

Pallet truck

Original instructions

1132 series

T14B

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Linde Material Handling - Your Partner

Linde Material Handling, a company of the KI-ON Group, is a leading global manufacturer of forklift trucks and warehouse trucks, as well as a solution and service provider for intralogistics.

With sales and service locations in more than 100 countries, we are never far from our customers in all major regions of the world.

Plus, thanks to more than 100 years of experience in providing material flow solutions to companies from virtually all industries, we are able to help our customers optimise their entire material flow process.

Our experts analyse all workflows from incoming goods to outgoing goods and work with the customer to develop solutions that fully meet their individual requirements.

Linde Material Handling ensures smooth implementation, reliable commissioning and responsive service.

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Rules for the operating company of industrial trucks

In addition to these operating instructions, a code of practice containing additional information for the operating companies of industrial trucks is also available.

This guide provides information for handling industrial trucks:

- · Definitions and abbreviations
- Selection of suitable industrial trucks for the specific application
- Prerequisites for the safe operation of industrial trucks
- Employers guide for the safe use of industrial trucks
- Transport, initial commissioning and storage
- · Example structure for a hazard assessment

Internet address and QR code

By entering the address www.linde-mh.com/VDMA

in a web browser or by scanning the QR code, information can be accessed at any time.





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1

Introduction

Introduction



Introduction

Your Linde forklift truck

gives you the very best in terms of performance, safety and driving comfort. However, it is up to you, the truck operator, to preserve these qualities for a long time to come and to make full use of their benefits on the job.

During the manufacturing process (if affixed with conformity mark):

- We adhered to all declaration of conformity safety requirements.
- We carried out all compliance tests required by law.

This is proven by the conformity stamp shown on the identification plates.

The manual provides you with important information on activating, driving, operating and maintaining a Linde forklift truck.

Regularly and promptly complete the maintenance checklists in accordance with the truck operating instructions and use the specified tools, cleaning products etc.

In order to maintain valid warranty service for your truck, please keep and save a complete, detailed record of the maintenance process.

All maintenance procedures must be recorded; otherwise you will lose the warranty.

Users, especially forklift truck drivers and repair personnel, must strictly adhere to GB/T 36507 regulations.

Users, especially forklift truck drivers and maintenance personnel, must strictly follow international standard ISO 21262, "Guidelines on correct and safe use of materials handling equipment", and BITA guidelines. (Overseas edition)

The user shall be responsible for any loss caused by improper use. The manufacturer Linde Ltd shall not be responsible for such loss.

If you want to use the truck for purposes that are not mentioned in the user manual, please

contact service partners accredited by Linde Corp. Ltd.

Any modification of your truck, in particular fitting of equipment or conversion of the truck, is prohibited without the permission of the manufacturer.

If the manufacturer is no longer in business and there is no successor to the business, the user may arrange for a modification or alteration to the truck, provided that the user:

- Arranges for the modification or alteration to be designed, tested and implemented by an engineer who is an expert in industrial trucks and the associated safety considerations
- Maintains a permanent record of the design, testing and implementation stages for the modification or alteration
- Makes appropriate changes to the designation plate, decals, tags and operation and maintenance manuals
- Attaches a permanent and easily visible label on the truck providing information about the manner in which the truck has been modified or altered together with the date of the modification or alteration, and the name of the organisation that completed this work

Attachment manuals are provided

Add a load identification plate for any attachments to the truck.

A CAUTION

To maintain stability and the specified minimum braking distance, do not carry out stacking/unstacking operations on a slope.

The climbing degrees in the type sheet are ascertained from the truck's pulling force, and only apply when going over small obstacles and driving on relatively flat surfaces.

Technical notes

This user manual must not be copied, translated or sent to a third party without the manufacturer's written consent.



Introduction

Linde's business philosophy is to constantly improve the design and structure of its products. KION Linde therefore reserves the right to change the design and technical parameters of its trucks at any time.

The company declines any responsibility for claims regarding the technical parameters, illustrations and instructions in this user manual.

The attachment operating instructions are enclosed for trucks that are delivered from the factory with an attachment. Before commissioning a truck with an attachment, you must check that loads are handled safely. Depending on the type of attachment, it may be necessary to make adjustments, e.g. pressure settings or adjusting stops and operating speeds. Corresponding instructions can be found in the attachment operating instructions. The instructions for operation of the attachment must also be observed.

Carry out the specified work regularly, at the due times and using the consumables designed for this purpose in accordance with the inspection and maintenance overview. Make sure that you record any work performed in the registration document for the industrial truck; this is essential for any warranty claims.

The designations used in the text (front, back, left, right) always refer to the installation position of the parts described in relation to the forward drive direction of the truck.

Servicing work not described here will require specialist knowledge, measuring instruments and, often, special tools. Please ask your authorised service partner to carry out this work.

Servicing should only be carried out by competent personnel (specialists) approved by Linde.

For questions about the truck and orders for spare parts, please contact your local Linde service partner and leave a full shipping address.

To maintain the original technical efficiency of the truck, please use authentic Linde spare parts when repairing. When ordering spare parts, in addition to part numbers, please provide the following information:

Truck model:

Serial number/year of manufacturing:

Delivery date:

Part numbers should be specified when ordering parts.

Part number of the lift mast:

Lifting height of the lift mast [mm]:

When taking delivery of the forklift truck, copy data from the component identification plates into this user manual. The relevant information can be found on the identification plates on the truck. We recommend you write down this information in the manual for future reference.

Truck handover

Before leaving the factory, every truck must be carefully examined so that it is completely up to standard and can be delivered to the user in perfect condition.

To guarantee the truck works correctly, Linde service partners are obliged to check the following items before the handover:

Check whether the drive wheel nuts are tightened Check the battery status Check the hydraulic oil level Check the hydraulic oil level Check the braking function Check the steering function Check the traction function Check the lift mast and attachment functions



General information

To avoid the inconvenience of making a claim after use, check the truck is in perfect condition and repair, and confirm your satisfaction with the vehicle on the manufacturer's product qualification certificate upon handover.

When a truck with attachments leaves the factory, operating instructions for the attachments should be provided along with the vehicle.

General information

The truck described in these operating instructions corresponds to the applicable standards and safety regulations.

The truck has been fitted with advanced technology. Following these operating instructions will allow the truck to be handled safely. By complying with the specifications in these operating instructions, the functionality and the approved features of the truck will be retained.

These operating instructions provide the necessary information and help to avoid accidents and to keep the truck ready for operation beyond the warranty period.

Therefore:

- Read the operating instructions before commissioning the truck and follow the instructions during operation.
- Follow all of the safety information contained in the operating instructions and on the truck.

Every truck is provided with the following technical documents:

- Operating instructions for the truck (paper version, or digital version obtainable by scanning a QR code on the vehicle body, depending on availability)
- Operating instructions for the attachments (only applies to trucks delivered from the factory with attachments)
- Declaration of Conformity (applicable for certified forklift trucks)

Operating on public roads

If the truck is to be operated on public roads, the truck must conform to the national regulations for the country in which it is being used. The required operating permit must be obtained from the relevant authorities.

Insurance cover on company premises

In many cases, company premises are restricted public traffic areas.



It is advisable to review the company liability insurance to ensure that insurance covers the industrial truck with respect to third parties in the event of damage caused in restricted public traffic areas.



Conformity marking



Conformity marking

Linde Material Handling uses the conformity marking to document the conformity of the industrial truck with the relevant directives at the time of placing on the market:

- CE: In the European Union (EU)
- UKCA: in the United Kingdom (UK)
- EAC: in the Eurasian Economic Union

The conformity marking is applied to the nameplate. A declaration of conformity is issued for the EU and UK markets.







Declaration that reflects the content of the declaration of conformity

Declaration that reflects the content of the declaration of conformity

Declaration			
Linde Material Handling GmbH Carl-von-Linde-Platz 63743 Aschaffenburg, Germany			
We declare that the specified machine conforms to the most recent valid version of the directives specified below:			
Industrial truck type Model	corresponding to these operating instructions corresponding to these operating instructions		
 Machinery Directive 2006/42/EC ¹⁾ Supply of Machinery Safety Regulations 2008, 2008 No. 1597²⁾ 			
Personnel authorised to compile the technical documents:			
See declaration of conformity			
Linde Material Handling GmbH			

- 1) For the markets of the European Union, the EU candidate countries, the EFTA States and Switzerland
- 2) For the United Kingdom market

The declaration of conformity document is supplied with the industrial truck. The declaration shown explains the conformity with the provisions of the EC Machinery Directive and the Supply of Machinery Safety Regulation 2008, 2008 No. 1597.

An unauthorised structural change or addition to the industrial truck can compromise safety, thus invalidating the declaration of conformity. The declaration of conformity must be carefully stored and made available to the responsible authorities if necessary. It must also be handed over to the new owner if the industrial truck is sold on.





Nameplate

Nameplate

- 1 Nameplate
- 2 Manufacturer
- 3 Model / serial number / Year of manufacture
- 4 Unladen mass
- 5 Max. battery weight / Min. battery weight
- 6 Service weight
- 7 Placeholder for "Data matrix code"
- 8 Conformity marking: CE mark for the markets of the EU, the EU candidate countries, the EF-TA States and Switzerland UKCA mark for the United Kingdom market EAC mark for the Eurasian Econom-

EAC mark for the Eurasian Economic Union market

- 9 Rated drive power
- 10 Battery voltage
- 11 Rated capacity



- It is possible for there to be multiple conformity markings on the nameplate.
- The EAC mark may also be located in the immediate vicinity of the nameplate.

Correct use

Damage and defects

Any damage or other defects found on the industrial vehicle or its attachments must immediately be reported to a supervisor. Industrial vehicles and attachments that present operating hazards can only be used after proper maintenance has been carried out.

Do not remove safety devices and switches or render them unusable. Do not alter specific settings without first obtaining permission from the manufacturer.



Danger areas

Danger areas are areas that are hazardous to personnel due to the movement of the industrial truck, its operating devices, loading devices (such as attachments) or loaded cargo. They also include areas for lowering loads or lowering operating devices and equipment.

Non-work personnel must never stand in the danger areas of the industrial vehicle.

Correct use

Work areas

A DANGER

In operating areas with magnetic fields that have a magnetic flux density greater than 5 mT, unintentional movements of the truck or hydraulics cannot be entirely excluded under unfavourable circumstances.

For magnetic fields with magnetic flux densities greater than 5 mT, components developed especially for this purpose must be used.

Contact your local authorised service partner.

Only areas authorised by the operating company or his representative can be used for transportation purposes. Loads may only be stacked or stored in the specified locations.

Travel routes

Travel routes should be well laid and remain flat and free of obstructions. Deal with drainage channels and rail track intersections, etc. by levelling them, if necessary using a ramp to cover them, so as to minimise the risk of collisions occurring when the vehicle passes over them.

The industrial vehicle can only travel along routes that are free from sharp turns, steep ramps, narrow passages and low ceilings.

The industrial vehicle must not travel on ramps that exceed the maximum gradient specified by the manufacturer, and the driving surface must be sufficiently adherent. Flat and smooth transitions at the upper and lower ends of ramps can prevent the load from contacting the ground or damage being caused to the chassis.

Do not exceed permitted zones and point loads of travel lanes or routes. Maintain a sufficient gap between the highest part of the industrial vehicle or load and fixtures in the surrounding area.

Comply with EU Directive 89/654/EEC (minimum safety and health requirements for the workplace). In non-EU countries/regions, comply with the corresponding national regulations. If necessary, use conventional road traffic signs or other warning signs to mark danger points along travel lanes or routes.

When driving on public roads, you must comply with the relevant laws and regulations as well as country/region-specific restrictions with regard to winter road conditions.

Fire prevention measures

The operating company is responsible for adopting appropriate fire prevention measures in the vicinity of the industrial truck. The operator is responsible for adopting additional fire prevention measures on the industrial truck, depending on how the industrial truck is used. If you have any questions, please contact the responsible supervisory authority.

If the truck is equipped with a fire extinguisher, the driver must be fully aware of how to use it. Instructions for use are provided on the fire extinguisher.

Attachments

Attachments may only be used after obtaining a permit. Drivers must be instructed in the operation of the relevant attachment.

The attachment operating instructions are enclosed for trucks delivered from the factory with attachments. Before commissioning a truck with an attachment, you must check that loads are handled safely. It may be necessary to make adjustments, depending on the type of attachment, e.g. to pressure settings or adjusting stops and operating speeds. Corresponding instructions can be found in the attachment operating instructions.

If the industrial vehicle is not delivered with attachments, you must comply with the specifications of the industrial vehicle manufacturer and accessory manufacturer.

Power connection of powered attachments must only be carried out by specialists in accordance with the manufacturer's specifications. Whenever an attachment is installed, it





Hazard assessment

should be checked before first use to ensure that it is functioning normally.

Do not exceed the permissible load capacity of the attachment or the permissible load of the industrial vehicle and attachment combination (load capacity and load torque). Refer to the attached load capacity plate for attachments.

Modifications, in particular attachments or modified parts, are not permitted to be made to the industrial vehicle without the manufacturer's approval.

The fork extension should not exceed 1.5 times the length of the support fork.

Vehicle modifications

If the manufacturer is no longer in business and there is no successor to the business, the user may arrange for a modification or alteration to the truck, provided that the user:

- Arranges for the modification or alteration to be designed, tested and implemented by an engineer who is an expert in industrial trucks and the associated safety considerations
- Maintains a permanent record of the design, testing and implementation stages for the modification or alteration
- Makes appropriate changes to the designation plate, decals, tags and operation and maintenance manuals
- Attaches a permanent and easily visible label on the truck providing information about the manner in which the truck has been

Hazard assessment

In accordance with health and safety regulations, the employer is responsible for the safety and health of employees at work.

In Europe, Directive 89/391/EEC and the individual directives based thereon stipulate the minimum level of health and safety requirements. The directives are transposed into national law in the EU Member States. These can be expanded on a country-specific basis. modified or altered together with the date of the modification or alteration, and the name of the organisation that completed this work

Removing the assemblies

It is prohibited to change or remove the assemblies of the truck, especially those for the guards and safety devices. If in doubt, contact a service partner authorised by the manufacturer.

Wind load

When lifting, lowering and transporting bulky cargos, strong winds can affect the stability of the truck.

Light cargos must be firmly fastened when it is windy, so that cargos will not be slid or fallen.

Software updates via wireless transmission

Wireless transmission of safety updates, updates to features, or enabling of new features.

Safety updates are related to the safety of the industrial truck. These operations must be executed.

Newly enabled features can only be put into use after you have downloaded and read the operating instructions for the newly enabled feature from the manufacturer portal. If you need any support, please contact your service partner.

Countries outside the European Union also have regulations governing occupational health and safety. It is therefore essential to also observe national laws for health and safety.

For companies that operate industrial trucks, the hazard assessment is a key element in defining measures to eliminate or minimise the dangers connected with the operation of industrial trucks.

Improper use

If the application conditions or the equipment on industrial trucks change, the hazard assessment must be adjusted.

Important points for the hazard assessment include:

- Roadways
- Poor visibility for the driver when the industrial truck is laden
- · Working areas with hazardous materials
- · Danger areas

Improper use

The operating company or driver, and not the manufacturer, is liable if the truck is used in a manner that is not permitted.

A WARNING

One of the main causes of accidents is the driver ignoring or being unaware of the basic safe operating practices of the truck.

The following basic safe operating practices must be observed to ensure the safety of operators and others.

A DANGER

High risk of injury, death and property damage.

Avoid the use of prohibited substances

The list below is merely illustrative and not exhaustive.

Never operate the truck in environments with a potentially explosive atmosphere.

Do not carry another passenger (unless a "two-person seat" is installed).

Do not overload the truck (by exceeding the rated load indicated on the load designation plate). Overloading can affect braking distances, truck stability and the strength of the lift mast.

Do not pick up an off-centre load.

Do not stand on the fork arms when they are lifting.

Do not increase the load capacity of the truck, by adding extra weight, for example.

- Fire protection
- · Physical strain on the driver
- · Attachments used with the industrial truck

Detailed information is also available in the VDMA (Verband Deutscher Machinen- und Anlagenbau — German Mechanical Engineering Industry Association) guideline "Employer's Guide for the Safe Use of Industrial Trucks", see the chapter entitled "Foreword".

Do not stack loads or turn when driving on a ramp.

Do not operate the truck on loose or greasy surfaces.

Do not drive on uneven or obstructed surfaces.

Never park the truck in a place that may obstruct fire extinguishers, fire escapes or aisles.

Do not dismount from the truck while it is moving.

Do not leave the truck unattended when the load is raised.

Never leave the vehicle unattended on a ramp.

When driving, do not place any part of your body outside the confines of the truck, lean on the edge of the truck or attempt to jump onto another truck or object.

Do not use the forks or any other part of the truck to push, pull or support items, unless the design permits this.

Operating steps

Adjust your driving style based on the conditions of the route, especially in hazardous work areas and when transferring loads.

Always look in the direction of travel.

Look out for pedestrians, to prevent the possibility of them becoming trapped between the truck and fixed obstacles.





Always sound the horn when approaching blind spots.

The truck and attachments must only be used for authorised applications.

Follow the instructions in the user manual when transporting loads.

On a ramp: Ensure that the truck has sufficient ground clearance to avoid striking the surface of the ramp. • Fully raise the load to avoid striking the surface of the ramp.

Drive a loaded truck forward when going uphill.

Drive a loaded truck in reverse when going downhill.

When raising a spreader, ensure that there is enough clearance.

When working near overhead power lines, observe the safety distances set by the competent authorities.

Only travel on surfaces that can withstand the combined weight of the truck and load.

Symbols used

The terms DANGER, WARNING, CAUTION, NOTE and ENVIRONMENT NOTE are used in these operating instructions. They are intended to draw attention to specific dangers or unusual information that needs to be highlighted:

A DANGER

Means that failure to comply can risk the lives of others and/or cause major damage to equipment.

A WARNING

Means that failure to comply can result in the risk of serious physical injury and/or major damage to equipment.

A CAUTION

Means that failure to comply can result in the risk of major damage to equipment or destruction.

Before leaving the operator's driving position, turn off the ignition and make sure you have applied the parking brake.

When driving, maintain a safe stopping distance from any vehicle or pedestrians in front of you.

Drivers should move off, brake, turn and reverse smoothly. Avoid sudden stops, sharp turns and overtaking at dangerous or blind spots.

Ensure that there is adequate ventilation when using the truck in enclosed or partially enclosed areas.

Summary

A safe, competent operator is one who takes pride in the way they operate their truck, respects the goods they handle and follows the correct operating procedures. **They never take risks**.

This means that particular attention must be paid to the specific technical meaning because this may not be obvious, even to a specialist.

ENVIRONMENT NOTE

The instructions listed here must be complied with otherwise environmental damage may result.



This label is found on the truck in the areas where particular care and attention are required from the operator.

Refer to the appropriate section in these operating instructions.

Disposing of components and batteries

For your safety, additional symbols are also used. Please take these different symbols into consideration.

Disposing of components and batteries

The truck is composed of different materials. If components or batteries need to be replaced and disposed of, the national regulations must be observed with regard to:

- Disposal
- · Handling
- Recycling



The documentation provided by the battery manufacturer must be observed when disposing of batteries.

Description of use and climatic conditions

Normal use

- Indoor use.
- Drive on solid, flat and well-laid surfaces (includes travelling and lifting).
- ➤ Ambient temperature of +5°C to +40°C.
- > Use at up to 2000 m above sea level.



We recommend working with a waste management company for disposal requirements.





Technical description

The series 1132 electric pallet trucks, including T14B, have a rated load weight of 1400kg.

Design

The latest ergonomic and practical design, adaptable to all operators and working conditions.

The polyurethane cowling provides superior stability and shock resistance, and has a variety of storage spaces.

The chassis is made of thick steel plate and is suitable for the harshest working conditions.

Steering system

Extremely smooth steering makes the vehicle easier to manoeuvre in tight spaces.

A gas spring enables the tiller to quickly return to the vertical position after it is released.

Tiller

The composite construction tiller head provides excellent impact resistance.

The ergonomic control layout is suitable for left-handed and right-handed operators. The push-buttons for the horn, lifting and lowering and initial lift can be operated using one hand without changing grip.

The crash protection button integrated into the tiller head protects the operator if the truck recoils.

Driving

The MOSFET electronic control unit ensures comfortable use and lower costs.

Precise, load-independent travel.

Jolt-free starting and smooth acceleration to maximum speed.

Simply release or turn the drive direction switch to brake.

Booster circuit prevents the truck rolling back when starting on a gradient.

Hydraulic system

The gear pump is driven by a fully enclosed air-cooled motor.

Safety valve and lowering brake protect the hydraulic system.

Brake system

The electromagnetic brake with dust protection function can be used as a safety brake and parking brake. Braking is controlled by the drive controller: the brake's electromagnet acts on the motor shaft and simultaneously cuts off the power. Automatic braking is activated when the tiller is in the horizontal or vertical position (end stop brake).

Battery

The power supply is provided by the standard lithium-ion battery.

The display unit displays the battery's remaining charge.

Technical description



2

Safety

Safety guidelines



Safety guidelines

The operating company or the person it has commissioned must ensure that the driver understands all safety information and that all directives and safety regulations are observed.

During training, drivers must familiarise themselves with the following:

- The operating conditions of the working area
- The specific technical characteristics of the industrial truck
- · The operation of attachments

Driving, control and steering operations must be practised with an unladen industrial truck until they are completely mastered. Only then may a laden industrial truck be used for practice.

Operating safely

A DANGER

The industrial truck must not be used by unauthorised persons.

Only persons who are trained, authorised and commissioned to operate the industrial truck may have access to the industrial truck.

Controlled access is possible via the switch key or an input unit with a keypad or with a transponder.

A DANGER

Risk of fatal injury due to insufficient visibility.

Trucks may only be operated if the driver has sufficient visibility.

- Ensure that there is sufficient light in the working area or use working spotlights.
- Glare caused by lighting (e.g. clipboard lighting). If necessary, adjust or switch off the lighting accordingly.
- The windscreen, rear window, roof panel and side windows as well as the rear-view mirror and lighting must be cleared of misting and, if necessary, dirt, ice and snow before driving off.
- For trucks with a driver's cab without a heating system or without air conditioning, the driver must ensure that they have a clear view by ventilating the cab during operation.

A DANGER

Safety systems (e.g. the seat switch) are in place to ensure safety.

Under no circumstances may any safety systems be disabled.

A DANGER

Risk of fire due to hot exhaust gases!

Exhaust gases become so hot that materials in the immediate vicinity may smoulder or burn.

Deposits of combustible materials may ignite in the vicinity of hot components, e.g. exhaust pipes.

- Observe the following courses of action!
- Maintain an appropriate safety distance between combustible materials and the exhaust gas outlet.
- If materials start to burn, take appropriate fire extinguishing measures immediately.
- Remove deposits on hot components.
- > Keep away from flammable liquids.

A WARNING

Risk of burns due to hot exhaust gases.

Exhaust gases and exhaust-gas-routing components become so hot that direct body contact can cause burns.

Do not touch hot components.

Various pieces of special equipment are connected to the "speed reduction" special function. This is purely an assistance function, and the driver must not rely solely on this function during operation.

The driver is always responsible for safe operation.

If the truck is equipped with a fire extinguisher, make sure that you familiarise yourself with how to use it in the event of an emergency. Instructions for use are provided on the fire extinguisher.



Safety guidelines

Working on the truck

A DANGER

Any additional bores or welding on the overhead guard will compromise its rigidity.

It is therefore strictly prohibited to drill bores in the overhead guard or to perform welding work on it.



🛦 WARNING

Depending on the duration of use and operating time, components carrying exhaust gases and exhaust air may become hot.

Protective equipment must therefore be worn.

A WARNING

In trucks with an accumulator, serious injuries may occur if the accumulator is handled incorrectly.

Before starting work on the accumulator, it must be depressurised.

Contact your service partner.

A CAUTION

Welding operations on other parts of the truck can cause damage to the electronics.

Therefore, always disconnect the battery and all connections to the electronic controls before performing any welding work.

A CAUTION

Various functions are supported by gas springs. Gas springs are subjected to a high internal pressure of up to 300 bar.

Gas springs may be removed only when they are not under tension, and must never be opened without prior instruction. Any kind of damage, lateral forces, buckling, temperatures in excess of 80°C and heavy contamination must be avoided under all circumstances.

Damaged or defective gas springs must be replaced immediately.

Contact your service partner.

Safety information for electromagnetic compatibility

A WARNING

In operating areas with magnetic fields that have a magnetic flux density greater than 5 mT, unintentional truck movements and lift mast movements cannot be entirely excluded in unfavourable circumstances.

For magnetic fields with magnetic flux densities greater than 5 mT, components developed especially for this purpose must be used.

Contact your service partner.

Magnetic flux densities greater than 5 mT can occur in induction furnaces for metal smelting (e.g. aluminium), with resistance welders for seam or spot welding, or on strong demagnetisation coils, for example. However, as the flux densities reduce to a fraction as the distance increases by e.g. 50 cm, actual influences are not known to occur in practice.

Electromagnetic radiation emitted by the industrial truck is far below the permissible limit values in Europe. The immunity to electromagnetic radiation is above the minimum legal values.

A WARNING

If a driver has active medical equipment such as a pace maker, defibrillator, cochlear implant, insulin pump or hearing aid, there is a possibility that the capabilities of the driver could be impaired.

The operating company must take drivers whose capabilities are restricted due to implanted or bodyworn medical equipment into account in the hazard assessment. The instructions of the physician and of the manufacturer of the medical equipment must be followed.

WARNING

Risk from non-ionising radiation from retrofitted devices (e.g. radio transmitter).

Persons with active or non-active implanted medical equipment must not be exposed to excessive nonionising radiation from the electromagnetic fields of retrofitted devices.

The guidelines from the respective device manufacturer must be followed. If necessary, fit a notice warning about non-ionising radiation within the field of vision of the driver.

Residual risks



Residual risks

Despite careful work and compliance with all applicable standards and regulations, the possibility of other dangers when using the industrial truck cannot be entirely excluded.

The industrial truck and its possible attachments comply with current safety regulations. Nevertheless, even when the truck is used for its proper purpose and all instructions are followed, some residual risk cannot be excluded.

Even beyond the narrow danger areas of the industrial truck itself, a residual risk cannot be excluded. Persons in the area around the industrial truck must exercise a heightened degree of awareness, so that they can react immediately in the event of any malfunction, incident or breakdown.

A DANGER

Persons in the vicinity of the industrial truck must be instructed with regard to the dangers that arise through use of the truck.

These operating instructions also contain additional safety regulations.

Residual dangers can include:

- Escape of consumables due to leakages or the rupture of lines, hoses or containers,
- Risk of accident when driving over difficult ground such as gradients, smooth or irregular surfaces, or with poor visibility,
- Risk of falling, tripping, slipping etc. during movement of the industrial truck, especially in the wet, with leaking consumables or on icy surfaces,
- Risk of fire and explosion due to the battery and electrical voltages,
- Human error,
- · Disregarding the safety regulations,
- · Risk caused by unrepaired damage,
- Risk caused by insufficient maintenance or testing,
- Risk caused by using the wrong consumables.

Stability

Stability is only guaranteed if the industrial truck is used according to the indicated recommendations.

It is not guaranteed in the event of:

- > cornering at high speeds
- moving with a load that is protruding to the side (e.g. sideshift)
- turning and driving diagonally on descents or ascents
- driving on descents or ascents with the load on the downhill side
- Ioads that are too wide or too heavy
- driving with an unstable load
- > ramp edges or steps.

Noise level

This value is calculated during testing cycle according to the EN 12053 standard.

Noise level at the driver's ear:



Model	Noise level	Uncertainty
T14B	L _{pAZ} = 66 dB(A)	$K_{PA} = \pm 4 \text{ dB}(A)$

i NOTE

Lower or higher noise levels may occur when using the pallet truck due to differences in the mode of operation, environmental factors and other sources of noise.



EMC - Electromagnetic compatibility

EMC - Electromagnetic compatibility

Electromagnetic compatibility (EMC) is a key quality feature of the truck.

EMC involves

- limiting the emission of electromagnetic interference to a level that ensures the troublefree operation of other equipment in the environment.
- ensuring sufficient resistance to external electromagnetic interference so as to guarantee proper operation at the planned usage location under the electromagnetic interference conditions to be expected there.

An EMC test thus firstly measures the electromagnetic interference emitted by the truck

Operating company

The operating company is the natural or legal person who operates the truck or on whose authority the truck is used.

The operating company must ensure that the truck is only used for its proper purpose and in compliance with the safety regulations set out in these operating instructions.

The operating company must ensure that all users read and understand the safety information.

Drivers

Trucks must be driven only by persons who:

- · Are at least 18 years of age
- Have been trained in performing this task
- Have demonstrated their ability to perform this task, e.g. driver's licence

Specific knowledge of the truck to be operated is also required.

The contract for driving a truck must be provided in writing. Observe the national regulations for your country. and secondly checks it for sufficient resistance to electromagnetic interference with reference to the planned usage location . A number of electrical measures are taken to ensure the electromagnetic compatibility of the truck .

The EMC regulations for the truck must be observed.

When replacing truck components the protective EMC components must be installed and connected again.

The operating company is responsible for the scheduling and correct performance of regular safety checks.

We recommend that the national specifications for the performance of safety checks are observed.



A driver's licence for public roads is required in order to drive industrial trucks on public roads. Observe the national regulations for your country.

Rights, duties and rules of behaviour for the driver

The driver must:

- · Be informed of his rights and duties
- Wear sturdy footwear to ensure safe driving and braking
- Wear protective equipment appropriate to the application conditions (protection suit,



Competent person

safety shoes, safety helmet, protection goggles, gloves)

- Have read and understood the operating instructions
- Have familiarised themselves with safe operation of the truck
- Be physically and mentally able to drive the truck safely

A DANGER

Risk of fatal injury due to impaired reactions!

Do not perform any work on or with the truck while under the influence of drugs, alcohol or medication that impair your reactions.

Prohibition of use by unauthorised persons

The driver is responsible for the truck during working hours. He must not allow unauthorised persons to operate the truck.

When leaving the truck, the driver must secure it against unauthorised use, e.g. by removing the key.

Competent person

A competent person is a specialist in the field of industrial trucks who has:

- Successfully completed training, as at least
 a service engineer for industrial trucks
- Many years of professional experience with industrial trucks
- Knowledge of the accident prevention regulations
- Knowledge of the relevant national technical regulations

Regulations

Regular safety inspection

Periodic safety inspections are essential to keep your truck safe and in good working order.

Observe the national regulations for your country.

Europe: National laws based on Directives 95/63/EC, 99/92/EC and 2001/45/EC require that the truck is checked regularly by a competent person to ensure that it is in good condition.

Germany: Ordinance on Industrial Safety and Health (BetrSichV).

China: National Standard GB 10827.1-2014 of the People's Republic of China.

The competent person is able to assess the condition of industrial trucks in terms of health and safety.



Handling consumables

Recommendation FEM 4.004 of the European Industrial Truck Association sets out the scope of the inspection. It defines a test log to document the current inspection and an inspection sticker for the next inspection. The next inspection is shown by year number (3) on sticker (2), the colour of which changes each year on (1). The scope of the inspection is extended by Linde in accordance with the specific truck type. Please ask your authorised service partner to carry out this work.



Handling consumables

ENVIRONMENT NOTE

Consumables must be handled properly and in accordance with the manufacturer's instructions.

- Consumables must be stored only in containers that comply with the applicable regulations and at the locations stipulated
- Do not allow flammable consumables to come into contact with hot objects or naked flames
- When topping up consumables, use only clean containers
- Observe the manufacturer's instructions relating to safety and disposal
- Avoid spillages
- Clean up spilled liquids immediately using suitable binders; dispose of these in accordance with regulations
- Old and contaminated consumables must be disposed of in accordance with the applicable regulations

- · Comply with the statutory provisions
- Before performing lubrication work, filter changes or any work on the hydraulic system, carefully clean the area around the relevant part
- Dispose of used spare parts in an environmentally responsible manner

A WARNING

Pressurised hydraulic fluid penetrating the skin, e.g. due to leakage, is dangerous. If an injury of this type occurs, consult a doctor.

> Wear protective equipment.

WARNING

The improper handling of coolant and coolant additives presents a risk to health and the environment.

> Observe the manufacturer's instructions.

3

Views





General view



d1132302 A

- Tiller 1
- Emergency off switch Battery charge indicator 2 3 4 5 6 7
- Outer cowling Fork arms
- Rollers
- Battery charging cable

- Traction motor cover 8
- 9 Cylinder
- 10 Drive wheel
- Hydraulic station Safety switch Butterfly switch
- 11 12 13



Operating devices



- Creep speed switch 1
- 2 3
- Display unit Key switch Fork arm lifting button Horn button 4 5

- Drive direction switch 6
- 7 Safety reverser
- 8 Fork lowering button
- 9 Tiller



Label summary diagram

Label summary diagram



- 1 Please read user manual label
- 2 3 Model label
- Nameplate
- 4
- Risk of trapping hand label Warning label: "The charging plug must be unplugged before driving the truck" 5
- 6 Label text, Linde
- 7 Model label
- 8 Lithium-ion battery sticker ION

- 9
- 10
- Hoisting point label "No step" symbol Charging plug symbol 11
- 12 Hazmat label (for lithium outlet)
- 13 Importer label
- 14 Made in China label (for UK)
- 15 Safety shoes required label
- 16 Emergency off switch warning icon



Display unit

Display unit



No.	Name	Function
1	Battery charging indicator light	10 bars: 91%-100% 2 bars: 11%-20% (limited lifting function, battery indicator flashing) 1 bar: 1%-10%
2	Fault indicator light	When the fault indicator lamp (2) and the digits (3) are illuminated simultaneously, this indicates a fault with the truck. The number (3) represents the fault code. The fault code should be used to troubleshoot the fault
3	Figure	The specific operating hours or fault codes are displayed
4	Operating hours indicator	When the operating hours indicator (4) and number (3) light up at the same time, number (3) represents the number of operating hours
5	Creep speed indicator	The truck is in creep mode when the indicator is lit up

Display unit



In the event of a fault, the operating hours indicator and the error code will light up alternately.
4

Operations

Inspections before first use



Inspections before first use

Drive mechanism and transmission system			
Check the drive direction switch			
Check the fork lifting/lowering function			
Check the functionality of the emergency off switch			
Check that the steering unit is working properly			
Check that the brake is working properly			
Driver's compartment			
Check that the safety reverser is working properly			
Check that the horn is working properly			
Check that the display unit is working properly			
Electrical system			
Check the battery charging status			
Check that the battery is locked properly			
Check that the battery cover is closed correctly			
Hydraulic system			
Visually inspect the truck for oil leaks			

Break-in period precautions

During the initial stage of putting the truck into use, it should be operated with low loads. Within the first 100 hours in particular, the following requirements should also be met:

- Excessive discharge of a new battery during initial use must be prevented. It should generally be charged promptly when at 20%.
- The specified preventive maintenance must be done thoroughly.
- Avoid sudden braking, driving quickly or sharp turns.

- Change oil or lubricant promptly according to the instructions.
- Limit the load weight to 70-80% of the rated load.

A CAUTION

When the truck is in the running-in stage (approx. 100 hours of operation), the equipment user should check the fastening of the wheel nuts and bolts and refasten them if necessary.

Pre-shift checks

Carrying out the following checks as part of your daily routine will help to keep the forklift truck in good condition. These checks



are supplemental and do not replace periodic maintenance work.

i NOTE

If, when carrying out the daily checks, you discover a defect or you are unsure whether the truck will function properly, do not use the truck and contact the technical service department.

Daily inspection items

Daily inspection items

Drive mechanism and transmission system			
Check the drive direction switch			
Check the fork lifting/lowering function			
Check the functionality of the emergency off switch			
Check that the steering unit is working properly			
Check that the brake is working properly			
Driver's compartment			
Check that the safety reverser is working properly			
Check that the horn is working properly			
Check that the display unit is working properly			
Electrical system			
Check the battery charging status			
Check that the battery is locked properly			
Check that the battery cover is closed correctly			
Lifting system			
Visually inspect the condition of the fork arms			
Hydraulic system			
Visually inspect the truck for oil leaks			





Operating instructions

This truck is designed for use in indoor environments.

See instructions in the section "Description of Use and Climate Conditions".

The location for use of the truck must comply with applicable specifications (ground conditions, lighting etc.).

The truck must be used on dry, clean and flat ground.

Before using the truck, it is essential to check the working environment. This check can be a visual inspection.

The work area must be clear. The truck's path must be free of obstacles and people.

The operator must be alert to anything that might prevent manoeuvres from being carried out safely. The following can create a danger:

- · A person near the truck
- The driver must not use MP3 players or any other electrical equipment that could impair awareness of their surroundings.
- There must be no signs of oil or grease on the floor.

The driver must take care when transporting loads. Load dimensions can interfere with manoeuvres and restrict field of vision. Truck speed must be reduced, as a truck could tip over when braking or cornering.

Loads must be consistent, with a maximum recommended height of 2 m.

For uses other than those shown above, please consult an authorised service partner.

It is important to use pallets that are in good condition.

Truck speed must be reduced when passing obstacles to prevent loss of truck balance and vibrations in the driver's arms.

Trucks can drive across ramps and shallow inclines. Initial lifting can improve ground clearance, enabling the truck to drive over larger obstacles.

A WARNING

There is a risk of destabilisation.

Always adapt driving to the ground conditions (uneven surfaces etc.), particularly hazardous working areas and the load.

- To prevent the bottom of the load lifting system from scraping on the ground, always move the fork arms to the raised position before switching on the truck.
- Always remember to switch off the key switch before exiting the truck.

There is a risk of injury.

Never take your hands off the tiller. Never put your hands near moving components and kits without first lowering the fork arms to the ground and disconnecting the battery.

For effective protection, operators must wear safety shoes.

WARNING

Driving safety guidelines:

- Drivers must drive slowly around corners and when entering narrow passageways.
- Drivers must always maintain a safe braking distance from vehicles or persons in front of them.
- Drivers must avoid stopping suddenly, making U-turns too quickly and overtaking in hazardous areas with poor visibility.



Setting the drive direction

Setting the drive direction

On a pallet truck, the controls for the drive directions include:

- Forward travel (1)
- Reverse travel (3)
- Drive to the left (4)
- Drive to the right (2)



Starting

- > Pull the emergency off switch (1).
- Insert the key into the switch (2) and turn the key clockwise to switch on the truck.
- The display unit on the tiller (3) is activated and illuminated.
- Raise the fork arms a few centimetres off the ground.

Always adjust your speed to suit your route, any hazards and the load. Use the pallet truck on ground that has the correct surface and hardness.





Forward travel/reverse travel

Forward travel/reverse travel

Forward drive

Pull the emergency off switch and turn on the key switch.



- Push the tiller down into the drive zone (3).
- Gently and slowly push the drive switch (4) in direction (B) with your thumb.
- The truck will slowly move forwards in the same direction as the drive switch.

In zones (1) and (2), regenerative braking is applied; when the driving speed is reduced to the set value, electromagnetic braking is applied, and the truck cannot be driven.

Reverse travel

- Insert the battery male connector.
- Pull up the emergency off switch and turn on the key switch.
- \succ Push the tiller into the drive zone (3).
- Gently and slowly press the drive switch (4) towards direction (A) with the thumb.
- The truck will slowly move backwards in the same direction as the drive switch.



Steering system



In zones (1) and (2), regenerative braking is applied; when the driving speed is reduced to the set value, electromagnetic braking is applied, and the truck cannot be driven.

Steering system

The pallet truck is equipped with a mechanical steering unit that can be controlled with the tiller (1).

The mechanical steering unit enables the tiller to be manoeuvred gently and precisely with only one hand.

The length of the tiller is designed for pedestrian driving.

WARNING

Risk of damaging the truck

Never use the pallet truck if the steering system is faulty.

A WARNING

There is a risk of tipping.

Approaching a tight corner too fast can cause the truck to overturn.

Always slow down before negotiating a corner.







Changing the drive direction

Steering directions in forward travel

Turn the tiller clockwise: The pallet truck will turn to the right (D).

⊳

Turn the tiller counterclockwise: The pallet truck will turn to the left (G).

The turning radius (Wa) depends on the length of the forks and the position of the platform. (See Technical Datasheet).

Changing the drive direction

You can change the drive direction when the truck is in operation.

- Release the drive switch (1).
- Push the drive switch in the opposite direction.

When changing the drive direction, the truck is braked electrically until it stops, then drives in the opposite direction.

The maximum speed reduction is controlled by the control module.



Safety reverser



Safety reverser

To protect the driver from any risk of being trapped between an obstacle and the truck, the end of the tiller is fitted with a safety reverser (1).

- Push the safety reverser switch (1) when the truck is driving in the direction of the tiller.
- The truck will stop immediately and then move in the direction of the fork arms at slow speed.
- Release the safety reverser (1) and the truck stops.



Emergency off switch

Push the emergency off switch.

In the event of an emergency, push the emergency off switch (1), which will fully shut down the truck's electrical system.

WARNING

To completely disconnect the truck's power supply (e.g. for maintenance work), the battery plug must be unplugged.

Pulling up the emergency off switch

During normal operation, pulling up the emergency off switch (1) will start the truck's electrical system.

The truck is only operational after correctly pulling up the emergency off switch.





Horn

The horn button (1) is located on the top of the tiller.

Occasions for using the horn:

- · On roads where drivers have poor vision
- · At the crossroads
- · In case of emergencies or dangers
- > Press the horn button (1) to sound the horn.



Using the truck on ramps

A CAUTION

Excessive use of the truck on ramps is not recommended. Using the truck on ramps places particular stress on the traction motor and battery.

The truck's working range and safety factor will both be restricted.

Be particularly careful near slopes:

- Never attempt to drive on a ramp with a slope greater than the maximum slope on which the truck can drive (see technical datasheet).
- Make sure that the ground is clean and has a non-slip surface, and that the route is clear.
- Traverse ramps in one go, and do not stop, turn around or drive diagonally on ramps.

Using the truck on ramps

Ascending ramps

To ascend with a load, you must travel in reverse (the load must be oriented uphill).

If there is no load, you can also ascend in the forward direction.



Descending ramps

⊳

A DANGER

Risk to life and/or risk of serious damage to equipment.

Never park the truck on a ramp. Never make a Uturn or take shortcuts on a ramp. The operator must drive very slowly on ramps.

A WARNING

Risk of serious injury and/or serious damage to equipment.

For safety reasons, do not park a loaded truck on a ramp with a slope greater than 10%.

To descend with a slope, always travel in the forward direction (the load must be oriented uphill).





Using the truck on ramps

If there is no load, descending in the forward direction is recommended.



Starting to move on a ramp

If it is necessary to stop and restart the truck on a ramp, follow the procedure below:

- Move the drive switch back to the neutral position and apply the parking brake to stop the truck.
- When you restart, push the tiller down into the drive zone (3) and push the drive switch in the required direction.
- > The truck will start.



Creep speed function



Using the creep speed function, the truck can manoeuvre in confined spaces.

Creep speed driving with tiller in upright position (upright driving function)

Keep the tiller in a vertical position.

Push the creep speed button (1) (tortoise icon) on the tiller. Keep pushing the button.



The creep speed indicator light (2) will be illuminated on the display unit.

 \triangleright

Gradually push the forward or reverse drive direction switches based on the operations that need to be performed.

- The driving speed is approximately 1.5 km/h. Please contact an authorised service partner if you need to change the settings.
- When the tiller is in the driving position, the creep speed function is automatically invalidated.
- Release the creep speed button (1) and the creep speed indicator light (2) on the display unit will turn off, exiting creep speed driving mode.

A CAUTION

Danger of operator entrapment.

Adjust the truck speed by gradually pushing the drive direction switch. This can prevent the truck from moving towards the operator too quickly.

NOTE

If the operator releases the creep speed button and/or the drive direction switch, the tiller reapplies the brake when in the vertical position.







Braking

To enter the creep speed drive mode with the tiller in the upright position, the tiller must be first pushed down into the operating zone and then returned to the upright position after the truck is powered on for the first time.

Braking

Electromagnetic brake

The electromagnetic brake is automatically activated if any of the following conditions is met: ⊳

- A serious malfunction is detected while driving.
- Push the emergency off switch.
- · The drive switch is in the neutral position
- When the tiller is in the upper zone (1) or lower zone (2) and the driving speed is reduced to the set value

Regenerative braking

When driving the truck, if you release the drive switch or push the drive switch in the opposite direction, regenerative braking will automatically be applied.

Release the drive switch:

> Fully release the drive switch when driving.

Change the drive direction:

- Press the drive switch to (A) or (B).
- Press the drive switch for the opposite direction when driving.
- > Release the drive switch.

When the tiller is in the upper zone (1)or lower zone (2), regenerative braking is automatically applied.



Lifting/lowering of fork arms

Lifting/lowering of fork arms

I NOTE

Always place both hands on the tiller when lifting or lowering the fork arms.

A CAUTION

Do not hang objects on the tiller.

Lift the fork:

- > Push the tiller down into the operating zone.
- Push the lifting buttons on either side (1) to lift the fork arms.

Lowering the fork arms:

- > Push the tiller down into the operating zone.
- Push the lowering buttons on either side (2) to lower the fork arms.

Working with loads

A CAUTION

Before picking up a load, make sure that its weight does not exceed the carrying capacity of the truck.

- Refer to the rated load capacity specified on the truck's nameplate.
- In addition, you must ensure that the load remains stable, balanced and reliably attached to the two fork arms, and that it is centred between the two fork arms, to avoid dropping part of the load.
- Check that the width of the load is suitable for the width of the fork arms.
- Check and ensure that the load is intact.

A CAUTION

There is a risk of injury.

You must wear safety footwear.

Transporting people is strictly prohibited.











Working with loads

A DANGER

There is a risk of tipping.

You must reduce the speed when cornering or when on wet surfaces.

A CAUTION

Arrangement of loads

Do not touch nearby loads, or loads that are next to or in front of the load to be moved.

There should be a small amount of space between the loads to prevent them from scratching each other.

Lifting a load from the ground

- > Approach the load carefully.
- Lower the fork arms until they can easily be inserted into the pallet.
- > Insert the fork arms below the load.
- If the load is shorter than the fork arms, one end of the load can hang over the end of the fork arms by a few centimetres. These precautions can prevent scratching of the load in front of it.
- Raise the load a few centimetres above the ground.
- > Slowly remove the load in a straight line.



Working with loads

Transporting a load

unde Material Handling

⊳

A DANGER

Danger of accidents

When driving in the direction of the fork arms, the load must not obstruct the driver's field of vision.

- When traversing ramps with a load, whether ascending or descending, always make sure that the load is facing uphill. Never cross ramps diagonally or make U-turns on ramps.
- To avoid obstacles, raise the fork arms slightly to increase the ground clearance.

A CAUTION

Never drive the truck with the fork arms loaded and the forks lowered to the position-related traction cutout.

Placing the load on the ground

- Carefully drive the truck to the intended location.
- Carefully place the load in the intended zone.
- > Lower the load until the fork arms are free.
- Drive back the truck in a straight line until the forks are completely clear of the load.
- > Lift the fork arms by a few centimetres.

A CAUTION

Be careful not to touch nearby loads or those behind the truck.

A DANGER

Danger of accidents

Ensure that there is no one under or near the pallet when the load is in the high position.







Jacking up the truck

A DANGER

There is a risk to life if the truck tips over!

If not raised and jacked up properly, the truck may tip over and fall off.

Only the hoists specified in the workshop manual for this truck are allowed and are tested for the necessary safety and load capacity.

- Only have the truck raised and jacked up by the authorised service centre.
- > Only jack the truck up at the points specified in the workshop manual.

The truck must be raised and jacked up for various types of maintenance work. The authorised service centre must be informed that this is to take place.

Safe handling of the truck and the corresponding hoists is described in the truck's workshop manual.

Hoisting a truck

A DANGER

Risk of forklift fall-through

Only use slings and hoists with sufficient load capacity.

Check the weight of the vehicle (including the battery) to select suitable equipment.

See Technical Datasheet.

A DANGER

Risk of fall-through

When hoisting the truck, make sure that no one is under or near the truck.

Forklift truck transport

- Lower the forks.
- Turn off the truck and disconnect the battery plug.
- Remove any items that may fall on the truck.
- Protect all components that come into contact with the lifting device.
- Attach four 2 to 3 metre-long slings to each of the four hoisting points.
- > Connect hoisting equipment.



Never hoist the truck by the tiller.

> Carefully hoist the truck.

Forklift truck transport

WARNING

When transporting the truck, secure it correctly to avoid movement.

- > Lower the forks and park the truck safely.
- Hang a tension belt(1) on the truck and secure it to the securing ring of the transport vehicle.
- Use chocks to prevent the truck from moving.
- Tighten the tension belt(1) with a tensioner.

WARNING

The transport vehicle must have a retaining ring.

Use chocks to secure the truck.

Only use a tension belt or fastening belt of sufficient strength.









Transporting faulty trucks

If required for long-haul pallet trucks, the truck must be transported on a forklift or trailer using a lifting device or platform. Before operation, securely belt the pallet truck to the transport vehicle and block the wheels to avoid relative movement during transport.



Transporting faulty trucks

In the event of truck malfunction or damage, it is not permitted to tow the truck directly on the ground, as the truck brakes are normally switched off and should be released first.

The faulty truck may be transported as follows.

Place the truck on a wooden pallet or secure the truck with wooden blocks. Use a rope to tie the fork blades and vehicle body.

Only use haulage equipment with sufficient load capacity.

- The load weight is greater than the net weight of the truck (including the battery weight).
- The load weight does not just include the net weight of the truck, it also includes the wooden pallet.
- The pallet or wooden box should be large and strong enough to withstand the weight of the truck.
- Pay attention to the fork blades when lifting the truck onto the pallet, to prevent injuries caused by the fork blades trailing on the ground.



Before leaving the truck

Follow the prescribed steps and park the vehicle correctly.

A CAUTION

Operate on open, level ground and pay attention to ground conditions when lifting and lowering the pallet to prevent the truck from tipping.

When transporting the truck, make sure it is fully secured and take precautionary measures against bad weather.

Before leaving the truck

[

Whenever the driver leaves the truck, it must be properly parked in accordance with specifications, even if you are only exiting for a short period of time.

A DANGER

Risk of injury!

It is prohibited to park the truck when the lifting system is still in the raised position.

A CAUTION

Always park the truck in accordance with specifications.

Never park the truck on a ramp.

- Choose a safe and flat location.
- Set down the load and lower the fork carriage completely.

The fork arms must be lowered to the lowest position.

- > Apply braking.
- Turn the switch key (2) counterclockwise to switch off the truck.
- \succ Press the emergency off switch (1).
- When exiting the truck, remove the key from the switch (2).
- If the truck will not be used for more than a week, unplug the battery.







Decommissioning and storing

Decommissioning and storing

- If the vehicle has been parked for more than a month, it must be placed in a dry, frost-free environment.
- > Clean the truck carefully.
- Check the hydraulic oil level and top up if required.
- Coat any unpainted metal parts with a thin layer of oil or grease.
- When not in use for long periods of time, try to remove the battery.
- Charge the battery regularly as required in the battery manual. This is to prevent it

Recommissioning after parking

- Clean the truck thoroughly.
- Lubricate the truck according to the lubrication diagram.
- Charge the battery.
- Check whether the hydraulic oil contains condensation water. Change the hydraulic oil if necessary.

from automatically discharging to a certain extent, and needing to be disposed of.

Lift and chock the truck: The wheels must not touch the ground, to prevent irreversible tyre distortion.

Follow the instructions above to ensure that the truck maintains good performance when it is put back into operation.

- > Carry out a functional test of the truck.
- Put the truck into service in accordance with the operational manual's instructions.



Disposal of old trucks



Disposal of old trucks

The disposal of old trucks is regulated in directive 2000/53/EC from the European Parliament and Council.

We therefore recommend having this work carried out in an approved recycling plant.

If you would like to carry out this work yourself, you must obtain approval from the relevant authorities as per articles 9, 10 and 11 of directive 75/442/EEC.

You must also observe the following minimum requirements:

- The locations where old trucks are stored must be areas that are suitable for this task. These areas must be equipped with waterproof surfaces. These areas must also be equipped with collection devices and separators for leaking fluids and degreasing cleaning materials.
- Processing areas must have the same features (waterproof surfaces, auxiliary devices)

for collecting and separators). In addition, there must be sufficient storage for disassembled parts with some oil staining and for the pneumatic tyres. Fire protection measures must also be taken. Storage tanks that are suitable for liquids such as hydraulic oil must also be provided.

- To dispose of harmful substances from old trucks, the batteries must be removed. Oils must also be removed, collected and stored separately.
- The following parts must be collected separately and recycled: metal components containing copper and aluminium, pneumatic tyres, large plastic components (consoles, fluid containers), etc.



The operating company is responsible for adherence to the directives as well as additional country-specific regulations.



Safety instructions

For trucks with lithium-ion batteries, special safety regulations must be observed. A lithium-ion battery label is attached to the truck.

For trucks with optional lithium-ion battery, separate instructions for use of the lithium-ion battery are provided with the vehicle.

- *Please read this lithium ion battery manual carefully before use.
- Follow the information in the lithium-ion battery operating instructions.

For your personal safety, please carefully read and observe the following lithium battery safety instructions:



Live device, do not touch!

Do not touch the positive and negative terminals of the battery compartment with both hands at the same time.



A DANGER

Do not rinse!

Avoid high-voltage components when washing the truck to avoid adverse consequences caused by contact with water.



No metal objects or watches!

Be sure to wear insulated gloves and not wear watches or other metal accessories when operating and maintaining the battery system.





A CAUTION

Flammable and explosive

The battery system should be working in an environment far away from highly corrosive or flammable substances and fire.

> Other Precautions for Lithium Batteries:

- Handle with care
- Up
- Keep away from any sources of heat or radiation
- Not suitable for moist environments
- Do not roll over
- · Keep note the temperature limits



Emergency handling plan

Scenario: Extreme emergency

In the course of using the truck, it is important to maintain safety awareness and avoid prohibited operations. Avoid abuse use of the battery system (overcharging, overdischarging, short circuit, squeezing, perforating, overly hot environments, large current discharging etc.). Common faults with the power battery system when charging or using the battery include:

- Rapid temperature increases with the battery system or local areas
- Any part of the battery system has an abnormal smell
- Any part of the battery system fumes or catches fire

Step 1: The driver should quickly exit the truck and call the police if the situation so requires.

Step 2: Implement the following operations as long as personal safety can be maintained:

1. If the battery wiring harness catches fire, extinguish the fire with a carbon dioxide or dry powder fire extinguisher.

2. If the battery catches fire, use a high-pressure water gun over a long distance to extinguish the fire.

3. If you should accidentally inhale smoke, leave the area immediately and seek medical attention.

Step 3: Contact the authorised service partner of the truck to get professional handling advice.

If the fire is caused by abnormal charging, be sure to switch off the power supply first and then proceed accordingly.





Instructions for using the battery system

Battery temperature properties

- Permissible ambient temperature for discharging: -20°C~55°C
- Permissible ambient temperature for charging: 0°C~45°C
- Ambient temperature for storage: 5°C~45°C

Checks before use

- Charge the battery to 100% before using the truck for the first time.
- After the battery is switched on, check that the display shows no battery system warnings.
- Check the residual charge before using the battery. It is recommended to use the battery when the SOC is between 50% and 100%.
- Do not use the battery if the SOC is below 20%. Please charge the battery as soon as possible.

A CAUTION

When you receive a prompt indicating low lithium battery level, charge the battery as soon as possible to avoid over-discharging, which may cause the battery to be unable to recharge. If the battery is unable to recharge after over-discharging, contact your authorised service partner for assistance.

Long-term storage

- Before long-term storage, make sure that the battery system has a battery level of 50% to 80%.
- Perform charge maintenance once every three months.
- Before using the battery system again after three months' storage, check the battery system for fault warnings. If there is any fault warning, contact your authorised service partner for maintenance.
- The storage environment should dry and ventilated, away from heat sources.

Checking the battery level

A CAUTION

Batteries that are discharged to below 20% of rated capacity are over-discharged. Over-discharging shortens the service life of the batteries and could render the battery warranty void.

When the charge is below 20%, it is not recommended to continue using the truck. Charge the battery as soon as possible.

Do not completely discharge the battery.

Charge the trolley immediately after use in a low-temperature environment below 0°C.

- \succ Pull the emergency off switch (1).
- > Turn on the key switch (2).





> Check the residual charge on the tiller display unit screen (3).

i NOTE

It is recommended to use the truck with a residual charge percentage (4) between 50% and 100%.

> Check the confirmation display screen for battery system malfunction messages.



Onboard charger



5

Serial number



Precautions for using on-board chargers

A DANGER

The housing of the onboard charger must not be opened, as there is a danger to life due to the high voltages inside.

In the event of non-compliance, the warranty will be voided.

When using the charging cable, keep the following in mind:

- Lay the charging cable without heavy mechanical stress, e.g. pulling.
- Protect the charging cable from mechanical stress. For example, no traffic routes may be or placed over sharp edges.
- Before using the charging cable, open the plugs and the connection sockets. Check for damage.

A DANGER

Plugs that are not fully plugged in can heat up excessively. They pose a fire hazard.

Always plug the mains plug and the vehicle plug of the charging cable completely into the respective plug in the socket.

A WARNING

Do not unplug the power supply under load, as it will wears excessively, thus creating a fire hazard.

If the power plug is to be unplugged before the end of charging, stop charging manually cancel beforehand.

If the charging plug is disconnected during charging (under load), an arc is created. This can lead to burn on the contacts, which significantly shortens their life-span and poses a fire hazard. In addition, the forklift electronics can be damaged by the resulting over voltage.

Lithium-ion battery charging

⊳



A DANGER

Improper charging may damage the battery or render it unusable.

Only use the manufacturer-approved charger to charge the lithium-ion battery.

See the lithium-ion battery user guide.

A CAUTION

If a malfunction warning appears during charging, both the battery system and the charger will stop charging.

When a malfunction appears, promptly contact your authorised service partner.

Before charging, park the truck in a safety area dedicated to charging.

- The charging environment should be dry and ventilated, with no flammable or explosive substances nearby.
- Lower the fork arms, unload the load and switch off the truck.
- Connect the battery charging plug on the truck to the charging power source. The battery will start charging.
- During the charging process, the charging indicator light (2) is illuminated.
- Charging indicator light flashes red: Charging is in progress.
- Charging indicator light is solid green: Fully charged.

To protect the battery, if charged when the charger level is above 75%, the charge level shown on the display unit will not be able to reach fully charged status

When the charge indicator light (1) turns green, the charger enters a floating status to protect the battery from damage.





When charging is complete, disconnect the battery charging plug from the charging power source.

Battery locking devices

Battery locking

Turn the knob to the locked state(1), the battery is locked.

A CAUTION

During operations to lock and insert the battery, keep your fingers away from moving components to avoid any risk of them being trapped.

We recommend the use of gloves.



Unlocking battery

Turn the knob to the unlocked state(2), the battery is unlocked.

A DANGER

Risk of injury

Do not use the truck when the battery is unlocked.

A CAUTION

Make sure the battery is correctly locked in position.

Once the battery is unlocked, it can be moved.

Only locking the battery correctly prevents it from being accidentally dislodged from its compartment.



Disassembling and installing the lithium battery

Risk of injury

Battery components are heavy and fragile. Please handle with care.

It is recommended to wear gloves and safety shoes.

A CAUTION

Danger of crushing.

When lowering the forks, make sure that your feet are not underneath a fork.

A CAUTION

Trapping hazard.

During operations to lock and insert the battery, make sure to keep your fingers away from moving components to avoid any risk of them getting trapped.

Immobilise the truck and lower the forks.

 \triangleright

- Switch off the truck, press the emergency off switch.
- Lift the upper cover plate and disconnect the power indicator connector.
- Disconnect the lithium-ion battery connector (1).
- Turn the battery lock knob to the unlocked state (2).
- Grasp the lithium-ion battery handle (3) and carefully pull the lithium-ion battery from the top.

A CAUTION

Before pulling out the lithium-ion battery, prevent the vehicle body from tilting to guard against the risk of unexpected tipping.



1320

2





- ➢ To install the lithium-ion battery, insert the lithium-ion battery into the battery holder.
- Turn the battery lock knob to the locked state (4).
- > Plug in the lithium-ion battery connector.
- Re-connect the charging indicator plug connector.
- > Close the upper cover plate.
- > The truck can be operated again.





Lithium-ion battery use and maintenance

General troubleshooting

Issue	Possible cause	Solution
The truck cannot be powered on.	The emergency off switch is pressed	Pulling up the emergency off switch
	The discharging plug connectors are not fitted into place and get loose.	Fit the plug connectors into place.
	The key switch is damaged.	Replace the key switch.
The battery cannot charge.	Physical connections are not com- plete or the charger is not connec- ted to a power source.	Check physical connections and connect the charger to a power source.
	The power battery is fully charged.	When the power battery is fully charged, charging will stop auto- matically.
	The power battery temperature is below 0°C or above 65°C.	Allow the battery to warm up or cool down before charging. Put the battery in an environment at an appropriate temperature and wait until the battery temperature becomes normal before charging.
	There is a fault with the charger or the truck.	If the power battery system fault indictor of the display unit is lit up, or if the display unit shows charg- ing system errors or charger er- rors, please stop charging immedi- ately and contact your authorised deal for assistance.

A CAUTION

If you encounter an issue that cannot be resolved, please contact your authorised service partner for assistance. Do not try to fix the issue yourself.



Lithium-ion battery: Transporting ▷ the battery

A "truck equipped with a lithium-ion battery" is transported in the usual manner. No additional measures and precautions are required.

A lithium-ion battery is a special product. Special measures must be taken when transporting the lithium-ion battery separately:

• The hazardous materials label with hazardous materials class 9 symbol (1) must be attached in a visible position on the transporting truck



- The applicable country-specific specifications and regulations must be observed when transporting a "truck equipped with a lithium-ion battery" and when transporting lithium-ion batteries separately
- The shipping company must have special knowledge about "transporting hazardous materials"



Special measures must be taken when transporting damaged lithium-ion batteries. For further information, contact your service partner.



Lithium-ion battery use and maintenance


5

Maintenance

General maintenance information



General maintenance information

General

The following instructions contain all the information required for servicing your truck. Carry out the various maintenance work in compliance with the maintenance plan. This will ensure that your truck is reliable and in good working order and that the warranty remains valid.

Maintenance should only be carried out by authorised technicians, or by authorised service partners in accordance with a signed maintenance contract.

Modifying or installing additional equipment on the forklift truck is prohibited without the agreement of the manufacturer.

If the data plates or affixed labels are incomplete or damaged, they must be replaced with new ones. For locations and reference numbers, please see the spare parts catalogue.

A CAUTION

If the forklift truck is used in an extreme environment (such as excessive heat, excessive cold or areas with high dust concentrations), the time intervals given in the maintenance tables should be reduced accordingly.



Please comply with regulations regarding the use, handling and disposal of fuel and lubricating oil.

The forklift must undergo functional testing and a trial run after each inspection.

Service plan

Maintenance work must be carried out according to the maintenance checklist.

The service plan is followed by advice to facilitate work.

Maintenance intervals must be reduced if the truck is used under harsh conditions (extreme heat or extreme cold, large quantities of dust).

Grade and quantity of lubricants and other consumables

Only lubricants and other consumables specified in these operating instructions are authorised for use during maintenance work.

Lubricants and other consumables required for truck maintenance are listed in the maintenance specifications table.

Never mix different qualities of grease or oil. If it is absolutely necessary to change brands, make sure to flush thoroughly beforehand.

Before changing any filters or working on the hydraulic system, thoroughly clean the surface and the areas around the part.

All containers used to pour oil must be clean.

Servicing and maintenance personnel training and qualification

Truck maintenance must only be carried out by qualified and authorised personnel.

The annual inspection for prevention of accidents at work must be carried out by a person qualified to do so. The person carrying out this inspection must provide their expertise and opinion without being influenced by economic factors or company internal issues. Safety is the only critical deciding factor.

The person responsible for carrying out the inspection must have sufficient knowledge and experience to be able to assess the condition of the truck and the efficiency of the protective installations in accordance with the



General maintenance information

technical regulations and principles established for checking industrial trucks.

Battery maintenance staff

Batteries must only be maintained and changed by specially trained personnel.

Personnel must follow the manufacturer's instructions of the battery, the battery charger and the truck. It is essential to follow the battery maintenance instructions and the battery charger operating instructions.

Maintenance operations that do not require special training

Simple maintenance operations such as checking the hydraulic fluid level or checking the battery electrolyte level can be carried out by persons with no special training.

A specific qualification is not necessary.

Complicated maintenance operations such as replacing the battery, replacing the wheels

and so on should be carried out by the authorised service centre.

Refer to the maintenance section of this manual for further information.



Inspection and maintenance data

Inspection and maintenance data

Components	Item/oil	Capacity/standard value
Main hydraul-	Hydraulic oil	0.6L
ic system	Maximum pressure	170 bar
Drive wheel	Wheel nuts	Tightening torque: 12 Nm
Stabilising wheel	Bolt	Tightening torque: 35 Nm (tightening and Calotai 243 glue)
Brake system	Electromagnetic brake air gap	0.3 mm to 0.35 mm
Transmission system	Gear oil (fill when gearbox is replaced)	0.044 kg
Chassis sys- tem	Lubricating grease	As necessary
F	F1	30 A
	F2	10 A

Recommended lubricating oils

A CAUTION

The use of non-recommended lubricating oils may damage the equipment.

Use only recommended lubricating oils. Only the lubricating oils listed below are approved by the manufacturer. Do not mix lubricating oils. If in doubt, contact your authorised service partner for replacement.

Hydraulic oil

Recommended lubricating oils for standard conditions:

ISO-L-HM 46 in accordance with ISO 6743-4, or ISO VG46-HLP in accordance with DIN 51524-2

Recommended lubricating oils for cold store version:

ISO-L-HM 32 in accordance with ISO 6743-4, or ISO VG32-HLP in accordance with DIN 51524-2

Gear oil

Lubricants recommended for gearbox replacement:

CLP PG220 is used according to DIN 51 517– 3

Multi-purpose grease

Lithium grease containing EP additive and MoS 2 **KPF 2 N - 20**, in compliance with DIN 51825 standards.

Used oil must be stored safely until it is disposed of in compliance with environmental protection measures. Make sure that no one can come into contact with the used oil. Do not dispose of used oil in drains or allow it to penetrate soil.



Regular maintenance



Regular maintenance

The following maintenance will help in improving the truck condition and ensure its functionality.

Complete this work as regularly as possible, in accordance with the operating environment.

- · Clean the truck (as required)
- · Check the balance wheels for wear
- Lubricate all connections and bearings of the truck
- Check the condition of the spring pins, snap rings
- Check the harness connections and tightness of electrical components and adjust tightness if needed
- Check the hydraulic cylinder and pistons for damage, noise and leaks

Lithium-ion battery

- · Clean the lithium-ion battery
- Check the housing appearance: Check the battery system housing for debris, obvious deformation, rust and other abnormal conditions
- Charging port: Turn off the battery system and check the charging port for debris, rust and other abnormal conditions
- Plug connectors: Turn off the battery system and check the plug connectors for looseness, damage or other abnormal conditions
- Check the display unit for lithium-ion battery error codes and make sure that the battery is in normal condition

If any problems are found during the inspection, please contact your authorised service partner.

Service plan table

Service plan table

Maintenance precautions

Servicing work requires specialised knowledge and special tools. Please contact an authorised service partner.

Preparations

Clean the truck (as required).

Check that all labels are complete and legible.

Perform maintenance every 1000 operating hours or at least every 12 months.

Chassis frame and transmission system

Check the gearbox for noise and leakages.

Check the wheels for deformation and damage.

Check the balance wheel for wear and replace if necessary.

Test the emergency stop function.

Test the reverse and regenerative braking function.

Check the steering function.

Chassis and bodywork

Check the chassis for deformation and cracks.

Check the panelling for deformation and damage, and replace if necessary.

Check whether all screws are tightened.

Check the connecting rod for deformation and damage.

Lubricate all connections and bearings of the truck

Check the condition of the spring pins and circlips and replace if necessary.

Driver's compartment

Check that the horn function is working normally.

Test the function of the (belly) safety button.

Check the function of the root switch.

Electrics-electronics









Service plan table

Perform maintenance every 1000 operating hours or at least every 12 months.

Check the cables for damage.

Check the function of the emergency off switch.

Check the electric traction motor for noise and damage.

Check that the display is working normally.

Check that the fuses are fastened.

Check the soft starter

Check the function and mechanical wear of the drive switch.

Check the harness connections and tightness of electrical components and adjust tightness if necessary.

Check the battery's voltage.

Check the terminals for corrosion and damage.

Check the battery housing for damage.

Check the main power cable for damage.

Check the startup protection function while charging.

Hydraulic system

Check the hydraulic cylinder and pistons for damage, noise and leaks.

Check the hydraulic connections and hoses for damage and leakage.

Check the hydraulic oil level and top up if necessary.

Lifting system

Check the fork arms for deformation and cracks.

Check the lifting and lowering function.

Subsequent tasks

Check that all labels are clear and complete.

Perform a test run.

Perform additional maintenance every 2000 operating hours or at least once every 2 years.

Hydraulic system

Change the hydraulic oil

Maintenance work

Maintenance work

Cleaning the truck

Disconnect the battery before cleaning.

Extreme care should be taken when using steam jet cleaners or products with strong decontamination effects. They may dilute the grease in the sealed lubrication bearings and the bearings cannot be relubricated. These cleaning methods damage the bearings.

A CAUTION

When using cleaning equipment, do not spray directly onto electrical and electronic components, electric motors, and insulation plates. Please protect these components before cleaning.

A CAUTION

Using compressed air

It is recommended to wear goggles and a protective mask

If using compressed air, first remove stubborn dirt with a cold cleaning material.

Before lubrication, please clean thoroughly: the cleaning material and grease filling opening.

- Oil filling opening and its surrounding areas
- Lubricating nipple

Dry the truck after cleaning.

If water still seeps into the motor after comprehensive protective measures are taken, the truck must be operated. This can prevent rusting (drying by self-heating). The motors may also be dried with compressed air.

NOTE

If a truck is cleaned frequently, it must also be greased more often.





Maintenance work

Lubrication point



d11325001_A

Shaft 1 2 Connecting pin

Lubricate the marked points according to the maintenance checklist. Only apply grease to No. 2, 3 and 4 after part maintenance or replacement.

Checking the hydraulic oil level

ENVIRONMENT NOTE ∕ॾ∕

Observe information regarding the use of consumables.

- Steering bearing 3 4
 - Shaft

5 Maintenance

Maintenance work

To check the hydraulic oil level, please perform the following steps:

- > Stop the truck and lower the forks.
- > Switch off the ignition and remove the key.
- > Press the emergency off switch.
- > Lift the upper cover plate.
- > Disconnect the battery male connector.
- \succ Unscrew the filler port cap(1)and check the hydraulic oil level through the dipstick.

The hydraulic oil level should be(3)(2)between the minimum and maximum marks on the dipstick.

- > If necessary, pour hydraulic oil to the appropriate level through the filler opening.
- > Refit the filler port cap.

A CAUTION

Risk of damaging components.

Only use hydraulic oil that complies with the specifications (see the "Recommended Lubricating Oil" section).

- Plug in the battery connector.
- > Refit the upper cover plate.
- The truck can be operated again.

Checking the fuses

Fuse	Value
F1	30A
F2	10A

Remove the main cover.

> Replace the fuses as necessary.











Maintenance work

Check the balance wheels

> Check the balance wheel retaining bolts(1).

Apply Loctite 243 to the bolt when tightening, tightening torque: 35 Nm.

- Check that the balance wheels are not touching the ground.
- Check that the jam nut islocked when the flat cross wheel (3) is in contact with the ground.
- When the flat cross wheel does not touch the ground, Clockwise adjustment bolts(2), Place the balance wheels on the ground, then lock the jam nut(3).



Troubleshooting

Troubleshooting

Trouble shooting

If the truck has malfunctions:

TROUBLE	CAUSE	REPAIR
	Load weight too high	Lift only the max. capacity, mentioned on the ID-plate
	Battery discharged	Charge the battery
Load can't be lifted	Lifting fuse faulty	Check and eventually replace the lift- ing fuse
	Hydraulic oil level too low	Check and eventually refill hydraulic oil
	Oil leakage	Repair the hoses and/or the sealing of the cylinder
Oil leakage from air breathing	Excessive quantity of oil.	Reduce oil quantity.
	Battery is charging	Charge the battery completely and then remove the main power plug form the electrical socket.
	Battery not connected	Connect the battery correctly
Truck not starts op-	Fuse faulty	Check and eventually replace fuses
erating	Low battery	Charge the battery
	Combined emergency switch is activated	De-activate the combined emergency switch by insert and pull the knob.
	Tiller in the operating zone	Move the tiller firstly to the braking zone.

If the truck has malfunctions and can't be operated out of the working zone, jack the truck up and go with a load handler under the truck and safe the truck securely. Then move truck out of the aisle.

6

Technical data



Technical datasheet

Technical datasheet





Technical datasheet

Characte	pristics		
1.1	Manufacturer		Linde
1.2	Model		T14B
1.3	Drive: Battery, diesel, petrol, LPG, AC		Lithium-ion battery
1.4	Operation		Pedestrian
1.5	Rated load capacity/rated load	Q (kg)	1400
1.6	Load centre distance	c (mm)	600
1.8	Axle centre to fork face	x (mm)	935 ¹⁾
1.9	Wheelbase: Forks up/down	y (mm)	1220/1260 ^{1/2)}

Weight			
2.1	Service weight	kg	175 ^{3/8)}
2.2	Axle load, full load (front/rear)	kg	475/1125 ^{3/8)}
2.3	Axle load, no load (front/rear)	kg	135/40/ ^{3/8)}

Wheels and tyres			
3.1	Tyres, drive side/load side		Polyurethane PU/PU
3.2	Tyre size, drive side	mm	210 × 73
3.3	Tyre size, load side	mm	80 × 70
3.4	Balance wheels	mm	80 x 30
3.5	Wheels, number drive side/load side (x=driven)		1X+2/4
3.6	Drive side track width	b10 (mm)	/
3.7	Load side track width	b11 (mm)	400/525 ¹⁾

Dimensions			
4.4	Lift height	h3 (mm)	115 ¹⁾
4.9	Working tiller height (min./max.)	h14 (mm)	750/1185
4.15	Lowered fork height (max.)	h13 (mm)	85 ⁷⁾
4.19	Overall length (including 1000mm long forks)	l1 (mm)	1670 ⁵⁾

6 Technical data



Technical datasheet

Dimensions			
4.20	Body length (without forks)	l2 (mm)	530 ⁵⁾
4.21	Body width	b1 (mm)	560/685 ¹⁾
4.22	Fork dimensions, thickness x width x length	s/e/l (mm)	55/160/1150
4.25	Fork arm adjustment spacing	b5 (mm)	560/685 ¹⁾
4.32	Ground clearance at centre of wheelbase (full load)	m2 (mm)	35 ²⁾
4.34.1	Minimum theoretical horizontal aisle width, pallet dimensions: 1000 x 1200	Ast (mm)	2254 ⁵⁾
4.34.2	Minimum theoretical horizontal aisle width, pallet dimensions: 800 x 1200	Ast (mm)	2130 ⁵⁾
4.35	Turning radius	Wa (mm)	1450 ⁵⁾

Performance			
5.1	Travel speed (full/no load)	km/h	4.5 ⁶⁾ / 5.0 ⁶⁾
5.2	Lifting speed, full/no load	mm/s	30/35 ⁶⁾
5.3	Maximum lowering speed (full/no load)	mm/s	46/33 ⁶⁾
5.8	Maximum climbing ability, full/no load	%	8/16
5.9	Acceleration time, full/no load	S	10 ⁶⁾) / 9 ⁶⁾
5.10	Service brake		Electromagnetic

Driving			
6.1	Drive motor (60 min rating)	kW	1
6.2	Lift motor power, 10% rating	kW	0.8
6.3	Battery, according to DIN 43 531/35/36 A, B, C, no		no
6.4	Battery voltage/rated capacity (20-hour dis- charge)	V/Ah	48V/20Ah
6.5	Battery weight (±5%)	kg	14
6.8	Power consumption according to VDI cycle	kWh/h	0.13

Other			
10.7	Noise level in driver's ear	dB(A)	66

Description of technical datasheet

The standard forklift truck parameters may vary based on the actual equipment

- 1) (+/-5mm)
- 2) Forks raised/lowered
- 3) (+/-5%)
- 4) Polyurethane solid tyre + polyurethane tyre
- 5) (+/-1%)
- 6) (+/-10%)
- 7) Tolerance (0 to -5mm)
- 8) Based on Model 560

Description of technical datasheet

A CAUTION

The parameters listed in the technical datasheet are examples of parameters for a specific configuration model in this range and are for reference only.

The model configuration delivered to the user may differ from the technical datasheet. For details, please refer to the forklift product datasheet provided with the vehicle or in the sales contract/quotation signed externally by the manufacturer or with the delivery receipt.

Eco-design requirements for electric motors and variable speed drives

All motors in this industrial truck are exempt from Regulation (EU) 2019/1781 because these motors do not meet the description given in Article 2 "Scope", Item (1) (a) and because of the provisions in Article 2 (2) (h) "Motors in cordless or battery-operated equipment" and Article 2 (2) (o) "Motors designed specifically for the traction of electric vehicles".

All variable speed drives in this industrial truck are exempt from Regulation (EU) 2019/1781 because these variable speed drives do not meet the description given in Article 2 "Scope", Item (1) (b).

6 Technical data



Eco-design requirements for electric motors and variable speed drives



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