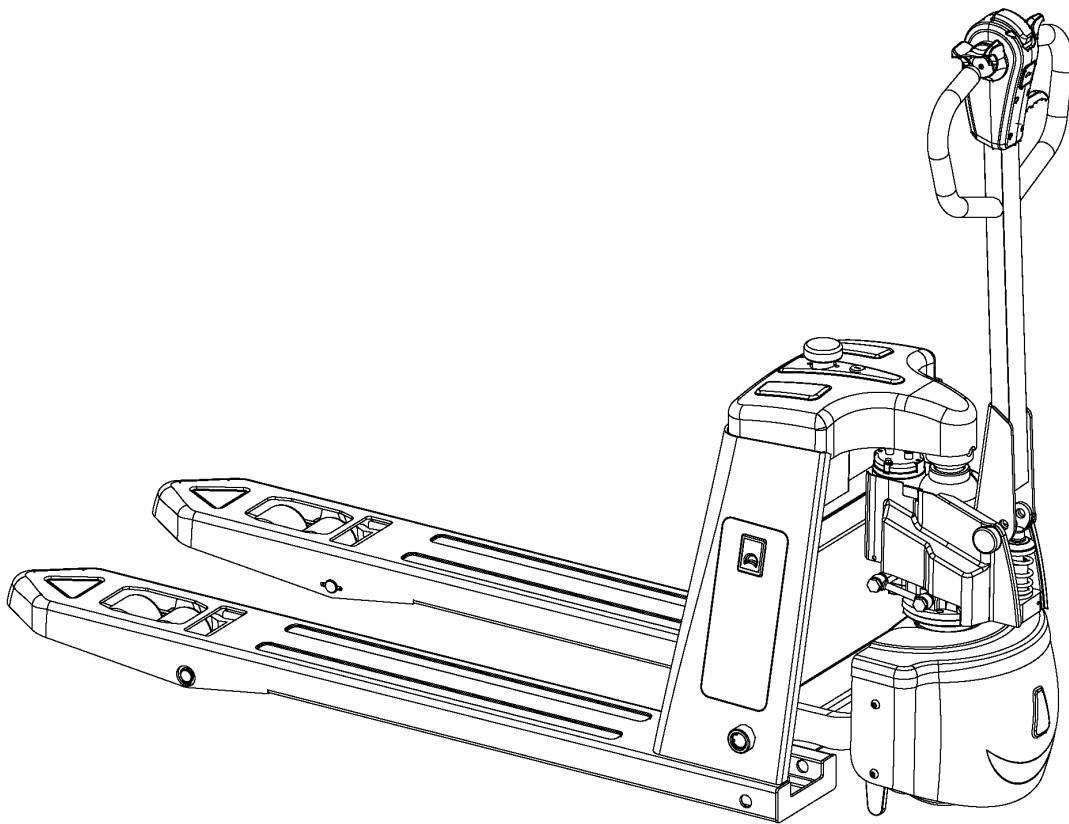




PJR122

Electric Pallet Truck

Operation Manual



Foreword

Thanks for choosing our pallet truck!

This manual is about how to use, operation and maintenance PJR122 series electrical pallet truck. Operator and whom in charge of the truck must read the manual carefully before operate the truck.

There may be changes made to the product over time, these may lead to differences between your product and the description in this manual.

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WARNING

TO PREVENT SERIOUS RISK OF INJURY TO YOURSELF AND OTHERS, PLEASE OBSERVE THE FOLLOWING SAFETY INSTRUCTIONS.

This truck may become hazardous if adequate maintenance is neglected. Therefore, adequate maintenance facilities, trained personnel and procedures should be provided.

Maintenance and inspection shall be performed in conformance with the following practices:

1. A scheduled planned maintenance, lubrication and inspection system should be followed.
2. Only qualified and authorized personnel shall be permitted to maintain, repair, adjust, and inspect truck.
3. Before leaving the truck:
 - Do not park the truck on an incline.
 - Fully lower the load forks.
 - Set the key switch to the "OFF" position and remove the key.
4. Before starting to operate truck:
 - Be in operating position
 - Place directional control in neutral
 - Before operating truck, check functions of lift systems, directional control, speed control, steering, warning devices and brakes.
5. Avoid fire hazards and have fire protection equipment present. Do not use open flame to check lever, or for leakage of electrolyte and fluids or oil. Do not use open pans of fuel or flammable cleaning fluids for cleaning parts.
6. Brakes, steering mechanisms, control mechanisms, guards and safety devices shall be inspected regularly and maintained in legible condition.
7. Capacity, operation and maintenance instruction plates or decals shall be maintained in legible condition.
8. All parts of lift mechanisms shall be inspected to maintain them in safe operating condition.
9. All hydraulic systems shall be regularly inspected and maintained in conformance with good practice. Cylinders, valves and other similar parts shall be checked to assure that "drift" has not developed to the extent that it would create a hazard.
10. Truck shall be kept in a clean condition to minimize fire hazards facilitate detection of loose or defective parts.
11. Modifications and additions which affect capacity and safe truck operation shall not be performed by the customer or user without manufacturers' prior written approval. Capacity, operation, and maintenance plates or stickers shall be changed accordingly.

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Correct Use and Application

The “Guidelines for the Correct Use and Application of Industrial Trucks” (VDMA) are supplied with the truck. The guidelines form part of these operating instructions and must be observed. National regulations apply in full.

The truck described in the present operator manual is an industrial truck designed for lifting and transporting load units.

It must be used, operated and serviced in accordance with the present instructions. Any other type of use is beyond the scope of application and can result in damage to personnel, the truck or property. In particular, avoid overloading the truck with loads which are too heavy or placed on one side. The data plate attached to the truck or the load diagram is 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.

Proprietor Responsibilities

For the purposes of the present operator manual the “proprietor” 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 proprietor 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 proprietor must ensure that the truck is used only for the purpose it is intended for 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 proprietor must ensure that all truck users have read and understood this operator manual.

Failure to comply with the operator manual 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 which affects or supplements the performance of the industrial truck requires the written permission of the manufacturer. In some cases, local authority approval shall be required. Approval of the local authorities however does not constitute the manufacturer’s Approval.

1. Truck Description

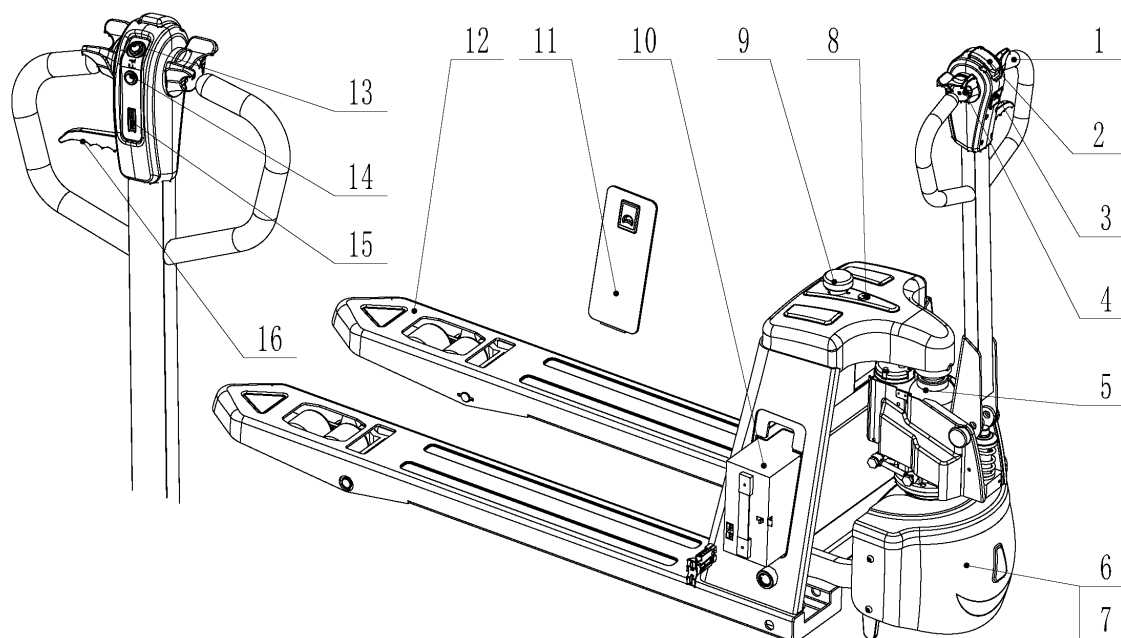
1.1 Application

The truck is designed to transport goods on flat surfaces. It can lift open bottom or diagonal board pallets within rated capacity.

Suitable environment temperature is 5°C to 40 °C.

If a long time in less than 5°C environment, cold storage or in the extreme conditions of temperature and humidity changes in the use of pallet, you must install additional special equipment, and obtain permission from the manufacturer.

1.2 Assemblies



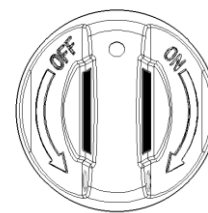
Item	Component	Item	Component
1	Control handle	9	Emergency brake button
2	Emergency reverse button	10	Power battery
3	Speed button	11	Battery compartment cover
4	Accelerator knob	12	fork
5	Lifting oil pump assembly	13	Horn button
6	Protective shield	14	Lift button
7	Driving wheel	15	ammeter
8	Power lock	16	Lever

1. 2. 1 Key Switch

Switch control current on and off.

Truck power supply is break off when the key turn 90 degrees anticlockwise.

Truck power supply is turn on when the key turn 90 degrees clockwise.



1. 2. 2 Battery Discharge Indicator

After starting the truck with the power switch (or key switch),

The battery's level is displayed on the OLED screen.

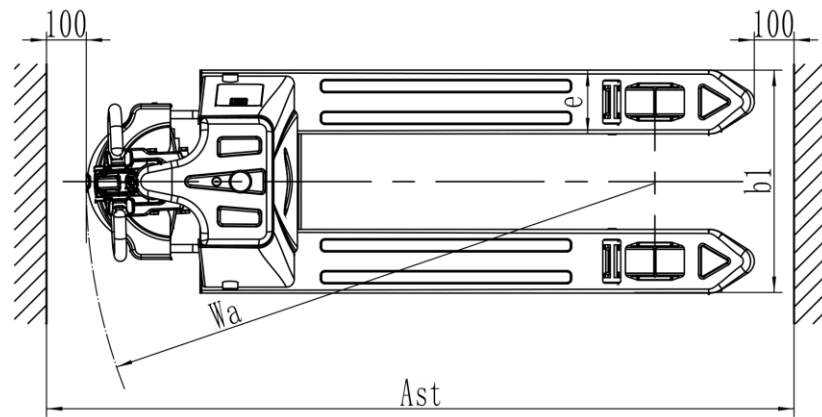
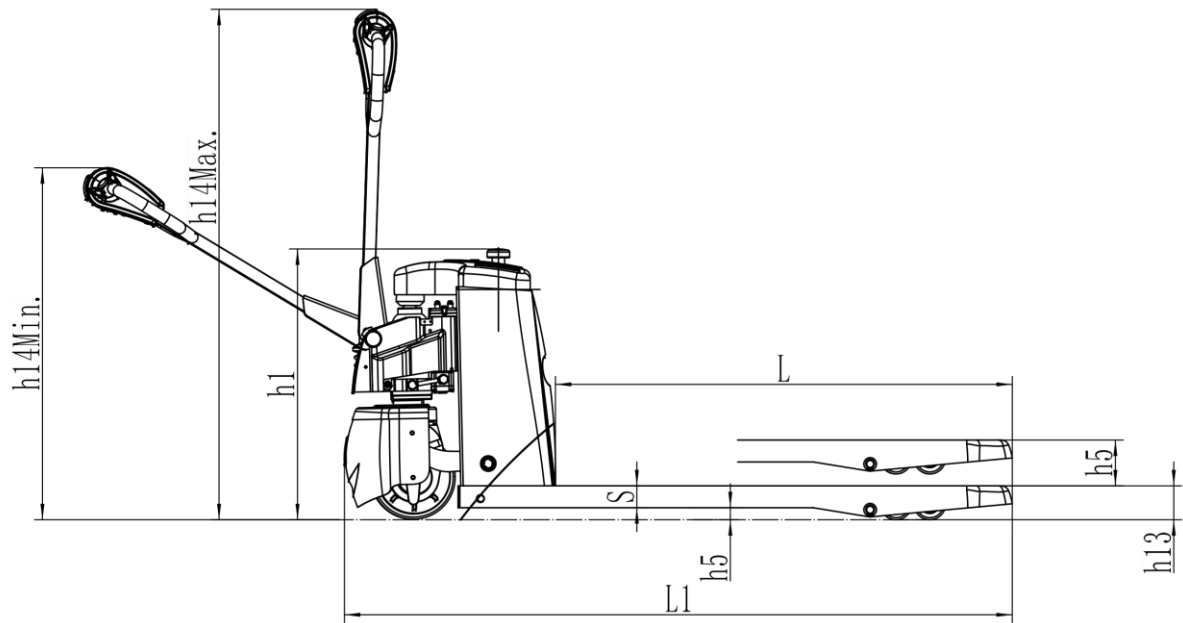
1. 2. 3 Emergency Brake Switch

The supply current is interrupted when put down the emergency brake switch and all electrical functions are deactivated and the truck is automatically stopped.

1.3 Performance Data for Standard Trucks

Model		PJR122
Drive Unit		Battery
Operator Type		Walkie
Capacity	kg	2000
Net. weight	kg	185/195
Wheel type		PU
Raised fork height	h3 (mm)	115
Lowered fork height	h13 (mm)	85
Overall length	l1 (mm)	1670/1740
Fork dimensions	s/e/l (mm)	80/160/1150/1220
Overall width	b5 (mm)	560/685
1000×1200 pallet cross-ways	ast (mm)	1920
800×1200 pallet cross-ways	ast (mm)	1920
Outer turning radius	wa (mm)	1480/1550
Drive speed, load/ unload	km/h	3.8/4.2
Maximum climbing angles, load/ unload	%	2/6
Drive motor power S2 45 min	kw	0.75
Battery voltage/ rated capacity	v/ah	24/30

PJR122



2. Transport and Commissioning

2.1 Using the Truck for the First Time

Only operate the truck with battery current. Rectified AC current will damage the electronic components.

Preparing the truck for operation after delivery or transport

- Check the equipment is complete.
- Check the hydraulic oil level.
- Install the battery if necessary (where required), do not damage battery cable.
- Charge the battery.

When the truck is parked, the surface of the tires will flatten. This flattening will disappear after a short period of operation.

2.2 During brake-in

We recommended operating the machine under light load conditions for the first stage of operation to get the most from it. Especially the requirements given below should be observed while the machine is in a stage of 100 hours of operation.

- Must prevent the new battery from over discharging when early used. Please charging when remain power more than 30%
- Perform specified preventive maintenance services carefully and completely.
- Avoid sudden stop, starts or turns.
- Oil changes and lubrication are recommended to do earlier than specified.
- Limited load is 70~80% of the rated load.

3. Operation

3.1 Safety Regulations for the Operation of Pallet Trucks

Driver authorization: The Pallet truck may only be used by suitably trained personnel, who have demonstrated to the proprietor, or his representative that they can drive and handle loads and have been authorized to operate the truck by the proprietor or his representative.

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

Safety shoes must be worn with pedestrian operated trucks.

Unauthorized Use of Truck: The driver is responsible for the truck during the time it is in use. He or she shall prevent unauthorized persons from driving or operating the truck.

It is forbidden to carry passengers or lift personnel.

Damage and Faults: The supervisor must be immediately informed of any damage or faults to the Pallet truck. Trucks are not safe for operation (e.g. wheel or brake problems) must not be used until they have been rectified.

Repairs: The driver must not carry out any repairs or alterations to the Pallet truck without the necessary training and authorization to do so. The driver must never disable or adjust safety mechanisms or switches.

Hazardous area: A 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.

Unauthorized persons must be kept away from the hazardous area:

Where there is danger to personnel, a warning must be sounded with sufficient notice.

If unauthorized personnel are still within the hazardous area the truck shall be brought to a halt immediately.

Safety Devices and Warning Signs: Safety devices, warning signs and warning instructions shall be strictly observed.

3.2 Operate and run the truck

3.2.1 Preparing

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

Checks and operations to be performed before starting daily work

Visually inspect the entire truck (in particular wheels and load handler) for obvious damage.

3.2.2 Travel, Steering, Turning, and Braking

- Open the power switch.
- Insert the key in the key switch and turn it on
- Set the control handle to the travel zone

Forward (V): Accelerator knob (4) forward rotation.

Backward (R): Accelerator knob (4) backward rotation.

Steering: Apply the control shaft to the left or right

Braking

Emergency stop:

Press down the emergency stop switch (9), the whole machine power off.

Regenerative braking:

Release the accelerator knob (4), and the truck begins to enter the regenerative braking state to slow down. When the deceleration is <1Km/h, the brake starts to work and the motor is stopped.

Reverse braking:

The accelerator knob can be switched to the opposite direction during the driving process, and the truck is braking through the reverse current until it begins to travel in the opposite direction.

Warning: When driving on a hill or uneven roads, please lift fork leg to prevent the bottom of fork leg and the ground from being rubbed.

3.2.3 Lifting, Transporting and Depositing Loads

Unsecured and incorrectly positioned loads can cause accidents

- Instruct other people to move out of the hazardous area of the truck. Stop working with the truck if people do not leave the hazardous.
- Only carry loads that have been correctly secured and positioned. Use suitable precautions to prevent parts of the load from tipping or falling down.
- Do not transport with bad handbarrow (as truck and pallet).
- Never stand underneath a raised load handler.
- Do not stand on the load handler.
- Do not lift other people on the load handler.
- Insert the forks as far as possible underneath the load.

Lift

Press button (14). Lift the forks by pressing lifting button until the desired lifting height is achieved.

Lower

Set fork to the lowest position by pulling lever (16) upward.

3.2.4 Parking the Truck Securely

- Set fork to the lowest position by pulling knob upward.
- Turn off the key switch and remove the key.
- Press the emergency stop button (9)

The truck is parked.

Warning!

- Parking the truck securely.
- Forbid parking on an incline.

Always fully lower the forks.

4. Battery Maintenance & Charging

4.1 Safety Regulations for Handling Acid Batteries

Park the truck securely before carrying out any work on the batteries.

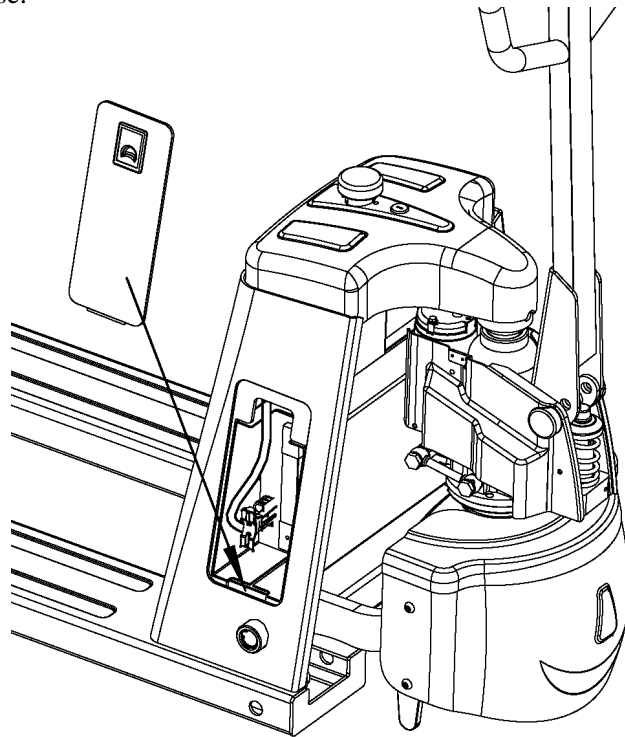
Fire protection:

- Smoking and naked flames must be avoided when working with batteries.
- Wherever a truck is parked for charging there shall be no inflammable material or operating fluids capable of creating
- Do not approach tools to the two poles of the battery, which can cause the sparkle.

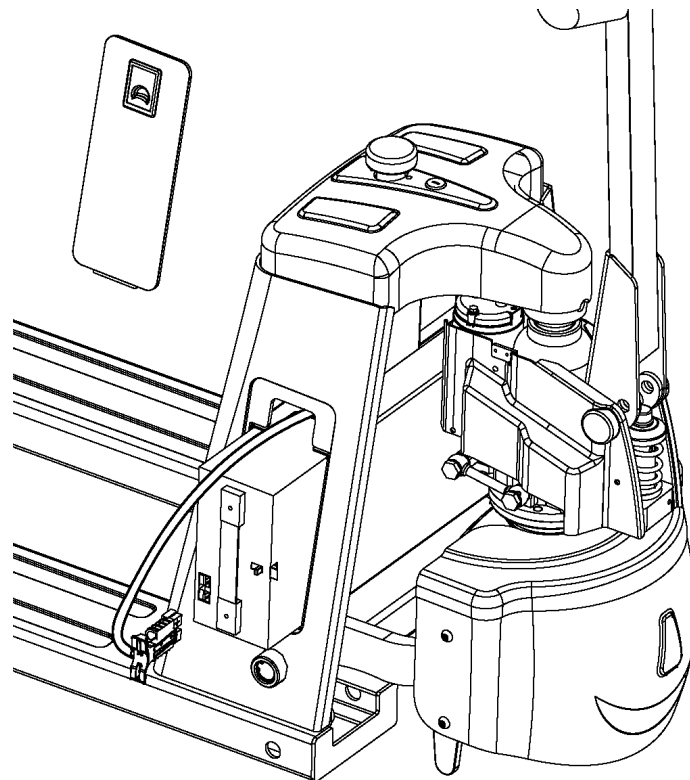
The power battery of this equipment adopts quick change mode:

Battery compartment cover open:

Push the latch handle outward and lift the cover plate upward to open the cover plate, or close the cover plate otherwise.



Remove the cable harness, push the battery fastening buckle to the left, pull the battery handle outward, and take out the battery. Otherwise, put the battery into the battery.



4.2 Charging the Battery

Safety Regulations for Charging the Battery

- To charge the battery, the truck must be parked in a closed and properly ventilated room. When charging, the tops of the battery cells must be exposed to provide sufficient ventilation.
- Do not place any metal objects on the battery.
- Before charging, check all cables and plug connections for visible signs of damage.
- Before start and finish charging to make sure power is turn OFF.
- Please using the truck until battery is fully charged.

This machine is only equipped with an external charger, after opening the battery compartment cover, unplug the wiring harness and plug in the charging cable to charge, or pull the battery away from the frame and put it in a suitable place for separate charging.

4.3 Battery Maintenance

Do not overuse battery:

- If you use up the energy of battery till the truck is immovable, you will shorten its working hours.
- Show for battery appears need for charge, please charge it quickly.

Battery maintenance:

The battery cell covers must be kept dry and clean. The terminals and cable shoes must be clean, secure and have a light coating of dielectric grease. Batteries with non-insulated terminal must be covered with a non-slip insulation mat.

Warning!

1. **Do not use dry cloth or fiber cloth to clean the battery, avoiding static to bring the explosion.**
2. **Unfixing battery plug.**
3. **Cleaning with wet cloth.**
4. **Wearing glasses for protecting eyes rubber.**

4. 4 Battery Disposal

Disposal of used batteries must strictly comply with the environmental regulations of the host country or the existing laws and regulations on waste disposal.

5. Truck Maintenance

5.1 Operational Safety and Environmental Protection

- The servicing and inspection operations contained in this chapter must be performed in accordance with the intervals indicated in the servicing checklists.
- Any modification to the Pallet truck assemblies, in particular the safety mechanisms, is prohibited. The operational speeds of the truck must not be changed under any circumstances.
- Only original spare parts have been certified by our quality assurance department.

To ensure safe and reliable operation of the Pallet truck, use only the manufacturer's spare parts. Used parts, oils and fuels must be disposed of in accordance with the relevant environmental protection regulations. For oil changes, contact the manufacturer's specialist department.

5.2 Maintenance Safety Regulations

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 users are jacking up the truck, please take appropriate measures to prevent the truck from slipping or tipping over (e.g. wedges, wooden blocks).

You may only work underneath a raised load handler if it is supported by a sufficiently strong chain.

Cleaning

Do not use flammable liquids to clean the industrial truck.

Prior to cleaning, all safety measures required to prevent sparking (e.g. through short circuits) must be taken. For battery-operated trucks, the battery connect cable must be removed. Only weak suction or compressed air and non-conductive antistatic brushes may be used for cleaning electric or electronic assemblies.

If the truck is to be cleaned with a water jet or a high-pressure cleaner, all electrical and electronic components must be carefully covered beforehand as moisture can cause malfunctions. Do not clean with pressurized water.

Electrical System

Only suitably trained personnel may operate on the truck's electrical system.

Before working on the electrical system, take all precautionary measures to avoid –electric shocks.

For battery-operated trucks, also de-energize the truck by removing the key.

Settings

When repairing or replacing hydraulic, electric or electronic components or assemblies, always note the truck-specific settings

5.3 Operating of Electrical System

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 service intervals stated are based on single shift operation under normal operating conditions. They must be reduced accordingly if the truck is to be used in conditions of extreme dust, temperature fluctuations or multiple shifts.

The following maintenance checklist states the tasks and intervals after which they should be carried out. Maintenance intervals are defined as:

W = Every 50 service hours, at least weekly

A = Every 500 operating hours

B = Every 1000 operating hours, or at least annually

C = Every 2000 operating hours, or at least annually

W service intervals are to be performed by the customer.

In the run-in period - after approx. 100 service hours - or after repair work, the owner must check the wheel nuts/bolts and re-tighten if necessary.

5.3.1 Maintenance Checklist

		Maintenance interval ●			
		W	A	B	C
Brake	Check magnetic brake air gap.			●	
Electrics T	Test instruments, displays and control switches.	●			
	Test warning and safety device.		●		
	Make sure wire connections are secure and check for damage			●	
	Test micro switch setting.	●			
	Check relays.			●	
	Fix the motor and cable			●	
Power supply	Visually inspect battery		●		
	Check battery cable connections are secure, grease terminals if necessary.			●	
Travel	Check the transmission for noise and leakage.			●	
	Check travel mechanism, adjust and lubricate if necessary. Check control handle recuperating function.		●		
	Check wheels for wear and damage.			●	
	Check wheel bearings and attachments.			●	
Truck frame	Check truck frame for damage			●	
Hydraulic operation	Test hydraulic system.		●		
	Check cylinders and piston rods for damage and leaks, and make sure they are secure.			●	

5.4 Safety Checks to be Performed at Regular Intervals and Following any Unusual Incidents

Carry out a safety check in accordance with national regulations. Manufacturer has a special safety department with trained personnel to carry out such checks. The truck must be inspected at least annually (refer to national regulations) or after any unusual event by a qualified inspector. The inspector shall assess the condition of the truck from purely a safety viewpoint, without regard to operational or economic circumstances. The inspector shall be sufficiently instructed and experienced 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 Pallet 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 examined for damage caused by possible improper use. A test report shall be provided. The test results must be kept for at least the next 2 inspections. The owner is responsible for ensuring that faults are immediately rectified. A test plate is attached to the truck as proof that it has passed the safety inspection. This plate indicates the due date for the next inspection.

5.5 Final De-commissioning, and Disposal

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

6. Troubleshooting

This chapter is designed to help the user identify and rectify basic faults or the results of incorrect operation. When locating a fault, proceed in the order shown in the table.

Fault	Possible cause	Action
Truck does not start.	<ul style="list-style-type: none"> • Key switch in “OFF” position • Battery charge too low • Truck in charge mode 	<ul style="list-style-type: none"> • Set key switch to “ON” • Check battery charge, charge battery if Necessary • Interrupt charging
Load cannot be lifted.	<ul style="list-style-type: none"> • Hydraulic oil level is too low • Excessive load 	<ul style="list-style-type: none"> • Check the hydraulic oil level • Note maximum capacity (see data plate)

If the fault cannot be rectified after carrying out the remedial procedure, notify the manufacturer’s service department, as any further troubleshooting performed by specially trained and qualified service.