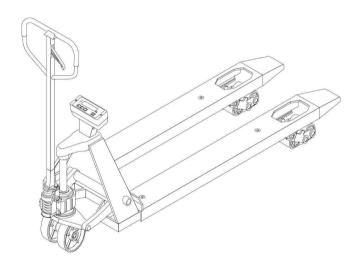


Ameise PTM 2.0 Scale

Operating instructions

(GB)



Valid from: 01/01/2019

Revision 01

Foreword

These operating instructions are a translation of the original operating instructions.

These operating instructions are designed to provide sufficient instruction for the safe operation of the material handling equipment. The information is presented in a precise and clear manner. The chapters are arranged by letter. Each chapter starts with page 1. The individual pages are identified by the chapter letter and page number.

Example: Page B 2 is the second page of chapter B.

The operating instructions describe different truck versions. When operating and servicing the truck, make sure that the particular section applies to your truck model.

Safety instructions and important explanations are indicated by the following icons:



Used before safety instructions which must be observed to avoid danger to personnel.



Used before notices which must be observed to avoid material damage.



Used before notices and explanations.

- Indicates standard equipment.
- O Indicates optional equipment.

In the interest of ongoing development, the manufacturer reserves the right to incorporate modifications (without changing the basic characteristics of the equipment model) without necessarily updating the present operating instructions at the same time.

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A Correct use

The truck described in these operating instructions is an industrial truck with weighing function designed for lifting and transporting loads.

It must be used, operated and serviced in accordance with these operating instructions. All other types of use are beyond its scope of application and may result in damage to personnel, the industrial truck or property. In particular, avoid overloading with items that are too heavy or placed on one side. The data plate attached to the truck or the load chart are binding for the maximum load capacity. The industrial truck must not be used in fire or explosion endangered areas, or areas threatened by corrosion or excessive dust.

Operating company responsibilities: For the purposes of these operating instructions the "operating company" is defined as any natural or legal person who either uses the industrial truck himself, or on whose behalf it is used. In special cases (e.g. leasing or renting) the operating company is considered the person who, in accordance with existing contractual agreements between the owner and user of the industrial truck, is charged with operational duties.

The operating company must ensure that the industrial truck is used only for the purpose for which it is intended and that danger to life and limb of the user and third parties are excluded. Furthermore, accident prevention regulations, safety regulations and operating, servicing and repair guidelines must be followed. The operating company must ensure that all users have read and understood these operating instructions.



Failure to comply with these operating instructions shall invalidate the warranty. The same applies if improper work is carried out on the truck by the customer or third parties without the permission of the manufacturer's customer service department.

Attaching accessories: The mounting or installation of additional equipment that affects or supplements the functions of the truck requires the written permission of the manufacturer. Local-authority approval may also need to be obtained. Local authority approval, however, does not replace the manufacturer's approval.

B Truck description

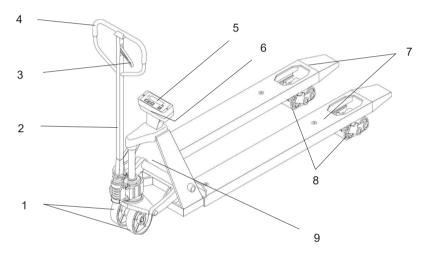
1 Application and operating conditions

The vehicle is a pallet truck with a weigher, designed for transporting goods on level surfaces. Open bottom pallets or pallets with diagonal boards can be lifted outside the range of the load wheels. The model is ideal for performing incoming goods inspections, determining shipping weights and avoiding truck overloads. The capacity is shown on the data plate and on the data capacity plate Qmax.

Operating conditions:

Ambient temperature: from -10°C to +40°C at 10 to 95% relative air humidity. Ambient lighting: min. 50 Lux

2 Assemblies



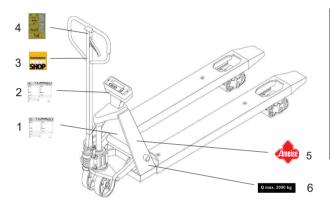
Item		Description
1	•	Steering wheels
2	•	Tiller
3	•	"Forks neutral/lift/lower" handle
4	•	Grip
5		Weigher operating and display unit
6	•	Data plate for weigher operating and display unit
7	•	Load handler
8		Load wheels
9	•	Data plate

● = Standard equipment	O = Optional equipment

3. Technical data

Capacity	2000 kg
Measuring tolerance for 2000 kg load	+/- 1.0 kg
Lift height min max.	90 - 200 mm
Steering wheel diameter	180 mm
Fork roller diameter	74 x 93 mm / 74 x 70 mm
Net weight	104 kg

3.1 Identification points and data plates



Warning and information signs		
1	Data plate	
2	Data plate for operating and display unit	
3	Jungheinrich Profishop	
4	"Correct operation" notice	
5	Ameise logo, both sides	
6	"Q max" plate, both sides	

The warning and information signs must be attached as shown in the figure. The figures given on the truck should be seen as a supplement to these operating instructions. Any damaged or missing decals must be replaced immediately.

3.2 Data plate

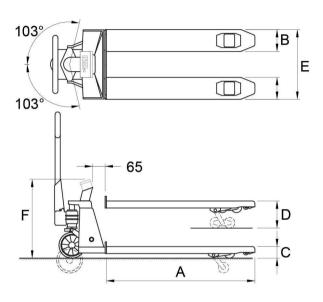
The following information is provided on the data plate



3.3 Batteries

Model	Quantity	Capacity	Voltage
1 kg increments	4	1.5 AH/per unit	1.5 V/per unit

3.4 Dimensions



Α	Fork length	1150 mm
В	Fork width	180 mm
С	Fork height, lowered	85 mm
D	Fork height, max.	200 mm
E	Width across forks	555 mm
F	Height of upper edge of display	600 mm

C Transport

1 Crane loading

Only use lifting gear with sufficient capacity (for transport weight see truck data plate).

Loading the truck by crane

Requirements

- Park the truck securely (see section D, chapter 5.0)



- Lifting gear
- Crane gear

Procedure

- Secure the crane gear to the attachment points.
- Attach the crane gear so that it cannot slip.
- Lifting accessories of the crane gear must be attached in such a way that they do not come into contact with any components.

The truck can now be loaded by crane.

2 Transport



The truck must be securely fastened when transported on a lorry or trailer.

Securing the truck for transport

Requirements

- Truck loaded.
- Truck parked securely (see section D, chapter 5.0)

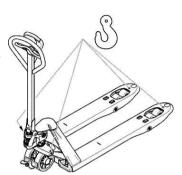
Tools and materials required: Lashing straps

Procedure

- To secure the truck, attach the tensioning belt to the attachment points and secure it to the fastening rings.
- Tighten the tensioning belt with the tensioner.

Carry out this procedure on both sides of the truck. The truck can now be transported.





D Operation

1 Safety regulations for the operation of industrial trucks

Operator's rights, obligations and responsibilities: The operator must be informed of his duties and responsibilities and be instructed in the operation of the truck and must also be familiar with the operating instructions. The operator shall be afforded all due rights.

Do not allow unauthorised persons to use the truck: The operator is responsible for the truck during the time it is in use. He must prevent unauthorised persons from driving or operating the truck. Carrying or lifting of persons on the truck is prohibited.

Damage and faults: The supervisor must be immediately informed of any damage or faults to the truck or attachment. Trucks which are unsafe for operation (e.g. worn wheels or brake defects) must not be used until the problems have been rectified.

Repairs: The operator must not carry out any repairs or alterations to the truck without the necessary training and authorisation to do so. The operator must never disable or adjust safety equipment or switches.

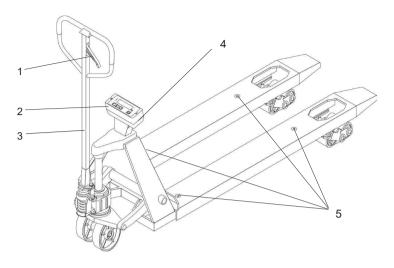
Hazardous area: The hazardous area is defined as the area in which a person is at risk due to truck movement, lifting operations, the load handler (e.g. forks or attachments) or the load itself. This also includes areas which can be reached by falling loads or lowering operating equipment.



Unauthorised persons must be kept away from the hazardous area. Where there is danger to personnel, a warning must be sounded with sufficient notice. If unauthorised personnel are still within the hazardous area the truck shall be brought to a halt immediately.

Safety devices and warning signs: The safety devices, warning signs and warning instructions described in these operating instructions shall be strictly observed.

2 Description of the controls and of the weighing system



Item	Control / Display		Function
1	"Lift/lower fork" handle	•	Selects lift/neutral/lower.
2	Weigher operating and display unit	•	Operates the weigher. Displays the weight on the forks.
3	Tiller	•	Moves and steers the truck. Raises the forks manually.
4	Battery	•	Power supply
5	4 weighing cells	•	Used to weigh the load

● = Standard equipment	O = Optional equipment

Weight detection

Four load cells are bolted to the load carrying frame and also to the load attachment head. The load cells and the connection cables to the evaluation and display unit are installed so that they are protected.

Operating and display unit

Weights, system statuses and quantities (o) are displayed. All functions of the weighing system can be called up using the keys below the display.

3 Starting up the truck



Before the truck can be started, operated or a load lifted, the operator must ensure that there is nobody within the hazardous area.

Checks and operations to be performed before starting daily work



Inspect the entire truck (especially the wheels and the load handler) for visible signs of damage.

4 Industrial truck operation

4.1 Safety regulations for truck operation

Travel routes and work areas: Only use lanes and routes specifically designated for traffic. Unauthorised third parties must stay away from work areas. Loads must only be stored in places specially designated for this purpose.

Travel conduct: The operator must adapt the travel speed to local conditions. The truck must be driven at slow speed when negotiating bends or narrow passageways, when passing through swing doors and at blind spots. The operator must always observe an adequate braking distance between the forklift truck and the vehicle in front and must be in control of the truck at all times. Abrupt stopping (except in emergencies), rapid U turns and overtaking at dangerous or blind spots are not permitted.

Travel visibility: The operator must look in the direction of travel and must always have a clear view of the route ahead. Loads that affect visibility must be positioned at the rear of the truck. If this is not possible, a second person must walk in front of the truck as a lookout.

Negotiating slopes and inclines: The industrial truck must not be operated or parked on inclines or slopes.

Negotiating lifts and docks: Lifts and docks must only be used if they have sufficient capacity, are suitable for driving on and authorised for truck traffic by the owner. The driver must satisfy himself of the above before entering these areas. The truck must enter lifts with the load in front and must take up a position which does not allow it to come into contact with the walls of the lift shaft. People travelling in the lift with the forklift truck must only enter the lift after the truck has come to a halt and must exit the lift before the truck.

Nature of loads to be carried: Only properly secured loads must be transported.

4.2 Travel, steering, braking



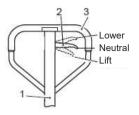
Never carry passengers.

Travel

- Set the handle (2) to the "neutral" position.
- The truck can be pulled or pushed using the grip on the tiller (1).



The handle (2) must be in the "neutral" position in order to move a laden truck.



Steering

- Move the tiller (1) to the left or right, within a range of approx. 105°.



On tight bends, the tiller extends beyond the perimeter of the truck.

Braking

In an emergency you can stop the truck by lowering the load:

- Push the handle (2) in the "Lower" direction to lower the load.

4.3 Lifting and depositing load units



Before lifting a load unit, the operator must ensure that it has been correctly palletised and does not exceed the truck's capacity. Do not lift long loads sideways.



The truck may tip over due to an excessive top load.



The handle (2) must be in the "neutral" position in order to move a laden truck.

- Push the handle (2) in the "lower" direction to lower the load.
- Fully insert the load handler underneath the load unit.

Lifting

- Push the handle (2) in the "Lift" direction.
- Lift the forks by moving the tiller (1) up and down until you reach the desired lift height.
- Set the handle (2) to the "neutral" position.

2 3 Lower Neutral Lift

Rapid lift

Note: Rapid lift is effective for loads of up to 120 kg. For pallets over 120 kg, rapid lift applies for the distance under the pallet. As soon as the load is raised, the truck switches to normal lift.

Lowering

- Push the handle (2) in the "Lower" direction to lower the load.
- Set the handle (2) to the "neutral" position.

4.4 Operating the weigher

Commissioning

Press the on/off button (3) to activate the weighing system.

After three to five minutes, the electronics and weighing cells will have reached operating temperature. Until this time, deviations of up to around 0.3% are possible.



Loads should only be lifted following zero adjustment.

4.5 Power supply and operating time

Power is supplied by 4 x 1.5V AA batteries. The device is deactivated automatically when not used for a period of 3 minutes.

With 5 weighing operations per day, the battery operating time is one year.

Replacing batteries in the operating and display unit



If battery acid has escaped, avoid contact with the skin, eyes and mucous membranes. In the event of contact with acid, immediately rinse the affected areas with plenty of clear water and contact a doctor immediately.

General battery instructions

Always remove depleted and/or damaged batteries from the device immediately. Remove batteries from the unit if it is not going to be used for an extended period of time. The batteries may run out and damage the unit.

Clean the battery and unit contacts before inserting batteries. Always replace all batteries at the same time. Ensure correct polarity when inserting the batteries.

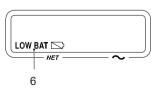
Use only batteries of the same type. No do mix different types of battery or used batteries with new ones.

Do not expose batteries to extreme conditions, do not place them on heaters or expose them to directly sunlight. Otherwise they are more likely to run out.

If battery acid is spilled, avoid contact with skin, eyes and mucous. In the event of contact with acid, immediately rinse the affected areas with plenty of clear water and contact a doctor immediately.

Batteries must not be charged or reactivated with other agents, must not be taken apart, thrown into fire or short-circuited.

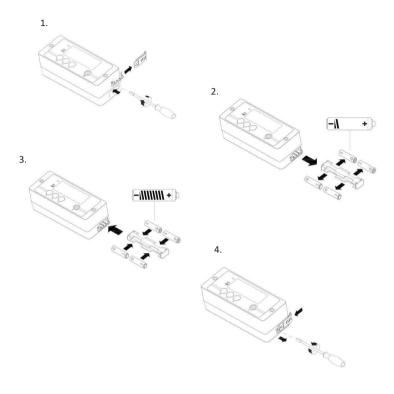
 If "LOW BAT" (6) is displayed, the battery voltage is too low and the batteries must be replaced.



Replacing the battery

Switch off the weigher before replacing the battery.

If using the system in multi-shift operation, we recommend that you procure additional batteries (optional).



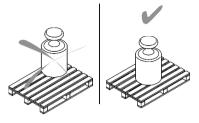
4.6 Avoiding malfunctions

→

Position the load centrally on the pallet in order to obtain an accurate weight measurement.

An eccentric load will bend or twist the forks slightly. This can impair the measurement accuracy.

On models that can be calibrated, an eccentric load or inclined position will affect the accuracy of the weight measurements. In this case, the tilt switch is activated, which in turn disables the display.



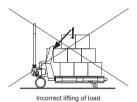
 \rightarrow

The weighing process must not be hindered by other objects.



→

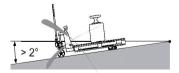
The load must be lifted freely, without touching the housing of the display unit or other pallets.





Correct lifting of load

During weighing, do not exceed the maximum truck tilt of 2°. In the case of an inclination in excess of 2°, the accuracy of the weighing system declines by approx. 0.1% per degree.



→

Weighing operations must only be performed on solid, level surfaces.





Do not exceed the maximum capacity of the truck.

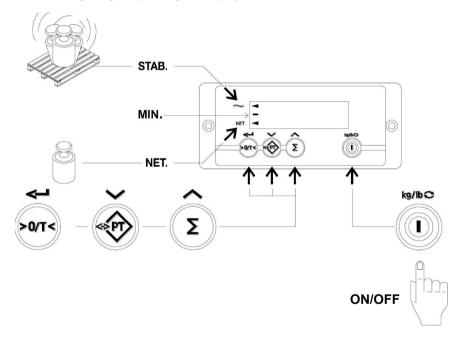


Temperature range: Between -10 and +40°C, the maximum deviation amounts to 0.1% of the measured weight. Outside this temperature range, deviations of up to 0.3% are possible.

Rapid changes in temperature should be avoided, otherwise condensation may form in the electronics. In the case of significant temperature differences, the scales should be switched off for acclimatisation purposes.

4.7 Display and controls

Protection rating: weigher operating and display unit: IP65, load cells: IP67



Resolution of the weight display

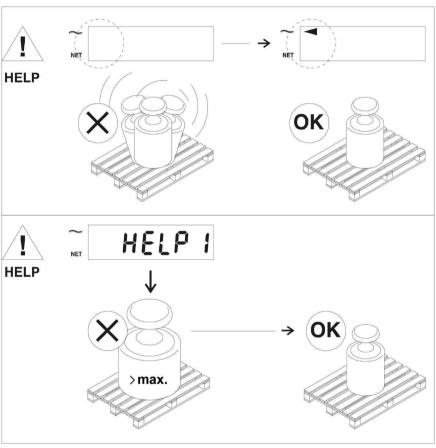
Weight range	Resolution
0 - 2000 kg	1.0 kg

4.7.1 Display messages

The following messages can appear on the display:

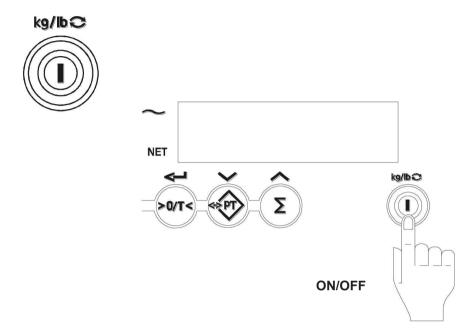


The measured weight exceeds the maximum setting. To avoid damage to the display or weighing cells, the load must be removed from the weigher immediately.

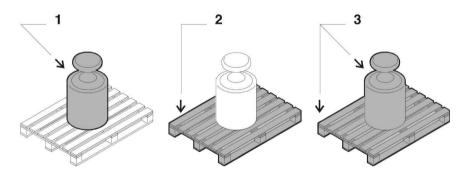


4.8 Weighing loads

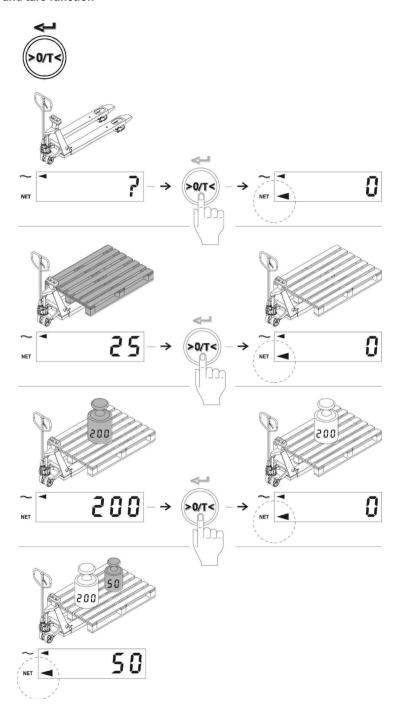
ON/OFF



Net + tare = gross

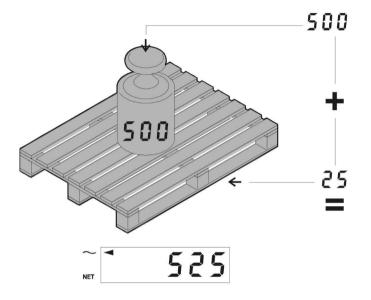


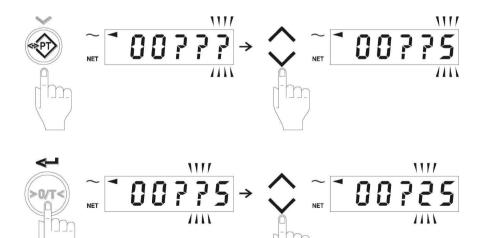
Zero and tare function

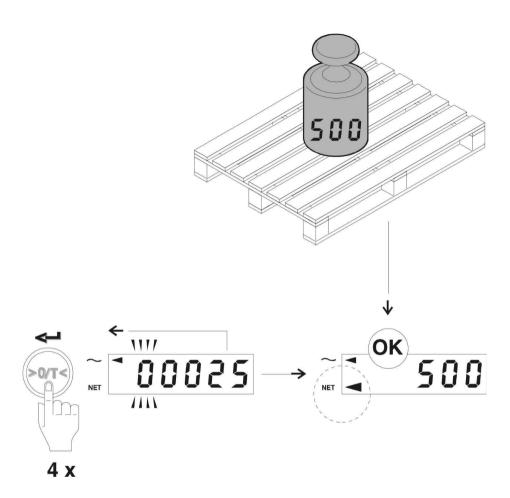


Manual tare entry



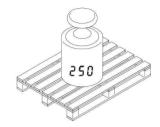




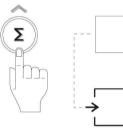


Adding







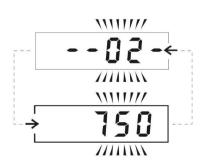




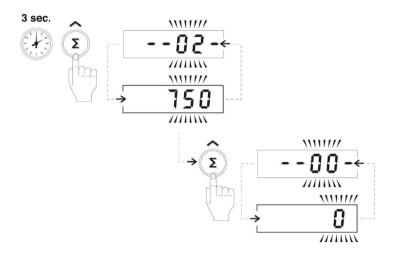








Total and reset



5.0 Parking the truck securely



Always park the truck securely.

Do not park the truck on slopes and always lower the forks fully. The truck must be securely fastened when transported on a lorry or a trailer. The truck must be tied down and the wheels secured with chocks.

5.1 Troubleshooting

This chapter allows the user to identify and rectify basic faults or the consequences of incorrect operation. When trying to locate a fault, proceed in the order shown in the table.

Fault	Possible cause	Corrective measures
Display on control and display unit cannot be read.	Operating temperature out of range.Loose cable connection or broken wire.Battery voltage too low.	 Check ambient temperature. Contact manufacturer's service department if necessary. Replace batteries.
Malfunctions of the weighing system display		- See section D, chapters 4.6 and 4.7.1.
Pallet truck does not reach max. lift height.	Insufficient oil in reservoir	– Top up oil
Pallet truck does	 No oil in reservoir 	– Top up oil
not lift.	 Contaminated oil 	– Change oil
	– Air in oil	 Bleed the hydraulic system
Pallet truck does not lower.	 Lift piston or pump is deformed due to overloading with excessive or incorrectly positioned loads. 	 Replace lift piston or pump
	 Lift piston rusty or jammed because forks have remained elevated for an extended period. 	 When not in use, park the pallet truck with the forks lowered. Ensure that the lift piston is lubricated.
Leaks	 Seal is worn or damaged. 	– Insert new seal
	Component torn.	
Pallet truck lowers automatically.	 Contaminated oil causes the bleed valve to jam. 	Replace with suitable oil and clean the bleed valve
	 Hydraulic unit is partially torn or broken. 	 Check and replace the damaged component
	– Air in oil	 Bleed the hydraulic system



If the fault could not be rectified by means of the "corrective measures", notify the manufacturer's service department, as further troubleshooting can only be performed by specially trained and qualified service personnel.

E Industrial truck maintenance

1 Operational safety and environmental protection



Any modification to the truck, in particular the safety mechanisms, is prohibited. Do not alter the truck operating speeds under any circumstances.



Only original spare parts have been certified by our quality assurance department. To ensure safe and reliable operation, use only the manufacturer's spare parts. Used parts and consumables must be disposed of in accordance with the applicable environmental-protection regulations. For oil changes, contact the manufacturer's specialist department.

Upon completion of inspection and servicing, the tasks contained in the "Recommissioning" section must be performed.

2 Maintenance Safety Regulations

High spring force in tiller spring.



Slight risk of injury to hands or face during disassembly. Insert a bolt horizontally all the way though the hole to depress the spring seat. Bolt \emptyset 8 mm, optimum bolt length 10 cm.

The hydraulic unit must only be disassembled by trained specialist personnel using special tools.

Maintenance personnel: Industrial trucks must only be serviced and repaired by specialist personnel. The manufacturer's service department has field technicians specially trained for these tasks.

Lifting and jacking up: When an industrial truck is to be lifted, the lifting gear must only be secured to the points specially provided for this purpose. When jacking up the equipment, take appropriate measures to prevent it from slipping or tipping over (e.g. wedges, wooden blocks). You must only work underneath a raised load handler if it is supported by a sufficiently strong chain.

Tyres: The quality of tyres affects the stability and performance of the truck. When replacing factory-fitted wheels/rollers, only use the manufacturer's original spare parts. Otherwise the truck's rated performance cannot be ensured.

3 Maintenance and Inspection

Thorough and expert servicing is one of the most important requirements for the safe operation of the industrial truck. Failure to perform regular servicing can lead to truck failure and poses a potential hazard to personnel and equipment.



The oil level must be checked every 4000 service hours, or at least every 6 months (type: ISO VG32, viscosity 30cSt at 40°C). Capacity: 0.4 litres.

Lubricate the joints monthly with an MoS2 lubricant.

3.1 Consumables

Handling consumables: Consumables must always be handled correctly. Follow the manufacturer's instructions.



Improper handling is hazardous to health, life and the environment. Consumables must only be stored in appropriate containers. They may be flammable and must therefore not come into contact with hot components or naked flames.

Only use clean containers when filling up with consumables. Do not mix consumables of different grades. The only exception to this is when mixing is expressly stipulated in the Operating Instructions.

Avoid spillage. Spilled liquids must be removed immediately with suitable bonding agents and the bonding agent / consumable mixture must be disposed of in accordance with regulations.

4 Maintenance instructions

4.1 Preparing the truck for maintenance and repair work

All necessary safety measures must be taken to avoid accidents when carrying out maintenance and repair work.



The pump delivery flow can be interrupted if the pallet truck is placed on its side for repairs or maintenance work. Before recommissioning, the tiller must be moved up and down several times with the handle in the "lower" position in order to prime the pump again.

4.2 Recommissioning

The equipment must only be restored to service after cleaning or repair work, once the following operations have been performed:

- Grease the truck.
- Bleed the hydraulic system by pumping the hand pallet truck to the uppermost position.

5 Safety tests to be performed at intervals and after unusual events



Perform a safety check in accordance with national regulations. Jungheinrich recommends the truck be checked according to FEM guideline 4.004.

The truck must be checked by a qualified inspector at least annually (observe national regulations) or after any unusual event. The inspector shall assess the condition of the system purely from a safety viewpoint, without regard to operational or economic circumstances. The inspector must have sufficient knowledge and experience to be able to assess the condition of the truck and the effectiveness of the safety mechanisms based on the technical regulations and principles governing the inspection of forklift trucks.

A thorough test of the truck must be undertaken with regard to its technical condition from a safety aspect. The truck must also be closely examined for damage caused by possible improper use. A test report must be produced. The results of the inspection must be retained for at least the next two inspections.

The operating company is responsible for ensuring that faults are rectified immediately.



An inspection plaque is attached to the truck as proof that it has passed the safety inspection. This plate indicates the due date for the next inspection.

6 Final De-Commissioning, Disposal



Final, correct decommissioning or disposal of the truck must be performed in accordance with the regulations of the country of use. In particular, regulations governing the disposal of batteries, fuels and electronic and electrical systems must be observed.