubricators) (fig. B4/7).
- 8 - Lubricators of the compensation cylinder head axle (2 lubricators) (fig. B4/8).



B4 - JIB (OPTION SEALED ARTICULATION AXLES FOR FERTILIZER)

GREASE

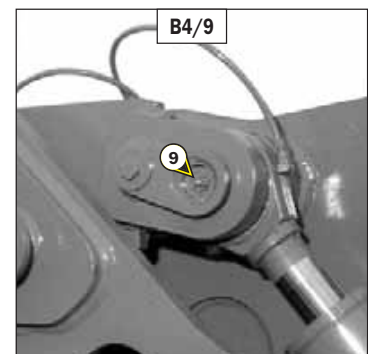
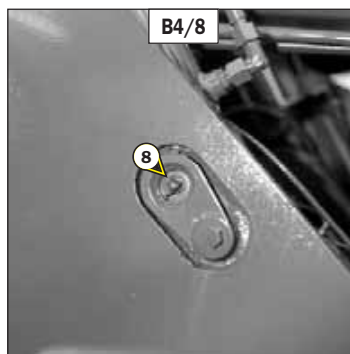
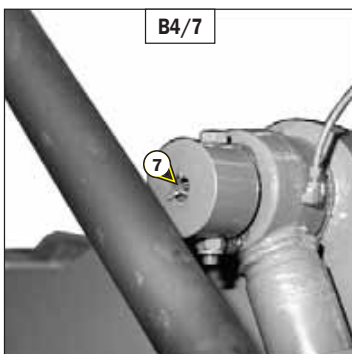
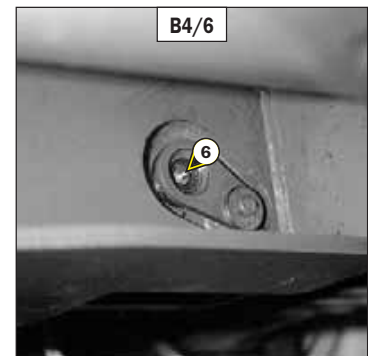
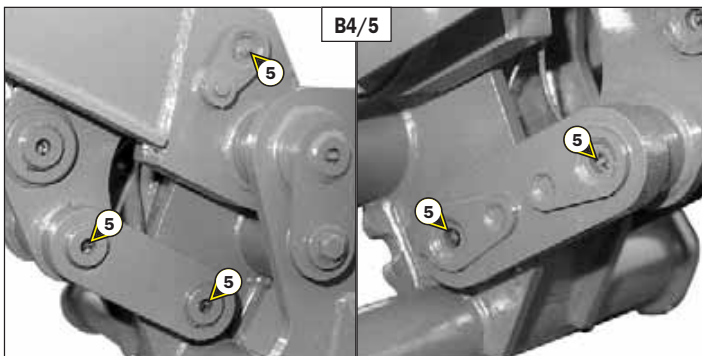
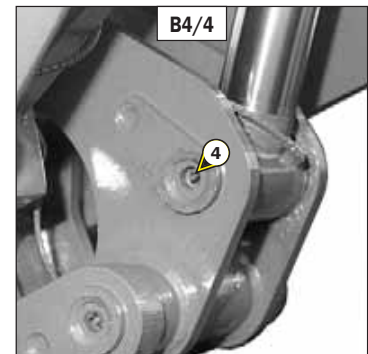
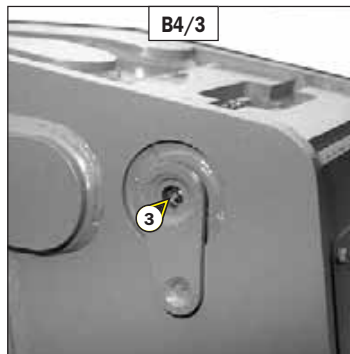
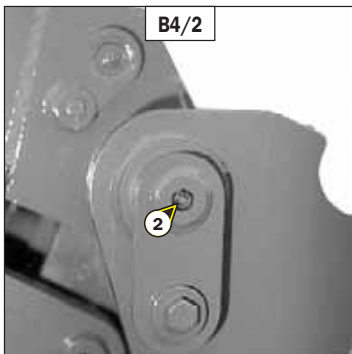
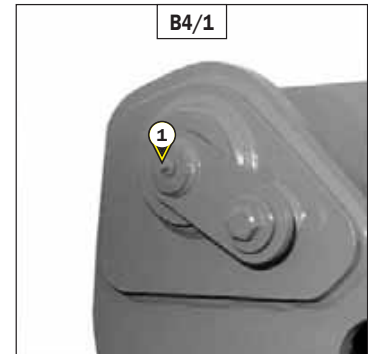
ML 635 Turbo Série 3-E2

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

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

Clean and lubricate the following points with grease (see: 3 - MAINTENANCE: LUBRICANTS AND FUEL) and remove the surplus of grease.

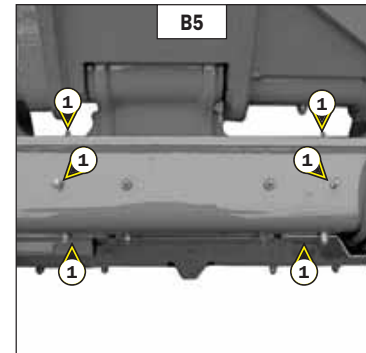
- 1 - Lubricators of the jib axle (2 lubricators) (fig. B4/1).
- 2 - Lubricators of the carriage axle (2 lubricators) (fig. B4/2).
- 3 - Lubricator of the tilt cylinder foot axle (1 lubricator) (fig. B4/3).
- 4 - Lubricator of the tilt cylinder head axle (1 lubricator) (fig. B4/4).
- 5 - Lubricators of the carriage connecting rod axle (5 lubricators) (fig. B4/5).
- 6 - Lubricators of the lifting cylinder foot axle (2 lubricators) (fig. B4/6).
- 7 - Lubricators of the lifting cylinder head axle (2 lubricators) (fig. B4/7).
- 8 - Lubricators of the compensation cylinder foot axle (2 lubricators) (fig. B4/8).
- 9 - Lubricators of the compensation cylinder head axle (2 lubricators) (fig. B4/9).



B5 - SINGLE SIDE-SHIFT CARRIAGE (OPTION)

GREASE

MT 1235 S Série 3-E2
MT 1235 S Turbo Série 3-E2
MT 1240 L Turbo Série 3-E2
MT 1240 L Turbo ULTRA Série 3-E2
MT 1335 SL Série 3-E2 - MT 1435 SL Série 3-E2
MT 1335 SL Turbo Série 3-E2 - MT 1435 SL Turbo Série 3-E2
MT 1440 SL Série 3-E2
MT 1340 SL Turbo Série 3-E2 - MT 1440 SL Turbo Série 3-E2
MT 1340 SL Turbo ULTRA Série 3-E2 - MT 1440 SL Turbo ULTRA Série 3-E2
MT 1740 SL Turbo Série 3-E2
MT 1740 SL Turbo ULTRA Série 3-E2



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

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

Clean and lubricate the following points with grease (see: 3 - MAINTENANCE: LUBRICANTS AND FUEL) and remove the surplus of grease.

- 1 - Wear plate lubricators (8 lubricators) (fig. B5).

B6 - HYDRAULIC OIL LEVEL

CHECK

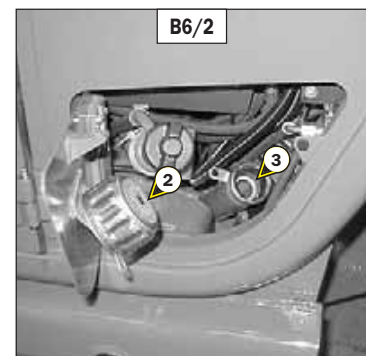
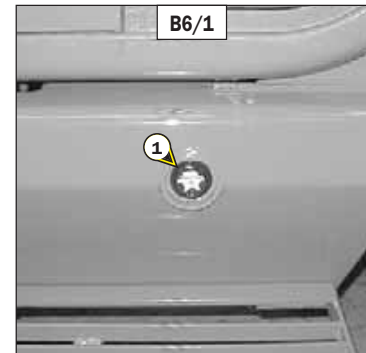
Place the lift truck on level ground with the I.C. engine stopped, and the jib retracted and lowered as far as possible.

- Refer to gauge 1 (fig. B6/1).
- The oil level is correct when it is at the level of the red point.
- If necessary, add oil (see: 3 - MAINTENANCE: LUBRICANTS AND FUEL).
- Open the access panel for hydraulic oil filling.
- Remove cap 2 (fig. B6/2).
- Add oil by filler port 3 (fig. B6/2).

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

- Put the cap back and close the access panel for hydraulic oil filling.
- Check visually that there is no leakage in the tank and pipes.

Always maintain the oil level at maximum as cooling depends on the oil flowing through the tank.



B7 - BRAKE OIL LEVEL

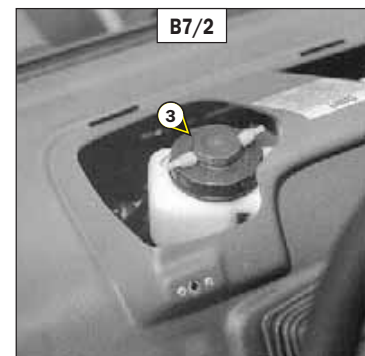
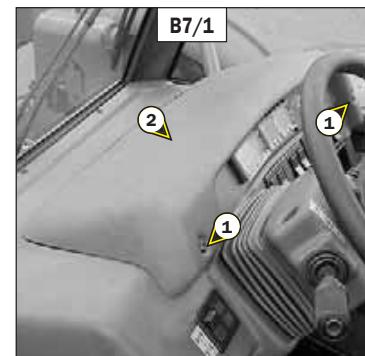
CHECK

Place the lift truck on level ground.

- Loosen screws 1 (fig. B7/1) and remove the access panel for braking oil tank 2 (fig. B7/1).
- The level is correct when it is at the MAXI level on the tank.
- If necessary, add oil (see: 3 - MAINTENANCE: LUBRICANTS AND FUEL) by the filler port 3 (fig. B7/2).
- Check visually that there is no leakage in the tank and pipes.



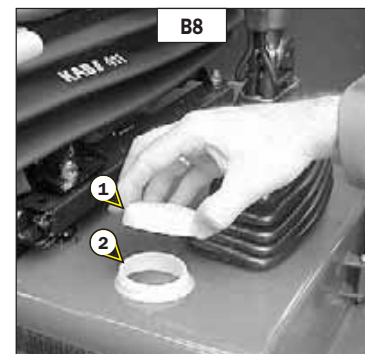
If the braking oil level is abnormally low, consult your dealer.



B8 - WINDSCREEN WASHER LIQUID LEVEL

CHECK

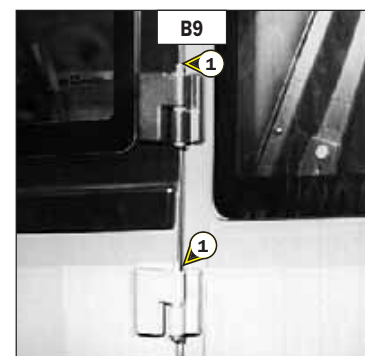
- Remove filler cap 1 (fig. B8).
- Check visually the level.
- If necessary add windscreen washer liquid (see: 3 - MAINTENANCE: LUBRICANTS AND FUEL) by filler port 2 (fig. B8).



B9 - CAB DOOR

GREASE

Clean and lubricate the points 1 (4 lubricators) (fig. B9) with grease (see: 3 - MAINTENANCE: LUBRICANTS AND FUEL) and remove the surplus of grease.

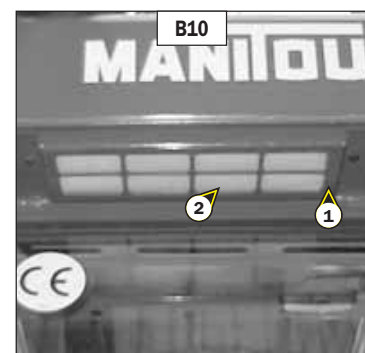


B10 - CAB VENTILATION FILTER (OPTION AIR CONDITIONING)

CLEAN

Except ML 635 Turbo Série 3-E2

- Lift up protective casing 1 (fig. B10).
- Lift out cabin ventilation filter 2 (fig. B10).
- Clean the filter with a compressed air jet.
- Check its condition and change if necessary (see: 3 - MAINTENANCE: FILTERS CARTRIDGES AND BELTS).
- Refit the filter and protective casing.



B11 - BATTERY ELECTROLYTE LEVEL

CHECKING

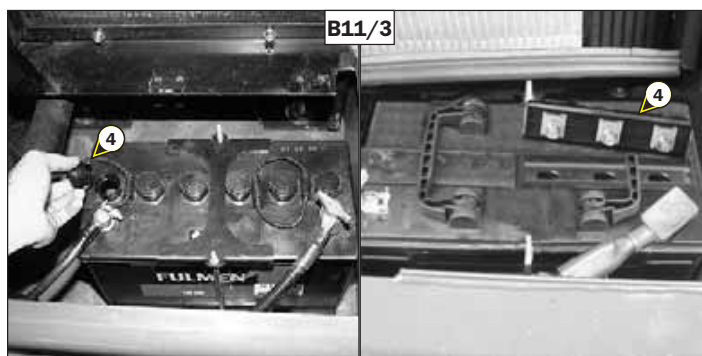
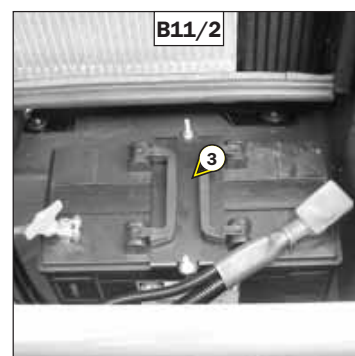
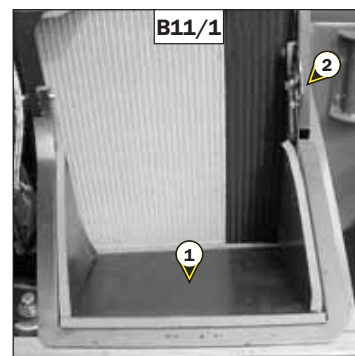
Check the electrolyte level in each cell of the battery.
If the lift truck is working in a high temperature environment, check the level more frequently than every 50 hours operation

- Open the engine cover.
- Open battery cover 1 (fig. B11/1) and hold it open with locking device 2 (fig. B11/1).
- Remove the mounting plate 3 (fig. B11/2). **(Depending on the model)**
- Remove caps 4 (fig. B11/3) from each cell of the battery.
- The level is correct when it is 1,5 cm above the plates in the battery.
- If necessary, top up the cells with clean distilled water that has been stored in a glass container.
- Clean and dry the caps 4 (fig. B11/3), and replace.
- Check the terminal connections and lightly smear with petroleum jelly to prevent the formation of verdigris.
- Replace the mounting plate 3 (fig. B11/2). **(Depending on the model)**
- Close the battery cover.



Handling and servicing a battery can be dangerous, so take the following precautions:

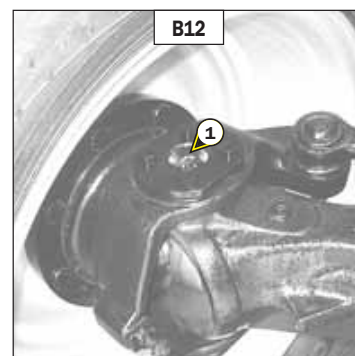
- **Wear protective goggles.**
- **Keep the battery horizontal.**
- **Never smoke or work near a naked flame.**
- **Work in a well-ventilated area.**
- **In the event of electrolyte being spilled onto the skin or splashed in the eyes, rinse thoroughly with cold water for 15 minutes and call a doctor.**



B12 - FRONT AND REAR WHEEL REDUCTION GEAR PIVOTS

GREASING

Clean and lubricate points 1 (8 nipples) (fig. B12) with grease (see: 3 - MAINTENANCE: LUBRICANTS AND FUEL) and remove any excess grease.

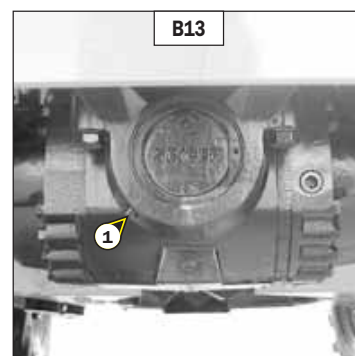


B13 - FRONT AXLE OSCILLATION

GREASING

Except for ML 635 Série 3-E2 Turbo
MT 1235 S Série 3-E2
MT 1235 S Série 3-E2 Turbo

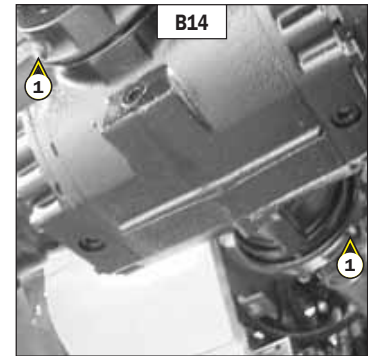
Clean and lubricate points 1 (2 nipples) (fig. B13) with grease (see: 3 - MAINTENANCE: LUBRICANTS AND FUEL) and remove any excess grease.



B14 - REAR AXLE OSCILLATION

GREASING

Clean and lubricate points 1 (2 nipples) (fig. B14) with grease (see: 3 - MAINTENANCE: LUBRICANTS AND FUEL) and remove any excess grease.



B15 - TRANSMISSION UNIVERSAL JOINT

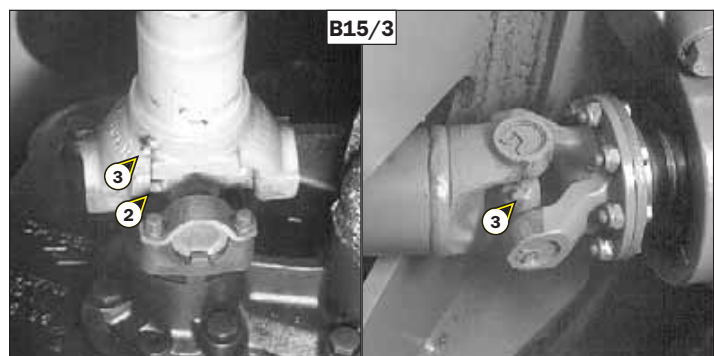
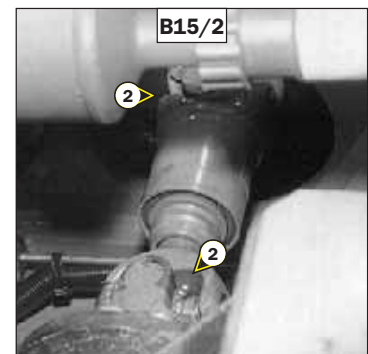
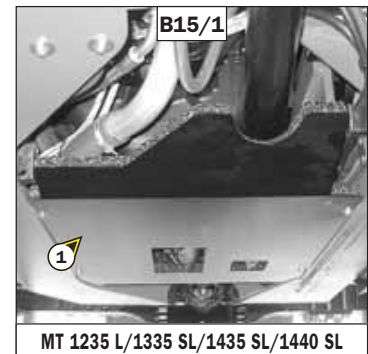
GREASING

Clean and lubricate the following points with grease (see: 3 - MAINTENANCE: LUBRICANTS AND FUEL) and remove any excess grease.

- Remove access panel 1 (fig. B15/1).

MT 1235 S Série 3-E2 (from machine no.)
MT 1335 SL Série 3-E2 (from machine no.)
MT 1435 SL Série 3-E2
MT 1440 SL Série 3-E2

- 2 - Nipples on the universal joint: Engine/Angle gear box (2 nipples) (fig. B15/2).
- 3 - Nipples on the universal joint: Transmission/Front axle (3 nipples) (fig. B15/3).
- 4 - Nipples on the universal joint: Transmission/Rear axle (3 nipples) (fig. B15/4).



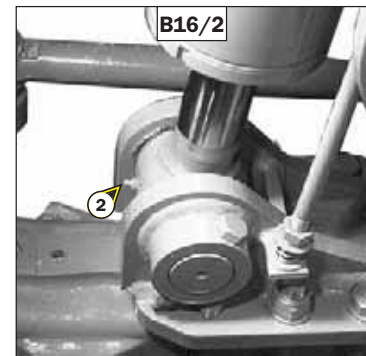
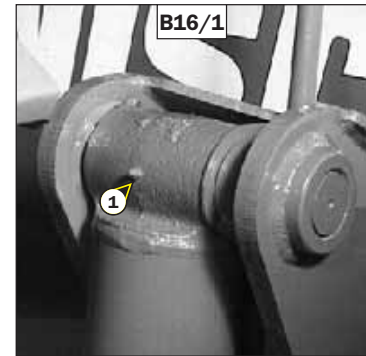
B16 - TILTING CORRECTOR

GREASE

MT 940 L Turbo Série 3-E2
MT 1240 L Turbo Série 3-E2
MT 1240 L Turbo ULTRA Série 3-E2
MT 1335 SL Série 3-E2 - MT 1435 SL Série 3-E2
MT 1335 SL Turbo Série 3-E2 - MT 1435 SL Turbo Série 3-E2
MT 1440 SL Série 3-E2
MT 1340 SL Turbo Série 3-E2 - MT 1440 SL Turbo Série 3-E2
MT 1340 SL Turbo ULTRA Série 3-E2 - MT 1440 SL Turbo ULTRA Série 3-E2
MT 1740 SL Turbo Série 3-E2
MT 1740 SL Turbo ULTRA Série 3-E2

Clean and lubricate the following points with grease (see: 3 - MAINTENANCE: LUBRICANTS AND FUEL) and remove the surplus of grease.

- 1 - Lubricator of the tilting corrector cylinder foot axle (1 lubricator) (fig. B16/1).
- 2 - Lubricator of the tilting corrector cylinder head axle (1 lubricator) (fig. B16/2).



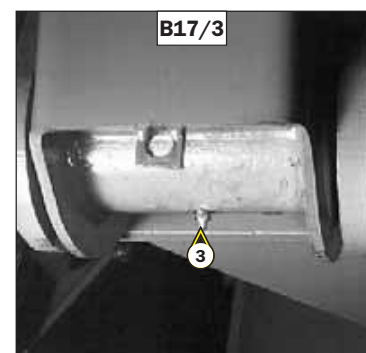
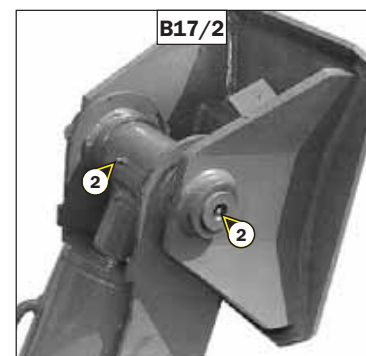
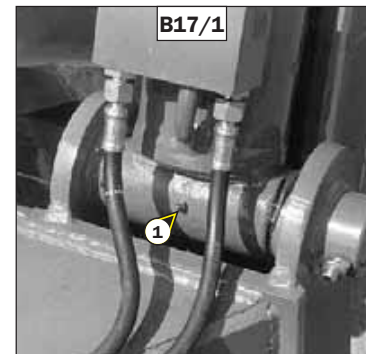
B17 - STABILIZERS

GREASE

MT 1235 S Série 3-E2
MT 1235 S Turbo Série 3-E2
MT 1335 SL Série 3-E2 - MT 1435 SL Série 3-E2
MT 1335 SL Turbo Série 3-E2 - MT 1435 SL Turbo Série 3-E2
MT 1440 SL Série 3-E2
MT 1340 SL Turbo Série 3-E2 - MT 1440 SL Turbo Série 3-E2
MT 1340 SL Turbo ULTRA Série 3-E2 - MT 1440 SL Turbo ULTRA Série 3-E2
MT 1740 SL Turbo Série 3-E2
MT 1740 SL Turbo ULTRA Série 3-E2

Clean and lubricate the following points with grease (see: 3 - MAINTENANCE: LUBRICANTS AND FUEL) and remove the surplus of grease.

- 1 - Lubricators of the stabilizers cylinders foot axle (2 lubricators) (fig. B17/1).
- 2 - Lubricators of the stabilizers cylinders head axle (2 lubricators) (fig. B17/2).
- 3 - Lubricators of the stabilizers axles (2 lubricators) (fig. B17/3).



C - EVERY 250 HOURS SERVICE

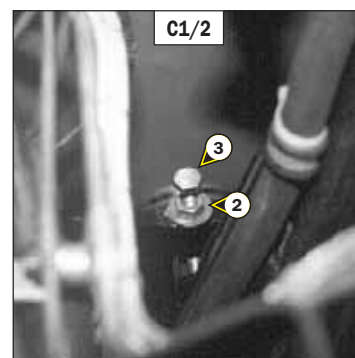
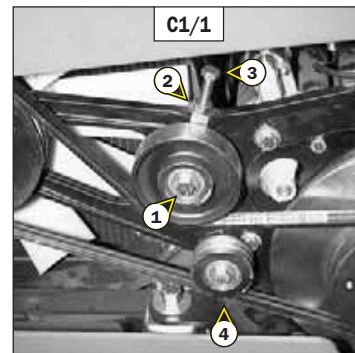
Carry out the operations described previously as well as the following operations.

C1 - FAN BELT TENSION

CHECK - ADJUST

- Open the I.C. engine bonnet.
- Check the belt for signs of wear and cracks and change if necessary (see: 3 - MAINTENANCE: FILTERS CARTRIDGES AND BELTS).
- Loosen screw 1 (fig. C1/1) on the tension pulley.
- Loosen lock nut 2 (fig. C1/1 and C1/2) and screw 3 (fig. C1/1 and C1/2).
- Bring the belt just into contact with pulley 4 (fig. C1/1) (on the lift truck, check this operation by feel).
- Make a mark on the head of screw 3 (fig. C1/1 and C1/2) and tighten, turning it 5 times.
- Tighten the lock nut 2 (fig. C1/1 and C1/2).
- Retighten screw 1 (fig. C1/1) on the tension pulley.

! When changing the fanbelt, tighten screw 3 (fig. C1/1 and C1/2) by one and a half turns, having allowed the I.C. engine to idle for 30 minutes.

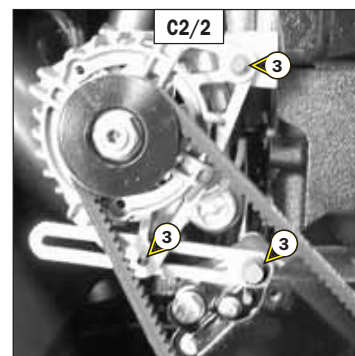
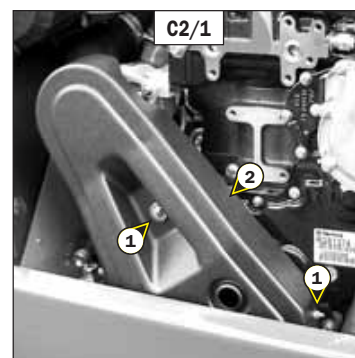


C2 - ALTERNATOR/CRANKSHAFT BELT TENSION

CHECK - ADJUST

- Open the I.C. engine bonnet.
- Unscrew the fastening screws 1 (fig. C2/1).
- Lay down the protective guard 2 (fig. C2/1).
- Check the belt for signs of wear and cracks and change if necessary (see: 3 - MAINTENANCE: FILTERS CARTRIDGES AND BELTS).
- Check the belt tension between the pulleys of the crankshaft and of the alternator.
- Under a normal pressure exerted with the thumb (45N), the tension should be approximately 10 mm.
- Carry out adjustments if necessary.
- Untighten screws 3 (fig. C2/2) by two to three thread turns.
- Swivel the alternator assembly so as to obtain the belt tension required.
- Retighten screws 3 (fig. C2/2) (tightening torque 22 N.m).
- Put the protective guard back 2 (fig. C2/1).

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



C3 - COMPRESSOR BELT TENSION (OPTION AIR CONDITIONING)

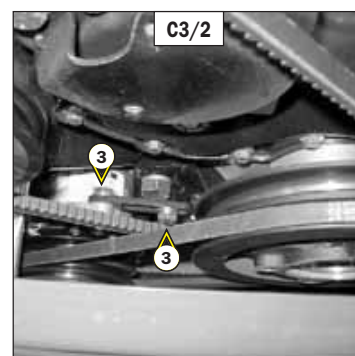
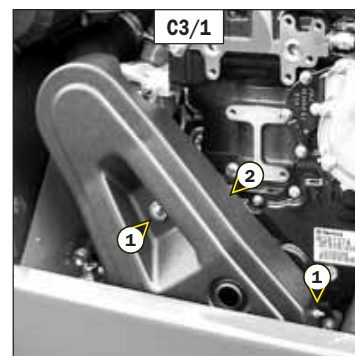
CHECK - ADJUST

Except ML 635 Turbo Série 3-E2

- Open the I.C. engine bonnet.
- Unscrew the fastening screws 1 (fig. C3/1).
- Lay down the protective guard 2 (fig. C3/1).
- Check the belt for signs of wear and cracks and change if necessary (see: 3 - MAINTENANCE: FILTERS CARTRIDGES AND BELTS).
- Check the belt tension between the pulleys of the crankshaft and of the compressor.
- Under a normal pressure exerted with the thumb (45 N), the tension should be approximately 10 mm.
- Carry out adjustments if necessary.
- Untighten screws 3 (fig. C3/2) by two to three thread turns.
- Swivel the compressor assembly so as to obtain the belt tension required.
- Retighten screws 3 (fig. C3/2).
- Put the protective guard back 2 (fig. C3/1).



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

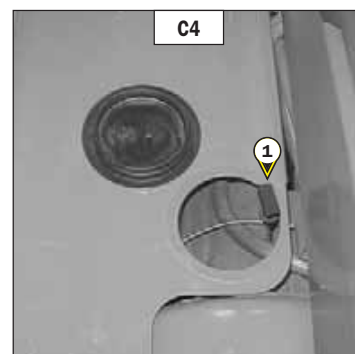


C4 - ANGLE GEAR BOX OIL LEVEL

CHECK

Park the lift truck on level ground with the jib raised and the I.C. engine stopped.

- Remove the plastic cap 1 (fig. C4).
- Remove level plug 2 (fig. C4).
- Wipe the dipstick and check the correct level between the MINI and MAXI marks.
- If necessary, add oil (see: 3 - MAINTENANCE: E5 - ANGLE GEAR BOX OIL).



C5 - PARKING BRAKE

CHECK - ADJUST

Except MT 940 L Turbo Série 3-E2 (from machine Nr 203420)

- Place the lift truck on a slope less than 15 % with the rated load in the transport position.
- Check the tightening adjustment by locking the parking brake in position A (fig. C5/1).
- The adjustment is correct when the lift truck is held stationary on a slope.
- Carry out adjustments if necessary.

ADJUSTMENT OF THE PARKING BRAKE CABLE ON THE FRONT AXLE

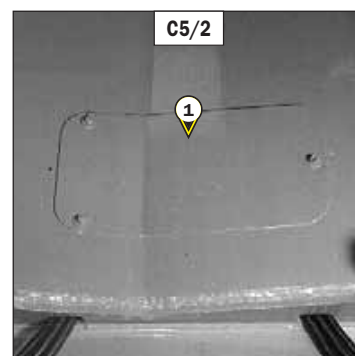
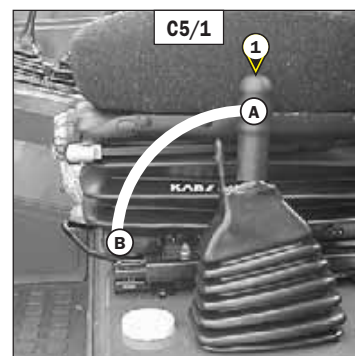
- Press and release the brake pedal, then release the parking brake, putting it in position B (fig. C5/1).
- Remove the cover plate 1 (fig. C5/2).
- Unscrew nuts 2 (fig. C5/3).
- Adjust the cable by untightening nuts 2 (fig. C5/3), until a clearance of 1.5 mm between cams 3 (fig. C5/3) and stops 4 (fig. C5/3) is obtained.



The adjustment of the stops performed by the manufacturer must not be modified under any circumstances.

ADJUSTMENT OF THE PARKING BRAKE

- Leave the parking brake in position B (fig. C5/1).
- Progressively tighten the end piece of the lever 5 (fig. C5/1) and recheck braking.
- Repeat the operation until the correct braking adjustment is obtained.



C5 - PARKING BRAKE

CHECKING - ADJUSTING

Except for MT 940 L Série 3-E2 Turbo (from machine no. 203420)

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

- Check braking by locking the parking brake in position A (fig. C5/1).
- The adjustment is correct when the lift truck is held stationary on the slope.
- Adjust if necessary.

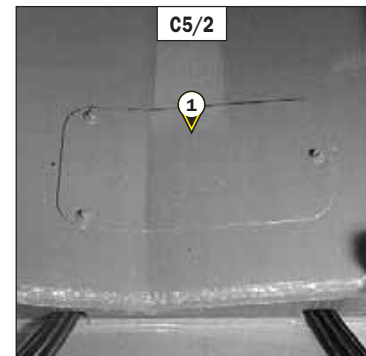
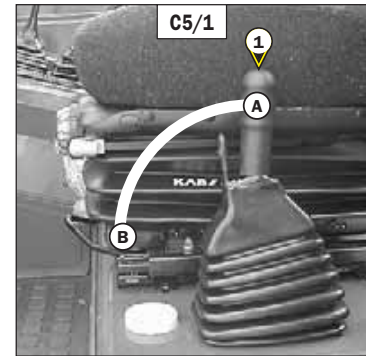
ADJUSTING THE PARKING BRAKE CABLE ON THE FRONT AXLE

- Press and release the brake pedal, then release the parking brake in position B (fig. C5/1).
- Remove the cover plate 1 (fig. C5/2).
- Unscrew the nuts 2 (fig. C5/3).
- Adjust the cable by tightening or loosening the nuts 2 (fig. C5/3) to obtain a play of 1,5 mm between the cams 3 (fig. C5/3) and the stops 4 (fig. C5/3).

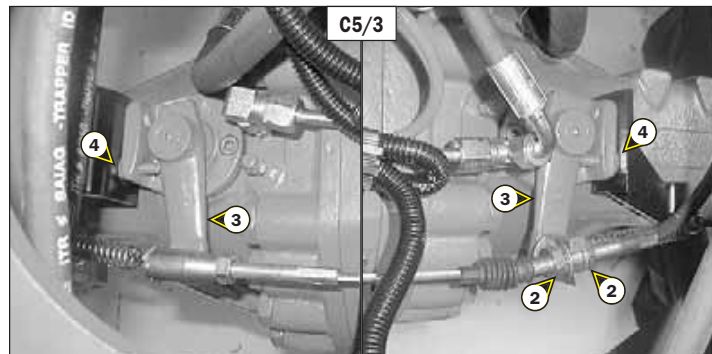
! *The manufacturer's settings of the stops must never be changed.*

ADJUSTING THE PARKING BRAKE

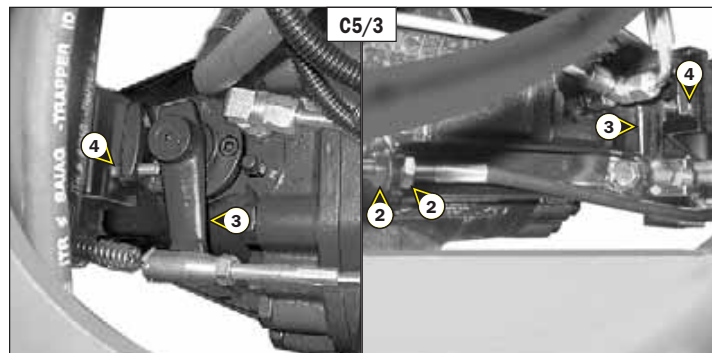
- Leave the parking brake in position B (fig. C5/1).
- Progressively tighten the end piece of lever 5 (fig. C5/1) and recheck the braking.
- Repeat the operation until correct brake adjustment is obtained.



1st FITTING



2nd FITTING

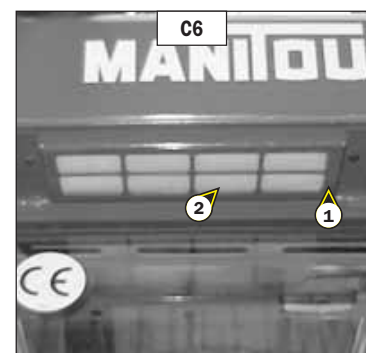


C6 - CAB VENTILATION FILTER (OPTIONAL AIR CONDITIONING)

CHANGE

except for ML 635 Série 3-E2 Turbo

- Remove protective casing 1 (fig. C6).
- Extract cabin ventilation filter 2 (fig. C6) and fit new filter (see: 3 - MAINTENANCE: FILTER CARTRIDGES AND BELTS).
- Refit the protective casing.

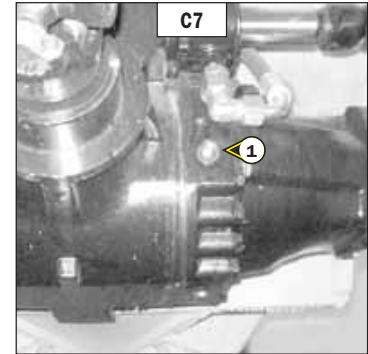


C7 - FRONT AXLE DIFFERENTIAL OIL LEVEL

CHECK

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

- Remove level plug 1 (fig. C7). The oil should be flush with the edge of the hole.
- If necessary, add oil (see: 3 - MAINTENANCE: LUBRICANTS AND FUEL) by the same hole.
- Replace and tighten the level plug 1 (fig. C7) (tightening torque 34 to 49 N.m).

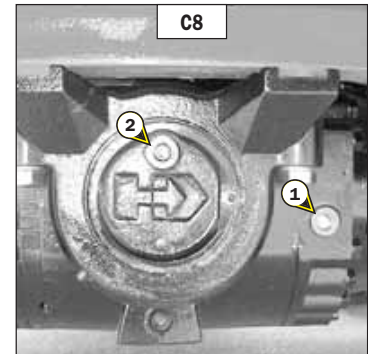


C8 - REAR AXLE DIFFERENTIAL OIL LEVEL

CHECK

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

- Remove level plug 1 (fig. C8). The oil should be flush with the edge of the hole.
- If necessary, add oil (see: 3 - MAINTENANCE: LUBRICANTS AND FUEL) by the filler port 2 (fig. C8).
- Replace and tighten the level plug 1 (fig. C8) (tightening torque 34 to 49 N.m).

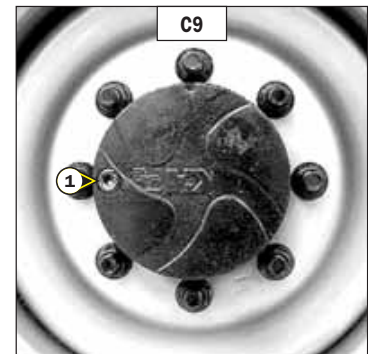


C9 - FRONT AND REAR WHEELS REDUCERS OIL LEVEL

CHECK

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

- Check the level on each front wheel reducer.
- Place level plug 1 (fig. C9) in the horizontal position.
- Remove the level plug; the oil should be flush with the edge of the hole.
- If necessary, add oil (see: 3 - MAINTENANCE: LUBRICANTS AND FUEL) by the same hole.
- Replace and tighten the level plug 1 (fig. C9) (tightening torque 34 to 49 N.m).
- Repeat the same operation on each rear wheel reducer.



D - EVERY 500 HOURS SERVICE

Carry out the operations described previously as well as the following operations.

D1 - I.C. ENGINE OIL

DRAIN

D2 - I.C. ENGINE OIL FILTER

CHANGE

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

DRAINING THE OIL

- Open the I.C. engine bonnet.
- Remove access panel 1 (fig. D1/1).
- Place a container under drain plug 2 (fig. D1/2) and unscrew the plug 3 (fig. D1/3).
- Take drain hose 4 (fig. D1/4).
- Place the end of the drain hose in the container and screw fully the union on draining port 5 (fig. D1/5).
- Remove filler cap 6 (fig. D1/6) in order to ensure that the oil is drained properly.

 **Dispose of the drain oil in an ecological manner.**

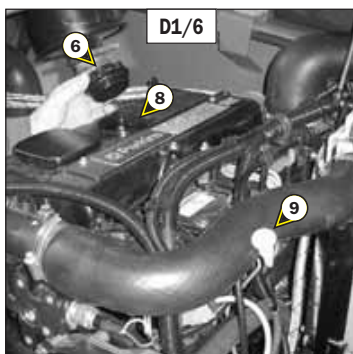
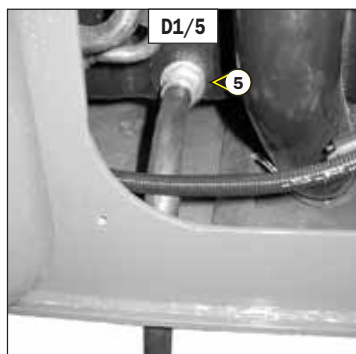
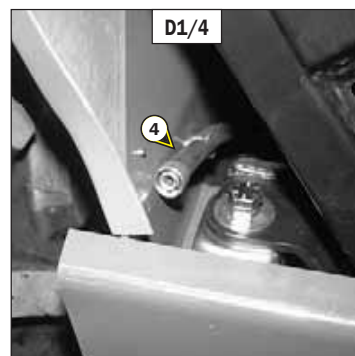
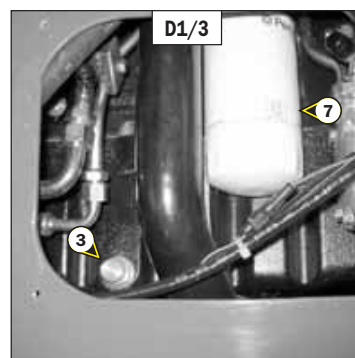
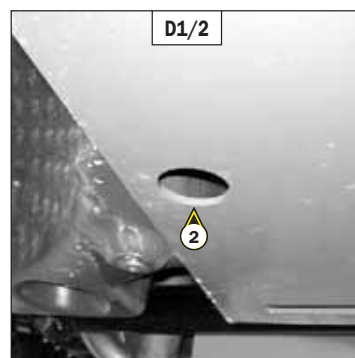
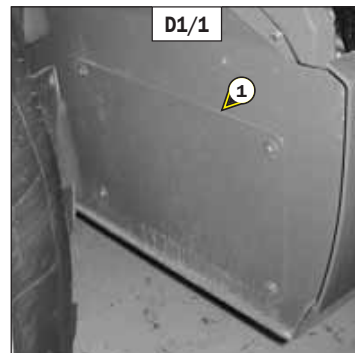
REPLACEMENT OF THE FILTER

- Remove I.C. engine oil filter 7 (fig. D1/3); discard the filter and the filter seal.
- Clean the filter bracket with a clean, lint-free cloth.
- Lightly grease the new oil filter seal and refit the oil filter (see: 3 - MAINTENANCE: FILTERS CARTRIDGES AND BELTS) on the filter bracket.

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

FILLING UP THE OIL

- Loosen, clean and put back in place the drain hose 4 (fig. D1/4).
- Refit and tighten drain plug 3 (fig. D1/3).
- Refit access panel 1 (fig. D1/1).
- Fill up with oil (see: 3 - MAINTENANCE: LUBRICANTS AND FUEL) by filler port 8 (fig. D1/6).
- Wait a few minutes to allow the oil to flow into the sump.
- Start the I.C. engine and let it run for a few minutes.
- Check for possible leaks at the drain plug and the oil filter.
- Stop the I.C. engine, wait a few minutes and check the level between the two notches on dipstick 9 (fig. D1/6).
- Top up the level if necessary.



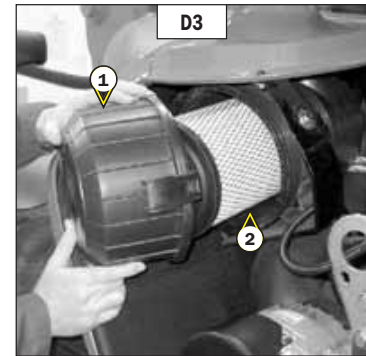
D3 - DRY AIR FILTER CARTRIDGE

CHANGE

In case of use in a heavily dust laden atmosphere, there are pre-filtration cartridges, see: 3 - MAINTENANCE: FILTERS CARTRIDGES AND BELTS. Also, the checking and cleaning periodicity of the cartridge must be reduced (up to 250 hours in a heavily laden dust atmosphere and with pre-filtration).

⚠ Change the cartridge in a clean location, with the I.C. engine stopped. Never run the I.C. engine with the air filter removed or damaged.

- Open the I.C. engine bonnet.
- Loosen the bolts and remove cover 1 (fig. D3).
- Gently remove the cartridge 2 (fig. D3), taking care to avoid spilling the dust.
- Leave the safety cartridge in place.
- The following parts must be cleaned 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 I.C. engine and the connection and state of the clogging indicator on the filter.
- Before mounting check the state of the new cartridge (see: 3 - MAINTENANCE: FILTERS CARTRIDGES AND BELTS).
- Introduce the cartridge into the filter axis and push it in, pressing the edges and not the middle.
- Reassemble the cover, guiding the valve downwards.

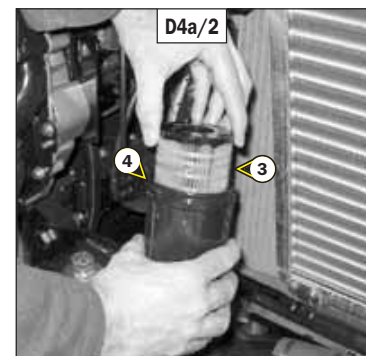
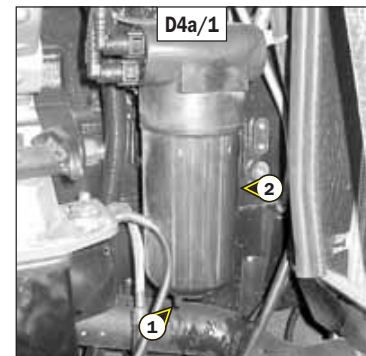


D4a - FUEL FILTER CARTRIDGE

CHANGE

⚠ Make sure the electrical contact on the lift truck is cut, otherwise fuel will be released if the lift pump is powered up.

- Open the I.C. engine bonnet.
- Carefully clean the outside of the filter and its holder, to prevent dust from getting into the system.
- Place a container under the filter and drain it via drain plug 1 (fig. D4a/1).
- Loosen the body of filter 2 (fig. D4a/1).
- Remove the filter cartridge by pressing the cartridge 3 (fig. D4a/2) down against the pressure of the spring and turn it to the left to extract it.
- Insert a new cartridge (see: 3 - MAINTENANCE: FILTERS CARTRIDGES AND BELTS), by pressing the cartridge 3 (fig. D4a/2) down against the pressure of the spring and turn it to the right to lock it into the body of the filter.
- Place the new seal 4 (fig. D4a/2) onto the body of the filter and lubricate the contact surface using clean engine oil.
- Remount the body of the filter onto its holder, hand-tighten it only and lock it with a quarter-turn.
- Close drain plug 1 (fig. D4a/1) and remove the container.
- Before starting the I.C. engine, leave the ignition on for three minutes on the lift truck, to give the lift pump time to release air from the filter.
- Start up the I.C. engine and make sure there is no leakage.
- If necessary, bleed the fuel circuit (see: 3 - MAINTENANCE: G1 - FUEL SYSTEM).



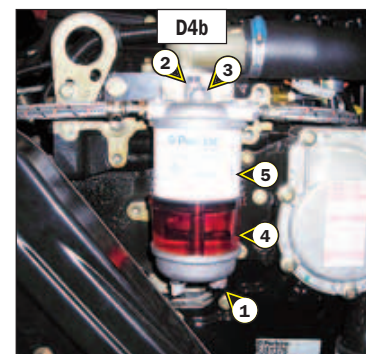
D4b - FUEL PRE-FILTER CARTRIDGE

CHANGE

(from machine 236906)

⚠ Make sure the electrical contact on the lift truck is cut, otherwise fuel will be released if the lift pump is powered up.

- Open the I.C. engine bonnet.
- Carefully clean the outside of the filter and its holder, to prevent dust from getting into the system.
- Place a container under the pre-filter and drain it using drain plug 1 (fig. D4b)
- Remove bleeder screw 2 (fig. D4b) in order to ensure that the oil is drained properly.
- Unscrew locking screw 3 (fig. D4b).
- Remove housing 4 (fig. D4b) and discard cartridge 5 (fig. D4b) as well as the seals of the cartridge.
- Clean the inside of the filter head and the housing, using a brush immersed in clean diesel oil.
- Refit the assembly with a new cartridge and new seals (see: 3 - MAINTENANCE: FILTERS CARTRIDGES AND BELTS).
- If necessary, bleed the fuel circuit (see: 3 - MAINTENANCE: G1 - FUEL SYSTEM).



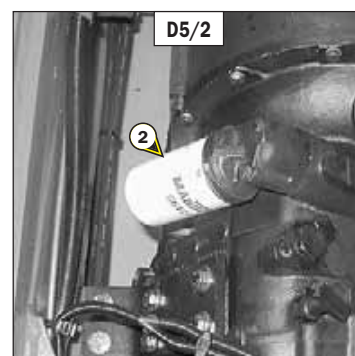
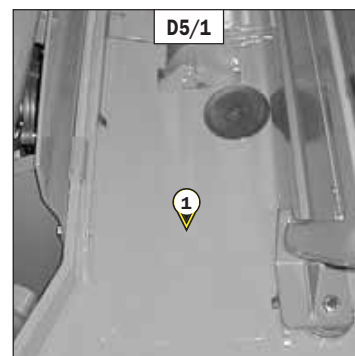
D5 - TRANSMISSION OIL FILTER

CHANGE

- Remove the cover plate 1 (fig. D5/1).
- Unscrew and discard the transmission oil filter 2 (fig. D5/2).
- Carefully clean the filter head with a clean, lint-free cloth.
- Slightly lubricate the new seal and fit the seal on the filter.
- Fill up the new transmission oil filter (see: 3 - MAINTENANCE: FILTERS CARTRIDGES AND BELTS) with oil (see: 3 - MAINTENANCE: LUBRICANTS AND FUEL).
- Refit the filter, making sure that the seal is correctly positioned and tightened.

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

- Put back the cover plate 1 (fig. D5/1).



D6 - HYDRAULIC RETURN OIL FILTER CARTRIDGE

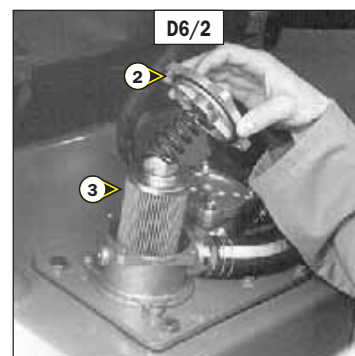
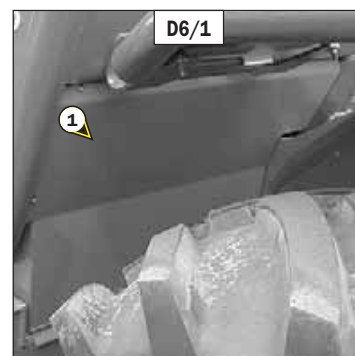
CHANGE

One filter for:	ML 635 Turbo Série 3-E2 MT 940 L Turbo Série 3-E2
Two filters for:	MT 1235 S Série 3-E2 MT 1235 S Turbo Série 3-E2 MT 1240 L Turbo Série 3-E2 MT 1240 L Turbo ULTRA Série 3-E2 MT 1335 SL Série 3-E2 - MT 1435 SL Série 3-E2 MT 1335 SL Turbo Série 3-E2 - MT 1435 SL Turbo Série 3-E2 MT 1440 SL Série 3-E2 MT 1340 SL Turbo Série 3-E2 - MT 1440 SL Turbo Série 3-E2 MT 1340 SL Turbo ULTRA Série 3-E2 - MT 1440 SL Turbo ULTRA Série 3-E2 MT 1740 SL Turbo Série 3-E2 MT 1740 SL Turbo ULTRA Série 3-E2

Stop the I.C. engine and remove the pressure from the circuits by acting on the hydraulic controls.

⚠ Thoroughly clean the outside of the filter and its surroundings before any intervention in order to prevent any risk of polluting the hydraulic circuit.

- Remove the shroud 1 (fig. D6/1).
- Unscrew the locking screws of the cover 2 (fig. D6/2).
- Remove the hydraulic return oil filter cartridge 3 (fig. D6/2), and fit new replacement cartridge (see: 3 - MAINTENANCE: FILTERS CARTRIDGES AND BELTS).
- Make sure that the cartridge is correctly positioned and refit cover 2 (fig. D6/2).
- Put back the shroud 1 (fig. D6/1).



D7 - HYDRAULIC PRESSURE OIL FILTERS CARTRIDGES

CHANGE

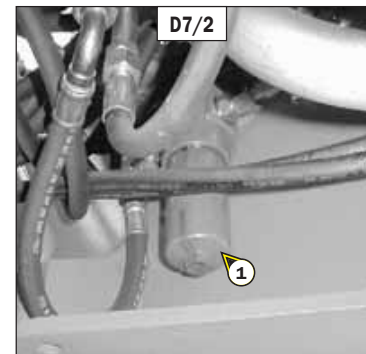
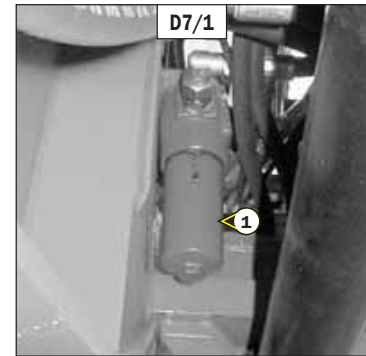
MT 1240 L Turbo ULTRA Série 3-E2
MT 1340 SL Turbo ULTRA Série 3-E2
MT 1440 SL Turbo ULTRA Série 3-E2
MT 1740 SL Turbo ULTRA Série 3-E2

Stop the I.C. engine and remove the pressure from the circuits by acting on the hydraulic controls.

⚠ Thoroughly clean the outside of the filters and its surroundings before any intervention in order to prevent any risk of polluting the hydraulic circuit.

- Place a container under the hydraulic pressure oil filters.
- Remove filter chambers 1 (fig. D7/1 and D7/2).
- Remove the hydraulic pressure oil filters cartridges and replace them with a new one (see: 3 - MAINTENANCE: FILTERS CARTRIDGES AND BELTS).
- Lubricate the threads and the seal surfaces on the filter heads, as well as the O-ring gaskets on the new cartridges and the filter chambers.
- Correctly position the filter cartridges on the centering sleeves on the heads of the filters.
- Remount the filter chambers (fig. D7/1 and D7/2).

⚠ Tighten the filter chambers by hand to their maximum extent and loosen by a quarter turn.



D8 - BALANCING VALVE

CHECK

To be performed after the first 50 hours of operation and then every 500 hours.
Stop the lift truck on horizontal ground, put the handbrake on and set the reverse gear to neutral.

ROLE OF BALANCING VALVES

- The balancing valves protect the user from any risk due to a fall in hydraulic pressure or an exploding hose during hydraulic operations.

⚠ Keep everyone well away during these inspections.

In all cases, the balancing valve(s) concerned must be repaired or replaced if hydraulic movement continues after the I.C. engine has been switched off.

Never use the lift truck with a defective balancing valve.

TESTING EACH HYDRAULIC MOVEMENT

LIFTING CIRCUIT:

- Start up the lift truck and raise the jib by about 45°.
- With the I.C. engine running at mid- speed, lower the jib. While the jib is being lowered, switch off the I.C. engine; movement should slow down as the I.C. engine speed falls and stop when the I.C. engine stops.

TELESCOPING CIRCUIT:

- Start up the lift truck and raise the jib as far as it will go, extending the telescope(s) completely.
- With the I.C. engine running at mid- speed, retract the telescope(s). When retracting the jib, switch off the I.C. engine; movement should slow down as the I.C. engine speed falls and stop when the I.C. engine stops.

TILT CIRCUIT:

- Place the nominal load on the forks, anchor it correctly to prevent it from falling off during the test.
- Start up the lift truck and tilt the carriage backwards, lifting the jib sufficiently to allow the carriage to tilt.
- With the I.C. engine running at mid-speed, tilt the carriage forwards. While it is tilting, switch off the I.C. engine; movement should slow down as the I.C. engine speed falls and stop when the I.C. engine stops.

TILT CORRECTOR CIRCUIT:

MT 940 L Turbo Série 3-E2
MT 1240 L Turbo Série 3-E2
MT 1240 L Turbo ULTRA Série 3-E2
MT 1335 SL Série 3-E2 - MT 1435 SL Série 3-E2
MT 1335 SL Turbo Série 3-E2 - MT 1435 SL Turbo Série 3-E2
MT 1440 SL Série 3-E2
MT 1340 SL Turbo Série 3-E2 - MT 1440 SL Turbo Série 3-E2
MT 1340 SL Turbo ULTRA Série 3-E2 - MT 1440 SL Turbo ULTRA Série 3-E2
MT 1740 SL Turbo Série 3-E2
MT 1740 SL Turbo ULTRA Série 3-E2

- Start up the lift truck and tilt it completely towards the right or left.
- With the engine running at mid-speed, restore it to a level position. While performing this operation, switch off the internal combustion engine; movement should slow down as the engine speed falls and stop when the engine stops.

STABILIZERS CIRCUIT:

MT 940 L Turbo Série 3-E2
MT 1235 S Série 3-E2
MT 1235 S Turbo Série 3-E2
MT 1240 L Turbo Série 3-E2
MT 1240 L Turbo ULTRA Série 3-E2
MT 1335 SL Série 3-E2 - MT 1435 SL Série 3-E2
MT 1335 SL Turbo Série 3-E2 - MT 1435 SL Turbo Série 3-E2
MT 1440 SL Série 3-E2
MT 1340 SL Turbo Série 3-E2 - MT 1440 SL Turbo Série 3-E2
MT 1340 SL Turbo ULTRA Série 3-E2 - MT 1440 SL Turbo ULTRA Série 3-E2
MT 1740 SL Turbo Série 3-E2
MT 1740 SL Turbo ULTRA Série 3-E2

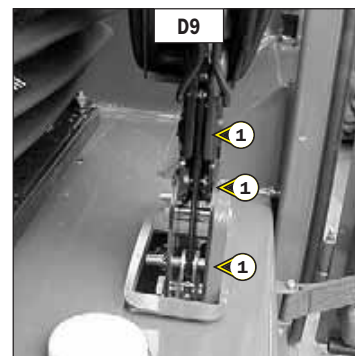
- Carry out the control on the two stabilizers.
- Place the nominal load on the forks, anchor it correctly to prevent it from falling off during the test.
- Start up the lift truck and lower a stabilizer completely.
- With the engine running at mid-speed, raise the stabilizer. When raising the stabilizer, switch off the internal combustion engine; movement should slow down as the engine speed falls and stop when the engine stops.

D9 - PARKING BRAKE LEVER MECHANISM

GREASE

Except MT 940 L Turbo Série 3-E2 (from machine Nr 203420)

- Clean and grease articulation axles 1 (fig. D9) with grease (see: 3 - MAINTENANCE: LUBRICANTS AND FUEL).

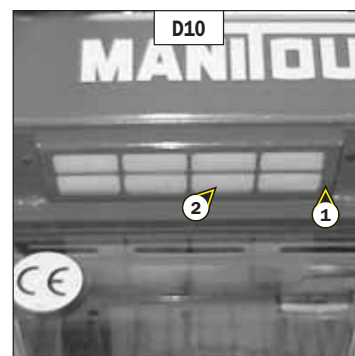


D10 - CAB VENTILATION FILTER

CLEAN

ML 635 Turbo Série 3-E2

- Lift up protective casing 1 (fig. D10).
- Lift out cabin ventilation filter 2 (fig. D10).
- Clean the filter with a compressed air jet.
- Check its condition and change if necessary (see: 3 - MAINTENANCE: FILTERS CARTRIDGES AND BELTS).
- Refit the filter and protective casing.



D11 - BATTERY ELECTROLYTE DENSITY

CHECK

The electrolyte density varies depending on the temperature concerned, but a minimum of 1260 at 16°C must be maintained. In the shaded area (fig. D11), the battery is in a normal charge condition. Readings above this zone indicate that the battery needs to be recharged.

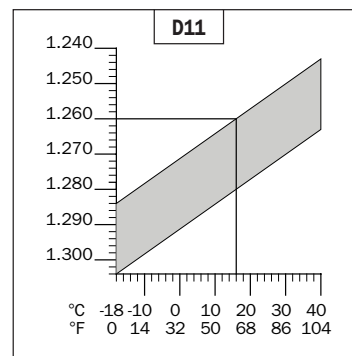
The density should not vary more than 0.025 units between cells.

- Check the electrolyte density in each battery cell using a hydrometer.
- Do not carry out this check immediately after topping up with distilled water. Recharge the battery for at least an hour before checking the battery electrolyte density.



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.



D12 - FRONT AXLE DIFFERENTIAL OIL

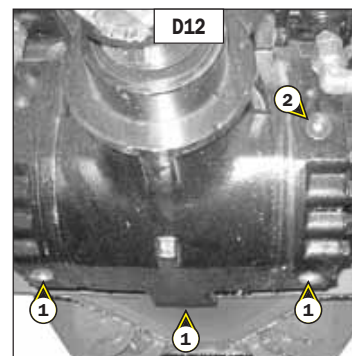
DRAIN

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



Dispose the drain oil in an ecological manner.

- Place a container under drain plugs 1 (fig. D12) and unscrew the plugs.
- Remove level plug 2 (Fig. D12) to ensure that the oil is drained properly.
- Refit and tighten drain plugs 1 (fig. D12) (tightening torque 34 to 49 N.m).
- Fill up with oil (see: 3 - MAINTENANCE: LUBRICANTS AND FUEL) by level port 2 (fig. D12).
- The level is correct when the oil level is flush with the edge of port 2 (fig. D12).
- Check for any possible leaks at the drain plugs.
- Refit and tighten level plug 2 (fig. D12) (tightening torque 34 to 49 N.m).



D13 - REAR AXLE DIFFERENTIAL OIL

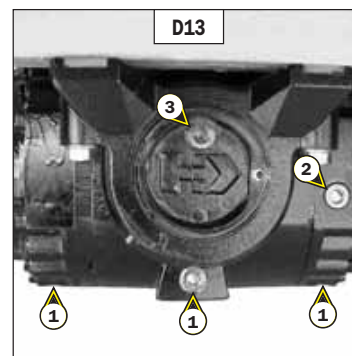
DRAIN

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



Dispose the drain oil in an ecological manner.

- Place a container under drain plugs 1 (fig. D13) and unscrew the plugs.
- Remove level plug 2 (fig. D13) and filler plug 3 (fig. D13) in order to ensure that the oil is drained properly.
- Refit and tighten drain plugs 1 (fig. D13) (tightening torque 34 to 49 N.m).
- Fill up with oil (see: 3 - MAINTENANCE: LUBRICANTS AND FUEL) by filler port 3 (fig. D13).
- The level is correct when the oil level is flush with the edge of port 2 (fig. D13).
- Check for any possible leaks at the drain plugs.
- Refit and tighten level plug 2 (fig. D13) (tightening torque 34 to 49 N.m) and filler plug 3 (fig. D13) (tightening torque 34 to 49 N.m).



E - EVERY 1000 HOURS SERVICE

Carry out the operations described previously as well as the following operations.

E1 - FUEL TANK

CLEAN

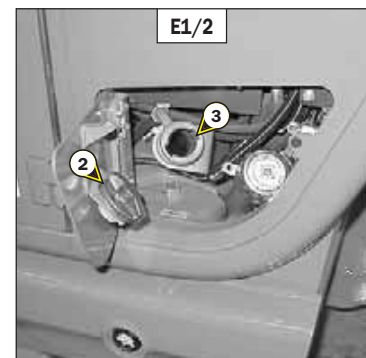
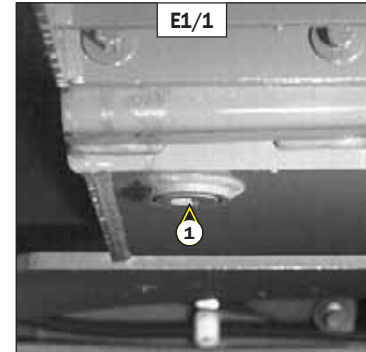
⚠ While carrying out these operations, do not smoke or work near a flame.

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

- Inspect the parts susceptible to leaks in the fuel circuit and in the tank.
- In the event of a leak, contact your dealer.

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

- Place a container under drain plug 1 (fig. E1/1) and unscrew the plug.
- Open the access panel for fuel filling.
- Remove cap 2 (fig. E1/2).
- Let the fuel flow and clean with 10 litres of clean fuel by filler port 3 (fig. E1/2).
- Refit and tighten drain plug 1 (fig. E1/1) (tightening torque 29 to 39 N.m).
- Fill the fuel tank with clean fuel (see: 3 - MAINTENANCE: LUBRICANTS AND FUEL) filtered through a strainer or a clean, lint-free cloth and refit the filler plug 2 (fig. E1/2).
- Close the access panel for fuel filling.
- If necessary, bleed the fuel circuit (see: 3 - MAINTENANCE: G1 - FUEL SYSTEM).

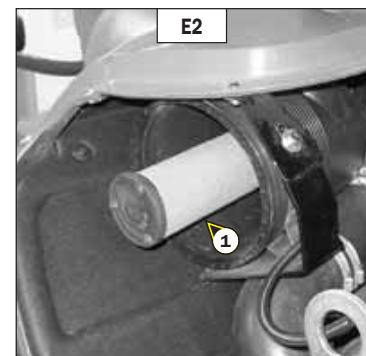


E2 - SAFETY DRY AIR FILTER CARTRIDGE

CHANGE

- For the disassembly and reassembly of the cartridge, see: 3 - MAINTENANCE: D3 - DRY AIR FILTER CARTRIDGE.
- Gently remove the dry air filter safety cartridge 1 (fig. E2), taking care to avoid spilling the dust.
- Clean the gasket surface on the filter with a damp, clean lint-free cloth.
- Before mounting check the state of the new safety cartridge (see: 3 - MAINTENANCE: FILTERS CARTRIDGES AND BELTS).
- Introduce the cartridge into the filter axis and push it in, pressing the edges and not the middle.

NOTE: The periodicity for changing the safety cartridge is given for information only. The safety cartridge must be changed for every two changes of the air filter cartridge.



E3 - TRANSMISSION OIL

DRAIN

E4 - TRANSMISSION HOUSING STRAINER

CLEAN

Place the lift truck on level ground with the I.C. engine stopped, the transmission oil still warm.

DRAINING THE OIL

- Place a container under drain plug 1 (fig. E3/1) and under cover 2 (fig. E3/2) and unscrew the drain plug.
- Remove cover plate 3 (fig. E3/3).
- Remove dipstick 4 (fig. E3/4) and unscrew filling plug 5 (fig. E3/4) in order to ensure that the oil is drained properly.



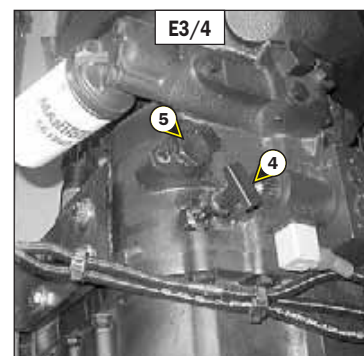
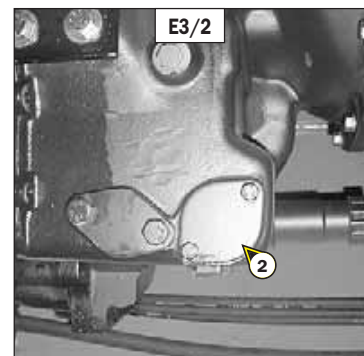
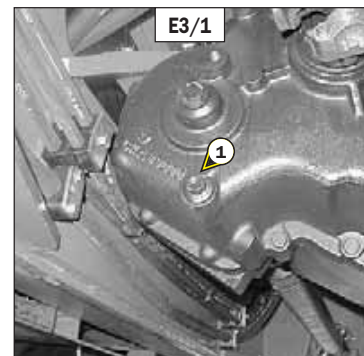
Dispose the drain oil in an ecological manner.

CLEANING THE STRAINER

- Remove cover 2 (fig. E3/2) and set aside the O-ring joint and sealing washer.
- Allow the rest of the oil to drain away.
- Remove and clean the strainer using a compressed air jet.
- Clean the magnetic section on the plate.
- Refit the assembly and tighten up plate 2 (fig. E3/2) (tightening torque 18 to 31 N.m).

FILLING UP THE OIL

- Refit and tighten drain plug 1 (fig. E3/1) (tightening torque 34 to 54 N.m).
- Fill up with oil (see: 3 - MAINTENANCE: LUBRICANTS AND FUEL) by filler port 5 (fig. E3/4) and refit the plug.
- Start the I.C. engine and let it run for a few minutes.
- Check any possible leaks from the drain plug or cover.
- Stop the I.C. engine, and within 5 minutes of the I.C. engine being stopped, check on the dipstick 4 (fig. E3/4) the correct level between the two MIN and MAX marks.
- Top up the level if necessary.
- Put back the cover plate 3 (fig. E3/3).



E5 - ANGLE GEAR BOX OIL

DRAINING

Place the lift truck on level ground with the engine stopped, the angle gear box oil still warm.

- Remove the access panel 1 (fig. E5/1).

MT 1235 S Série 3-E2 (from machine no.)

MT 1335 SL Série 3-E2 (from machine no.)

MT 1435 SL Série 3-E2

MT 1440 SL Série 3-E2

- Place a container under the drain plug 2 (fig. E5/2) and unscrew the plug.
- Remove cover plate 3 (fig. E5/3).
- Remove dipstick 4 (fig. E5/4) and unscrew filler plug 5 (fig. E5/4) in order to ensure that the oil is drained completely.



Dispose the drain oil in an ecological manner.

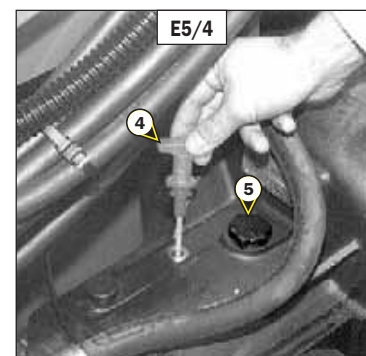
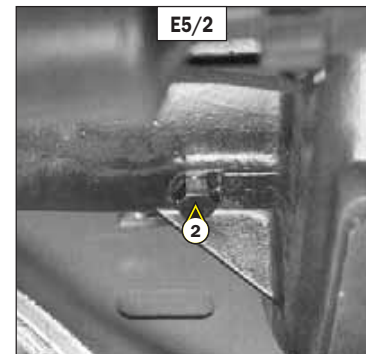
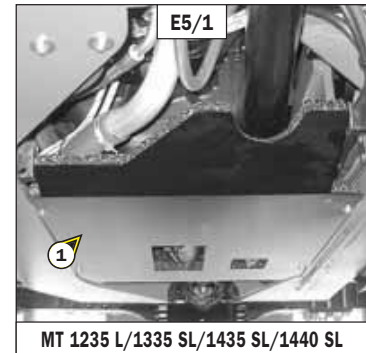
- Refit and tighten drain plug 2 (fig. E5/2) (tightening torque 20 to 29 Nm).
- Fill up with oil (see: 3 - MAINTENANCE: LUBRICANTS AND FUEL) by filler port 5 (fig. E5/4) and refit the plug.
- Check the correct level between the MIN and MAX marks on dipstick 4 (fig. E5/4).
- Check for any possible leaks at the drain plug.
- Replace the cover plate 3 (fig. E5/3).
- Refit access panel 1 (fig. E5/1).

MT 1235 S Série 3-E2 (from machine no.)

MT 1335 SL Série 3-E2 (from machine no.)

MT 1435 SL Série 3-E2

MT 1440 SL Série 3-E2



E6 - HYDRAULIC OIL

DRAIN

E7 - SUCTION STRAINER FOR HYDRAULIC OIL TANK

CLEAN

E8 - FILTER CAP FOR HYDRAULIC OIL TANK

CHANGE

Place the lift truck on level ground with the I.C. engine stopped and telescope jib retracted and lowered as far as possible.

! Before any intervention, thoroughly clean the area surrounding the drain plugs and the suction cover on the hydraulic tank.

DRAINING THE OIL

- Place a container under drain plug 1 (fig. E6/1) and unscrew the plug.
- Open the access panel for hydraulic oil filling.
- Remove filler cap 2 (fig. E6/2) in order to ensure that the oil is drained properly.

! Dispose the drain oil in an ecological manner.

CLEANING THE STRAINER

- Remove the shroud 3 (fig. E6/3).
- Remove suction cover 4 (fig. E6/4).
- Remove and clean the strainer using a compressed air jet, check its condition and replace if necessary (see: 3 - MAINTENANCE: FILTERS CARTRIDGES AND BELTS).
- Refit the strainer and tighten the suction cover 4 (fig. E6/4) making sure the seal is in the correct position.

FILLING UP THE OIL

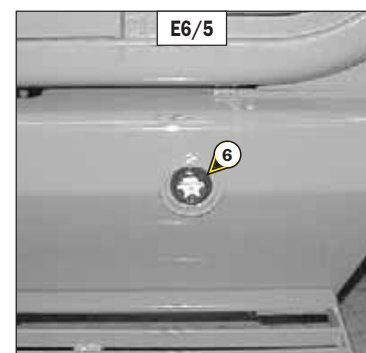
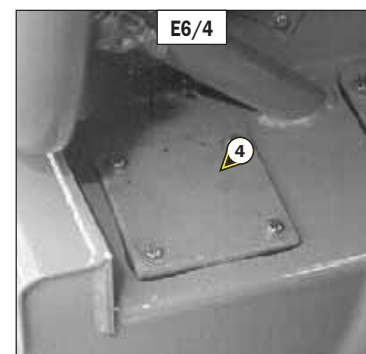
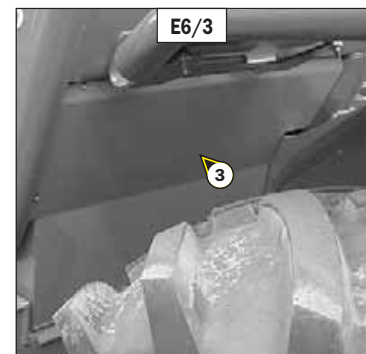
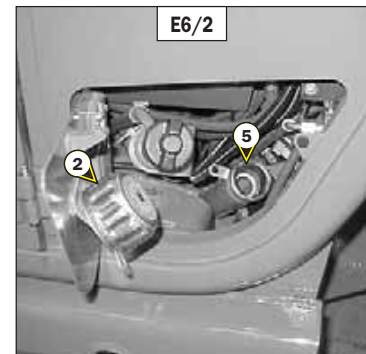
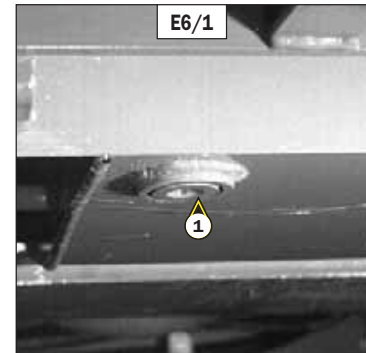
- Clean and refit drain plug 1 (fig. E6/1) (Tightening torque 29 to 39 N.m).
- Fill up with oil (see: 3 - MAINTENANCE: LUBRICANTS AND FUEL) by filler port 5 (fig. E6/2).

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

- Observe the oil level on dipstick 6 (fig. E6/5); the oil level should be at the level of the red point.
- Check for any possible leaks at the drain plug.
- Replace filler plug 2 (fig. E6/2) with a new filler plug (see: 3 - MAINTENANCE: FILTERS CARTRIDGES AND BELTS).

POLLUTION ABATEMENT OF THE HYDRAULIC CIRCUIT

- Let the I.C. engine run (accelerator pedal at halfway travel) for 5 minutes without using anything on the lift truck, then for 5 more minutes while using completely the hydraulic movements (except the steering system and the service brakes).
- Accelerate the I.C. engine at full speed for 1 minute, then activate the steering system and the service brakes.
- This operation makes a pollution abatement of the circuit possible through the hydraulic return oil filter.



E9 - SEAT BELT

CHECK

SEAT BELT WITH TWO ANCHORING POINTS

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

REELED SEAT BELT WITH TWO ANCHORING POINTS

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

NOTE: After an accident, replace the seat belt.

 **Under no circumstances should you use the lift truck if the seat belt is faulty (fixing, locking, it has cuts or tears, etc). Repair or replace the seat belt immediately.**

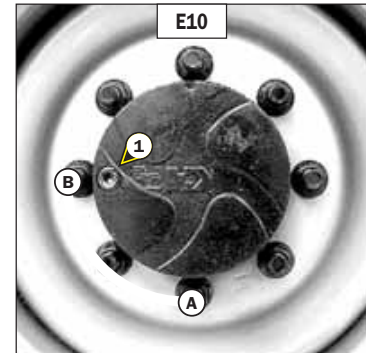
E10 - FRONT AND REAR WHEELS REDUCERS OIL

DRAIN

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

 **Dispose the drain oil in an ecological manner.**

- Drain and change each front wheel reducer.
- Place drain plug 1 (fig. E10) 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 (see: 3 - MAINTENANCE: LUBRICANTS AND FUEL) by level port 1 (fig. E10).
- The level is correct when the oil level is flush with the edge of the hole.
- Refit and tighten the drain plug 1 (fig. E10) (tightening torque 34 to 49 N.m).
- Repeat this operation on each rear wheel reducer.



F - EVERY 2000 HOURS SERVICE

Carry out the operations described previously as well as the following operations.

F1 - COOLING LIQUID

DRAIN

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

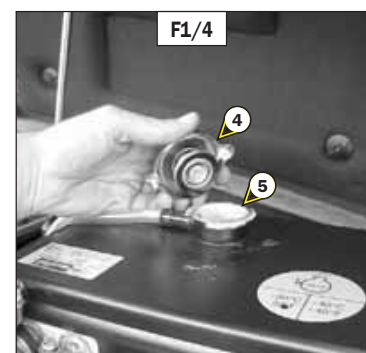
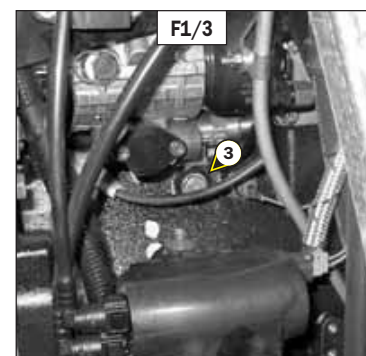
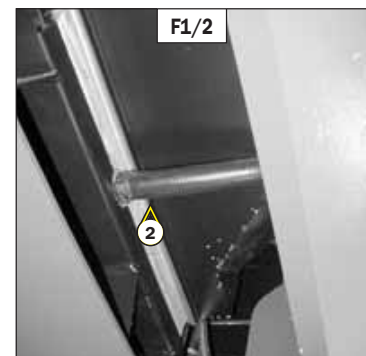
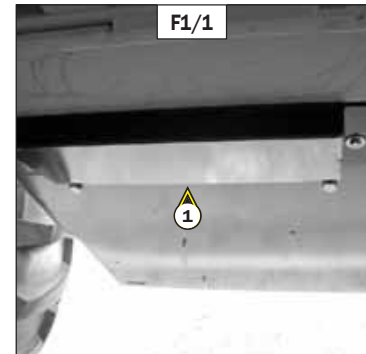
DRAINING THE LIQUID

- Open the I.C. engine bonnet.
- Remove the shroud 1 (fig. F1/1).
- Place a container under hose 2 (fig. F1/2) on the radiator and drain plug 3 (fig. F1/3) of the engine block. Remove the hose and loosen the drain plug.
- Remove filler cap 4 (fig. F1/4) of the radiator.
- Let the cooling circuit drain entirely while ensuring that the ports do not get clogged.
- Check the condition of the hoses as well as the fastening devices and change the hoses if necessary.
- Rinse the circuit with clean water and use a cleaning agent if necessary.

FILLING THE LIQUID

- Refit and tighten the hose 2 (fig. F1/2) and drain plug 3 (fig. F1/3) (tightening torque 40 N.m).
- Slowly fill up the cooling circuit (see: 3 - MAINTENANCE: LUBRICANTS AND FUEL) to 12 mm under filler port 5 (fig. F1/4).
- Put back filler cap 4 (fig. F1/4).
- Run the I.C. engine at idle for a few minutes.
- Check for any possible leaks.
- Put back the shroud 1 (fig. F1/1)
- Check the level and refill if necessary.

⚠ The I.C. engine does not contain any corrosion resistor and must be filled during the whole year with a mixture containing 25 % of ethylene glycol-based antifreeze.



G - OCCASIONAL MAINTENANCE

G1 - FUEL SYSTEM

BLEED

These operations are to be carried out only in the following cases:

- A component of the fuel system replaced.
- A drained tank.
- Running out of fuel.

Ensure that the level of fuel in the tank is sufficient and bleed in the following order:

- Open the I.C. engine bonnet.
- Put the ignition on for three minutes on the lift truck, to give the lift pump time to release air from the filter.
- Switch off the ignition with the ignition key.

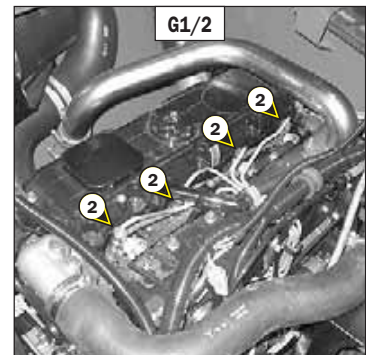
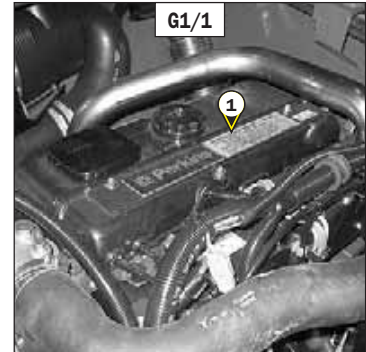
BLEEDING THE INJECTORS

- Remove the injectors cover 1 (fig. G1/1).
- Loosen high pressure connectors 2 (fig. G1/2) of all the injectors.
- Activate the starter until the diesel fuel flows out free of air at high pressure connectors 2 (fig. G1/2).

! Do not engage the starter motor on a continual basis for more than 30 seconds and let it cool between unsuccessful attempts.

- Tighten the connection while the diesel fuel is flowing out (tightening torque 30 N.m).
- The I.C. engine is then ready to be started up.
- Turn the I.C. engine over slowly for 5 minutes immediately after bleeding the fuel feed circuit, in order to ensure that the injection pump has been bled thoroughly.

NOTE: If the I.C. engine functions correctly for a short time then stops or functions irregularly, check for possible leaks in the low pressure circuit. If in doubt, contact your dealer.



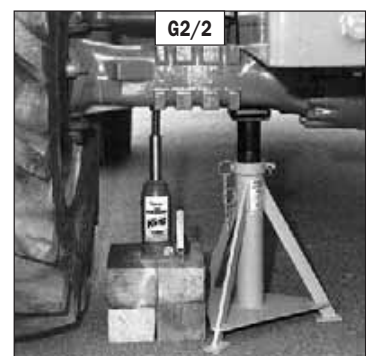
G2 - WHEEL

CHANGE

! In the event of a wheel being changed on the public highway, make sure of the following points:

For this operation, we advise you to use the hydraulic jack MANITOU reference 505507 and the safety support MANITOU reference 554772.

- Stop the lift truck, if possible on even and hard ground.
- To pass on stop of lift truck (see: 1 - OPERATING AND SAFETY INSTRUCTIONS: DRIVING INSTRUCTIONS UNLADEN AND LADEN).
- Put the warning lights on.
- Immobilise the lift truck in both directions on the axle opposite to the wheel to be changed.
- Unlock the nuts of the wheel to be changed.
- Place the jack under the flared axle tube, as near as possible to the wheel and adjust the jack (fig. G2/1).
- Lift the wheel until it comes off the ground and put in place the safety support under the axle (fig. G2/2).
- Completely unscrew the wheel nuts and remove them.
- Free the wheel by reciprocating movements and roll it to the side.
- Slip the new wheel on the wheel hub.
- Refit the nuts by hand, if necessary grease them.
- Remove the safety support and lower the lift truck with the jack.
- Tighten the wheel nuts with a torque wrench (see: 3 - MAINTENANCE: A - DAILY OR EVERY 10 HOURS SERVICE for tightening torque).



G3 - LIFT TRUCK

MT 940 L Turbo Série 3-E2

TOW

This procedure is to be performed in the event of parking brake malfunction
If the lift truck is not on a horizontal ground, to fix so that it does not descend the slope.



Do not tow the lift truck at more than 25 km/h.

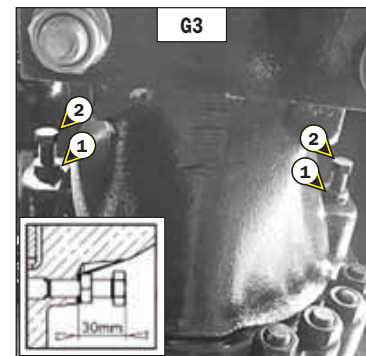
- Put the reversing lever and the gear shift in neutral.
- Put the warning lights on.

MANUALLY UNBLOCKING THE PARKING BRAKE

- First perform this operation on the left-hand side of the front axle, then on the right-hand side.
- Unscrew locknuts 1 (fig. G3) by approximately 8 mm.
- Alternately tighten the screws 2 (fig. G3) by a ¼ turn at a time up to a maximum of 1 turn in order to free the brake discs.
- If the I.C. engine is not running there will be no steering or braking assistance. Operate the steering and pedal slowly avoiding sudden jerky movements.
- Once this operation is completed, adjust the parking brake.

ADJUSTING THE PARKING BRAKE

- First perform this operation on the left-hand side of the front axle, then on the right-hand side.
- Completely unscrew screws 2 (fig. G3) by alternately unscrewing them a ¼ turn at a time.
- Grease the threads with a silicone lubricant (MANITOU reference: 479292).
- Retighten the screws 2 (fig. G3) to obtain a dimension of 30 mm (fig. G3).
- Lock the locknuts 1 (fig. G3) while holding the screw 2 (fig. G3) in position.



G3 - LIFT TRUCK

TOW

⚠ Do not tow the lift truck at more than 25 km/h.

- Put the forward/reverse lever and the gear shift in neutral.
- Release the parking brake.
- Put the warning lights on.
- If the I.C. engine is not running there will be no steering or braking assistance. Operate the steering and pedal slowly avoiding sudden jerky movements.

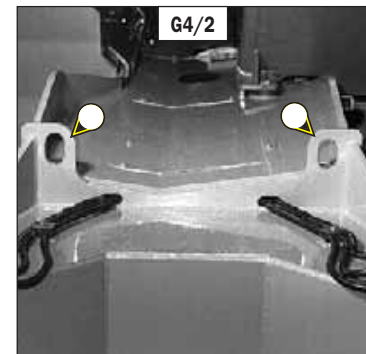
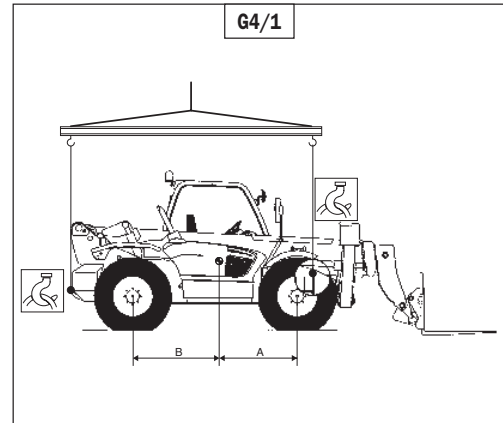
G4 - LIFT TRUCK

SLING

- Take into account the position of the lift truck gravity center for lifting (fig. G4/1).

A = mm	B = mm	
A = 1510 mm	B = 1260 mm	ML 635 Turbo Série 3-E2
A = 1375 mm	B = 1395 mm	MT 940 L Turbo Série 3-E2
A = 1375 mm	B = 1395 mm	MT 1235 S Série 3-E2
A = 1460 mm	B = 1310 mm	MT 1235 S Turbo Série 3-E2
A = 1460 mm	B = 1310 mm	MT 1240 L Turbo Série 3-E2
A = 1310 mm	B = 1460 mm	MT 1240 L Turbo ULTRA Série 3-E2
A = 1310 mm	B = 1460 mm	MT 1335 SL Série 3-E2
A = 1445 mm	B = 1325 mm	MT 1335 SL Turbo Série 3-E2
A = 1445 mm	B = 1325 mm	MT 1340 SL Turbo Série 3-E2
A = 1370 mm	B = 1400 mm	MT 1340 SL Turbo ULTRA Série 3-E2
A = 1370 mm	B = 1400 mm	MT 1435 SL Série 3-E2
A = 1430 mm	B = 1340 mm	MT 1435 SL Turbo Série 3-E2
A = 1430 mm	B = 1340 mm	MT 1440 SL Série 3-E2
A = 1430 mm	B = 1340 mm	MT 1440 SL Turbo Série 3-E2
A = 1450 mm	B = 1320 mm	MT 1440 SL Turbo ULTRA Série 3-E2
A = 1450 mm	B = 1320 mm	MT 1740 SL Turbo Série 3-E2
A = 1450 mm	B = 1320 mm	MT 1740 SL Turbo ULTRA Série 3-E2

- Place the hooks in the fastening points provided (fig. G4/2 and G4/3).



G5 - LIFT TRUCK ON A PLATFORM

TRANSPORT

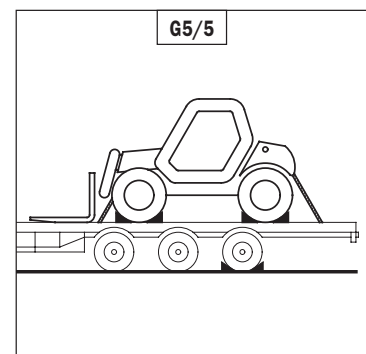
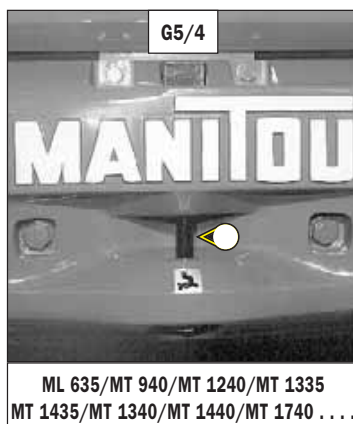
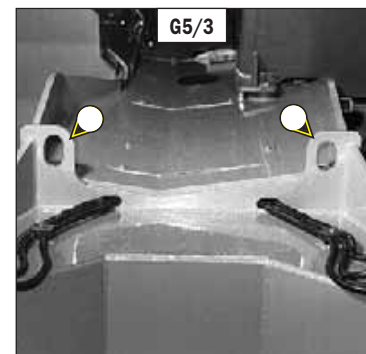
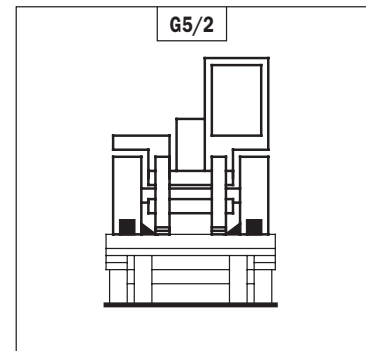
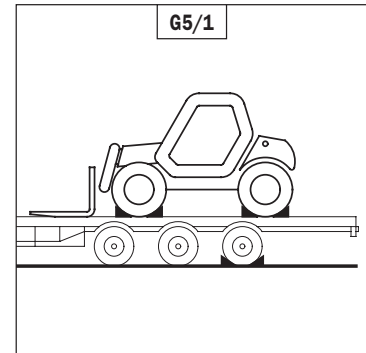
- ⚠ Ensure that the safety instructions connected to the platform are respected before the loading of the lift truck and that the driver of the means of transport is informed about the dimensions and the weight of the lift truck (see: 2 - DESCRIPTION: CHARACTERISTICS).
- ⚠ Ensure that the platform has got dimensions and a load capacity sufficient for transporting the lift truck. Check also the pressure on the contact surface allowable for the platform in connection with the lift truck.
- ⚠ For lift trucks equipped with a turbo-charged I.C. engine, block off the exhaust outlet to avoid rotation of the turbo shaft without lubrication when transporting the vehicle.

LOAD THE LIFT TRUCK

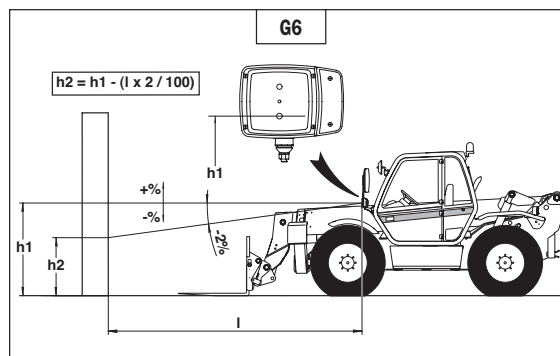
- Block the wheels of the platform.
- Fix the loading ramps so that you obtain an angle as little as possible to lift the lift truck.
- Load the lift truck parallel to the platform.
- Stop the lift truck (see: 1 - OPERATING AND SAFETY INSTRUCTIONS: DRIVING INSTRUCTIONS UNLADEN AND LADEN).

STOW THE LIFT TRUCK

- Fix the chocks to the platform at the front and at the back of each tyre (fig. G5/1).
- Fix also the chocks to the platform in the inside of each tyre (fig. G5/2).
- Stow the lift truck on the platform with enough resisting ropes. At the front of the lift truck, on the fastening points 1 (fig. G5/3) and at the back, on the towing pin 2 (fig. G5/4).
- Tighten the ropes (fig. G5/5).



ADJUST



H - EVERY TWO YEARS (OPTION AIR CONDITIONING)

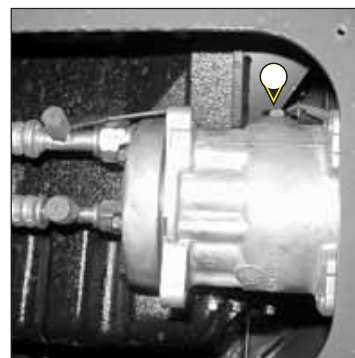
⚠ WARNING: NEVER TRY TO REPAIR ANY ANOMALIES YOURSELF. TO RECHARGE A CIRCUIT, ALWAYS CONTACT YOUR DEALER WHO HAS THE APPROPRIATE SPARE PARTS, TECHNICAL TRAINING AND NECESSARY TOOLS.

- Do not open the circuit under any circumstances as this would cause the coolant to be lost.
- The cooling circuit contains a gas which can be dangerous under certain conditions. This gas, coolant R 134a, is colourless, odourless and heavier than air.

⚠

- If this gas is inhaled, take the victim into fresh air, give oxygen or artificial respiration if necessary and call a doctor.
- If the gas is in contact with the skin, wash it immediately under running water and remove any contaminated garments.
- If the gas is in contact with the eyes, rinse them in clear water for 15 minutes and call a doctor.

- The charger has an oil level gauge; never unscrew this gauge because it would depressurise the installation. The oil level is only checked when changing the oil in the circuit.



H1 - CLEANING THE CONDENSER AND EVAPORATOR COILS (*)

H2 - CLEANING THE HOTWELL AND THE PRESSURE RELIEF VALVE (*)

H3 - COLLECTING THE COOLANT TO REPLACE THE FILTER-DRIER (*)

H4 - RELOADING COOLANT AND CHECKING THE THERMOSTATIC CONTROL AND PRESSURE SWITCHES (*)

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

(*): (CONSULT YOUR DEALER).

4 - ADAPTABLE ATTACHMENTS IN OPTION ON THE RANGE

TABLE OF CONTENTS

INTRODUCTION	4 - 5
---------------------	--------------

PICKING UP THE ATTACHMENTS	4 - 6
-----------------------------------	--------------

A - ATTACHMENT WITHOUT HYDRAULICS AND HAND LOCKING DEVICE	4 - 6
--	--------------

B - ATTACHMENT WITHOUT HYDRAULICS AND HYDRAULIC LOCKING DEVICE (OPTION)

MT 940 L Turbo Série 3-E2	4 - 7
MT 1235 S Série 3-E2 + Turbo (up to machine Nr)	4 - 7
MT 1235 S Série 3-E2 + Turbo (from machine Nr)	4 - 8
MT 1240 L Turbo Série 3-E2	4 - 7
MT 1240 L Turbo ULTRA Série 3-E2	4 - 9
MT 1335 SL Série 3-E2 + Turbo	4 - 7
MT 1340 SL Turbo Série 3-E2	4 - 7
MT 1340 SL Turbo ULTRA Série	4 - 9
MT 1435 SL Série 3-E2 + Turbo	4 - 8
MT 1440 SL Série 3-E2 + Turbo	4 - 8
MT 1440 SL Turbo ULTRA Série 3-E2	4 - 9
MT 1740 SL Turbo Série 3-E2	4 - 7
MT 1740 SL Turbo ULTRA Série 3-E2	4 - 9

C - HYDRAULIC ATTACHMENT AND HAND LOCKING DEVICE

MT 940 L Turbo Série 3-E2	4 - 10
MT 1235 S Série 3-E2 + Turbo (up to machine Nr)	4 - 10
MT 1235 S Série 3-E2 + Turbo (from machine Nr)	4 - 11
MT 1240 L Turbo Série 3-E2	4 - 10
MT 1240 L Turbo ULTRA Série 3-E2	4 - 12
MT 1335 SL Série 3-E2 + Turbo	4 - 10
MT 1340 SL Turbo Série 3-E2	4 - 10
MT 1340 SL Turbo ULTRA Série	4 - 12
MT 1435 SL Série 3-E2 + Turbo	4 - 11
MT 1440 SL Série 3-E2 + Turbo	4 - 11
MT 1440 SL Turbo ULTRA Série 3-E2	4 - 12
MT 1740 SL Turbo Série 3-E2	4 - 10
MT 1740 SL Turbo ULTRA Série 3-E2	4 - 12

D - HYDRAULIC ATTACHMENT AND HYDRAULIC LOCKING DEVICE (OPTION)

MT 940 L Turbo Série 3-E2	4 - 13
MT 1235 S Série 3-E2 + Turbo (up to machine Nr)	4 - 13
MT 1235 S Série 3-E2 + Turbo (from machine Nr)	4 - 14
MT 1240 L Turbo Série 3-E2	4 - 13
MT 1240 L Turbo ULTRA Série 3-E2	4 - 15
MT 1335 SL Série 3-E2 + Turbo	4 - 13
MT 1340 SL Turbo Série 3-E2	4 - 13
MT 1340 SL Turbo ULTRA Série	4 - 15
MT 1435 SL Série 3-E2 + Turbo	4 - 14
MT 1440 SL Série 3-E2 + Turbo	4 - 14
MT 1440 SL Turbo ULTRA Série 3-E2	4 - 15
MT 1740 SL Turbo Série 3-E2	4 - 13
MT 1740 SL Turbo ULTRA Série 3-E2	4 - 15

TECHNICAL SPECIFICATIONS OF ATTACHMENTS	4 - 16
--	---------------

ATTACHMENT SHIELDS	4 - 30
---------------------------	---------------

INTRODUCTION

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

! *We would remind users that the MT 1740 SL Turbo Série 3-E2 and MT 1740 SL Turbo ULTRA Série 3-E2, are lift trucks essentially intended for handling. Occasional use with the buckets CBC 800/900 and CBR 900/1000 is authorised, but under no circumstances is intensive use for difficult applications (quarry, waste, cereals, agriculture, etc) permissible. In addition, use of the lift truck with the buckets CBC 800/900 and CBR 900/1000 should be with the jib completely retracted, in order to reduce the constraints on the jib head. Use other buckets CBA, CBC, CBM, CBR, CB, CBG and manure forks FFGR is forbidden.*

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

! *All attachments with a suspended load (winch, crane jib, crane jib with winch, hook, etc.) MUST be used with a lift truck equipped with a hydraulic movement cut-out device. In this case, the movement cut-out must be switched on and the transverse attitude perfectly horizontal.*

! *Only attachments approved by MANITOU are to be used on our lift trucks (see: 4 - ADAPTABLE ATTACHMENTS IN OPTION ON THE RANGE: TECHNICAL SPECIFICATIONS OF ATTACHMENTS). The manufacturer's liability will be denied in case of modification or of attachment adaptation carried out without his knowing it.*

! *The single side-shift carriage (TSDL) is only compatible with the following attachments:*

- floating fork carriage (TFF)
- tilting fork carriage (PFB)
- loading bucket (CBR)
- concrete bucket (BB, BBG)
- spout bucket (GL)
- crane jib and crane jib with winch (P, PT, PO, PC)
- winch (H)
- fixed platform, swivelling platform, roofer's platform.

It is prohibited to use any other attachments on the TSDL.

Attachments authorised for use on the TSDL must comply strictly with the applications for which they are designed.

It is prohibited to use them for any other application (for example, earth moving, excavation, desurfacing, back scraping, etc. for the loading bucket CBR) or any application placing abnormal stress on the structure of the TSDL: risk of deformation which could cause the load to fall.

! *Depending on their size, certain attachments may, when the jib is lowered and retracted, come into contact with the front tyres and cause damage to them, if reverse tilt is activated in the forward tilt direction. TO REMOVE THIS RISK, EXTEND THE TELESCOPE TO A SUFFICIENT EXTENT FOR THE PARTICULAR LIFT TRUCK AND ATTACHMENT SO THAT THIS CONTACT IS NOT POSSIBLE.*

! *Maximum loads are defined by the capacity of a lift truck taking account of the attachment's mass and centre of gravity. In the event of the attachment having less capacity than the lift truck, never exceed this limit.*

PICKING UP THE ATTACHMENTS

A - ATTACHMENT WITHOUT HYDRAULICS AND HAND LOCKING DEVICE

TAKING UP AN ATTACHMENT

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

HAND LOCKING

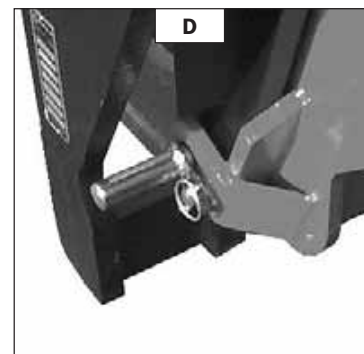
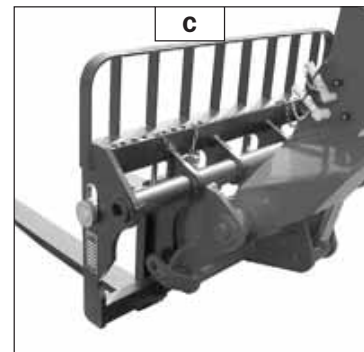
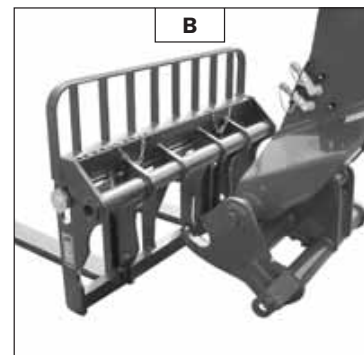
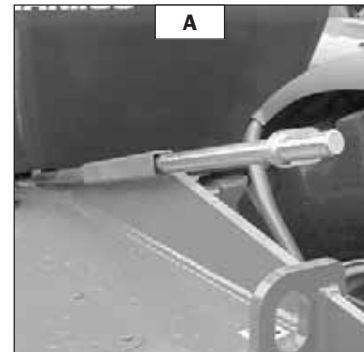
- Take the locking pin and the clip on the bracket (fig. A) and lock the attachment (fig. D). Do not forget to refit the clip.

HAND RELEASING

- Proceed in the reverse order of paragraph HAND LOCKING while making sure you put back the locking pin and the clip in the bracket (fig. A).

LAYING AN ATTACHMENT

- Proceed in the reverse order of paragraph TAKING UP AN ATTACHMENT while making sure you place the attachment flat on the ground and in closed position.



B - ATTACHMENT WITHOUT HYDRAULICS AND HYDRAULIC LOCKING DEVICE (OPTION)

MT 940 L Turbo Série 3-E2
MT 1235 S Série 3-E2 (up to machine Nr)
MT 1235 S Turbo Série 3-E2 (up to machine Nr)
MT 1240 L Turbo Série 3-E2
MT 1335 SL Série 3-E2
MT 1335 SL Turbo Série 3-E2
MT 1340 SL Turbo Série 3-E2
MT 1740 SL Turbo Série 3-E2

TAKING UP AN ATTACHMENT

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

HYDRAULIC LOCKING

- Put the valve in position A (fig. D), that is to say, the hydraulic circuit of the attachment locking open.
- Push the lever of the distributor 1 (fig. E) forwards in order to completely lock the attachment on the carriage.
- Close the valve in position B (fig. D), that is to say, the hydraulic circuit of the attachment locking closed.

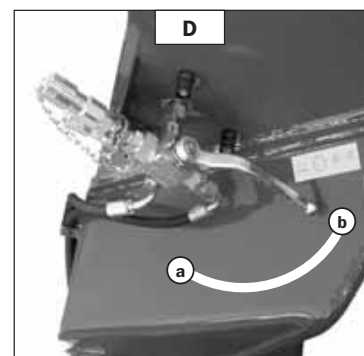
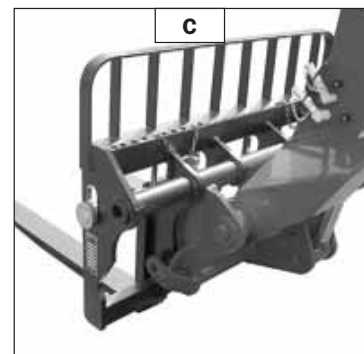
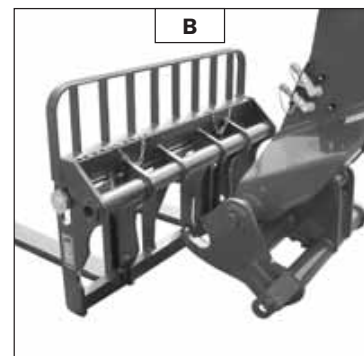
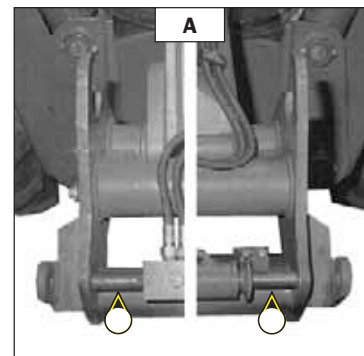
! Always close the valve in position B (fig. D) after the locking of the attachment, in order to avoid accidental unlocking and use the attachment safely.

HYDRAULIC RELEASING

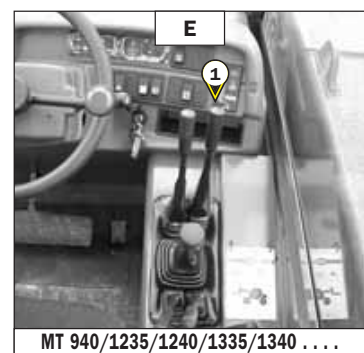
- Put the valve in position A (fig. D), that is to say, the hydraulic circuit of the attachment locking open.
- Pull the lever of the distributor 1 (fig. E) backwards in order to unlock the attachment.

LAYING AN ATTACHMENT

- Proceed in the reverse order of paragraph TAKING UP AN ATTACHMENT while making sure you place the attachment flat on the ground and in closed position.



MT 1740 SL Turbo Série 3-E2



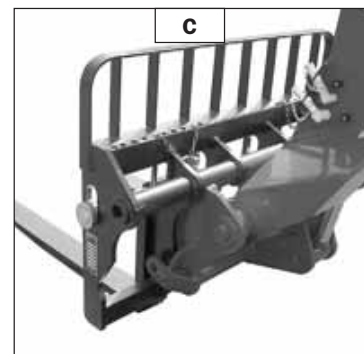
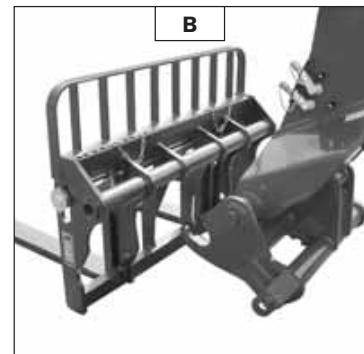
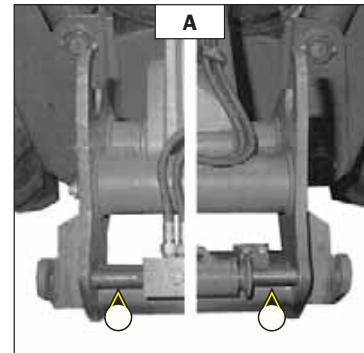
MT 940/1235/1240/1335/1340 . . .

B - ATTACHMENT WITHOUT HYDRAULICS AND HYDRAULIC LOCKING DEVICE (OPTION)

MT 1235 S Série 3-E2 (from machine Nr)
MT 1235 S Turbo Série 3-E2 (from machine Nr)
MT 1435 SL Série 3-E2
MT 1435 SL Turbo Série 3-E2
MT 1440 SL Série 3-E2
MT 1440 SL Turbo Série 3-E2

TAKING UP AN ATTACHMENT

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



HYDRAULIC LOCKING

- Put the valve in position A (fig. D), that is to say, the hydraulic circuit of the attachment locking open.
- Push the lever of the distributor 1 (fig. E) forwards in order to completely lock the attachment on the carriage.
- Close the valve in position B (fig. D), that is to say, the hydraulic circuit of the attachment locking closed.

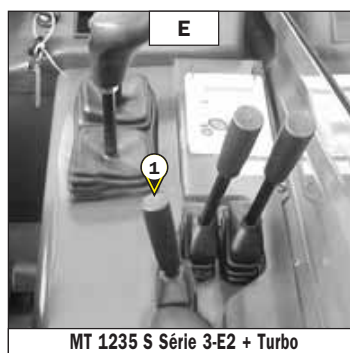
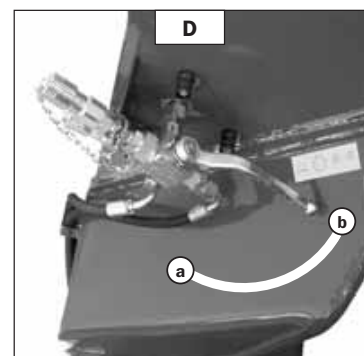
⚠ Always close the valve in position B (fig. D) after the locking of the attachment, in order to avoid accidental unlocking and use the attachment safely.

HYDRAULIC RELEASING

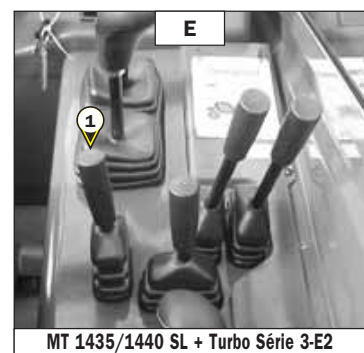
- Put the valve in position A (fig. D), that is to say, the hydraulic circuit of the attachment locking open.
- Pull the lever of the distributor 1 (fig. E) backwards in order to unlock the attachment.

LAYING AN ATTACHMENT

- Proceed in the reverse order of paragraph TAKING UP AN ATTACHMENT while making sure you place the attachment flat on the ground and in closed position.



MT 1235 S Série 3-E2 + Turbo



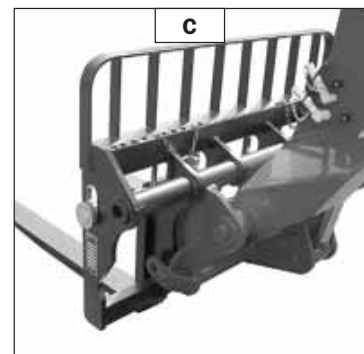
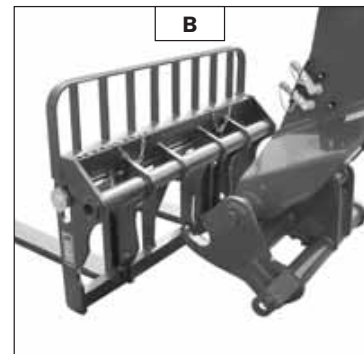
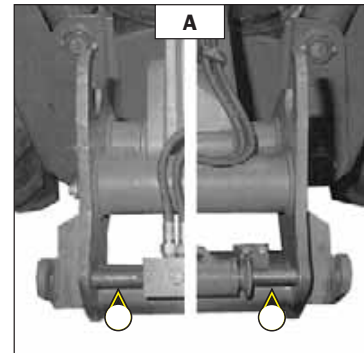
MT 1435/1440 SL + Turbo Série 3-E2

B - ATTACHMENT WITHOUT HYDRAULICS AND HYDRAULIC LOCKING DEVICE (OPTION)

MT 1240 L Turbo ULTRA Série 3-E2
MT 1340 SL Turbo ULTRA Série 3-E2 - MT 1440 SL Turbo ULTRA Série 3-E2
MT 1740 SL Turbo ULTRA Série 3-E2

TAKING UP AN ATTACHMENT

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



HYDRAULIC LOCKING

- Put the valve in position A (fig. D), that is to say, the hydraulic circuit of the attachment locking open.
- Hold button 1 (fig. E) down and move lever 2 (fig. E) forwards to lock the attachment onto the carriage.
- Close the valve in position B (fig. D), that is to say, the hydraulic circuit of the attachment locking closed.

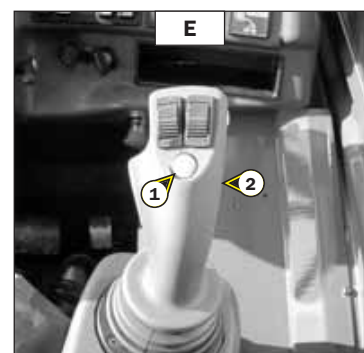
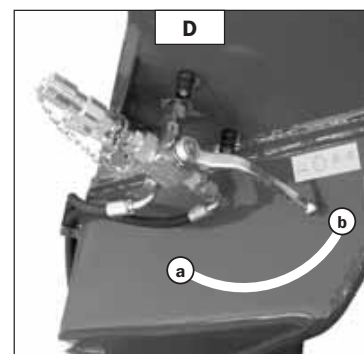
⚠ Always close the valve in position B (fig. D) after the locking of the attachment, in order to avoid accidental unlocking and use the attachment safely.

HYDRAULIC RELEASING

- Put the valve in position A (fig. D), that is to say, the hydraulic circuit of the attachment locking open.
- Hold button 1 (fig. E) down and move lever 2 (fig. E) backwards to release the attachment from the carriage.

LAYING AN ATTACHMENT

- Proceed in the reverse order of paragraph TAKING UP AN ATTACHMENT while making sure you place the attachment flat on the ground and in closed position.



C - HYDRAULIC ATTACHMENT AND HAND LOCKING DEVICE

MT 940 L Turbo Série 3-E2
MT 1235 S Série 3-E2 (up to machine Nr)
MT 1235 S Turbo Série 3-E2 (up to machine Nr)
MT 1240 L Turbo Série 3-E2
MT 1335 SL Série 3-E2
MT 1335 SL Turbo Série 3-E2
MT 1340 SL Turbo Série 3-E2
MT 1740 SL Turbo Série 3-E2

TAKING UP AN ATTACHMENT

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

HAND LOCKING AND CONNECTING THE ATTACHMENT

- Take the locking pin and the clip on the bracket (fig. A) and lock the attachment (fig. D). Do not forget to refit the clip.
- Stop the I.C. engine.
- Remove the pressure of the hydraulic circuit by using the lever of the distributor 1 (fig. E).
- Connect the rapid connectors according to the logic of the attachment's hydraulic movements.

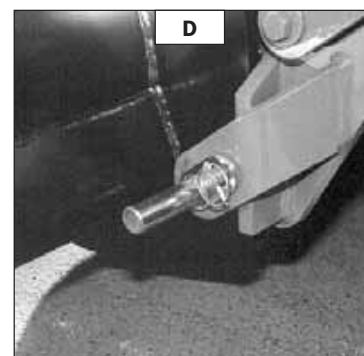
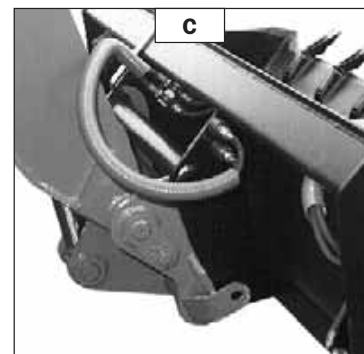
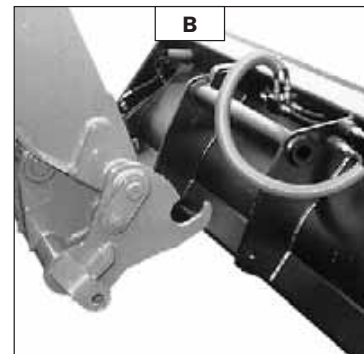
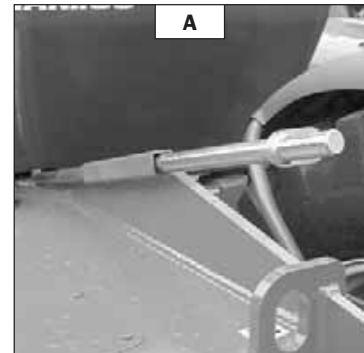
! *Make sure that the rapid connectors are clean and protect the holes which are not used, with the caps provided.*

HAND RELEASING AND DISCONNECTING THE ATTACHMENT

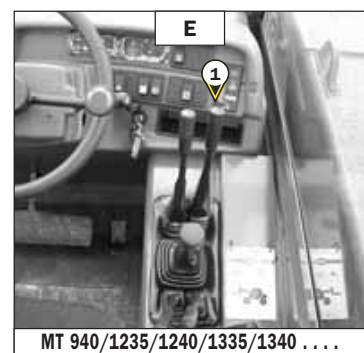
- Proceed in the reverse order of paragraph HAND LOCKING AND CONNECTING THE ATTACHMENT while making sure you put back the locking pin and the clip in the bracket (fig. A).

LAYING AN ATTACHMENT

- Proceed in the reverse order of paragraph TAKING UP AN ATTACHMENT while making sure you place the attachment flat on the ground and in closed position.



MT 1740 SL Turbo Série 3-E2



MT 940/1235/1240/1335/1340 . . .

C - HYDRAULIC ATTACHMENT AND HAND LOCKING DEVICE

MT 1235 S Série 3-E2 (from machine Nr)
MT 1235 S Turbo Série 3-E2 (from machine Nr)
MT 1435 SL Série 3-E2
MT 1435 SL Turbo Série 3-E2
MT 1440 SL Série 3-E2
MT 1440 SL Turbo Série 3-E2

TAKING UP AN ATTACHMENT

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

HAND LOCKING AND CONNECTING THE ATTACHMENT

- Take the locking pin and the clip on the bracket (fig. A) and lock the attachment (fig. D). Do not forget to refit the clip.
- Stop the I.C. engine.
- Remove the pressure of the hydraulic circuit by using the lever of the distributor 1 (fig. E).
- Connect the rapid connectors according to the logic of the attachment's hydraulic movements.

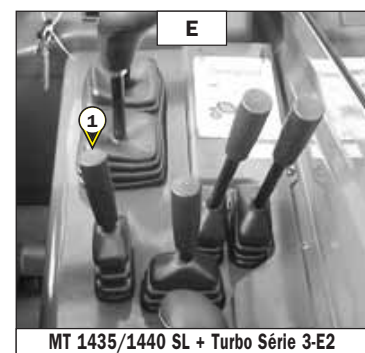
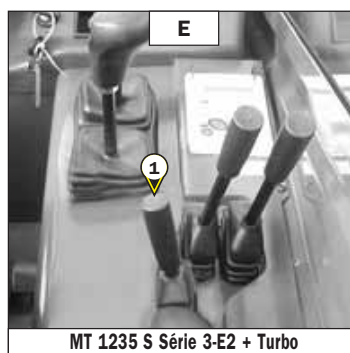
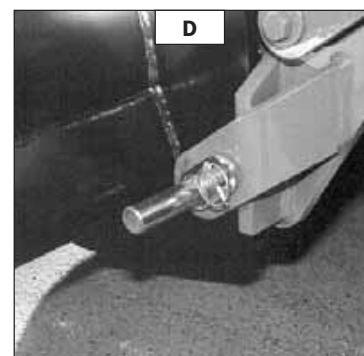
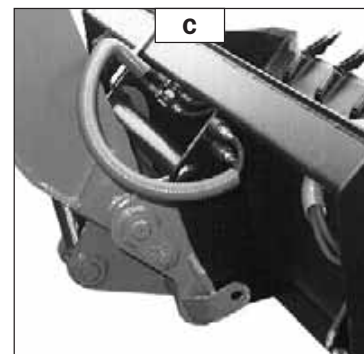
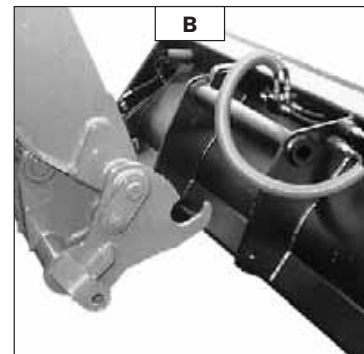
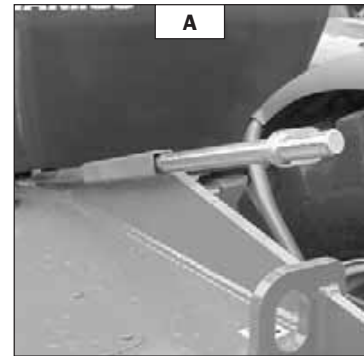
! Make sure that the rapid connectors are clean and protect the holes which are not used, with the caps provided.

HAND RELEASING AND DISCONNECTING THE ATTACHMENT

- Proceed in the reverse order of paragraph HAND LOCKING AND CONNECTING THE ATTACHMENT while making sure you put back the locking pin and the clip in the bracket (fig. A).

LAYING AN ATTACHMENT

- Proceed in the reverse order of paragraph TAKING UP AN ATTACHMENT while making sure you place the attachment flat on the ground and in closed position.



C - HYDRAULIC ATTACHMENT AND HAND LOCKING DEVICE

MT 1240 L Turbo ULTRA Série 3-E2

MT 1340 SL Turbo ULTRA Série 3-E2 - MT 1440 SL Turbo ULTRA Série 3-E2

MT 1740 SL Turbo ULTRA Série 3-E2

TAKING UP AN ATTACHMENT

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

HAND LOCKING AND CONNECTING THE ATTACHMENT

- Take the locking pin and the clip on the bracket (fig. A) and lock the attachment (fig. D). Do not forget to refit the clip.
- Stop the I.C. engine and keep the ignition on the lift truck.
- Release the pressure in the attachment hydraulic circuit, by holding down button 1 (fig. E) and moving the distributor lever 2 (fig. E) backwards and forwards 4 or 5 times.
- Connect the rapid connectors according to the logic of the attachment's hydraulic movements.

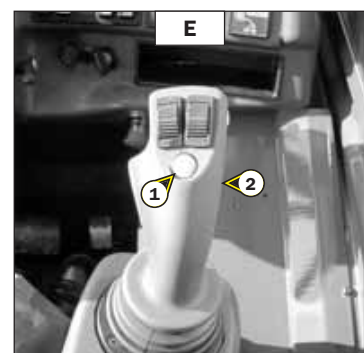
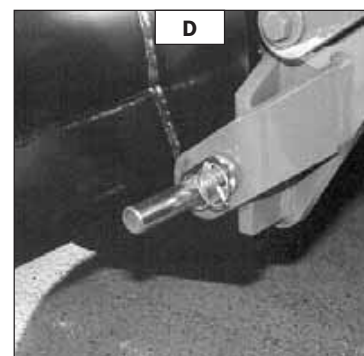
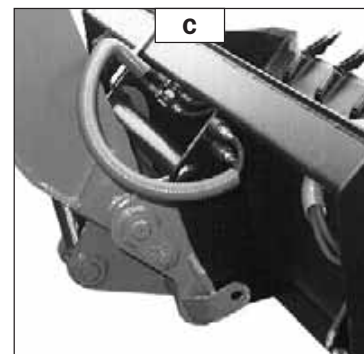
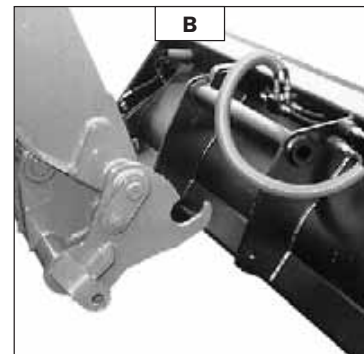
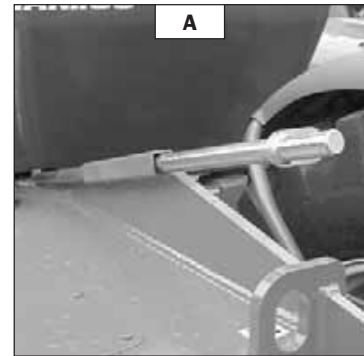
! Make sure that the rapid connectors are clean and protect the holes which are not used, with the caps provided.

HAND RELEASING AND DISCONNECTING THE ATTACHMENT

- Proceed in the reverse order of paragraph HAND LOCKING AND CONNECTING THE ATTACHMENT while making sure you put back the locking pin and the clip in the bracket (fig. A).

LAYING AN ATTACHMENT

- Proceed in the reverse order of paragraph TAKING UP AN ATTACHMENT while making sure you place the attachment flat on the ground and in closed position.



D - HYDRAULIC ATTACHMENT AND HYDRAULIC LOCKING DEVICE (OPTION)

MT 940 L Turbo Série 3-E2
MT 1235 S Série 3-E2 (up to machine Nr)
MT 1235 S Turbo Série 3-E2 (up to machine Nr)
MT 1240 L Turbo Série 3-E2
MT 1335 SL Série 3-E2
MT 1335 SL Turbo Série 3-E2
MT 1340 SL Turbo Série 3-E2
MT 1740 SL Turbo Série 3-E2

TAKING UP AN ATTACHMENT

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

HYDRAULIC LOCKING AND CONNECTING THE ATTACHMENT

- Put the valve in position A (fig. D), that is to say, the hydraulic circuit of the attachment locking open.
- Push the lever of the distributor 1 (fig. E) forwards in order to completely lock the attachment on the carriage.
- Stop the I.C. engine.
- Remove the pressure of the attachment hydraulic circuit by using the lever of the distributor 1 (fig. E).
- Connect the rapid connectors according to the logic of the attachment's hydraulic movements.

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

- Close the valve in position B (fig. D), that is to say, the hydraulic circuit of the attachment locking closed.

! Always close the valve in position B (fig. D) after the locking of the attachment, in order to avoid accidental unlocking and use the attachment safety.

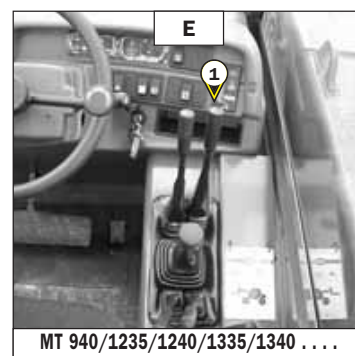
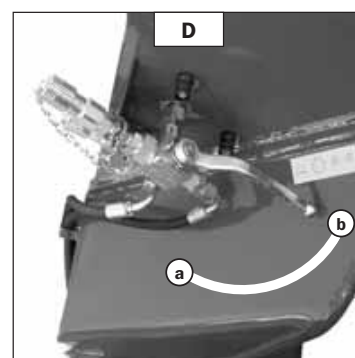
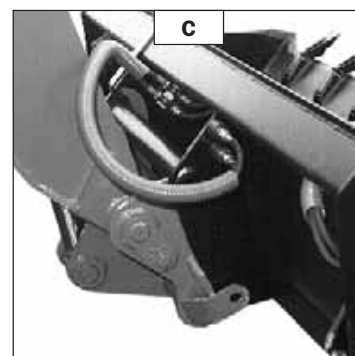
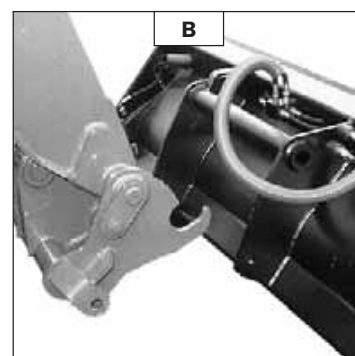
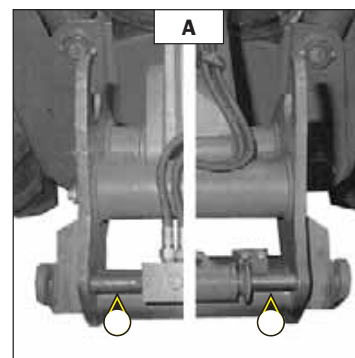
HYDRAULIC RELEASING AND DISCONNECTING THE ATTACHMENT

- Close the attachment.
- Put the valve in position A (fig. D), that is to say, the hydraulic circuit of the attachment locking open.
- Push the lever of the distributor 1 (fig. E) backwards in order to completely unlock the attachment.
- Stop the I.C. engine.
- Remove the pressure of the attachment hydraulic circuit by using the lever of the distributor 1 (fig. E).
- Disconnect the rapid connectors of the attachment.

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

LAYING AN ATTACHMENT

- Proceed in the reverse order of paragraph TAKING UP AN ATTACHMENT while making sure you place the attachment flat on the ground and in closed position.

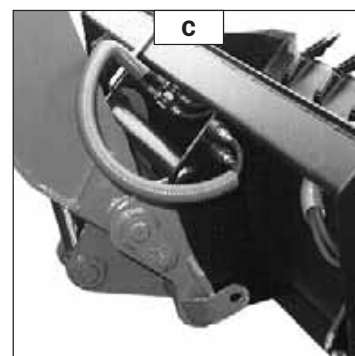
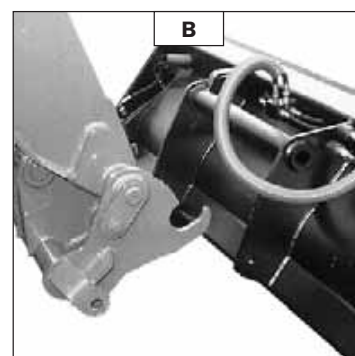
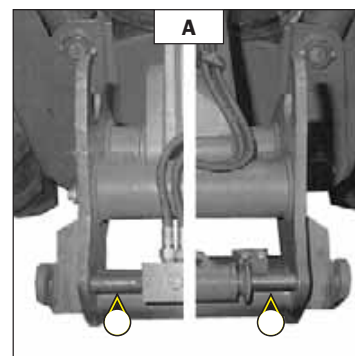


D - HYDRAULIC ATTACHMENT AND HYDRAULIC LOCKING DEVICE (OPTION)

MT 1235 S Série 3-E2 (from machine Nr)
MT 1235 S Turbo Série 3-E2 (from machine Nr)
MT 1435 SL Série 3-E2
MT 1435 SL Turbo Série 3-E2
MT 1440 SL Série 3-E2
MT 1440 SL Turbo Série 3-E2

TAKING UP AN ATTACHMENT

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



HYDRAULIC LOCKING AND CONNECTING THE ATTACHMENT

- Put the valve in position A (fig. D), that is to say, the hydraulic circuit of the attachment locking open.
- Push the lever of the distributor 1 (fig. E) forwards in order to completely lock the attachment on the carriage.
- Stop the I.C. engine.
- Remove the pressure of the attachment hydraulic circuit by using the lever of the distributor 1 (fig. E).
- Connect the rapid connectors according to the logic of the attachment's hydraulic movements.

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

- Close the valve in position B (fig. D), that is to say, the hydraulic circuit of the attachment locking closed.

! Always close the valve in position B (fig. D) after the locking of the attachment, in order to avoid accidental unlocking and use the attachment safely.

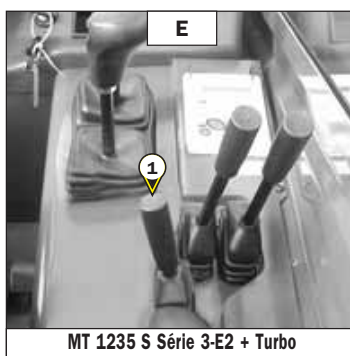
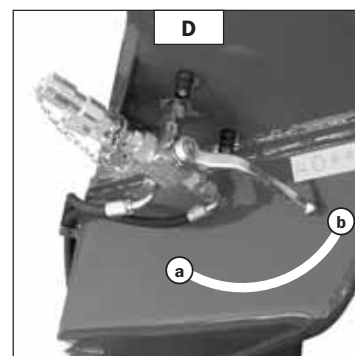
HYDRAULIC RELEASING AND DISCONNECTING THE ATTACHMENT

- Close the attachment.
- Put the valve in position A (fig. D), that is to say, the hydraulic circuit of the attachment locking open.
- Push the lever of the distributor 1 (fig. E) backwards in order to completely unlock the attachment.
- Stop the I.C. engine.
- Remove the pressure of the attachment hydraulic circuit by using the lever of the distributor 1 (fig. E).
- Disconnect the rapid connectors of the attachment.

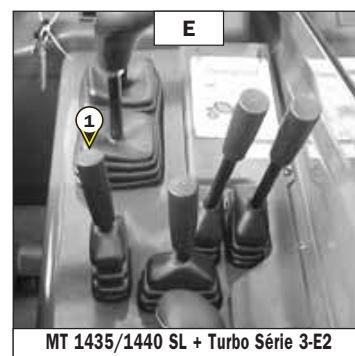
! Make sure that the rapid connectors are clean and protect the holes which are not used, with the caps provided.

LAYING AN ATTACHMENT

- Proceed in the reverse order of paragraph TAKING UP AN ATTACHMENT while making sure you place the attachment flat on the ground and in closed position.



MT 1235 S Série 3-E2 + Turbo



MT 1435/1440 SL + Turbo Série 3-E2

D - HYDRAULIC ATTACHMENT AND HYDRAULIC LOCKING DEVICE (OPTION)

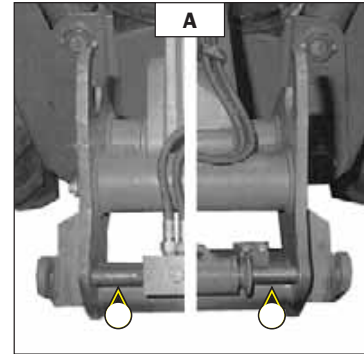
MT 1240 L Turbo ULTRA Série 3-E2

MT 1340 SL Turbo ULTRA Série 3-E2 - MT 1440 SL Turbo ULTRA Série 3-E2

MT 1740 SL Turbo ULTRA Série 3-E2

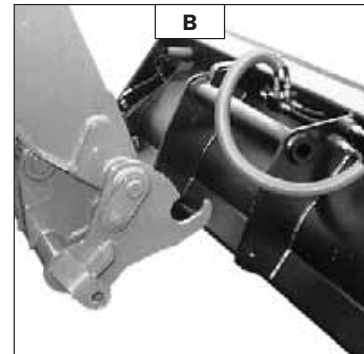
TAKING UP AN ATTACHMENT

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



HYDRAULIC LOCKING AND CONNECTING THE ATTACHMENT

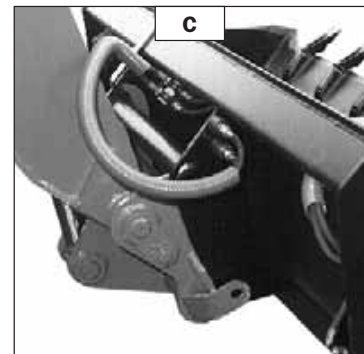
- Put the valve in position A (fig. D), that is to say, the hydraulic circuit of the attachment locking open.
- Hold down button 1 (fig. E) and move lever 2 (fig. E) forwards to lock the attachment to the carriage.
- Stop the I.C. engine and keep the ignition on the lift truck.
- Release the pressure in the attachment hydraulic circuit, by holding down button 1 (fig. E) and moving the distributor lever 2 (fig. E) backwards and forwards 4 or 5 times.
- Connect the rapid connectors according to the logic of the attachment's hydraulic movements.



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

- Close the valve in position B (fig. D), that is to say, the hydraulic circuit of the attachment locking closed.

! Always close the valve in position B (fig. D) after the locking of the attachment, in order to avoid accidental unlocking and use the attachment safely.



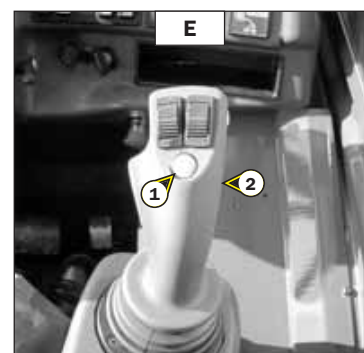
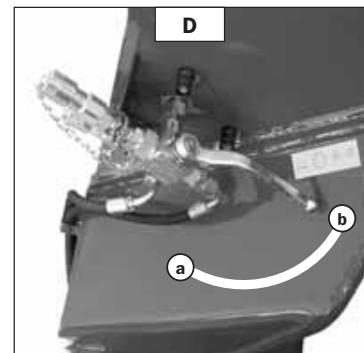
HYDRAULIC RELEASING AND DISCONNECTING THE ATTACHMENT

- Close the attachment.
- Put the valve in position A (fig. D), that is to say, the hydraulic circuit of the attachment locking open.
- Hold button 1 (fig. E) down and move lever 2 (fig. E) backwards to release the attachment from the carriage.
- Stop the I.C. engine and keep the ignition on the lift truck.
- Release the pressure in the attachment hydraulic circuit, by holding down button 1 (fig. E) and moving the distributor lever 2 (fig. E) backwards and forwards 4 or 5 times.
- Disconnect the rapid connectors of the attachment.

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

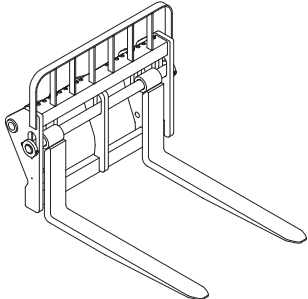
LAYING AN ATTACHMENT

- Proceed in the reverse order of paragraph TAKING UP AN ATTACHMENT while making sure you place the attachment flat on the ground and in closed position.

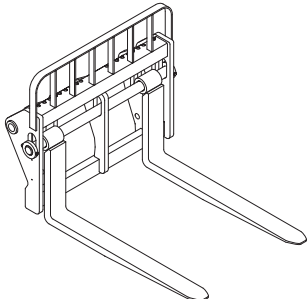


TECHNICAL FEATURES OF THE ATTACHMENTS

CARRIAGE WITH FLOATING FORKS

ML 635 Turbo Série 3-E2 MT 1235 S Série 3-E2 MT 1235 S Turbo Série 3-E2 MT 1335 SL Série 3-E2 - MT 1435 SL Série 3-E2 MT 1335 SL Turbo Série 3-E2 - MT 1435 SL Turbo Série 3-E2				
	TFF 35 MT-1040	TFF 35 MT-1300		
PART NUMBER	654093	654094		
Nominal load capacity	3500 Kg	3500 Kg		
Width	1040 mm	1300 mm		
Weight	300 Kg	340 Kg		

CARRIAGE WITH FLOATING FORKS

MT 940 L Turbo Série 3-E2 MT 1240 L Turbo Série 3-E2 MT 1240 L Turbo ULTRA Série 3-E2 MT 1440 SL Série 3-E2 MT 1340 SL Turbo Série 3-E2 - MT 1440 SL Turbo Série 3-E2 MT 1340 SL Turbo ULTRA Série 3-E2 - MT 1440 SL Turbo ULTRA Série 3-E2 MT 1740 SL Turbo Série 3-E2 MT 1740 SL Turbo ULTRA Série 3-E2				
	TFF 45 MT-1040	TFF 45 MT-1300		
PART NUMBER	653344	653345		
Nominal load capacity	4500 Kg	4500 Kg		
Width	1040 mm	1300 mm		
Weight	370 Kg	415 Kg		

CARRIAGE WITH FLOATING FORKS WITH SIDE-SHIFT



Use prohibited with the single side-shift carriage option (TSDL).

ML 635 Turbo Série 3-E2

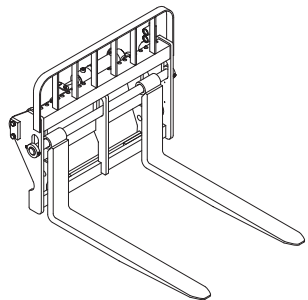
MT 1235 S Série 3-E2

MT 1235 S Turbo Série 3-E2

MT 1335 SL Série 3-E2 - MT 1435 SL Série 3-E2

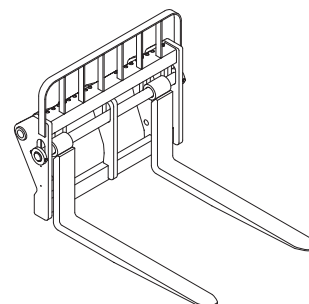
MT 1335 SL Turbo Série 3-E2 - MT 1435 SL Turbo Série 3-E2

	TFF 35 MT-1040 DL	TFF 35 MT-1300 DL	
PART NUMBER	654095	654096	
Nominal load capacity	3500 Kg	3500 Kg	
Side-shift	2 x 100 mm	2 x 100 mm	
Width	1040 mm	1300 mm	
Weight	345 Kg	385 Kg	



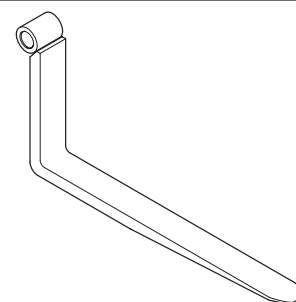
CARRIAGE WITH FLOATING FORKS WITH SIDE-SHIFT

 Use prohibited with the single side-shift carriage option (TSDL).			
MT 940 L Turbo Série 3-E2 MT 1240 L Turbo Série 3-E2 MT 1240 L Turbo ULTRA Série 3-E2 MT 1440 SL Série 3-E2 MT 1340 SL Turbo Série 3-E2 - MT 1440 SL Turbo Série 3-E2 MT 1340 SL Turbo ULTRA Série 3-E2 - MT 1440 SL Turbo ULTRA Série 3-E2 MT 1740 SL Turbo Série 3-E2 MT 1740 SL Turbo ULTRA Série 3-E2			
	TFF 45 MT-1040 DL	TFF 45 MT-1300 DL	
PART NUMBER	556294	556295	
Nominal load capacity	4500 Kg	4500 Kg	
Side-shift	2 x 100 mm	2 x 100 mm	
Width	1040 mm	1300 mm	
Weight	400 Kg	450 Kg	



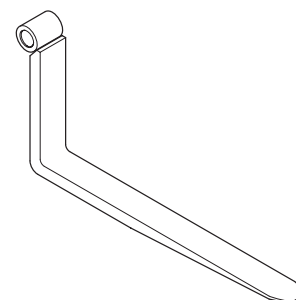
FLOATING FORK

ML 635 Turbo Série 3-E2 MT 1235 S Série 3-E2 MT 1235 S Turbo Série 3-E2 MT 1335 SL Série 3-E2 - MT 1435 SL Série 3-E2 MT 1335 SL Turbo Série 3-E2 - MT 1435 SL Turbo Série 3-E2			
PART NUMBER	415801		
Section	125 x 45 x 1200 mm		
Weight	68 Kg		



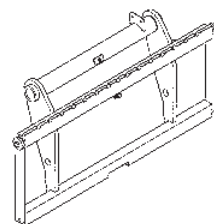
FLOATING FORK

MT 940 L Turbo Série 3-E2 MT 1240 L Turbo Série 3-E2 MT 1240 L Turbo ULTRA Série 3-E2 MT 1440 SL Série 3-E2 MT 1340 SL Turbo Série 3-E2 - MT 1440 SL Turbo Série 3-E2 MT 1340 SL Turbo ULTRA Série 3-E2 - MT 1440 SL Turbo ULTRA Série 3-E2 MT 1740 SL Turbo Série 3-E2 MT 1740 SL Turbo ULTRA Série 3-E2			
PART NUMBER	211922		
Section	125 x 50 x 1200 mm		
Weight	71 Kg		



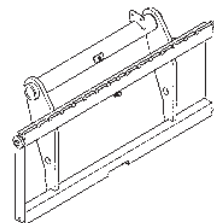
STANDARDIZED SWINGING FORK CARRIER

ML 635 Turbo Série 3-E2 MT 1235 S Série 3-E2 MT 1235 S Turbo Série 3-E2 MT 1335 SL Série 3-E2 - MT 1435 SL Série 3-E2 MT 1335 SL Turbo Série 3-E2 - MT 1435 SL Turbo Série 3-E2			
	PFB 35 N MT-1260 S2	PFB 35 N MT-1470 S2	PFB 35 N MT-1580 S2
PART NUMBER	653744	653745	653746
Nominal load capacity	3500 Kg	3500 Kg	3500 Kg
Width	1260 mm	1470 mm	1580 mm
Weight	103 Kg	126 Kg	131 Kg



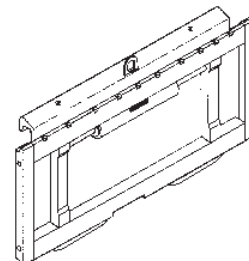
STANDARDIZED SWINGING FORK CARRIER

MT 940 L Turbo Série 3-E2 MT 1240 L Turbo Série 3-E2 MT 1240 L Turbo ULTRA Série 3-E2 MT 1440 SL Série 3-E2 MT 1340 SL Turbo Série 3-E2 - MT 1440 SL Turbo Série 3-E2 MT 1340 SL Turbo ULTRA Série 3-E2 - MT 1440 SL Turbo ULTRA Série 3-E2 MT 1740 SL Turbo Série 3-E2 MT 1740 SL Turbo ULTRA Série 3-E2			
	PFB 45 N MT-1260 S2	PFB 45 N MT-1670 S2	PFB 45 N MT-2000 S2
PART NUMBER	654407	653747	653748
Nominal load capacity	4500 Kg	4500 Kg	4500 Kg
Width	1260 mm	1670 mm	2000 mm
Weight	200 Kg	255 Kg	288 Kg



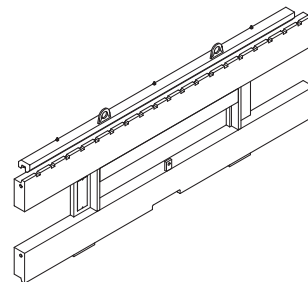
STANDARDIZED CARRIAGE WITH SIDE-SHIFT

 Use prohibited with the single side-shift carriage option (TSDL).			
ML 635 Turbo Série 3-E2 MT 1235 S Série 3-E2 MT 1235 S Turbo Série 3-E2 MT 1335 SL Série 3-E2 - MT 1435 SL Série 3-E2 MT 1335 SL Turbo Série 3-E2 - MT 1435 SL Turbo Série 3-E2			
	TDL 3T L1260 FEM3	TDL 5T L1470 FEM3	TDL 5T L1580 FEM3
PART NUMBER	556359	556361	556362
Nominal load capacity	3000 Kg	5000 Kg	5000 Kg
Side-shift	2 x 100 mm	2 x 100 mm	2 x 100 mm
Width	1260 mm	1470 mm	1580 mm
Weight	110 Kg	192 Kg	200 Kg



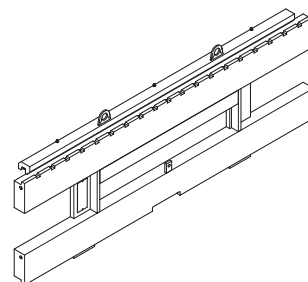
STANDARDIZED CARRIAGE WITH SIDE-SHIFT

 Use prohibited with the single side-shift carriage option (TSDL).			
MT 940 L Turbo Série 3-E2 MT 1240 L Turbo Série 3-E2 MT 1240 L Turbo ULTRA Série 3-E2			
	TDLA 40 N MT-1670	TDLA 40 N MT-2000	
PART NUMBER	556360	556363	
Nominal load capacity	4300 Kg	4300 Kg	
Side-shift	2 x 100 mm	2 x 100 mm	
Width	1670 mm	2000 mm	
Weight	335 Kg	380 Kg	



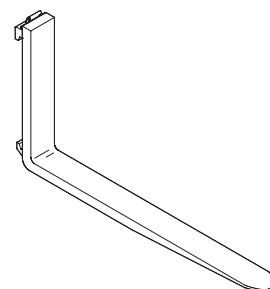
STANDARDIZED CARRIAGE WITH SIDE-SHIFT

 <i>Use prohibited with the single side-shift carriage option (TSDL).</i>			
MT 1440 SL Série 3-E2 MT 1340 SL Turbo Série 3-E2 - MT 1440 SL Turbo Série 3-E2 MT 1340 SL Turbo ULTRA Série 3-E2 - MT 1440 SL Turbo ULTRA Série 3-E2			
	TDLA 40 N MT-1670		
PART NUMBER	556360		
Nominal load capacity	4300 Kg		
Side-shift	2 x 100 mm		
Width	1670 mm		
Weight	335 Kg		



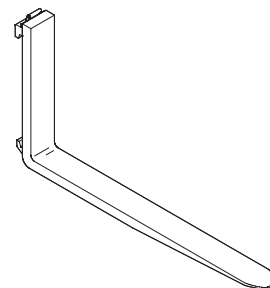
STANDARDIZED FORK

ML 635 Turbo Série 3-E2 MT 1235 S Série 3-E2 MT 1235 S Turbo Série 3-E2 MT 1335 SL Série 3-E2 - MT 1435 SL Série 3-E2 MT 1335 SL Turbo Série 3-E2 - MT 1435 SL Turbo Série 3-E2			
PART NUMBER	415618		
Section	125 x 45 x 1200 mm		
Weight	72 Kg		

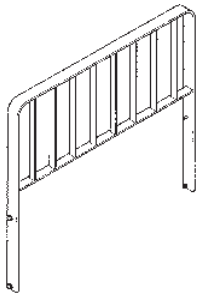


STANDARDIZED FORK

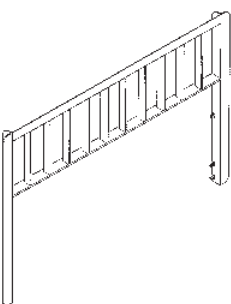
MT 940 L Turbo Série 3-E2 MT 1240 L Turbo Série 3-E2 MT 1240 L Turbo ULTRA Série 3-E2 MT 1440 SL Série 3-E2 MT 1340 SL Turbo Série 3-E2 - MT 1440 SL Turbo Série 3-E2 MT 1340 SL Turbo ULTRA Série 3-E2 - MT 1440 SL Turbo ULTRA Série 3-E2 MT 1740 SL Turbo Série 3-E2 MT 1740 SL Turbo ULTRA Série 3-E2			
PART NUMBER	415652		
Section	125 x 50 x 1200 mm		
Weight	78 Kg		



LOAD BACK REST

ML 635 Turbo Série 3-E2 MT 1235 S Série 3-E2 MT 1235 S Turbo Série 3-E2 MT 1335 SL Série 3-E2 - MT 1435 SL Série 3-E2 MT 1335 SL Turbo Série 3-E2 - MT 1435 SL Turbo Série 3-E2				
PART NUMBER	556008	555325	556010	
Width	1260 mm	1470 mm	1580 mm	
Weight	36 Kg	39 Kg	41 Kg	

LOAD BACK REST

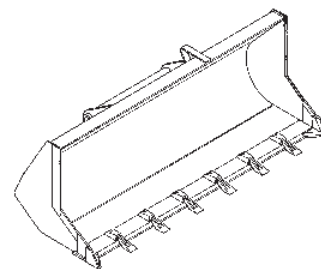
MT 940 L Turbo Série 3-E2 MT 1240 L Turbo Série 3-E2 MT 1240 L Turbo ULTRA Série 3-E2 MT 1440 SL Série 3-E2 MT 1340 SL Turbo Série 3-E2 - MT 1440 SL Turbo Série 3-E2 MT 1340 SL Turbo ULTRA Série 3-E2 - MT 1440 SL Turbo ULTRA Série 3-E2 MT 1740 SL Turbo Série 3-E2 MT 1740 SL Turbo ULTRA Série 3-E2				
PART NUMBER	572788	572790		
Width	1670 mm	2000 mm		
Weight	56 Kg	62 Kg		

BUILDING BUCKET



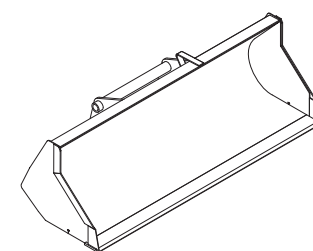
Use prohibited with the single side-shift carriage option (TSDL).

	CBC 800 L2250 S3	CBC 900 L2450 S3	
REFERENCE	654471	654470	
Nominal load capacity	814 L	893 L	
Width	2250 mm	2450 mm	
Weight	364 Kg	390 Kg	

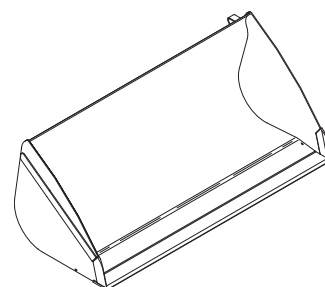


LOADING BUCKET

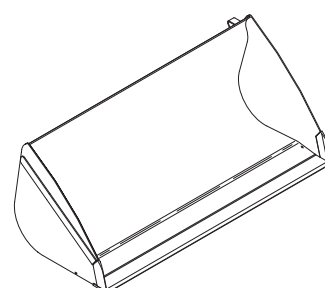
	CBR 900 L2250 S2	CBR 1000 L2450 S2	
REFERENCE	653749	654716	
Nominal load capacity	904 L	990 L	
Width	2250 mm	2450 mm	
Weight	360 Kg	381 Kg	



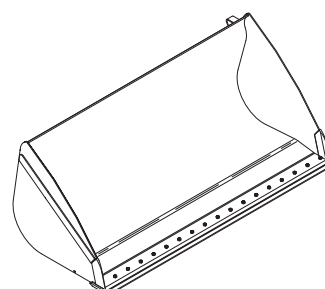
GRAIN BUCKET			
ML 635 Turbo Série 3-E2			
	CBA 1500 S3 L2450	CBA 1700 S3 L2100	CBA 2000 S3 L2450
PART NUMBER	570547	570549	570551
Nominal load capacity	1502 L	1643 L	1998 L
Width	2450 mm	2100 mm	2450 mm
Weight	514 Kg	522 Kg	607 Kg
	CBA 2500 S3 L2450	CBA 3000 S3 L2500	CBA 3200 S3 L2500
PART NUMBER	570553	570555	570556
Nominal load capacity	2508 L	3003 L	3200 L
Width	2450 mm	2500 mm	2500 mm
Weight	701 Kg	774 Kg	764 Kg



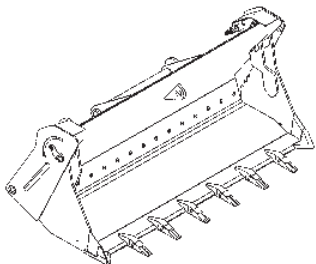
GRAIN BUCKET			
 Use prohibited with the single side-shift carriage option (TSDL).			
MT 940 L Turbo Série 3-E2 MT 1235 S Série 3-E2 MT 1235 S Turbo Série 3-E2 MT 1240 L Turbo Série 3-E2 MT 1240 L Turbo ULTRA Série 3-E2 MT 1335 SL Série 3-E2 - MT 1435 SL Série 3-E2 MT 1335 SL Turbo Série 3-E2 - MT 1435 SL Turbo Série 3-E2 MT 1440 SL Série 3-E2 MT 1340 SL Turbo Série 3-E2 - MT 1440 SL Turbo Série 3-E2 MT 1340 SL Turbo ULTRA Série 3-E2 - MT 1440 SL Turbo ULTRA Série 3-E2			
	CBA 1500 S3 L2450	CBA 2000 S3 L2450	
PART NUMBER	570547	570551	
Nominal load capacity	1502 L	1998 L	
Width	2450 mm	2450 mm	
Weight	514 Kg	607 Kg	
	CBA 2500 S3 L2450	CBA 3000 S3 L2500	
PART NUMBER	570553	570555	
Nominal load capacity	2508 L	3003 L	
Width	2450 mm	2500 mm	
Weight	701 Kg	774 Kg	



GRAIN BUCKET (WITH REVERSIBLE AND REMOVABLE BLADE)			
 Use prohibited with the single side-shift carriage option (TSDL).			
ML 635 Turbo Série 3-E2 MT 940 L Turbo Série 3-E2 MT 1235 S Série 3-E2 MT 1235 S Turbo Série 3-E2 MT 1240 L Turbo Série 3-E2 MT 1240 L Turbo ULTRA Série 3-E2 MT 1335 SL Série 3-E2 - MT 1435 SL Série 3-E2 MT 1335 SL Turbo Série 3-E2 - MT 1435 SL Turbo Série 3-E2 MT 1440 SL Série 3-E2 MT 1340 SL Turbo Série 3-E2 - MT 1440 SL Turbo Série 3-E2 MT 1340 SL Turbo ULTRA Série 3-E2 - MT 1440 SL Turbo ULTRA Série 3-E2			
	CBA 1500 S3 L2450 LDR	CBA 2000 S3 L2450 LDR	CBA 2500 S3 L2450 LDR
PART NUMBER	570548	570552	570554
Nominal load capacity	1502 L	1998 L	2508 L
Width	2450 mm	2450 mm	2450 mm
Weight	585 Kg	678 Kg	772 Kg



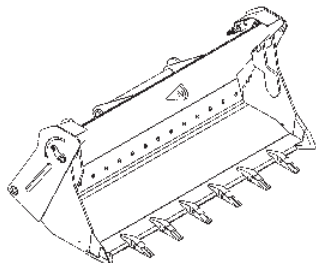
4 X 1 BUCKET

ML 635 Turbo Série 3-E2 MT 940 L Turbo Série 3-E2				
	CB4X1-700 L1950	CB4X1-850 L2300	CB4X1-900 L2450	
PART NUMBER	654434	654433	654432	
Nominal load capacity	700 L	850 L	900 L	
Width	1950 mm	2300 mm	2450 mm	
Weight	615 Kg	704 Kg	738 Kg	

4 X 1 BUCKET


Use prohibited with the single side-shift carriage option (TSDL).

MT 1235 S Série 3-E2
 MT 1235 S Turbo Série 3-E2
 MT 1240 L Turbo Série 3-E2
 MT 1240 L Turbo ULTRA Série 3-E2
 MT 1335 SL Série 3-E2 - MT 1435 SL Série 3-E2
 MT 1335 SL Turbo Série 3-E2 - MT 1435 SL Turbo Série 3-E2
 MT 1440 SL Série 3-E2
 MT 1340 SL Turbo Série 3-E2 - MT 1440 SL Turbo Série 3-E2
 MT 1340 SL Turbo ULTRA Série 3-E2 - MT 1440 SL Turbo ULTRA Série 3-E2
 MT 1740 SL Turbo Série 3-E2
 MT 1740 SL Turbo ULTRA Série 3-E2



	CB4X1-700 L1950	CB4X1-850 L2300	
PART NUMBER	654434	654433	
Nominal load capacity	700 L	850 L	
Width	1950 mm	2300 mm	
Weight	615 Kg	704 Kg	

MULTIPURPOSE BUCKET (WITH REVERSIBLE AND REMOVABLE AND CUTTING EDGE)



Use prohibited with the single side-shift carriage option (TSDL).

MT 1235 S Série 3-E2

MT 1235 S Turbo Série 3-E2

MT 1335 SL Série 3-E2 - MT 1435 SL Série 3-E2

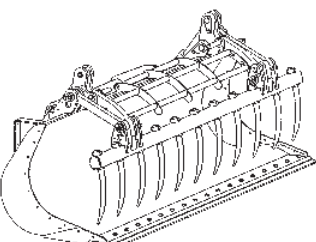
MT 1335 SL Turbo Série 3-E2 - MT 1435 SL Turbo Série 3-E2

MT 1440 SL Série 3-E2

MT 1340 SL Turbo Série 3-E2 - MT 1440 SL Turbo Série 3-E2

MT 1340 SL Turbo ULTRA Série 3-E2 - MT 1440 SL Turbo ULTRA Série 3-E2

	CBM 2450 LDR S5		
PART NUMBER	653784		
Nominal load capacity	1,03 m3		
Width	2450 mm		
Claw	11		
Weight	790 Kg		

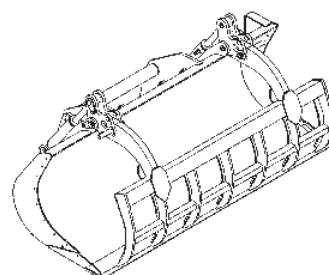


BUCKET WITH GRAB


Use prohibited with the single side-shift carriage option (TSDL).

ML 635 Turbo Série 3-E2
 MT 940 L Turbo Série 3-E2
 MT 1235 S Série 3-E2
 MT 1235 S Turbo Série 3-E2
 MT 1240 L Turbo Série 3-E2
 MT 1240 L Turbo ULTRA Série 3-E2
 MT 1335 SL Série 3-E2 - MT 1435 SL Série 3-E2
 MT 1335 SL Turbo Série 3-E2 - MT 1435 SL Turbo Série 3-E2
 MT 1440 SL Série 3-E2
 MT 1340 SL Turbo Série 3-E2 - MT 1440 SL Turbo Série 3-E2
 MT 1340 SL Turbo ULTRA Série 3-E2 - MT 1440 SL Turbo ULTRA Série 3-E2

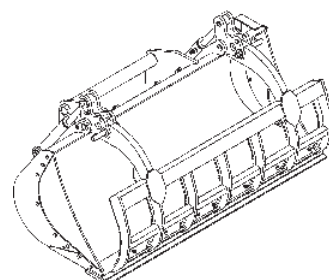
	CBG 1950 S4	CBG 2300 S4	CBG 2450 S4
PART NUMBER	653002	653005	653010
Nominal load capacity	1 m3	1,2 m3	1,26 m3
Width	1950 mm	2300 mm	2450 mm
Claw	7	8	8
Weight	552 Kg	609 Kg	630 Kg


BUCKET WITH GRAB (FOR NON-HAZARDOUS INDUSTRIAL WASTE)


Use prohibited with the single side-shift carriage option (TSDL).

ML 635 Turbo Série 3-E2
 MT 940 L Turbo Série 3-E2
 MT 1235 S Série 3-E2
 MT 1235 S Turbo Série 3-E2
 MT 1240 L Turbo Série 3-E2
 MT 1240 L Turbo ULTRA Série 3-E2
 MT 1335 SL Série 3-E2 - MT 1435 SL Série 3-E2
 MT 1335 SL Turbo Série 3-E2 - MT 1435 SL Turbo Série 3-E2
 MT 1440 SL Série 3-E2
 MT 1340 SL Turbo Série 3-E2 - MT 1440 SL Turbo Série 3-E2
 MT 1340 SL Turbo ULTRA Série 3-E2 - MT 1440 SL Turbo ULTRA Série 3-E2

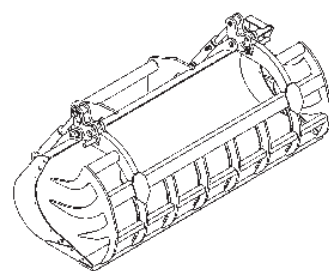
	CBG 1950 DIB S4	CBG 2300 DIB S4	CBG 2450 DIB S4
PART NUMBER	653016	653018	653020
Nominal load capacity	1 m3	1,2 m3	1,26 m3
Width	1950 mm	2300 mm	2450 mm
Claw	7	8	8
Weight	678 Kg	740 Kg	767 Kg


BUCKET WITH GRAB (CLOSED GRAB)


Use prohibited with the single side-shift carriage option (TSDL).

ML 635 Turbo Série 3-E2
 MT 940 L Turbo Série 3-E2
 MT 1235 S Série 3-E2
 MT 1235 S Turbo Série 3-E2
 MT 1240 L Turbo Série 3-E2
 MT 1240 L Turbo ULTRA Série 3-E2
 MT 1335 SL Série 3-E2 - MT 1435 SL Série 3-E2
 MT 1335 SL Turbo Série 3-E2 - MT 1435 SL Turbo Série 3-E2
 MT 1440 SL Série 3-E2
 MT 1340 SL Turbo Série 3-E2 - MT 1440 SL Turbo Série 3-E2
 MT 1340 SL Turbo ULTRA Série 3-E2 - MT 1440 SL Turbo ULTRA Série 3-E2

	CBG 2300 GF S4		
PART NUMBER	653008		
Nominal load capacity	1,2 m3		
Width	2300 mm		
Claw	8		
Weight	637 Kg		

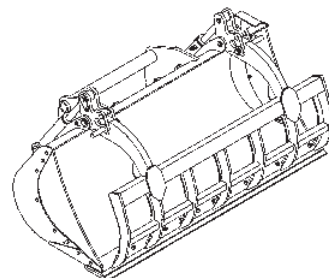


BUCKET WITH GRAB (WITH CLOSED SIDES AND REMOVABLE, REVERSIBLE CUTTING EDGE)



Use prohibited with the single side-shift carriage option (TSDL).

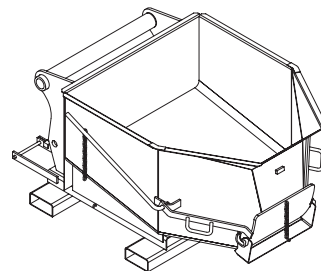
ML 635 Turbo Série 3-E2
MT 940 L Turbo Série 3-E2
MT 1235 S Série 3-E2
MT 1235 S Turbo Série 3-E2
MT 1240 L Turbo Série 3-E2
MT 1240 L Turbo ULTRA Série 3-E2
MT 1335 SL Série 3-E2 - MT 1435 SL Série 3-E2
MT 1335 SL Turbo Série 3-E2 - MT 1435 SL Turbo Série 3-E2
MT 1440 SL Série 3-E2
MT 1340 SL Turbo Série 3-E2 - MT 1440 SL Turbo Série 3-E2
MT 1340 SL Turbo ULTRA Série 3-E2 - MT 1440 SL Turbo ULTRA Série 3-E2



	CBG 1950 JFD-LDR S4	CBG 2300 JFD-LDR S4	CBG 2450 JFD-LDR S4
PART NUMBER	653003	653006	653009
Nominal load capacity	1 m3	1,2 m3	1,26 m3
Width	1950 mm	2300 mm	2450 mm
Claw	7	8	8
Weight	655 Kg	715 Kg	742 Kg

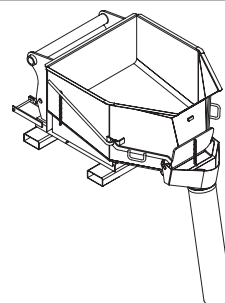
CONCRETE BUCKET (ADAPTABLE ON FORKS)

	BB 500 S4	BBH 500 S4	
REFERENCE	654409	654410	
Nominal load capacity	500 L/1300 Kg	500 L/1300 Kg	
Width	1100 mm	1100 mm	
Weight	210 Kg	230 Kg	



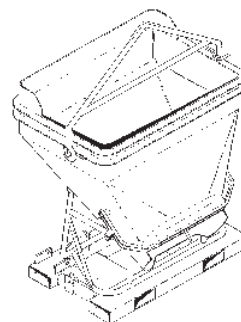
CONCRETE BUCKET WITH SPOUT (ADAPTABLE ON FORKS)

	BBG 500 S4	BBHG 500 S4	
REFERENCE	654411	654412	
Nominal load capacity	500 L/1300 Kg	500 L/1300 Kg	
Width	1100 mm	1100 mm	
Weight	210 Kg	230 Kg	



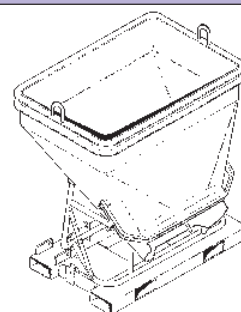
SPOUT BUCKET (ADAPTABLE ON FORKS)

	GL 300 S2	GL 400 S2	GL 600 S2	
REFERENCE	174371	174372	174373	
Nominal load capacity	300 L/660 Kg	400 L/880 Kg	600 L/1320 Kg	
Weight	149 Kg	157 Kg	277 Kg	
	GL 800 S2			
REFERENCE	174374			
Nominal load capacity	800 L/1760 Kg			
Weight	308 Kg			
HYDRAULIC KIT TO OPEN THE SPOUT				
REFERENCE	653750			



SPOUT BUCKET (ADAPTABLE ON FORKS)

	GL 1000 S2	GL 1500 S2	
REFERENCE	174375	174376	
Nominal load capacity	1000 L/2200 Kg	1500 L/3300 Kg	
Weight	325 Kg	375 Kg	
HYDRAULIC KIT TO OPEN THE SPOUT			
REFERENCE	653750		

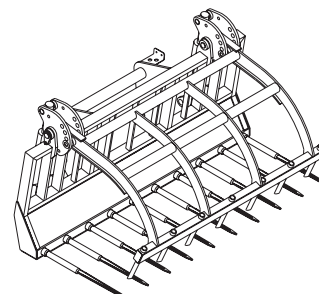


MANURE FORK WITH GRAB



Use prohibited with the single side-shift carriage option (TSDL).

ML 635 Turbo Série 3-E2
MT 940 L Turbo Série 3-E2
MT 1235 S Série 3-E2
MT 1235 S Turbo Série 3-E2
MT 1240 L Turbo Série 3-E2
MT 1240 L Turbo ULTRA Série 3-E2
MT 1335 SL Série 3-E2 - MT 1435 SL Série 3-E2
MT 1335 SL Turbo Série 3-E2 - MT 1435 SL Turbo Série 3-E2
MT 1440 SL Série 3-E2
MT 1340 SL Turbo Série 3-E2 - MT 1440 SL Turbo Série 3-E2
MT 1340 SL Turbo ULTRA Série 3-E2 - MT 1440 SL Turbo ULTRA Série 3-E2

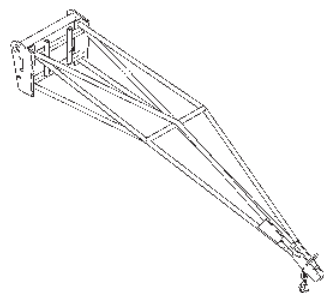


	FFGR 30 MT 2100 S5	FFGR 30 MT 2400 S5	FFGR 30 MT 2100 DR
PART NUMBER	556843	570594	570728
Nominal load capacity	1700 Kg	1700 Kg	1700 Kg
Width	2100 mm	2400 mm	2100 mm
Finger	10	12	10 (round finger)
Claw	7	8	7
Weight	567 Kg	606 Kg	567 Kg

CRANE JIB


MUST be used with a lift truck equipped with an operational hydraulic movement cut-out device.

	P 600 MT S3		
REFERENCE	653228		
Nominal load capacity	600 Kg		
Weight	170 Kg		


CRANE JIB

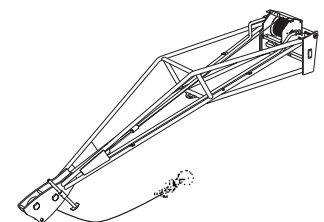

MUST be used with a lift truck equipped with an operational hydraulic movement cut-out device.

	P 4000 MT S2		
REFERENCE	653226		
Nominal load capacity	4000 Kg/1200 Kg		
Weight	210 Kg		


CRANE JIB WITH WINCH

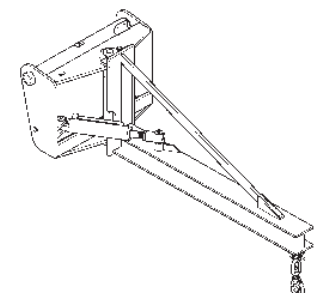

MUST be used with a lift truck equipped with an operational hydraulic movement cut-out device.

	PT 600 MT S6		
REFERENCE	708358		
Nominal load capacity	600 Kg		
Weight	288 Kg		


15°/15° MULTI-DIRECTIONAL CRANE JIB

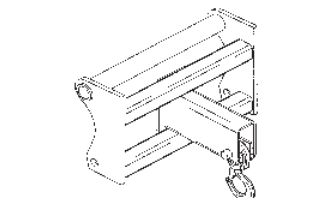

MUST be used with a lift truck equipped with an operational hydraulic movement cut-out device.

	PO 600 L2500 S2	PO 1000 L1500 S2	PO 2000 L1000 S2
REFERENCE	653230	653231	653232
Nominal load capacity	600 Kg	1000 Kg	2000 Kg
Weight	280 Kg	230 Kg	210 Kg


CRANE JIB


MUST be used with a lift truck equipped with an operational hydraulic movement cut-out device.

	PC 50		
REFERENCE	708544		
Nominal load capacity	5000 Kg		
Weight	120 Kg		



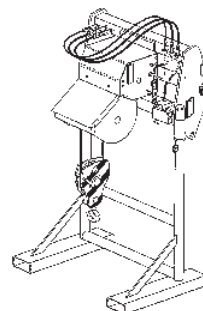
WINCH



MUST be used with a lift truck equipped with an operational hydraulic movement cut-out device.

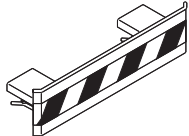
MT 1235 S Série 3-E2
MT 1235 S Turbo Série 3-E2
MT 1335 SL Série 3-E2 - MT 1435 SL Série 3-E2
MT 1335 SL Turbo Série 3-E2 - MT 1435 SL Turbo Série 3-E2
MT 1440 SL Série 3-E2
MT 1340 SL Turbo Série 3-E2 - MT 1440 SL Turbo Série 3-E2
MT 1340 SL Turbo ULTRA Série 3-E2 - MT 1440 SL Turbo ULTRA Série 3-E2
MT 1740 SL Turbo Série 3-E2
MT 1740 SL Turbo ULTRA Série 3-E2

	H3T S4	H4T S4	
PART NUMBER	708534	708535	
Nominal load capacity	3000 Kg	4000 Kg	
Weight	310 Kg	420 Kg	



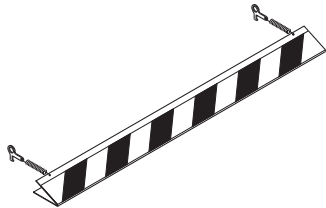
ATTACHMENT SHIELDS

FORK PROTECTOR

REFERENCE	227801			

BUCKET PROTECTOR

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

REFERENCE	206734	206732	206730	
Width	1375 mm	1500 mm	1650 mm	
REFERENCE	235854	206728	206726	
Width	1850 mm	1950 mm	2000 mm	
REFERENCE	223771	223773	206724	
Width	2050 mm	2100 mm	2150 mm	
REFERENCE	206099	206722	223775	
Width	2250 mm	2450 mm	2500 mm	

MANURE FORK PROTECTOR

REFERENCE	230689			