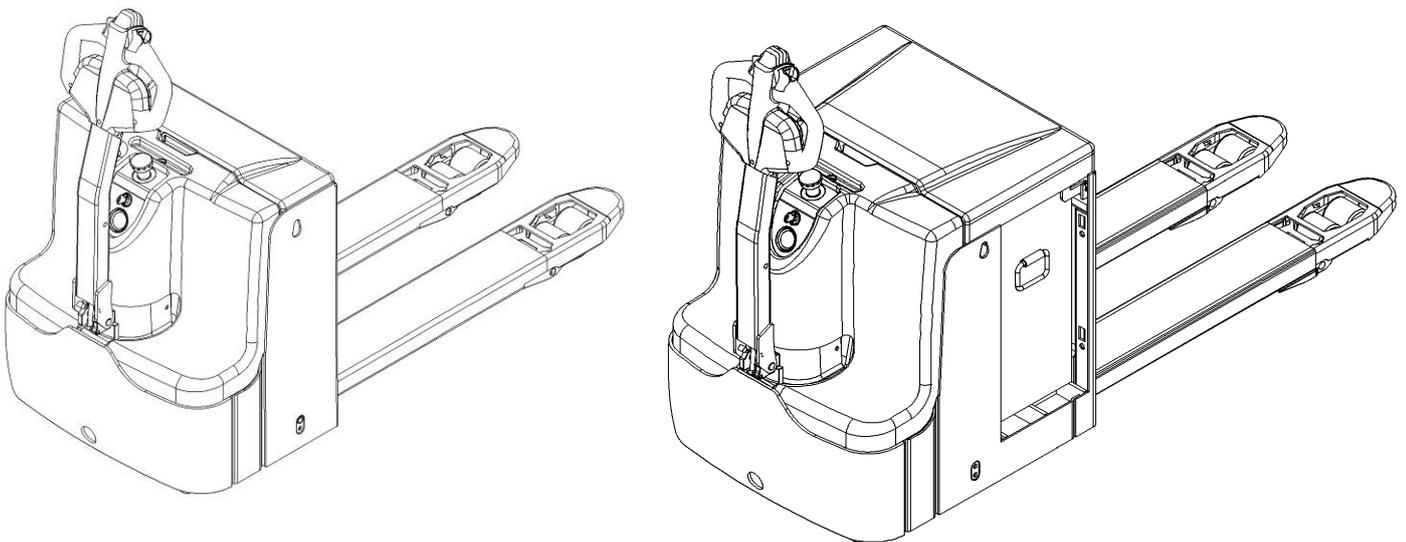


16EP-X / 20EP-X / 25EP-X

Electric Pallet Truck

Operator's Manual



WARNING



Do not use the pallet truck before reading and understanding these operating instructions.

NOTE:

- Please check the designation of your present type at the last page of this document as well as on the ID-plate.
- Keep for future reference.

FOREWORD

Before operating the truck, read this ORIGINAL INSTRUCTION HANDBOOK carefully and understand the usage of the truck completely. Improper operation could create danger.

This handbook describes the usage of different electric pallet trucks. When operating and servicing the truck, make sure, that it applies to your type.

Keep this handbook for future reference. If this or the warning/ caution labels are damaged or got lost, please contact your local dealer for replacement.

ATTENTION:

- Environmentally hazardous waste, such as batteries, oil and electronics, will have a negative effect on the environment, or health, if handled incorrectly.
- The waste packages should be sorted and put into solid dustbins according to the materials and be collected disposal by local special environment protection bureau. To avoid pollution, it's forbidden to throw away the wastes randomly.
- To avoid leaking during the use of the products, the user should prepare some absorbable materials (scraps of wooden or dry duster cloth) to absorb the leaking oil in time. To avoid second pollution to the environment, the used absorbable materials should be handed in to special departments in terms of local authorities.
- Our products are subject to ongoing developments. Because this handbook is only for the purpose of operating /servicing the pallet truck, therefore please have understanding, that there is no guarantee out of particular features out of this handbook.



NOTE: On this manual, the left sign means warning and danger, which can lead to death or serious injury if not followed.

Copyright

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1. CORRECT APPLICATION

It is only allowed to use this electric pallet truck according to this instruction handbook.

The trucks described in this handbook are self propelled electric power pallet trucks, with electrically powered low height lifting function as well for trucks with mast-lift and initial lift. The trucks are designed to lift, lower and transport palletized loads.

A wrong usage can cause human injuries or can damage equipment.

The operator/ the operating company has to ensure the correct usage and has to ensure, that this pallet truck is used only by staff, which is trained and authorized to use this truck.

The pallet truck has to be used on substantially firm, smooth, prepared, level and adequate surfaces. The truck is intended to be used for indoor applications with ambient temperatures between +5°C and +40°C and for various transportation applications without crossing permanent obstacles or potholes. Operating on ramps is not allowed. While operating, the load must be placed approximately on the longitudinal centre plane of the truck.

Lifting or transporting people is forbidden.

If used on tail lifts or loading ramps, please ensure that these are used correctly according to the operating instructions.

The capacity is marked on capacity sticker as well on the Identification plate. The operator has to consider the warnings and safety instructions.

Operating lighting must be minimum 50 Lux.

Modification

No modifications or alterations to this pallet truck which may affect, for example, capacity, stability or safety requirements of the truck, shall be made without the prior written approval of the original truck manufacturer, its authorized representative, or a successor thereof. This includes changes affecting, for example braking, steering, visibility and the addition of removable attachments. When the manufacturer or its successor approve a modification or alteration, they shall also make and approve appropriate changes to capacity plate, decals, tags and operation and maintenance handbooks.

By not observing these instructions, the warranty becomes void.

2. DESCRIPTION OF THE PALLET TRUCK

a. Overview of the main components

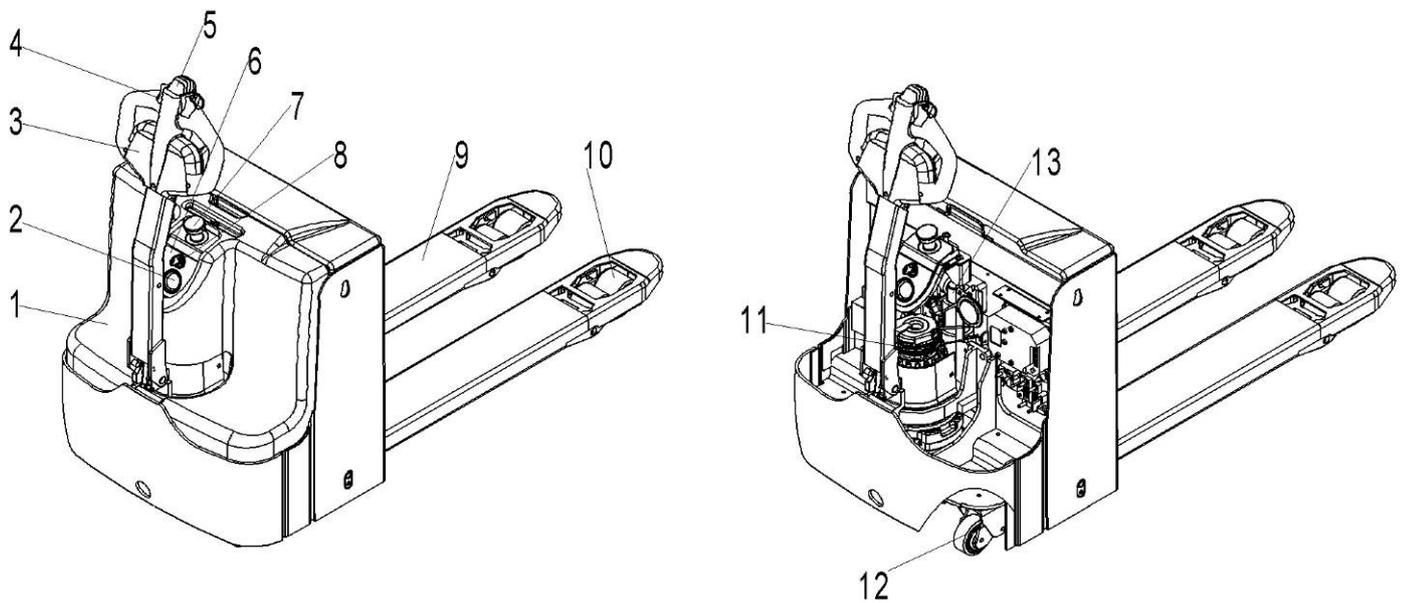


Fig. 1: Overview main components

- | | |
|--------------------------------|------------------------|
| 1. Electrical box cover | 8. Key switch |
| 2. Battery discharge Indicator | 9. Fork chassis |
| 3. Tiller | 10. Load wheels |
| 4. Accelerator | 11. Drive wheel |
| 5. Safety (belly) button | 12. Castors |
| 6. Instrument board cover | 13. Hydraulic cylinder |
| 7. Emergency button | |

b. Main technical data

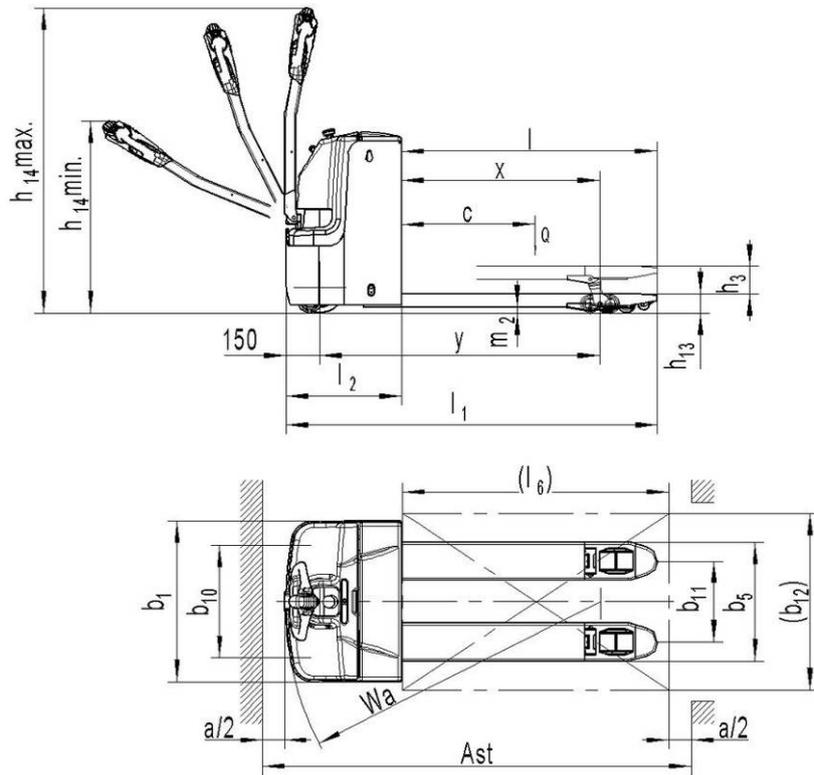


Fig. 2: Technical data 16/20EP-X

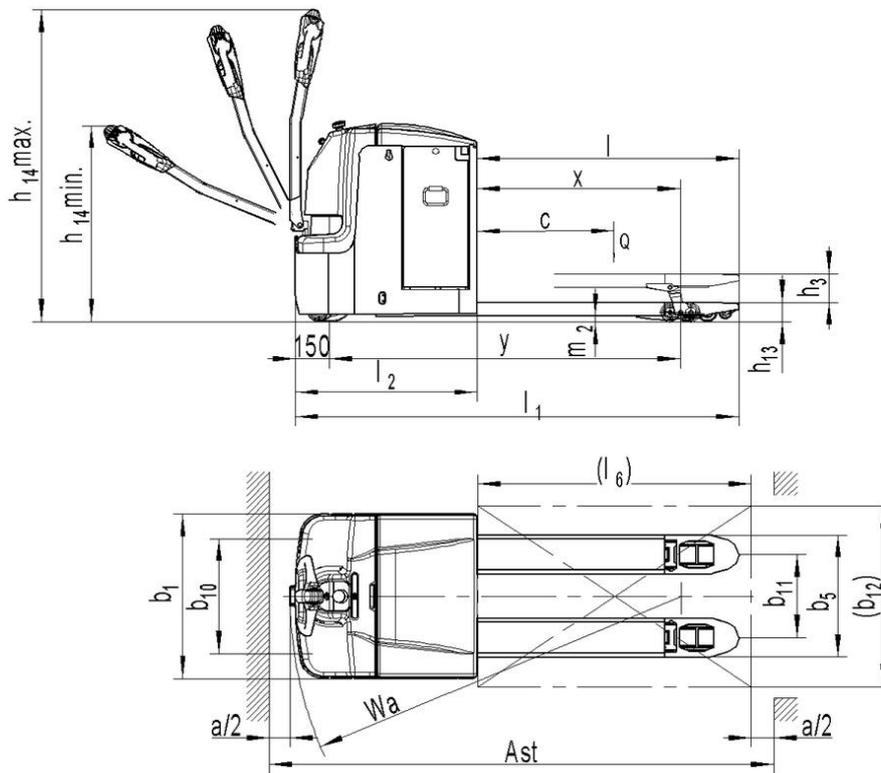


Fig. 3: Technical data 25EP-X

Table 1: Main technical data for standard version

Type sheet for industrial truck acc. to VDI 2198						
Distinguishing mark	1.2	Manufacturer`s type designation		16EP-X	20EP-X	25EP-X
	1.3	Power(Battery,Diesel,Petrol gas, Manual)		Battery		
	1.4	Operator type		Pedestrian		
	1.5	Load Capacity (upper and lower pallets)	Q (t)	1.6	2.0	2.5
	1.6	Load center distance	c (mm)	600		
	1.8	Load distance, center of drive axle to fork	x(mm)	892		
	1.9	Wheelbase	y (mm)	1261	1327	1541
Weight	2.1	Service weight	kg	445	535	720
	2.2	Axle loading, laden front/rear	kg	715/1330	855/1680	1020/2200
	2.3	Axle loading, unladen front/ rear	kg	345/100	415/120	540/200
Tires, chassis	3.1	Tires		Polyurethane (PU)		
	3.2	Tire size, front	Ø x w (mm)	Ø230X70		
	3.3	Tire size, rear	Ø x w (mm)	Ø84X84		
	3.4	Additional wheels (dimensions)	Ø x w (mm)	Ø100X40		
	3.5	Wheels, number front/ rear(x=driven wheels)		1x+2/4		
	3.6	Tread, front	b ₁₀ (mm)	510		
	3.7	Tread, rear	b ₁₁ (mm)	367/512		
	4.4	Lift height	h ₃ (mm)	120		
	4.9	Height of tiller in drive position min. / max.	h ₁₄ (mm)	820/1335		
	4.15	Height, lowered	h ₁₃ (mm)	85		
	4.19	Overall length	l ₁ (mm)	1670	1735	1950
	4.20	Length to face of forks	l ₂ (mm)	520	595	810
	4.21	Overall width	b ₁ (mm)	729		
	4.22	Fork dimensions	s/e/l (mm)	60/173/1150		
	4.25	Distance between fork-arms	b ₅ (mm)	540/685		
	4.32	Ground clearance, center of wheelbase	m ₂ (mm)	25		
	4.33	Aisle width for pallets 1000 x 1200 crossways	Ast(mm)	1885	1955	2175
4.34	Aisle width for pallets 800X1200 lengthways	Ast (mm)	1935	2005	2225	
4.35	Turning radius	Wa (mm)	1440	1490	1750	
Performance	5.1	Travel speed, laden/ unladen	km/h	5.7/6.0		5.5/6.0
	5.2	Lift speed, laden/ unladen	m/s	0.025/0.035	0.020/0.035	0.035/0.045
	5.3	Lowering speed, laden / unladen	m/s	0.035/0.030	0.035/0.030	0.040/0.040
	5.8	Gradeability, laden/ unladen	%	8/15		
	5.10	Service brake		Electromagnetic		
Motors	6.1	Drive motor rating S2 60min	kW	1.3		1.7
	6.2	Lift motor rating at S3 10%	kW	0.8		2.2
	6.3	Battery acc. to DIN 43531 /35 / 36 A, B, C, no		2VBS	2PzS	3PzS
	6.4	Battery voltage, nominal capacity K5	V/Ah	160	210	350
	6.5	Battery weight (minimum)	kg	150	215	285
	6.6	Energy consumption acc. to VDI cycle	KWh/h	0.44	0.39	0.82
	8.1	Type of drive control		AC -Speed Control		
	8.4	Sound level at driver`s ear acc. to EN 12053	dB(A)	67	69	64

C. Description of the safety devices and warning labels

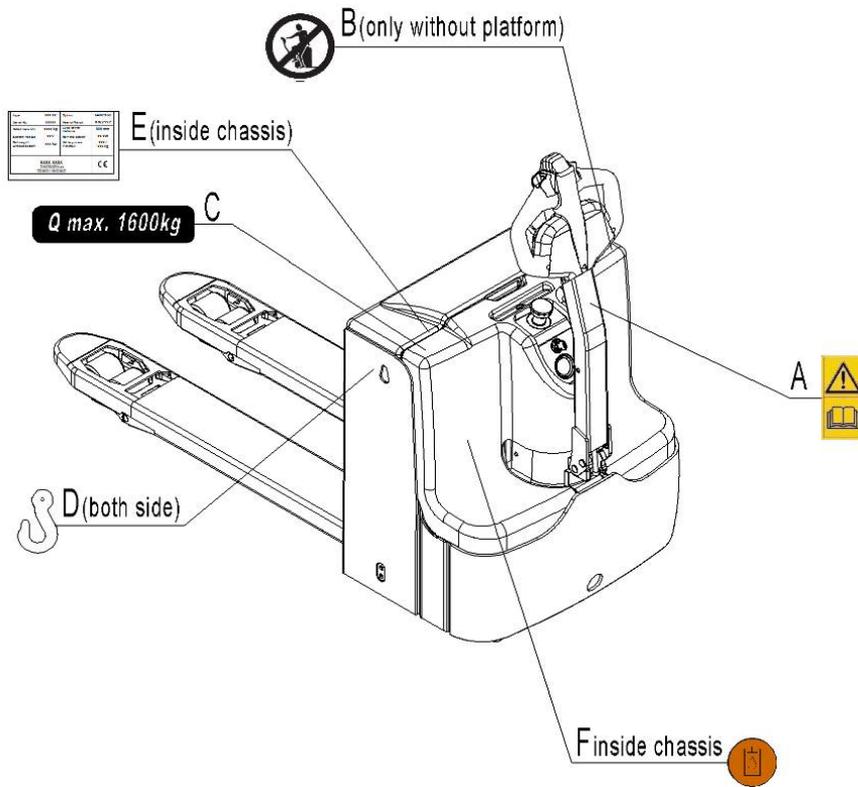


Fig. 4: Safety and warning labels 16/20EP-X

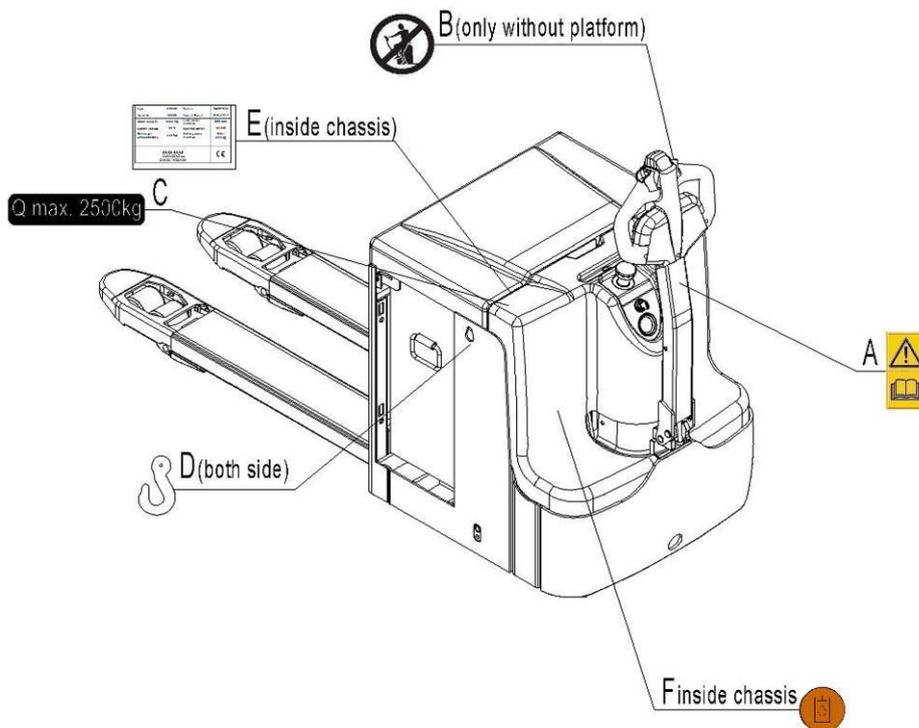


Fig. 5: Safety and warning labels 25EP-X

- A Sticker to read and follow this instruction
- B “No passengers” decal
- C Capacity sticker
- D Crane hook label
- E Identification plate (ID-plate)
- F Sign oil filling point

The truck is equipped with an emergency switch (7) which stops all lifting-, lowering-, driving- functions and engages the failsafe electromagnetic brake when it is pushed.

The truck is equipped with a safety (belly) button (5) which switches the driving function away from the operator, if the truck travels towards the operator and the tiller is activated in the tillers operating zone. Follow also the instructions given on the decals. Replace the decals if they are damaged or missing.

d. Identification plate

- | | |
|----------------------------------|-------------------------|
| 1 Model | 7 Max Battery weight |
| 2 Type | 8 Min. Battery weight |
| 3 Serial Number | 9 Voltage / Rated power |
| 4 Load capacity | 10 Manufacturing date |
| 5 Lift height | |
| 6 Truck weight (without battery) | |

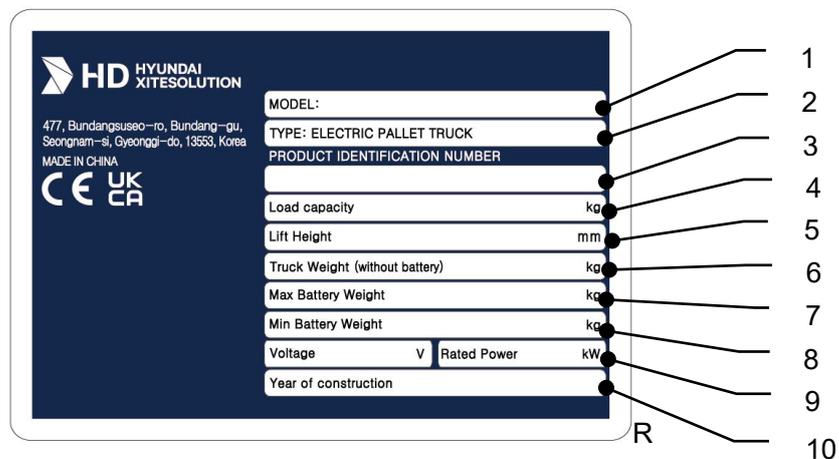


Fig. 4: Identification plate

3. WARNINGS, RESIDUAL RISK AND SAFETY INSTRUCTIONS

DO NOT



- Put foot or hand under or into the lifting mechanism.
- Allow other person than the operator to stand in front of or behind the truck when it is moving or lifting/lowering.
- Overload the truck.
- Put foot in front of the wheels, injury could result.
- Lift people. People could fall down and suffer severe injury.
- Push or pull loads
- Use this truck on ramps
- Side or end load. Load must be distributed evenly on the forks.
- Use the truck with unstable, unbalanced not stable load.
- Use truck without manufacturer's written consent.
- Lifted loads could become unstable at wind forces. In the case of wind forces do not lift the load if there is any influence to the stability

Watch difference in floor levels when driving. Load could fall down or the truck could get uncontrollable.

Keep watching the condition of load. Stop operating the truck if load becomes unstable.

Brake the truck and activate the emergency button (7) by pushing when sliding load on or off the truck. If the truck has any malfunctions, follow chapter 6.

Practice maintenance work according to regular inspection. This truck is not designed to be water resistant. Use the truck under dry condition. Prolonged continuous operation might cause damage of the power pack. Stop operation if temperature of hydraulic oil is too high.



- When operating the electric pallet truck, the operator has to wear safety shoes.
- The truck is intended to be used for indoor applications with ambient temperatures between +5°C and + 40°C.
- The operating lighting must be minimum 50 Lux.
- It is not allowed to use the truck on ramps.
- To prevent unintended sudden movements when not operating the tuck (i.e. from another person, etc.) switch of f the truck when not operating it.

4. TCOMMISSIONING, TRANSPORTING, DECOMMISSIONING

a. Commissioning

Table 2: Commissioning data

Type	16EP-X	20EP-X	25EP-X
Commissioning weight [kg]	445	535	720
Dimensions [mm]	1385x729x1670	1385x729x1735	1385X729X1950

After receiving our new pallet truck or for re-commissioning you have to do following before (firstly) operating the truck:

- Check if are all parts included and not damaged
- Eventually installation of the multifunction tiller
- Eventually installation and charging the batteries (follow chapter 7)
- Do the work according to the daily inspections as well as functional checks.

b. Lifting/ transportation

For transporting, remove the load, lower the forks to the lowest position and fix the truck safe with dedicated lifting gear according to the following figures.

Lifting



USE DEDICATED CRANE AND LIFTING EQUIPMENT
DO NOT STAND UNDER THE SWAYING LOAD
DO NOT WALK INTO THE HAZARDOUS AREA DURING LIFTING

Park the truck securely and lash the truck according to the points identified in fig. 7. Lift the truck to its destination and place the truck securely before removing the lifting gear. The lashing points are according to the fig. 7.

Transportation



DURING TRANSPORTATION ON A LORRY OR TRUCK
ALWAYS FASTEN THE TRUCK SECURELY

Lower the forks and park the truck securely.

Fasten the truck according to fig. 8 by fixing dedicated lashing belts to each side of the trucks crane hook holes and fasten the other side at the transporting truck.

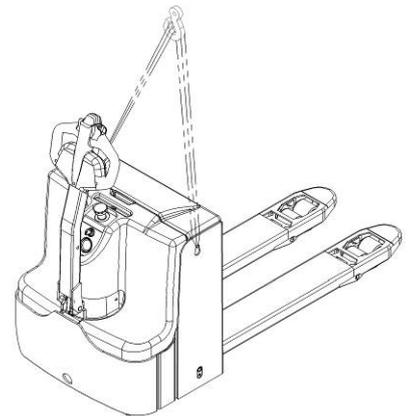


Fig. 7: Lifting with a crane

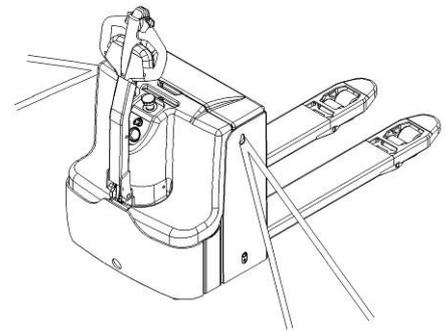


Fig. 8: fixing points

C. Decommissioning

For storage, remove the load, lower the truck to the lowest position, grease all in this handbook mentioned greasing points (regular inspection), eventually protect the truck against corrosion and dust. Remove the batteries and jack the truck safely, so that there will be no flattening after storage.

For final decommissioning hand the truck to a designated recycling company. Oil, batteries and electric components must be recycled due to legal regulations.

5. DAILY INSPECTION

This chapter describes pre-shift checks before putting the truck into operation.

Daily inspection is effective to find the malfunction or fault on this truck. Check the truck on the following points before operation.

Remove load from truck and lower the forks.



DO NOT USE THE TRUCK IF ANY MALFUNCTION IS FOUND.

- Check for scratches, deformation or cracks.
- Check if there is any oil leakage from the cylinder.
- Check the vertical creep of the truck.
- Check the smooth movement of the wheels.
- Check the function of the emergency brake by activating the emergency button.
- Check, the tiller arm- switch braking function
- Check the lifting and lowering functions by operating the buttons.
- Check if all bolts and nuts are tightened firmly.
- Visual check if there are any broken hoses or broken electric wires.

6. OPERATING INSTRUCTIONS



BEFORE OPERATING THIS TRUCK, PLEASE FOLLOW THE WARNINGS AND SAFETY INSTRUCTIONS (CHAPTER 3).

Make sure, that the load is palletized and stable and that the daily inspection is carried out.

Insert the key switch(8), turn on it. Press the horn button (14) to activate the audible warning signal.

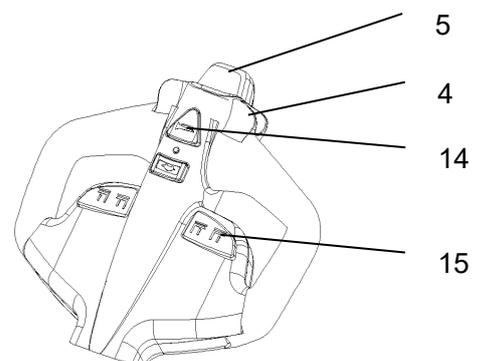


Fig.9: Tiller operating controls

a. Parking



DO NOT PARK THE TRUCK ON INCLINED SURFACES

The truck is equipped with an electromagnetic failsafe stopping and parking brake.

Always lower the forks fully. Press the emergency switch (7),

b. Lifting



DO NOT OVERLOAD THE TRUCK! THE MAXIMUM CAPACITY IS 1600kg(16EP-X), 2000kg(20EP-X), 2500kg.(25EP-X)

Travel with the lowered forks fully underneath the pallet until the load and press the lifting button (15) until you reached the desired lifting height.

c. Lowering

Press the lowering button (15) carefully.

Lower the load until the forks are clear of the pallet, then drive the truck carefully out of the load unit.

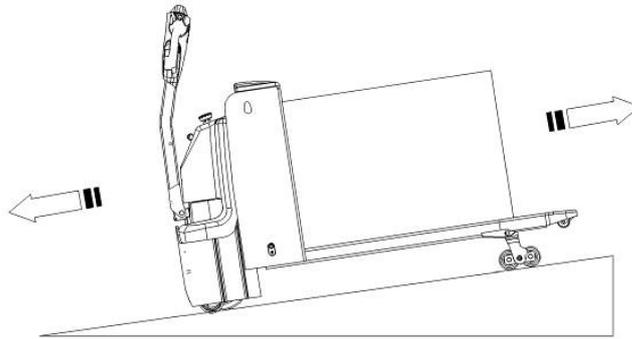


Fig. 10: Load facing uphill

d. Travelling



TRAVEL ON INCLINES ONLY WITH THE LOAD FACING UPHILL.
DO NOT TRAVEL ON INCLINES MORE THAN SPECIFIED WITH THE TECHNICAL DATA.

After starting the truck by turning on the key switch (8), move the tiller to the operating zone ('F', fig.11). Turn the accelerator button to the desired direction forward 'Fw.' or backwards 'Bw.'(fig. 11).

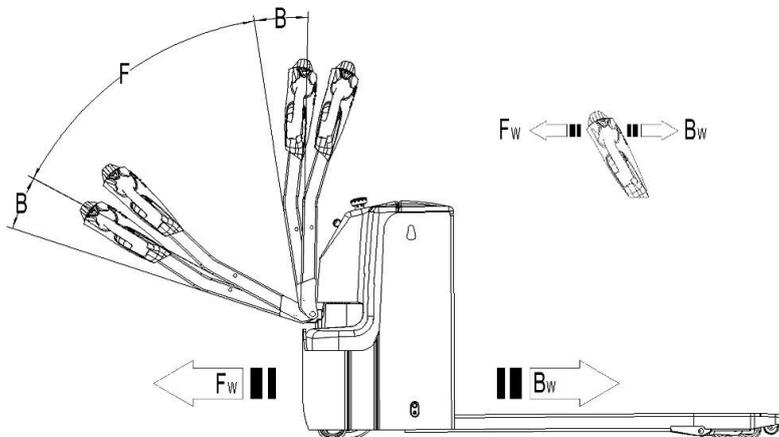


Fig. 11: Operating direction

Control the travelling speed by moving the accelerator button (4) carefully until you reached the desired speed. If you move the accelerator button back to the neutral position, the controller decelerates the truck until the truck stops. If the truck stopped, the parking brake will be engaged.

Drive carefully the truck to the destination. Watch the route conditions and adjust the travelling speed with the accelerator-button.

e. Steering

You steer the truck by moving the tiller to the left or right side.

f. Braking



THE BRAKING PERFORMANCE DEPENDS ON THE TRACK CONDITIONS AND THE LOAD CONDITIONS OF THE TRUCK

The braking function can be activated on several ways:

- By moving the accelerator button (4) back to the initial '0' position or by releasing the button, the regenerative braking is activated. The truck brakes until it stops.
- By moving the accelerator button (4) from one driving direction directly to the opposite direction, the truck brakes regenerative until it starts travelling into the opposite direction.
- The truck brakes, if the tiller is moved up or down to the braking zones ('B'). If the tiller is released, the tiller moves automatically up to the upper braking zone ('B'). The truck brakes until it stops.
- The safety (belly) button (1) prevents the operator from being crushed. If this button is activated, the truck decelerates and or starts travelling into the backwards direction ('Bw.') for a short distance and stops. Please consider, that this button also operates, if the truck is not travelling and the tiller is in the operating zone.

g. Malfunctions

If there are any malfunctions or the truck is inoperative, please stop using the truck and activate the emergency button (7) by pushing it. If possible, park the truck on a safe area and remove the key switch (8). Inform immediately the manager and, or call your service. If necessary, tow the truck out of the operating area by using dedicated towing/ lifting equipment.

h. Emergency

In emergencies or in the event of tip over (or off dock), keep safe distance immediately. If possible push the emergency button (7). All electrical functions will be stopped.

7. BATTERY CHARGING AND REPLACEMENT



- Only qualified personnel are allowed to service or charge the batteries. The instructions of this handbook and from the battery- manufacturer must be observed.
- The batteries are liquid acid traction batteries. Optional maintenance free batteries are available; for these batteries re- filling is prohibited.
- Recycling of batteries undergoes national regulations. Please follow these regulations.
- By handling batteries, open fire is prohibited, gases could cause explosion!
- In the area of battery charging neither burning materials nor burning liquids are allowed. Smoking is prohibited and the area must be ventilated.
- Park the truck securely before starting charging or installing/changing the batteries
- Before finishing the maintenance work, make sure, that all cables are connected correctly and that there are no disturbing towards other components of the truck.

Battery types

Depending on the version, the truck is equipped with different battery types. The following tables show which combinations are intended as standard, indicating the capacity.

The battery weights can be taken from the battery data plate.

Manufacturer's type designation	Battery type	Capacity	Weight	Max. dimensions
16EP-X	24 V battery	2PzB-160Ah	155kg	624x146x590mm
	24 V battery Li-Ion	100Ah	55kg	624x146x590mm
20EP-X	24 V battery	2PzS-210Ah	195kg	624x212x627mm
	24 V battery Li-Ion	150Ah	67kg	624x212x627mm
25EP-X	24 V battery	3PzS-350Ah	285kg	624x284x627mm
	24 V battery Li-Ion	200Ah	90kg	624x284x627mm



LEAD-ACID BATTERIES AND LITHIUM BATTERIES ARE ALLOWED FOR APPLICATION.

THE WEIGHT OF THE BATTERIES HAS AN INFLUENCE TO THE TRUCKS OPERATING BEHAVIOR.

PLEASE CONSIDER THE MAXIMUM OPERATING TEMPERATURE OF THE BATTERIES.

a. Replacement

16EP-X / 20EP-X

Park the truck securely and switch off the truck with the key switch (8), push the emergency button (7). Open the battery cover and let it stay upright, disconnect the battery plug (16), then move the battery out with a crane.

The installation is in the reverse order of the removal. Please connect the positive terminals firstly. Otherwise the tuck could be damaged.

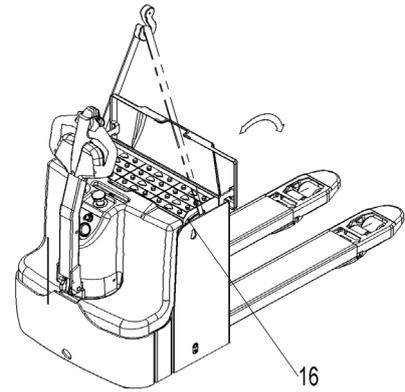


Fig. 12: Battery replacement 16/20EP-X

25EP-X

Park the truck securely and switch off the truck with the key switch (8), push the emergency button (7). Open the battery cover and let it stay upright, disconnect the battery plug (16) and mechanical lock (17), and then pull out the battery.

The installation is in the reverse order of the removal. Please connect the positive terminals firstly. Otherwise the tuck could be damaged.

Note: for PT 20L, if you would like to exchange to the side, please refer to PT 25L.

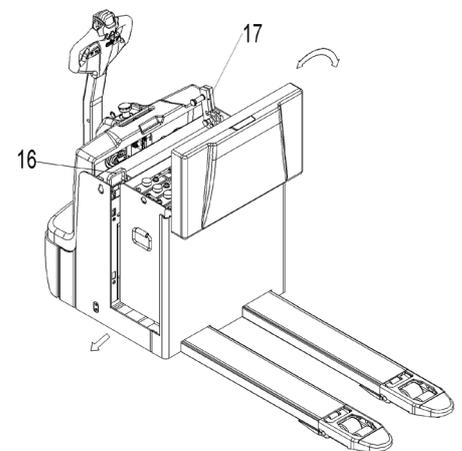
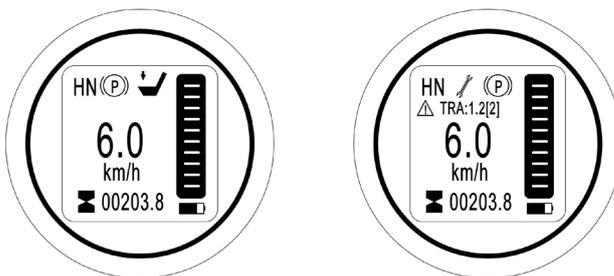


Fig. 13: Battery replacement 25EP-X

b. Battery indicator

Battery indicator (CURTIS)



Normal

Malfunction

Fig. 15: Battery indicator

The main interface displays as shown in the figure above.

Hour meter

The digital counter after Hourglass Symbol indicates the working hour of the truck.

Battery state of charge

It displays the battery symbol and the current battery level. The charge status of the battery is displayed in ten increments. Each is represented by a rectangle that corresponds to 10% of the battery charge.

Monkey Wrench Symbol

It displays the current fault code (TRA is for drive controller failure, STR is for steering controller failure).

Operating mode and truck speed

The number in the center of the battery indicator indicates the traveling speed (km/h).

Working state

The upper left corner of the battery indicator indicates the state of truck and the its mode.

c. Charging



- Before charging ensure that you are using an appropriate charger for charging the installed battery!
- Before using the charger, please fully understand the instructions of the charger instructions.
- Always follow these instructions!
- The room, where you are charging must be ventilated.
- The exactly charge status can be only checked from the discharge indicator. To control the status, the charging

must be interrupted and the truck must be started.

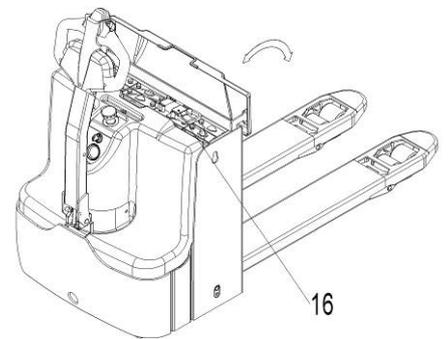


Fig.16: Battery charging

The external charger of battery

Park the truck at a dedicated secured area with a dedicated power supply.

Lower the forks and remove the load; if supplied remove the battery cover.

Switch the truck off and connect the battery plug to the charging plug of the charger.

The charger starts charging the battery if the charger is connected to the main power supply.

Disconnect the battery plug after the charger finished charging.

If supplied, assemble the battery cover. Connect the battery plug with the plug at the truck.

When charging is finished, disconnect the connector from the socket and place it in the designated pocket.

The external charger of lithium-ion battery

Parking the truck at a safe field which is dedicated for charging with a specific power resource.

Lower the forks and remove the load.

Turn off the power, Open the battery cover and let it stay upright, connect the charging connector (18) and power connector (19).

Start charging.

Disconnect the charging plug after charging and install the battery cover. After charging, disconnect the connector from the

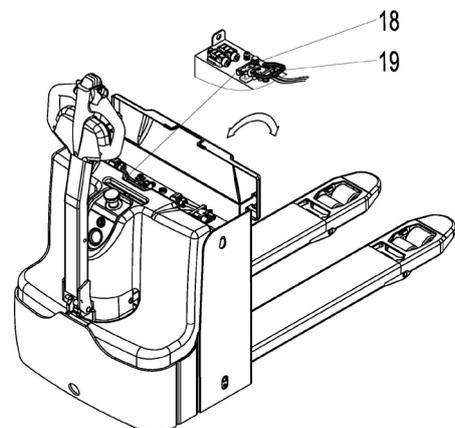


Fig.17: Li-ion battery charging

socket and place it in the designated position.

Charger specification

Manufacturer's type designation	Battery type	Capacity	Charger specification
16EP-X	24 V battery	2PzB-160Ah	24V /SN25A
	24 V battery Li-Ion	100Ah	24V60A
20EP-X	24 V battery	2PzS-210Ah	24V /SN35A
	24 V battery Li-Ion	150Ah	24V60A
25EP-X	24 V battery	3PzS-350Ah	24V /SN45A
	24 V battery Li-Ion	200Ah	24V80A

d. Description of the lithium-ion battery

The lithium-ion battery is a battery with rechargeable cells, the battery is designed for industrial trucks and can withstand related vibrations during operation. The battery is equipped with special connections for charging and discharging operations. Do not try to install or connected improper connectors to the battery.

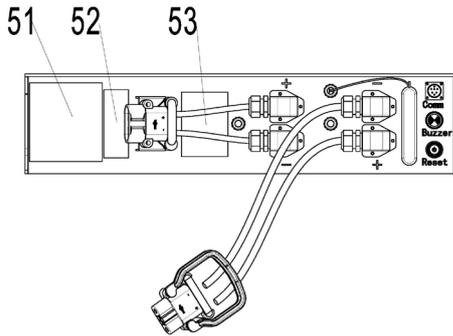
The battery is equipped with BMS – battery management system, which performs the control of battery condition and implements related safety protocols to protect the battery and cells from damages caused by operation or environmental conditions. The BMS controls the following safety functions and conditions: voltage, temperature, under voltage, overvoltage, over temperature and over current.

Battery temperature range

Temperature range for using the battery is from +5°C to +40°C. Low temperatures reduce the effective battery capacity, high temperatures reduce the battery's life time. The temperature difference between the two sides of the battery shall not exceed 5°C.

Only approved battery chargers must be used to charge the lithium battery.

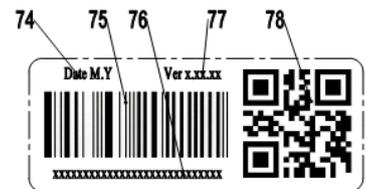
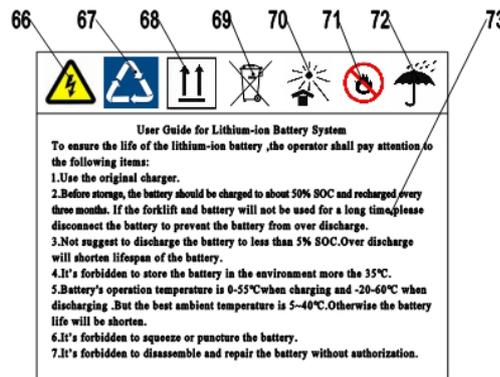
e. Battery Decals



Item	Description
51	Identification plate
52	Bar code and two-dimensional
53	Warning Label

Identification plate and Warning label

54	LOGO	
55	Model	LPxxx
56	Nominal Voltage	xx V
57	Rated Capacity	xx Ah
58	Energy	xx kWh
59	Weight	xx kg±xx kg
60	JW REV	0-CH-FK-R
61	TCP	xxx
62	Serial No.	xxx
63	Date of manufacture	20xx.*
64	Manufacturer:	
65	Address:	



Item	Description	Item	Description
54	Manufacturer logo	67	Rechargeable logo
55	Battery model	68	Vertical upward packing, transportation
56	Nominal voltage of battery	69	No putting into ordinary garbage bins
57	Rated capacity of battery	70	No long-term exposure to sunshine
58	Battery energy of battery	71	Stay away from fire
59	Weight of battery	72	Keep out of the rain
60	Configuration of battery	73	Guide to use
61	Protocol version of battery	74	Production date
62	Production serial No.	75	Battery information bar code
63	Production date	76	Bar code interpretation
64	Name of manufacturer	77	Software version of battery
65	Manufacturer's address	78	Battery information 2D code
66	Electrical hazard marker		

f. Safety Instructions, Warning Indications and other Notes

Safety regulations for handling lithium-ion batteries

Do not try to make any repairs or servicing of lithium batteries



Risk of electric shock and burning

The battery's charging and discharging connectors have open terminals, avoid any body contacts, contamination or direct contacts with objects which can cause short circuit connection of terminals. Use necessary pre-cautions and protective caps to secure the open terminals. The connectors should be maintained in clean and dry conditions.



Use only batteries designed and approved by the manufacturer for the truck.

Do not try to modify or alter the battery.



Any damage or defects to the charger can result in accidents. Use only charger approved by the manufacturer of the truck, which is suitable for used battery

In case charger has any damages or defects, exclude the charger from operation and contact your service provider. Do not modify or try to repair the charger.

Proper use of charger or use of wrong charger can cause damages to a battery or charger. Follow the required charger specifications; If the operation voltage of the charger is out of the applicable voltage range, the charger or battery may be damaged causing serious safety risks. The charger in use must be approved by the battery (truck) manufacturer.

Reversed connection of charging plug is prohibited. Follow the instruction for correct connection. For disconnection of charging plug use dedicated grip and never pull out the plug by means of cable.

Stop charging immediately if any abnormalities are detected, e.g. severe temperature increase, deformation of battery case, smoke, noise etc.



Intermediate charging

Lithium batteries support so called opportunity charging. The lithium battery, which is not fully discharged can be charged in any time. However, frequent opportunity charging not to the full charging state and stop of charging process before the appearance of corresponding indication of charger may result in dis-balance voltage of cells which increases the battery BMS calculation error. In order to effectively deal with this phenomenon, charge the battery in full allowing the automotive balancing process to be completed at least once a week.



Do not charge a fully charged battery

Note that in order to prevent the battery from continuing restart of charging under fully charged

condition causing reduction of battery lifetime, the BMS has a protection function that prohibits recharging of fully charged battery. The charger will not work while battery is fully charged.

Potential hazards

If equipment is used according to its design purpose, following the correct operations procedures, there are no hazards anticipated.

The following hazards can arise in the event of improper use:

- Physical damage to the battery in case a battery falls or is deformed through impacts. Mechanical damages can cause leakages of harmful materials, fire or battery explosion.
- Short circuits may be caused by connecting the two battery terminals, for instance caused by water or intentional/unintentional connections.
- Temperature damages caused by location of batteries in overheated locations or being exposed to impact of fire, open sunlight etc. can cause leakages of harmful materials, fire or battery explosion.

In order to avoid fire, explosion and leakage of harmful materials, a safe place for storing batteries until the service arrives on site must satisfy the following criteria:

- Do not store in places where personnel is located.
- Do not store in places with valuable objects and close to valuable objects.
- A Class D fire extinguisher must be available on demand.
- There should not be any fire or smoke detectors in the storage area in order to ensure that an automatic fire detection system is only activated in the event of actual danger (e.g. naked flames).
- No ventilation intake pipes should be in the facility to exclude spreading of discharged content within a building.

Examples of where to store a non-functional battery:

- Roofed outdoor position.
- Ventilated container.
- Covered fire resistant box with pressure and smoke discharge option.

Symbols - Safety and Warnings

	<p>Caution!</p> <p>Battery short-circuit is prohibited.</p>
	<p>The battery can be recharged cyclically</p>
	<p>Vertical upward packing, transportation and use</p>
	<p>Used lithium-ion batteries must be treated as hazardous waste.</p> <p>Lithium-ion batteries marked with the recycling symbol and the sign showing a crossed-out waste bin must not be disposed of with ordinary household waste.</p>
	<p>Avoid fire and short circuits causing overheating.</p> <p>Do not ignite or locate batteries close to open flame, heat sources or sparks.</p> <p>Keep lithium-ion batteries away from heat sources.</p>
	<p>Protect the lithium-ion battery from solar radiation or other forms of heat radiation.</p> <p>Do not expose the lithium-ion battery to heat sources.</p>
	<p>Keep out of the rain.</p>

Explosion and fire hazard



Physical damage, thermal effects or incorrect storage in the event of a defect can result in explosions or fire. The battery materials can be flammable.

Particular hazard from combustion products

The lithium batteries may be damaged by a fire. When extinguishing a lithium battery fire, the following information must be taken into consideration.



Contact with combustion products can be hazardous

Fire produces combustion products, which can occur in the form of smoke, through leaking fluids, escaping gases, debris as well decomposition products of certain chemicals. These combustion products are substances that enter the body through the respiratory tract and/or the skin can produce and adverse effects such as choking.



Avoid contact with combustion products.

Use protective equipment.

Special firefighting protective equipment

Use self-contained breathing apparatus.

Wear protective equipment.

Additional firefighting instructions

To prevent secondary fires, the lithium-ion battery must be cooled from the outside. Fluids or solids must never be directed into the lithium battery.

Suitable extinguishing agents

- Carbon dioxide extinguisher (CO₂)
- Water (not on mechanically opened or damaged batteries)

Unsuitable extinguishing agents

- Foam
- Grease fire extinguishing agents
- Powder extinguishers
- Metal fire extinguishers (PM 12i extinguishers)
- Metal fire powder PL-9/78 (DIN EN 3SP-44/95)
- Dry sand

Instructions for cooling an overheated, non-physically damaged battery

This type of damage may be caused by a short circuit inside the battery, which may result in leakage of harmful materials, fire or battery explosion.

Material discharge

Battery electrolyte fluid can be hazardous



Electrolyte fluid can be discharged if the battery is physically damaged. Avoid its contact with skin or eyes. If the contact happened:

- Rinse the affected parts with big amount of water and request for medical assistance immediately.
- In case of skin irritation or if any substances are breathed in request the medical assistance immediately.

Precautionary measures for personnel

- Keep personnel away, avoid any contact with smoke or discharged materials.
- Block off the affected area and ensure its reasonable ventilation.
- Wear personal protective equipment. If vapors, dust or aerosols are presented use self-contained breathing apparatus.

Precautionary measures for the environment

Do not allow spilled fluids to enter the water system, drainage system or the underground water.

Cleaning measures

The leaked fluid must be removed professionally following the related protocols.

Battery lifetime and maintenance

The lithium-ion batteries are maintenance-free.

Full discharge can damage the battery

Self-discharge can cause the battery to fully discharged state. Full discharge shortens the service life of the battery and can cause deep discharge and activation of related safety protocols when battery will not be able to be charged anymore.

Before a long period of inactivity, the battery must be charged to at least 70%.

Re-charge the battery at least every 12 weeks.

If the battery is deeply discharged or if the battery temperature is below the permissible level, the battery will not charge. Deep discharged batteries can never be charged. Due to the risk of condensate formation, batteries that have been stored at 0°C or below must only be charged after natural warming up to at least +5°C, forced heating is forbidden.

Storage and safe handling

Storage of batteries

Deep Discharge can damage the battery

If the battery is not used for a long period of time, it can become damaged through discharge.

- Before a long period of inactivity, the battery must be charged to the level of at least 70%.
- Recommended to check and charge, if necessary, the battery every 4 weeks when not in use.
- The storage of fully charged battery reduces its lifetime. Recommended level of charge is in the range of 30% to 70%
- The temperature range for storing the battery is 0°C to 30°C.

Instructions for safe handling

New lithium-ion batteries are transported and stored with a charge status of at least <70 %.

- Do not modify the battery.
- Do not open, damage, drop, penetrate or deform the battery.
- Do not throw the battery into a fire.
- Protect the battery from overheating.
- Protect the battery from direct sun light.
- Follow storage and charging procedures

Failure to comply with these safety instructions can result in fire and explosion or the leakage of harmful materials.

Faults



If any damage is found to the battery or battery charger contact the service provider immediately.
Do not open the battery.

Disposal and transport of a lithium-ion battery

Instructions for disposal

Lithium-ion batteries must be disposed of in accordance with the relevant national environmental protection regulations. Batteries must be treated as hazardous waste. Batteries must not be disposed with ordinary waste.

Shipping information

The lithium-ion battery is a hazardous material. The applicable regulations must be fulfilled during transportation.

Shipping functional batteries

Functioning batteries can be shipped in accordance with the related regulations

Shipping faulty batteries

To transport faulty lithium-ion batteries, contact the service provider. Faulty lithium batteries require following of special transporting procedures.

8. REGULAR MAINTENANCE



- Only qualified and trained personnel are allowed to do maintenance on this truck.
- Before maintaining, remove the load from the forks and lower the forks to the lowest position.
- If you need to lift the truck, follow chapter 4b by using designated lashing or jacking equipment. Before working, put safety devices (for instance designated lift jacks, wedges or wooden blocks) under the truck to protect against accidental lowering, movement or slipping.
- Please pay attention by maintain the tiller arm. The gas pressure spring is pre-loaded by compression, carelessness can cause injury.
- Use approved and from your dealer released original spare parts.
- Please consider that oil leakage of hydraulic fluid can cause failures and accidents.
- It is allowed to adjust the pressure valve only from trained service technicians.

If you need to change the wheels, please follow the instructions above. The castors must be round and they should have no abnormal abrasion.

Check the items emphasized maintenance checklist.

a. Maintenance checklist

Table 3: Maintenance checklist

		Interval(Month)			
		1	3	6	12
Hydraulic					
1	Check the hydraulic cylinder(s), piston for damage noise and leakage		•		
2	Check the hydraulic joints and hose for damage and leakage		•		
3	Inspect the hydraulic oil level, refill if necessary		•		
4	Refill the hydraulic oil (12 month or 1500 working hours)				•
5	Check and adjust function of the pressure valve (1600kg /2000kg /2500kg +0/+10% OR 3500lb /4500 lb /5500 lb +0/+10%)				•
Mechanical system					
6	Inspect the forks for deformation and cracks		•		
7	Check the chassis for deformation and cracks		•		
8	Check if all screws are fixed		•		
9	Check the push rods for deformation and damages		•		
10	Check the gearbox for noise and leakage		•		
11	Inspect the wheels for deformation and damages		•		
12	Inspect and lubricate the steering bearing				•
13	Inspect and lubricate the pivot points		•		
14	Lubricate the grease nipples	•			
Electrical system					
15	Inspect the electric wiring for damage		•		
16	Check the electric connections and terminals		•		
17	Test the Emergency switch function		•		

18	Check the electric drive motor for noise and damages		•		
19	Test the display		•		
20	Check, if correct fuses are used		•		
21	Test the warning signal		•		
22	Check the contactor(s)		•		
23	Check the frame leakage (insulation test)		•		
24	Check function and mechanical wear of the accelerator		•		
25	Check the electrical system of the drive motor		•		
Braking system					
26	Check brake performance, if necessary replace the brake disc or adjust the air gap		•		
Battery					
27	Check the battery voltage		•		
28	Clean and grease the terminals and check for corrosion and damage		•		
29	Check the battery housing for damages		•		
30	Check and if necessary refill the battery with distilled water	•			
Charger					
31	Check the main power cable for damages			•	
32	Check the start-up protection during charging			•	
Function					
33	Check the horn function	•			
34	Check the air gap of the electromagnetic brake	•			
35	Test the emergency braking	•			
36	Test the reverse and regenerative braking	•			
37	Test the safety (belly) button function	•			
38	Check the steering function	•			
39	Check the lifting and lowering function	•			
40	Check the tiller arm switch function	•			
General					
41	Check if all decals are legible and complete	•			
42	Inspect the castors, adjust the height or replace these if worn out.		•		
43	Carry out a test run	•			

b. Lubricating points

Lubricate the marked points according to the maintenance checklist. The required grease specification is: DIN 51825, standard grease.

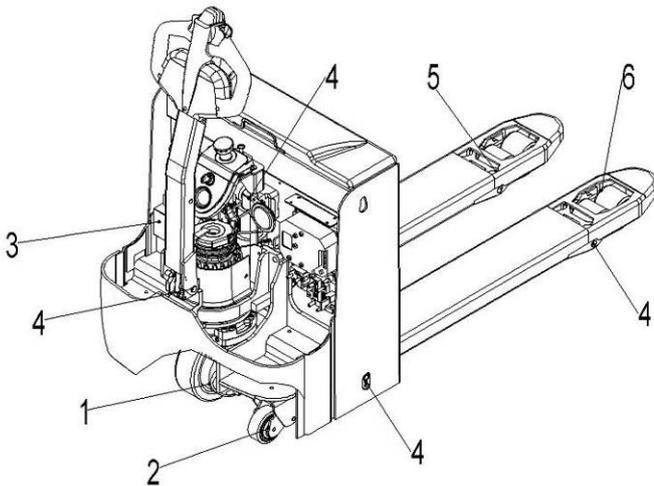


Fig. 18: Lubricating points

1. Steering castor bearing
2. Support castor bearing
3. Pump
4. Axle
5. Joint
6. Load roller bearing

c. Check and refill hydraulic oil

The required hydraulic fluid- type is

- H-LP 46, DIN 51524
- Viscosity is 41.4 - 47
- Depending on the type the amount is 0,7L(16/20EP-X) and 0.8L (25EP-X)

Waste material like oil, used batteries or other must be probably disposed and recycled according to the national regulations and if necessary brought to a recycling company.

The oil level height shall be in the not lifted position min.0.6L to 0.8L.

If necessary add oil at the filling point.

d. Checking electrical fuses

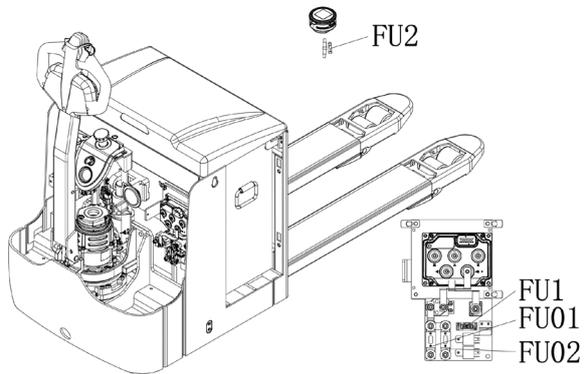


Fig. 20: Location fuses (16EP-X / 20EP-X / 25EP-XL) (CURTIS)

	Rate
FU1	0.5 A
FU2	10 A
FU01	80A
FU02	150A

Table 5: Size fuses (16EP-X / 20EP-X / 25EP-XL) (CURTIS)

e. Wheel replacement procedure

Drive wheel

Lift the truck with help of hydraulic jack



Unscrew five nuts holding the tire



Remove the tire

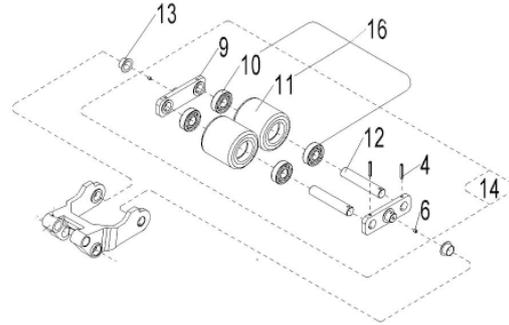


Assemble back with reversed order

Torque for nuts 90Nm

Rollers

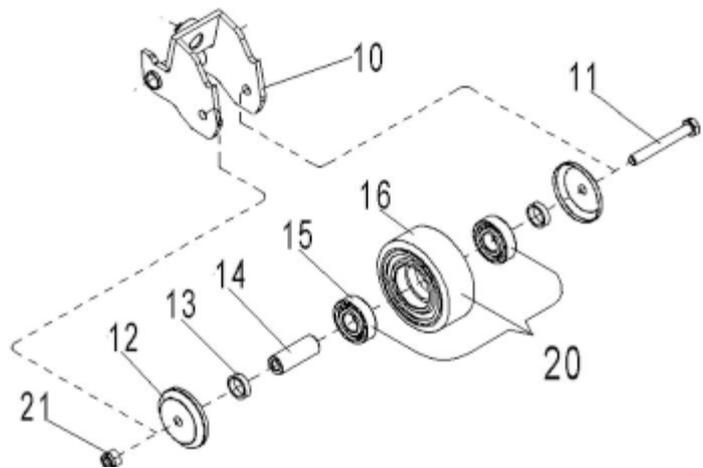
Remove pins pos. 4
Remove axles pos. 12
Remove rollers pos. 11
Assemble in the reversed order



Support wheel

Remove nut pos. 21
Remove bolt pos. 11
Replace wheel pos. 16 with bearings
pos. 15

Assemble in the reversed order
Sleeve pos. 14 must be inserted in
bearings pos. 15



f. De-energizing of energy stored components

During maintenance of energy stored components the energy need to be released prior to any maintenance procedures to avoid injuries.

Gas spring: the gas spring of the tiller can be removed only when tiller is put to its upright position.

Electromagnetic brake: before disassembling of electromagnetic brake the braking disk needs to be fixed with two M6x40 screws through the special holes in the coil of brake. Slightly tighten the screws to fix the braking disk together with the coil. The brake can be removed afterwards.

After the brake is assembled back to the motor, the screws must be removed.



9. TROUBLE SHOOTING



- If the truck has malfunctions follow the instructions, mentioned under chapter 6.

Table 6: Trouble shooting

TROUBLE	CAUSE	REPAIR
Load can't be lifted	Load weight too high	Lift only the max. capacity, mentioned on the ID-plate
	Battery discharged	Charge the battery
	Lifting fuse faulty	Check and eventually replace the lifting 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.
Truck not starts operating	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
	Fuse faulty	Check and eventually replace fuses
	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.

10. WIRING / CIRCUIT DIAGRAM

a. Electrical circuit diagram

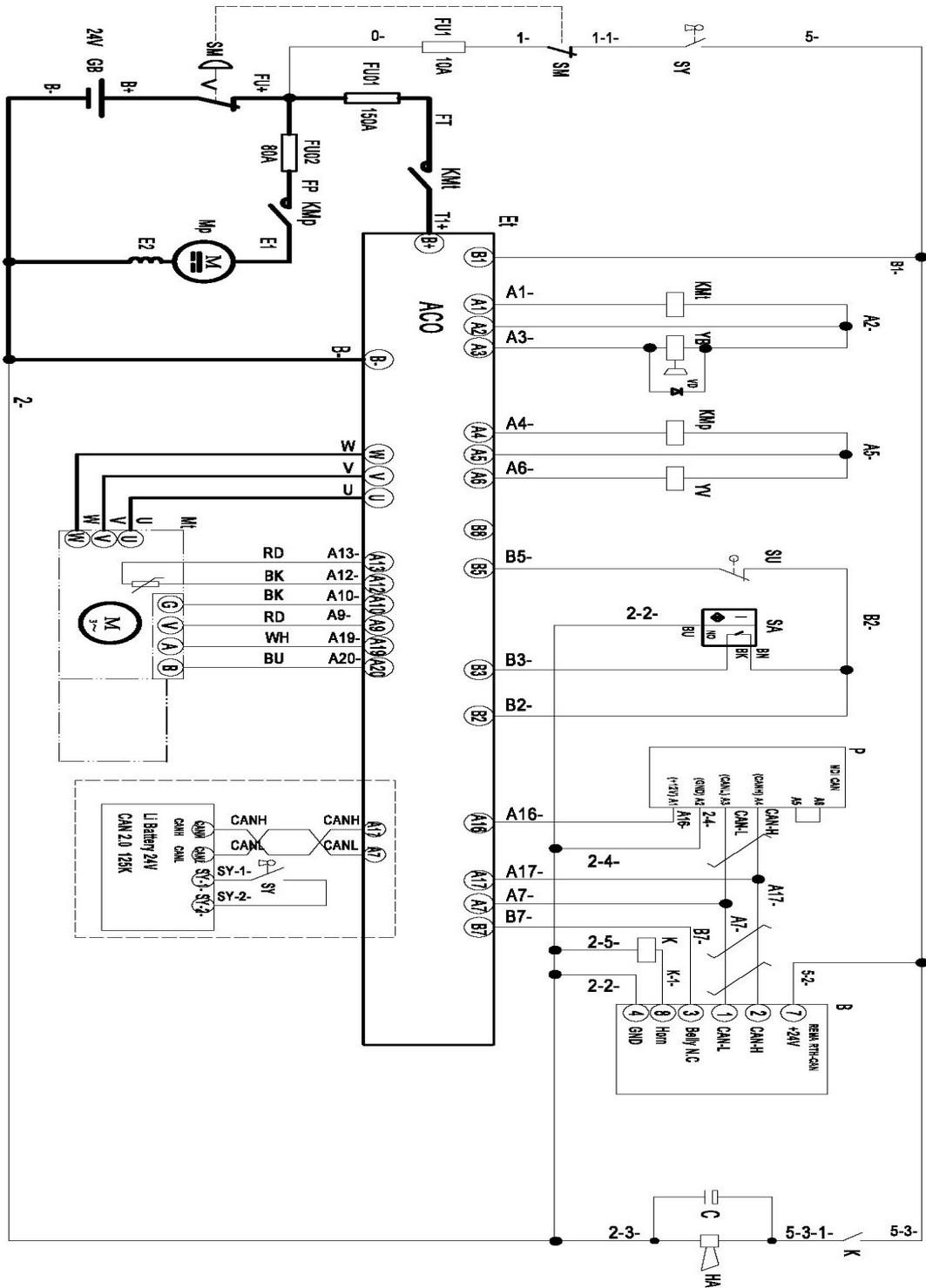
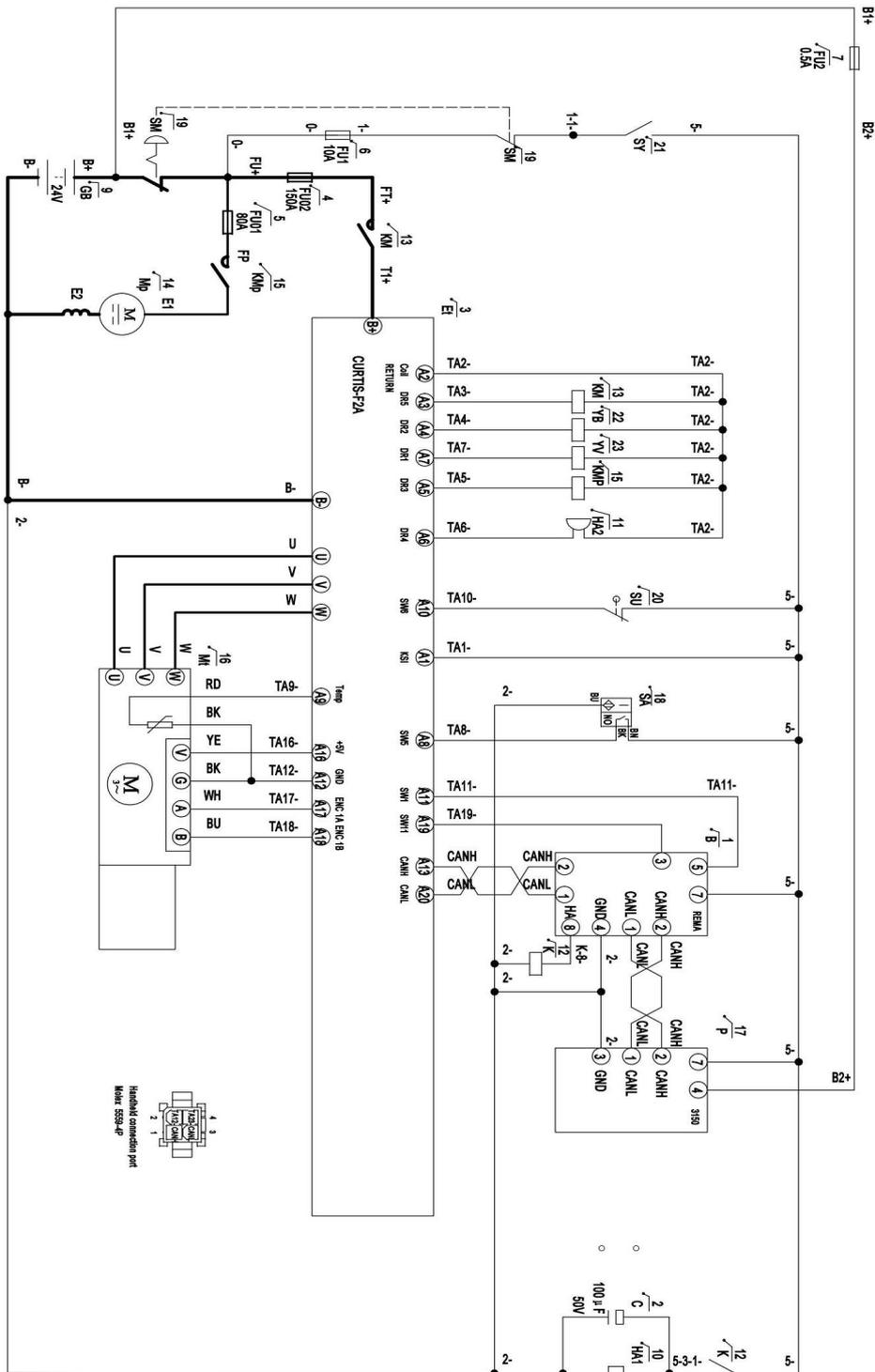


Fig. 22: Electrical diagram (16EP-X / 20EP-X / 25EP-X)

FU01:	150A
FU02:	80A
FU1:	10A

Table 8: Description of electrical diagram

Code	Item	Code	Item
GB	Li battery	K	Relay
SM	Emergency button	SA	Proximity switch
Et	Controller	P	Indicator
KMt	Main contactor	B	Tiller
FU01	Fuse 150A	C	Capacitor
FU02	Fuse 80A	HA	Horn
FU1	Fuse 10A	SU	Micro switch
SY	Key switch	YV	Electromagnetic valve
KMp	Lifting contactor	Mt	Traction motor
Es	Steering Controller	YB	Electromagnetic brake
Mp	Pump motor	VD	Diode

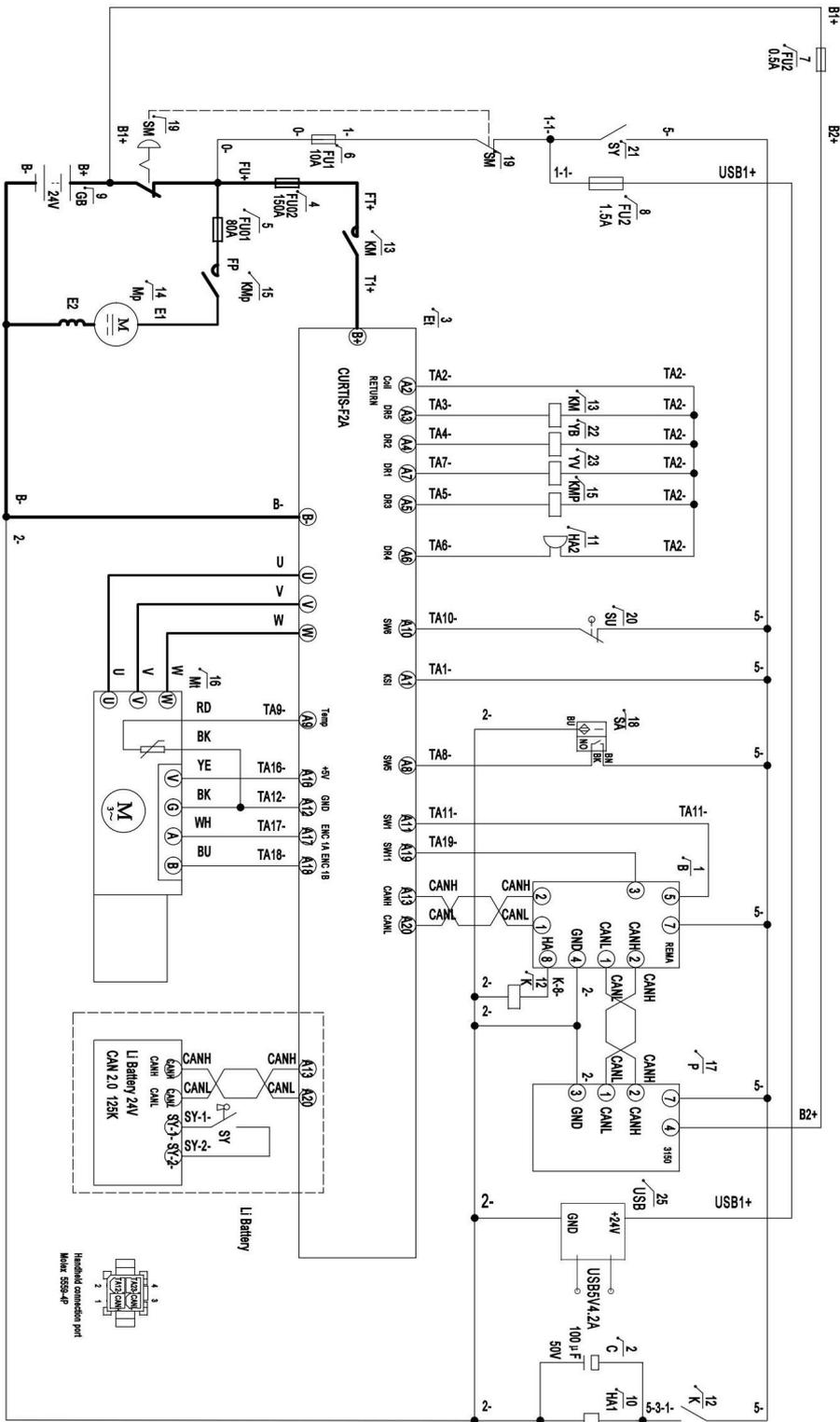


- FU01: 150A
- FU02: 80A
- FU1: 10A
- FU2: 0.5A

Fig. 23: Electrical diagram (CE)

Code	Item	Code	Item
GB	Battery	K	Relay
SM	Emergency button	SA	Proximity switch
Et	Controller	P	Indicator
KMt	Main contactor	B	Tiller
FU01	Fuse 80A	C	Capacitor
FU02	Fuse 150A	HA	Horn
FU1	Fuse 10A	SU	Micro switch
SY	Key switch	YV	Electromagnetic valve
KMp	Lifting contactor	Mt	Traction motor
Es	Steering Controller	YB	Electromagnetic brake
Mp	Pump motor	VD	Diode

Table 9: Description of electrical diagram



FU01:	150A
FU02:	80A
FU1:	10A
FU2:	0.5A
FU3:	1.5A

Fig. 24: Electrical diagram (Li)(CE)

Code	Item	Code	Item
GB	Li battery	K	Relay
SM	Emergency button	SA	Proximity switch
Et	Controller	P	Indicator
KMt	Main contactor	B	Tiller
FU01	Fuse 80A	C	Capacitor
FU02	Fuse 150A	HA	Horn
FU1	Fuse 10A	SU	Micro switch
SY	Key switch	YV	Electromagnetic valve
KMp	Lifting contactor	Mt	Traction motor
Es	Steering Controller	YB	Electromagnetic brake
Mp	Pump motor	VD	Diode

Table 10: Description of electrical diagram

b. Hydraulic circuit

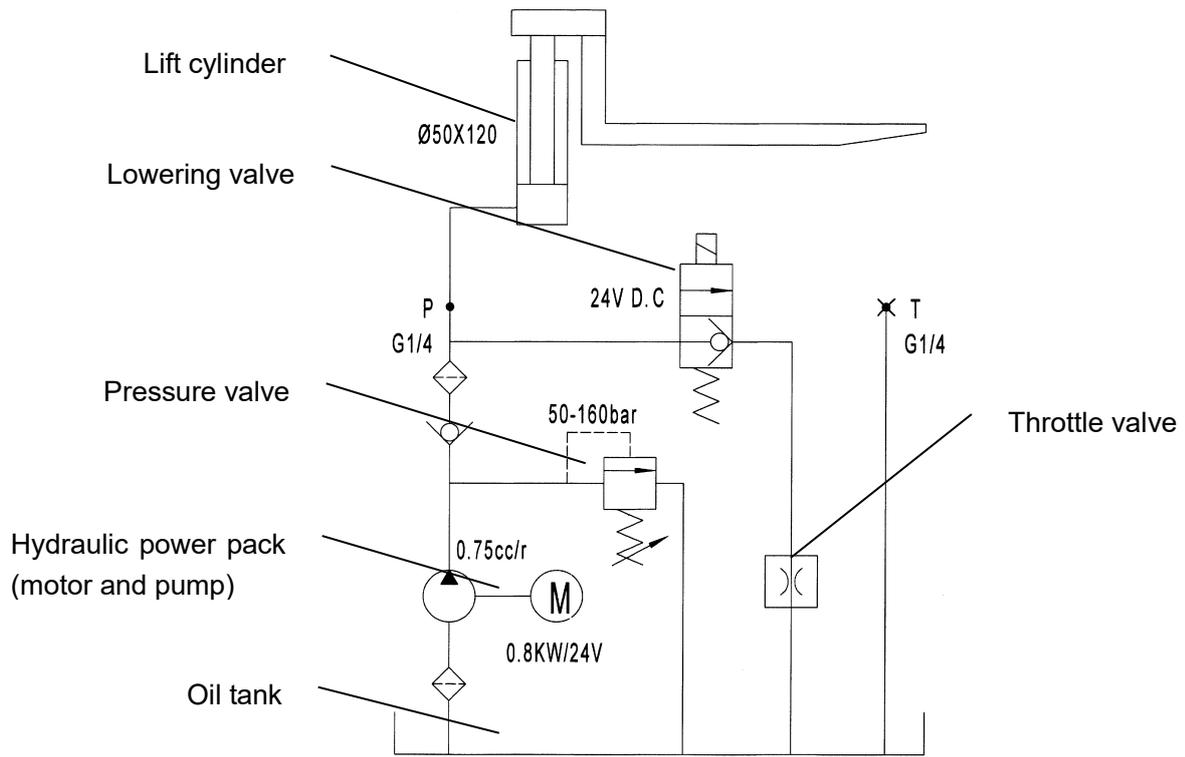


Fig. 25: 16EP-X / 20EP-X Hydraulic circuit

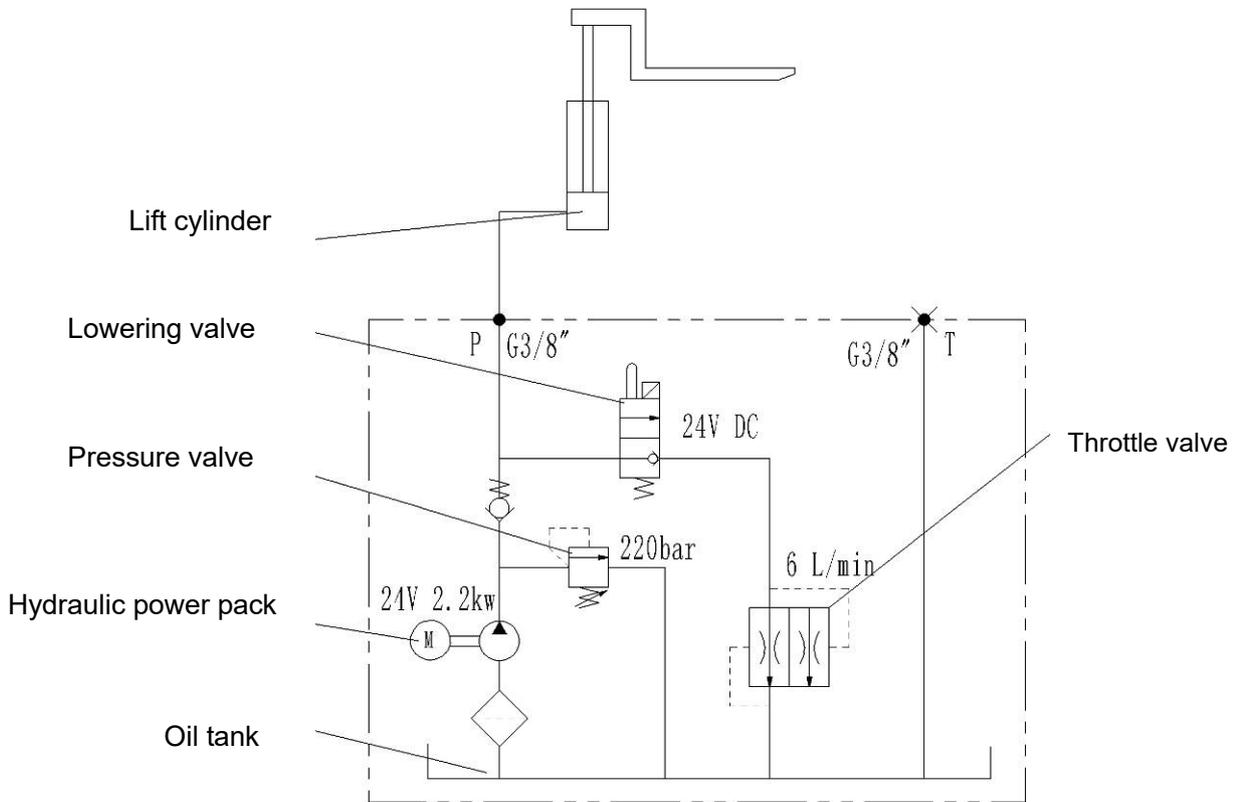


Fig. 26: 25EP-X Hydraulic circuit

11. DECLARATION OF CONFORMITY(valid, if sold within the EU)

[GB] Original CE Declaration of conformity

The signatory hereby declares that the specified machine conforms to the EC Directive 2006/42/EC (Machine Directive), and 2014/30/EU (Electro-Magnetic Compatibility, EMC) including their amendments as translated into national legislation of the member countries. The signatory is individually authorized to compile the technical documents and declares that the following standards, including the normative procedures contained therein, have been applied:

[D] Original EG- Konformitätserklärung

Der Unterzeichner erklärt hiermit, dass die angegebene Maschine den EG-Richtlinien 2006/42/EG (Maschinenrichtlinie) und 2014/30/EU (Elektromagnetische Verträglichkeit, EMV) einschließlich ihrer Änderungen in der Umsetzung in die nationale Gesetzgebung der Mitgliedsländer entspricht. Der Unterzeichner ist zur Zusammenstellung der technischen Unterlagen einzeln befugt und erklärt, dass folgende Normen, einschließlich der darin enthaltenen normativen Verfahren, angewendet wurden:

[E] Original DECLARACIÓN DE CONFORMIDAD CE

El signatario declara por la presente que la máquina especificada cumple con la Directiva CE 2006/42/EC (Directiva de Máquinas) y 2014/30/EU (Compatibilidad Electromagnética, EMC) incluidas sus enmiendas traducidas a la legislación nacional de los países miembros. El firmante está autorizado individualmente para compilar los documentos técnicos y declara que se han aplicado los siguientes estándares, incluidos los procedimientos normativos contenidos en ellos:

[F] Originale DECLARATION DE CONFORMITE CE

Le signataire déclare par la présente que la machine spécifiée est conforme à la directive CE 2006/42/CE (directive machine) et 2014/30/UE (compatibilité électromagnétique, CEM), y compris leurs modifications telles que traduites dans la législation nationale des pays membres. Le signataire est individuellement autorisé à compiler les documents techniques et déclare que les normes suivantes, y compris les procédures normatives qu'elles contiennent, ont été appliquées:

[NL] Origineel EG-CONFORMITEITSVERKLARING

De ondertekenaar verklaart hierbij dat de gespecificeerde machine voldoet aan de EG-richtlijnen 2006/42/EG (machinerichtlijn) en 2014/30/EU (elektromagnetische compatibiliteit, EMC) inclusief hun amendementen zoals vertaald in de nationale wetgeving van de aangesloten landen. De ondertekenaar is individueel gemachtigd om de technische documenten samen te stellen en verklaart dat de volgende normen, inclusief de normatieve procedures die daarin zijn opgenomen, zijn toegepast:

[P] Original DECLARAÇÃO DE CONFORMIDADE CE

O signatário declara que a máquina especificada está em conformidade com a Diretiva EC 2006/42/EC (Diretiva de Máquinas) e 2014/30/EU (Compatibilidade Eletromagnética, EMC), incluindo suas emendas traduzidas para a legislação nacional dos países membros. O signatário está individualmente autorizado a compilar os documentos técnicos e declara que as seguintes normas, incluindo os procedimentos normativos neles contidos, foram aplicadas:

[I] Originale DICHIARAZIONE DI CONFORMITÀ CE

Il firmatario dichiara che la macchina specificata è conforme alla Direttiva CE 2006/42/CE (Direttiva macchine) e 2014/30/UE (Compatibilità elettromagnetica, EMC) compresi i relativi emendamenti tradotti nella legislazione nazionale dei paesi membri. Il firmatario è autorizzato individualmente alla compilazione dei documenti tecnici e dichiara che sono state applicate le seguenti norme, comprese le procedure normative ivi contenute:

[BG] Оригинален ЕВРОПЕЙСКА ОБЩНОСТ - ДЕКЛАРАЦИЯ ЗА СЪОТВЕТСТВИЕ

С настоящото подписаното лице декларира, че посочената машина отговаря на Директива на ЕО 2006/42/ЕС (Директива за машини) и 2014/30/ЕУ (Електромагнитна съвместимост, EMC), включително техните изменения, преведени в националното законодателство на страните-членки. Подписаното лице е лично упълномощено да съставя техническите документи и декларира, че са приложени следните стандарти, включително съдържащите се в тях нормативни процедури:

[CZ] Originál EG - PROHLÁŠENÍ OSHODĚ

Signatář tímto prohlašuje, že uvedený stroj je ve shodě se směrnicí ES 2006/42/ES (Směrnice o strojích) a 2014/30/EU (Elektromagnetická kompatibilita, EMC) včetně jejich změn ve znění přeložené do národní legislativy členských zemí. Podepisující osoba je samostatně oprávněna sestavit technické dokumenty a prohlašuje, že byly použity následující normy, včetně normativních postupů v nich obsažených:

[DK] Original EF-OVERENSSTEMMELSE SERKLÆRING

Underskrivere erklærer hermed, at den specificerede maskine er i overensstemmelse med EF-direktivet 2006/42/EC (maskindirektivet) og 2014/30/EU (elektro-magnetisk kompatibilitet, EMC) inklusive deres ændringer som oversat til national lovgivning i medlemslandene. Underskrivere er individuelt bemyndiget til at udarbejde de tekniske dokumenter og erklærer, at følgende standarder, inklusive de normative procedurer indeholdt deri, er blevet anvendt:

[EST] Originaal EL vastavusavaldus

Allakirjutatu kinnitab käesolevaga, et nimetatud masin vastab EÜ direktiivile 2006/42/EÜ (masinadirektiiv) ja 2014/30/EL (elektromagnetiline ühilduvus, EMC), sealhulgas nende muudatustele, nagu on tõlgitud liikmesriikide siseriiklikesse õigusaktidesse. Allakirjutatul on individuaalselt õigus koostada tehnilisi dokumente ja ta kinnitab, et on kohaldatud järgmisi standardeid, sealhulgas neis sisalduvaid normatiivprotseduure:

[FIN] Alkuperäinen EU-YHDENMUKAISUUSSELOSTUS

Allekirjoittaja vakuuttaa täten, että määritetty kone on EY-direktiivin 2006/42/EY (konedirektiivi) ja 2014/30/EU (sähkömagneettinen yhteensopivuus, EMC) mukainen, mukaan lukien niiden muutokset, sellaisina kuin ne on käännetty jäsenmaiden kansalliseen lainsäädäntöön. Allekirjoittaja on henkilökohtaisesti valtuutettu kokoamaan tekniset asiakirjat ja vakuuttaa, että seuraavia standardeja, mukaan lukien niihin sisältyvät normatiiviset menettelyt, on sovellettu:

[GR] Πρωτότυπο ΔΗΛΩΣΗ ΣΥΜΜΟΡΦΩΣΗΣ ΕΚ

Ο υπογράφοντας δηλώνει με το παρόν ότι το συγκεκριμένο μηχάνημα συμμορφώνεται με την Οδηγία 2006/42/ΕΚ (Οδηγία Μηχανών) και 2014/30/ΕΕ (Ηλεκτρομαγνητική Συμβατότητα, EMC) συμπεριλαμβανομένων των τροποποιήσεων τους όπως έχουν μεταφραστεί στην εθνική νομοθεσία των χωρών μελών. Ο υπογράφοντας είναι ατομικά εξουσιοδοτημένος να συντάξει τα τεχνικά έγγραφα και δηλώνει ότι έχουν εφαρμοστεί τα ακόλουθα πρότυπα, συμπεριλαμβανομένων των κανονιστικών διαδικασιών που περιέχονται σε αυτά:

[H] Eredeti EU KONFORMITÁSI NYILATKOZAT

Az aláíró ezennel kijelenti, hogy a megadott gép megfelel a 2006/42/EC (gépirányelv) és a 2014/30/EU (elektromágneses összeférhetőség, EMC) irányelveknek, beleértve azok módosításait a tagországok nemzeti jogszabályai alapján. Az aláíró egyénileg jogosult a műszaki dokumentumok összeállítására, és kijelenti, hogy a következő szabványokat, beleértve az abban foglalt normatív eljárásokat, alkalmazták:

[LT] Originalus ES atitikimo deklaracija

Pasirašęs asmuo pareiškia, kad nurodyta mašina atitinka EB direktyvą 2006/42/EB (mašinų direktyvą) ir 2014/30/ES (elektromagnetinį suderinamumą, EMC), įskaitant jų pakeitimus, išverstus į šalių narių nacionalinius teisės aktus. Pasirašęs asmuo yra individualiai įgaliotas rengti techninius dokumentus ir pareiškia, kad buvo taikomi šie standartai, įskaitant juose nurodytas normines procedūras:

[LV] Oriģināls ES atbilstības deklarācija

Parakstītājs ar šo apliecinā, ka norādītā iekārta atbilst EK Direktīvai 2006/42/EK (Mašīnu direktīva) un 2014/30/ES (Elektromagnētiskā saderība, EMC), ieskaitot to grozījumus, kas ir tulkoti dalībvalstu nacionālajos tiesību aktos. Parakstītājs ir individuāli pilnvarots sastādīt tehniskos dokumentus un apliecinā, ka ir piemēroti šādi standarti, tostarp tajos ietvertās normatīvās procedūras:

[N] Opprinnelig EU-KONFORMITETSERKLÆRING

Underskrivere erklærer herved at den spesifiserte maskinen er i samsvar med EC-direktivet 2006/42/EC (maskindirektivet), og 2014/30/EU (elektromagnetisk kompatibilitet, EMC) inkludert deres endringer som oversatt til nasjonal lovgivning i medlemslandene. Underskrivere er individuelt autorisert til å sammenstille de tekniske dokumentene og erklærer at følgende standarder, inkludert de normative prosedyrene som finnes deri, er brukt:

[PL] Oryginalny DEKLARACJA ZGODNOŚCI WE

Sygnatariusz niniejszym oświadcza, że określona maszyna jest zgodna z dyrektywą WE 2006/42/WE (dyrektywa maszynowa) i 2014/30/UE (kompatybilność elektromagnetyczna, EMC) wraz z ich poprawkami w tłumaczeniu na ustawodawstwo krajowe krajów członkowskich. Sygnatariusz jest indywidualnie upoważniony do sporządzania dokumentacji technicznej i oświadcza, że zastosowano następujące normy, w tym zawarte w nich procedury normatywne:

[RO] Original DECLARATIE DE CONFORMITATE CE

Semnatarul declară prin prezenta că mașina specificată este conformă cu Directiva CE 2006/42/CE (Directiva Mașini) și 2014/30/UE (Compatibilitate electro-magnetică, EMC), inclusiv amendamentele acestora, astfel cum au fost traduse în legislația națională a țărilor membre. Semnatarul este autorizat individual să întocmească documentele tehnice și declară că au fost aplicate următoarele standarde, inclusiv procedurile normative cuprinse în acestea:

[RUS] Оригинал Декларация соответствия стандартам ЕС

Настоящим подписывающая сторона заявляет, что указанная машина соответствует Директиве ЕС 2006/42/ЕС (Директива по машинам) и 2014/30/ЕС (Электромагнитная совместимость, ЭМС), включая их поправки, переведенные в национальное законодательство стран-членов. Подписавшаяся сторона имеет индивидуальное право на составление технических документов и заявляет, что были применены следующие стандарты, включая содержащиеся в них нормативные процедуры:

[SI] Original EG-KONFORMITETS FÖRKLARING

Undertecknaren intygar härmed att den specificerade maskinen överensstämmer med EG-direktivet 2006/42/EC (maskindirektivet) och 2014/30/EU (elektromagnetisk kompatibilitet, EMC) inklusive deras tillägg som översatts till nationell lagstiftning i medlemsländerna. Undertecknaren är individuellt behörig att sammanställa de tekniska dokumenten och förklarar att följande standarder, inklusive de normativa proceduren som finns däri, har tillämpats:

[SK] Originál vyhlásenie o zhode

Signatár týmto vyhlasuje, že špecifikovaný stroj je v súlade so Smernicou ES 2006/42/EC (Smernica o strojoch) a 2014/30/EU (Elektromagnetická kompatibilita, EMC) vrátane ich dodatkov preložených do národnej legislatívy členských krajín. Signatár je individuálne oprávnený zostavovať technické dokumenty a vyhlasuje, že boli aplikované nasledujúce normy vrátane normatívnych postupov v nich obsiahnutých:

[SLO] Original EU IZJAVA O SKLADNOSTI

Podpisnik s tem izjavlja, da je navedeni stroj v skladu z Direktivo ES 2006/42/ES (Direktiva o strojih) in 2014/30/EU (Electro-Magnetic Compatibility, EMC), vključno z njunimi spremembami, kot so prevedene v nacionalno zakonodajo držav članic. Podpisnik je posamično pooblaščen za sestavo tehnične dokumentacije in izjavlja, da so bili uporabljeni naslednji standardi, vključno z normativnimi postopki, ki jih vsebuje:

[TR] Orijinal AB Uygunluk Açıklaması

İmza sahibi, belirtilen makinenin AB Direktifi 2006/42/EC (Makine Direktifi) ve 2014/30/EU (Elektro-Manyetik Uyumluluk, EMC) ve bunların üye ülkelerin ulusal mevzuatına tercüme edilen değişiklikleri ile uyumlu olduğunu beyan eder. İmza sahibi, teknik belgeleri derlemeye bireysel olarak yetkilidir ve burada yer alan normatif prosedürler dahil olmak üzere aşağıdaki standartların uygulandığını beyan eder:

<the applied standards have to be shown here>

- (1) Type: **XX XX– Self-propelled industrial truck**
- (2) Serial No: **XXXXXXXX**
- (3) Year of constr.: **YYYY**
- (4) Manufacturer: Noblelift Intelligent Equipment Co., Ltd.
528 Changzhou Road, Taihu Sub-district, Changxing, 313100, PR China
- (5) Responsible for compiling the technical documentation: <Company name>,
<Company Address>
- (6) Date: <Place>, **YYYY.MM.DD**
- (7) Authorized signatory: <Position> **Mr. Sample**

- (1) Type/ Typ/ Tipo/ Modello/ Түрүп/ Tipo / ΤΥΠΟΣ/ Típus/ Tip/ Тип/ Tips/ Tipas/ Tüüp:
- (2) Serial No./ Serien-Nr./ N°. de série/ Seriennummer/ N° de serie/ Numero di serie/ Serienr./ Sarjanro/ αριθμωση/ Seriové číslo/ Szériaszám/ Nr.Seryjny/ Serijska številka/ Výrobné číslo/ Серийный номер/ Seri No./ Seerianr./ Sērijas Nr./ Serijos numeris:
- (3) Year of constr./ Baujahr/ Année de constr./ Bouwjaar/ Año de constr./ Anno di costruzione/ Produktionsår/ Byggeår/ Tillverkningsår/ Valmistusvuosi/ Ano de fabrico / έτος κατασκευής/ Rok výroby/ Gyártási év/ Rok produkcji / Letnik / Годизготовления / Üretim yılı / Väljallaskeasta / Izgatavošanas gads / Gambybosmetai
- (4) Manufacturer/ Hersteller/ Fabricante/ Fabricant/ Fabrikant/ Fabricante/ Produttore/ производитель/ Výrobce/ Fabrikant/ Tootja/ Valmistaja/ Κατασκευαστής/ Gyártó/ Gamintojas/ Ražotājs/ Produzent/ Producent/ Producător/ Производител/ Tillverkare/ Výrobca/ Proizvajalec/ Üretici firma
- (5) Responsible for compiling the technical documentation/ Verantwortlich für die Zusammenstellung der technischen Dokumentation/ Responsable de compilar la documentación técnica/ Responsable de la compilation de la documentation technique/ Verantwoordelijk voor het samenstellen van de technische documentatie/ Responsável pela compilação da documentação técnica/ Responsabile della compilazione della documentazione tecnica/ Отговаря за съставянето на техническата документация/ Zodpovedá za sestavení technické dokumentace/ Ansvarlig for udarbejdelse af den tekniske documentation/ Vastutab tehnilise dokumentatsiooni koostamise eest/ Vastaa teknisen dokumentaation laatimisesta/ Υπεύθυνος για τη σύνταξη της τεχνικής τεκμηρίωσης/ Felelős a műszaki dokumentáció összeállításáért/ Atsakingas už techninės dokumentacijos sudarymą/ Atbildīgs par tehniskās dokumentācijas sastādīšanu/ Ansvarlig for sammenstilling av teknisk dokumentasjon/ Odpowiedzialny za kompletowanie dokumentacji technicznej/ Responsabil cu întocmirea documentatiei tehnice/ Ответственный за составление технической документации/ Ansvarig för att sammanställa den tekniska dokumentationen/ Zodpovedá za zostavenie technickej dokumentácie/ Odgovoren za pripravo tehnične dokumentacije/ Teknik dokümantasyonun derlenmesinden sorumlu
- (6) Date/ Datum/ Data/ Fecha/ datum/ Dato/ päiväys/ Kuupäev/ Datums/ дата/ Dátum/ dátum/ tarihi/ ημερομηνία
- (7) Authorised signatory/ ImAuftrag/ pour ordre/ Incaricato/ Por orden de/ por procuração/ op last van/ påvegeaef/ påuppdrag/ Etteroppdrag/ psta./ Ülesandel/ pavedus / v.i. / Попоручению / megbízásból / длъжностнолице / z pověření / z poverenia / po nalogu / napolecenie / din sarcina / адина / θαη' ελληνή