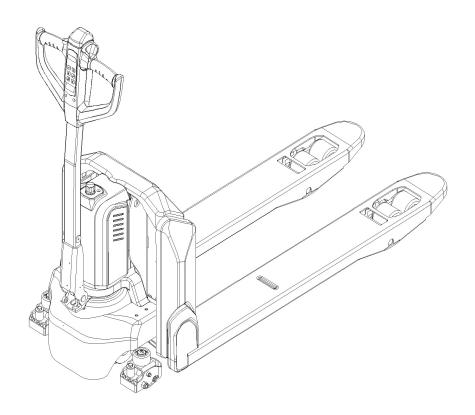
# 15EP-XB / 20EP-XB

# 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 get lost, please contact your local dealer for replacement.

Note: Each of the following model names in the group refer to same model of trucks. Different model names are used for different markets, the numbers in name reflect the capacity of truck in KG or LBS:

• 15EP-XB / 20EP-XB

### 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. 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  $+5^{\circ}$ C and  $+40^{\circ}$ C and for various transportation applications without crossing permanent obstacles or potholes. The work on ramps is allowed if ramp is not exceeding the allowed angle. While operating, the load must be placed approximately on the longitudinal center 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.

Only in the event that the truck manufacturer is no longer in business and there is no successor in the interest to the business, may the user arrange for a modification or alteration to a powered industrial truck, provided, however, that the user:

- a) arranges for the modification or alteration to be designed, tested and implemented by an engineer(s) expert in industrial trucks and their safety,
- b) maintains a permanent record of the design, test(s) and implementation of the modification or alteration,
- c) approves and makes appropriate changes to the capacity plate(s), decals, tags and instruction handbook, and
- d) affixes a permanent and readily visible label to the truck stating the manner in which the truck has been modified or altered, together with the date of the modification or alteration and the name and address of the organization that accomplished those tasks.

By not observing these instructions, the warranty becomes void.

# 2. DESCRIPTION OF THE PALLET TRUCK

# a. Overview of the main components

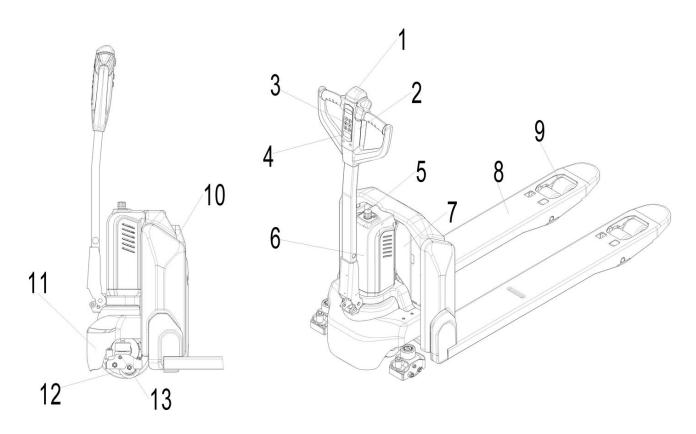


Fig. 1: Overview main components

- 1. Safety (belly) button
- 2. Tiller
- 3. Pin-code panel (PTE20N/45N with card)
- 4. Discharge indicator and charging indicating LED
- 5. Emergency switch
- 6. Hydraulic unit cover
- 7. Chassis

- 8. Fork
- 9. Load roller
- 10. Battery
- 11. Apron
- 12. Driving unit
- 13. Side roller (option for PTE15N)

# b. Main technical data

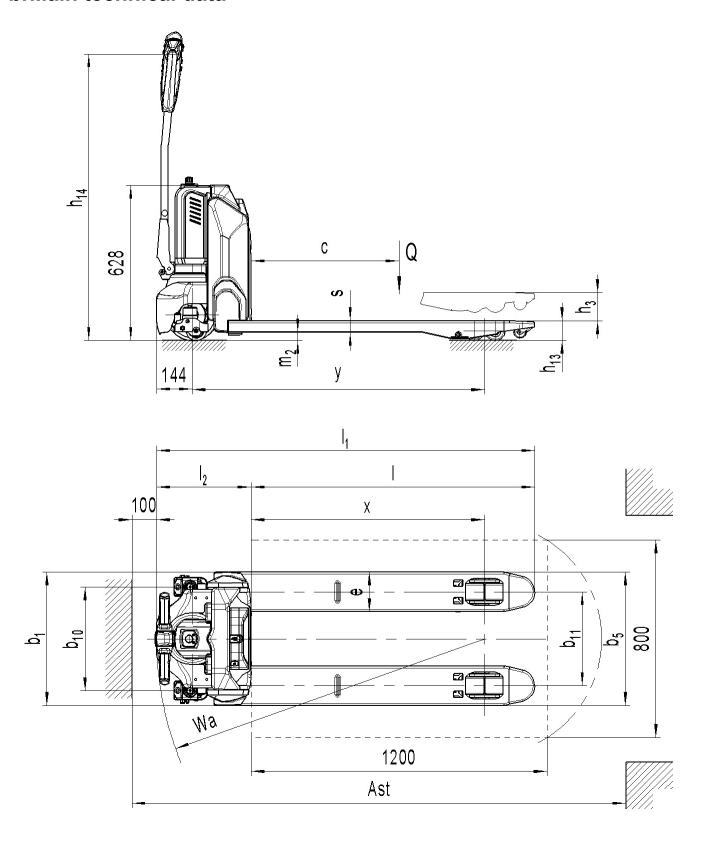


Fig. 2: Technical data

Table 1: Main technical data for standard version

Table 1: Main technical data for standard version  Type sheet for industrial truck acc. to (VDI2198)									
			istrial tru				- 1/5		
논	1.2	Manufacturer`s type designation		15E	P-XB		P-XB		
ma	1.3	Power(battery,diesel,petrogas,manual)				ittery			
ng	1.4	Operator type	O (1)			ian/Stand			
shi	1.5	Load Capacity / rated load	Q (t)	1	.5	2.0			
gui	1.6	Load center distance  Load distance, center of drive axle to	c (mm)		C	600			
Distinguishing mark	1.8	fork	x(mm)	947			51		
	1.9	Wheelbase	y (mm)	11	185	11	89		
Ħ	2.1	Service weight	kg	123	126	149	153		
Weight	2.2	Axle loading, laden front/rear	kg	623/ 1000	626 / 1000	621 / 1528	625 /1528		
>	2.3	Axle loading, unladen front/ rear	kg	96 / 27	99 / 27	115 /34	119 / 34		
	3.1	Tires			Polyuret	hane (PU)			
	3.2	Tire size, front	Ø x w (mm)		Ø 2	10×70			
			Øxw						
sis.	3.3	Tire size, rear	(mm)		Ø 80×93	8(∅ 80×70)			
chas	3.4	Additional wheels (dimensions)	Øxw (mm)		Ø 8	30×30			
Tires, chassis	3.5	Wheels, number front/ rear(x=driven wheels)	, ,			2(1x/ 4) 2(1x +2/ 4)			
	3.6	Tread, front	b <sub>10</sub> (mm)	430					
	3.7	Tread, rear	b <sub>11</sub> (mm)	380	525	380	525		
	4.4	Lift height	h <sub>3</sub> (mm)		 1	115			
	4.9	Height of tiller in drive position min. /	h <sub>14</sub>	700 / 1160					
	4.9	max.	(mm)	70071100					
	4.15	Height, lowered	h <sub>13</sub>	80					
		-	(mm)				00		
	4.19 4.20	Overall length  Length to face of forks	l <sub>1</sub> (mm)	1530 380		1536 386			
ons		•	l <sub>2</sub> (mm)						
nsi	4.21	Overall width	b <sub>1</sub> (mm)	540 685		540	685		
Dimensions	4.22	Fork dimensions	s/e/l (mm)	47 / 10		60 / 1150			
	4.25	Width across forks	b <sub>5</sub> (mm)	540	685	540	685		
	4.32	Ground clearance, center of wheelbase	m <sub>2</sub> (mm)	33		33			
	4.34	Aisle width for pallets 800X1200 lengthways	Ast(mm)	2000		20	06		
	4.35	Turning radius	Wa (mm)	1330		13	36		
ø	5.1	Travel speed, laden/ unladen	km/h	4.6	/ 4.8	4.8/	5.2		
Performance	5.2	Lift speed, laden/ unladen	m/s	0.020	/ 0.025	0.017	0.022		
)rm	5.3	Lowering speed, laden / unladen	m/s	0.05 /	0.04	0.05 /	0.03		
erfo	5.8	Gradeability, laden/ unladen	%	6 /	<sup>'</sup> 16	7 /	16		
T.	5.10	Service brake				magnetic			
	6.1	Drive motor rating S2 60min	kW	0.	.65	ı	75		
တွ	6.2	Lift motor rating at S3 10%	kW	0.	.50	0	.8		
Motors	6.3	Battery acc. to DIN 43531 /35 / 36 A, B,	****	0.		/	-		
	6.4	C, no Battery voltage, nominal capacity K5	V/Ah	24 / 20(	24 / 36)	48/ 20			

6.5	Battery weight (minimum)	kg	4.6	7.5	
6.6	Energy consumption acc. to EN16796-2	KWh	0.22	0.18	
8.1	Type of drive control		DC -Speed Control		
8.4	Sound level at driver's ear acc. to EN 12053	dB(A)	69	<70	

# c. Description of the safety devices and warning labels



For the USA –market, the description of the safety and warning labels is mentioned in chapter 12.

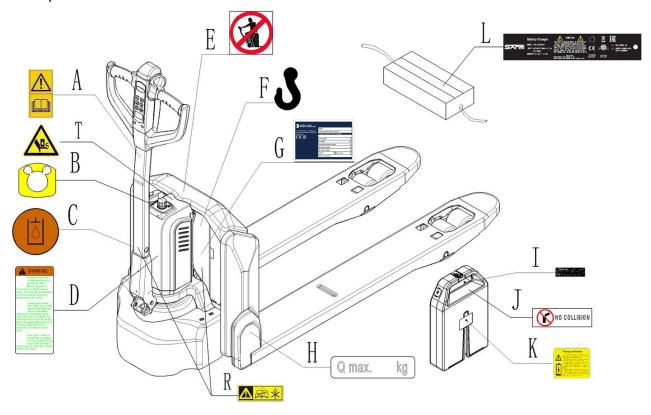


Fig. 3: Safety and warning labels

- A Sticker to read and follow this instruction
- B Emergency button sticker
- C Sign oil filling point
- D Warning sticker (on request/not mandatory)
- E "No passengers" decal
- F Crane hook label
- G Identification plate (ID-plate)

- H Capacity sticker
- I Battery ID plate
- J No collision sticker
- K Battery warning sticker
- L Charger ID plate
- R Sticker to read and follow service manual
- T Warning sticker

The truck is equipped with an emergency switch (5) which stops all lifting-, lowering-, driving- functions and engages the failsafe electromagnetic brake when it is pressed. By turning this button clockwise, the

truck can be operated after the controller checked the functions. Before operating, type the password on pin-code panel and press the  $\sqrt{}$  button. To prevent unauthorized access, press emergency switch (5) or press the X button of pin-code panel.

The truck is equipped with a safety (belly) button (1) 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 Designation, type
- 2 Serial number
- 3 Rated capacity in kg
- 4 Supply voltage in V
- 5 Own mass (self-weight) in kg without battery
- 6 Name and address of manufacturer)
- 7 Battery weight minimum/ maximum
- 8 Nominal power in kW
- 9 Load center distance
- 10 Manufacturing date
- 11 Option

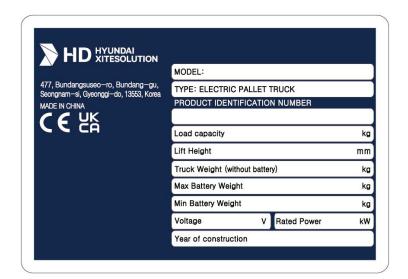


Fig. 4: Identification plate

# 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
- Locate loads on sides or fork end. Load must be distributed evenly on the forks.
- Use the truck with unstable or unbalanced 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 switch (5) by pushing when sliding load on or off the truck. If the truck has any malfunctions, follow chapter 10.

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.
- To prevent unintended sudden movements when not operating the truck (i.e. from another person, etc.), press emergency switch (5) or press the X button of pin-code panel.

### 4. COMMISSIONING, TRANSPORTING, DECOMMISSIONING

# a. Commissioning

Table 2: Commissioning data

Typo	15EP-XB	15EP-XB	20EP-XB	20EP-XB
Туре	(540X1150)	(685X1150)	(540X1150)	(685X1150)
Commissionin g weight [kg]	123kg	126kg	149kg	153kg
Dimensions [mm]	1530x540x1250	1530x685x1250	1536x540x1250	1536x685x1250

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

- Check if are all parts included and not damaged
- Make sure the tiller is assembled correctly (electrical socket is connected and fixed with two plastic clamps, circlip of the axle is installed)
- Check that battery is charged (follow chapter 8)
- 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. 5. Lift the truck to its destination and place the truck securely before removing the lifting gear. The lashing points are according to the Fig. 5.

### **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. 6 by fixing dedicated lashing belts to each side of the trucks crane hook holes and fasten the other side at the transporting truck.

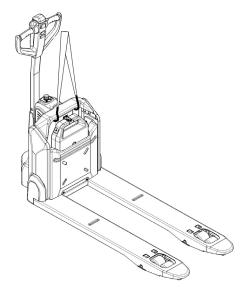


Fig. 5: Lifting with a crane

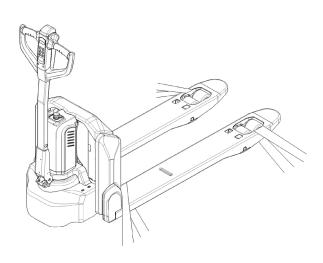


Fig. 6: Fixing points

# c. Decommissioning

For storage, remove the load, lower the truck to the lowest position, grease all in this handbook mentioned greasing points (regular inspection), and 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 smooth movement of the wheels.
- Check the function of driving in both directions (section 6d).
- Check the functions of braking by activation of tiller arm sensor, reversing of driving buttons, release of driving buttons and of the safety (belly) button (section 6f).
- Check the function of driving with tiller in its vertical position (section 6d).
- Check the function of the emergency brake by activating the emergency switch.
- Check the lifting and lowering functions by operating the buttons (section 6b and 6c).
- Check the function of steering by turning the tiller from one end position to the other one. The steering should be smooth, without jerks or abnormal sound.
- Check if all bolts and nuts are tightened firmly.
- Visual check if there are any broken electric wires.
- If supplied with a backrest extension, check it for damages and correct assembling.
- Check the presence of warning stickers and signs (section 2c and section 12)

### 6. OPERATING INSTRUCTIONS



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

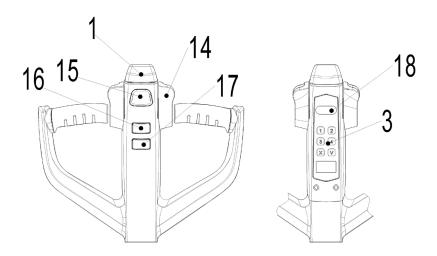


Fig. 7: Tiller operating controls

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

Type the password on pin-code panel and press √ button to start the truck. For PTE20N, truck can also be activated with RFID access card.

Press the horn button (15) to activate the audible warning signal.

# 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 (Fig.1,5).

# b. Lifting



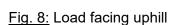
DO NOT OVERLOAD THE TRUCK!
WHEN THE LOAD CENTER IS 600MM
THE MAXIMUM CAPACITY OF PTE15N/PTE33N IS 1500KG
THE MAXIMUM CAPACITY OF PTE20N/PTE45N IS 2000KG

Travel with the lowered forks fully underneath the pallet and press the lifting button (Fig. 7, 16) until you reached the desired lifting height.

# c. Lowering

Press the lowering button (Fig.7,17) carefully. Lower the load until the forks are clear of the pallet, then drive the truck carefully out of the load unit.

# 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 activation from Pin-code panel, move the tiller to the operating zone ('F', Fig.9). Turn the accelerator button to the desired direction forward 'Fw.' or backwards Bw.'(Fig. 9).

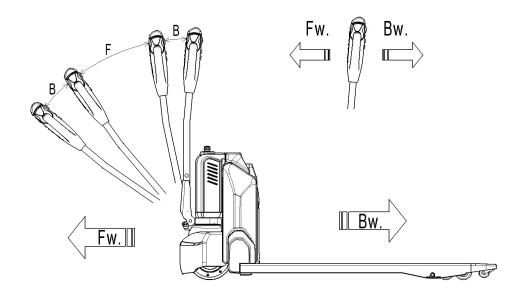


Fig. 9: Operating direction

Control the travelling speed by moving the accelerator button (Fig.7,13) 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.

Press turtle button (Fig.7,18) to enter into slow speed mode, travel slowly by moving the accelerator button (Fig.7,14), press turtle button again to return back to regular speed mode.

Press turtle button and hold for 2 seconds to activate driving function with tiller in its vertical position when operating in confined areas. The driving function is active only when turtle button is pressed (the speed is reduced); the release of turtle button will cause immediate stop. The activation of accelerator button in time gap shorter than two seconds after the turtle button is pressed will not activate the driving function, the activation cycle has to be repeated from the beginning. Accelerator button should remain in neutral position till two seconds passed.

# e. Steering

Steer the truck by moving the tiller to the left or right side.

# f. Braking



PLEASE CHECK THE BRAKING DISTANCE WITH TRUCK BEFORE OPERATION 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 (14) 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 (14) from one driving direction directly to the opposite direction,

- the truck brakes regenerative until it starts traveling 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 traveling into the backwards direction ('Bw.') for a short distance and stops. Please consider, that this button also operates, if the truck is not traveling 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 switch (5) by pushing it. If possible, park the truck on a safe area and press the X button of pin-code panel. 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 fall off a dock), keep safe distance immediately. If possible push the emergency button (5). All electrical functions will be stopped.

### 7. PIN-CODE PANEL

PTE15N/PTE33N is equipped with a pin-code panel (3).

PTE20N/PTE45N is equipped with a pin-code panel (3) and RFID cards.

### a. Introduction

Pin-code panel is an electronic system which is similar with an electronic alarm system. Truck will not able to operate before typing a correct password, the main function is to prevent unauthorized operation.

### b. Main functions

For PTE15N/PTE33N, it can be operated only when correct password is typed.

For PTE20N/PTE45N, it can be operated only when correct password is typed or valid ID card is used.

There are two passwords of pin-code panel, one is the default user password 1234, and you can use it immediately. The other one is the administrator password 3232; with this you can set a new user password according to the following steps:

- Type "3232", click "√".
- Type previous user password, click " $\sqrt{}$ ".
- Type new password, and click "√", previous password will be replaced.

In case you need to reset the password, please follow the procedure under:

- Type "123", click "√".
- Type "123" again, click "√". Password will be "1234".

In case you need to add additional ID card (only for PTE20N/45N), please follow the procedure under:

- Type "3434", click " $\sqrt{}$ ".
- Swipe the new ID card within 5 seconds.
- This pin-code panel supports Max. five cards.

# 8. BATTERY SAFETY, CHARGING AND REPLACEMENT

# a. Description of the lithium-ion battery

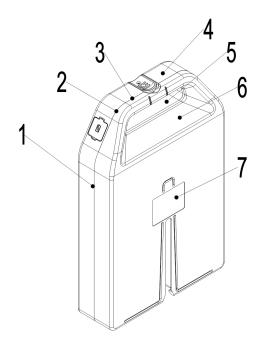
The lithium-ion battery is a battery with rechargeable cells, the battery is designed for industrial trucks and can withstand related vibrations during operation. The battery is equipped with special connections for charging and discharging operations. Do not try to install or connect improper connectors 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, overcurrent, short circuit, etc. The internal resistance of lithium battery is generally low, which minimizes heat generation and maximizes the available power of the truck.

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.

# **b. Battery Decals**



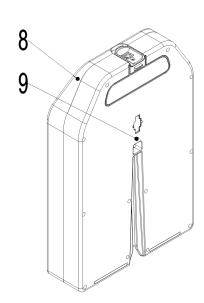


Fig. 10: Battery Decals

Table 3: Battery Decals

Item	Description	Item	Description
1	Disposal mark	6	Warning notice: "Avoid collision"
2	Charging indication	7	Safety information
3	Serial number	8	No random disposal
4	Fuse location	9	Fuse label
5	Identification plate		

# **Battery identification plate**

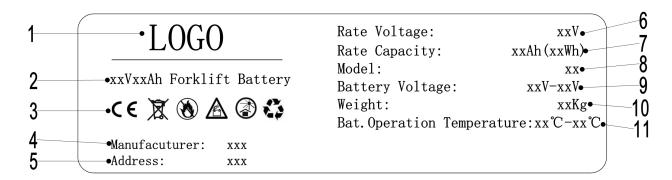


Fig. 11: Battery identification plate

Table 4: Battery data plate

Item	Item Description		Description
1	1 Manufacturer trademark		Battery capacity
2	Battery information	8	Model designation
3	3 CE mark and other safety labels		Voltage range
4	Battery manufacturer	10	Battery weight
5 Manufacturer address		11	Operating temperature range
6	6 Rated voltage		

Service mass is indicated on the battery data plate, the center of gravity is located approximately at middle of the battery case

# c. 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. Replacement of parts is not assumed.



### 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.



Improper 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 short connection of battery terminals, for instance, by water or other intentional/unintentional short connections.
- Temperature damages caused by placing of batteries in overheated environment conditions 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/or leakage of harmful materials, a safe place for storing non-functional or damaged 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. 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**

Table 5: Symbols - Safety and Warnings



Used lithium-ion batteries must be treated as hazardous waste.

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.



Avoid fire and short circuits causing overheating.

Do not ignite or locate batteries close to open flame, heat sources or sparks.

Keep lithium-ion batteries away from heat sources.



Caution!

Battery short-circuit is prohibited.



Protect the lithium-ion battery from solar radiation or other forms of heat radiation.

Do not expose the lithium-ion battery to heat sources.



The battery can be recharged cyclically

### Explosion and fire hazard



Physical damage, thermal impacts 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.

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 selfcontained 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, maintenance and storage

The lithium-ion batteries are maintenance-free.

### Deep discharge can damage the battery

Self-discharge without periodical recharge can lead 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 40%~60%.

Control the level of battery charge at least every 12 weeks and re-charge if necessary.

The temperature range for storing of the battery should be within the range of 0°C to 30°C.

If the battery is deeply discharged or if the battery temperature is below the permissible level, the battery cannot be charged. Deeply 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.

### Instructions for safe handling of batteries

- 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
- Protect the battery from water damages and other impacts

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

# Pre-shift checks before the system is put into operation

Check that the battery is in its normal condition, has no evidence of damages, leakages, abnormal findings, e.g. high temperature, smell, smoke etc. The surface of the battery should be clean and dry, without evidence of water damages, marks of rust on terminals and housing (if applicable). Connecting cables and plugs are in good condition.

### **Faults**



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

### Disposal and transport of a lithium-ion battery

### Instructions for disposal

Lithium-ion batteries must be disposed 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**

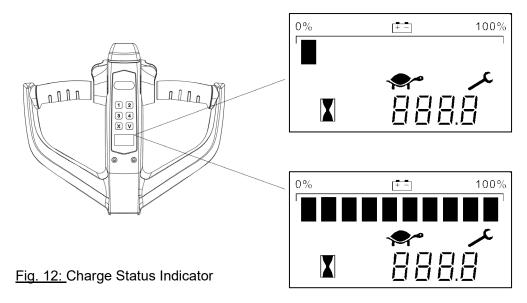
Functioning batteries can be shipped in accordance with the related regulations

### Shipping faulty batteries

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

# d. Charging the battery

### **Charge Status Indicator**



The charge status indicator of the battery is integrated in the control handle.

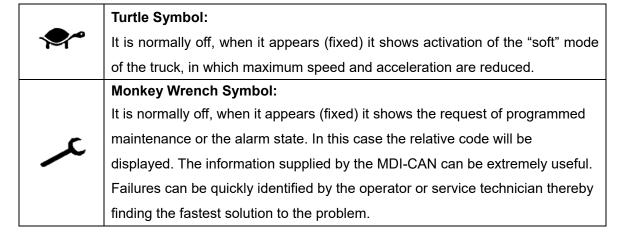
The charge status is displayed in ten increments. Each is represented by a rectangle that corresponds to 10% of the battery charge.

The rectangles gradually disappear as the battery discharges. Special statuses appear in the display unit as error codes.

Table 6: Error codes

Code	The error code appears if	Effect
0	Low battery power.	Lift function is deactivated and travel speed is reduced.
91	Battery over discharged.	Lift function is deactivated and travel speed is reduced.

Table 7: Main symbol specification





### **Hourglass Symbol:**

It blinks when the hour meter is working.

### **Charging the Battery with External Charger**

### Maintenance personnel

Batteries may only be charged, serviced or replaced by trained personnel. These operating instructions and the battery manufacturer's instructions must be observed when performing these operations.

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

### General information

- The charge status of the battery is indicated by LEDs on the battery charger.
- The charging time depends on the battery charge status. The time it takes to charge an almost fully depleted battery depends both on the battery capacity and the charge current. The approximate duration can be calculated as follows:
  - Charging time = capacity of battery / charge current of battery charger.
- The lithium-ion battery can also be used when not fully charged. In this case, the remaining operating time is reduced.
- Charging continues automatically after a mains failure is restored.

The battery temperature rises by approx. 13°C during charging. Battery charging should only start when the battery temperature is below 40°C. The battery temperature before charging should be at least 5°C.

### Status of the LEDs on the battery charger

When the battery charger is connected to the battery and to the power supply, the LEDs on the charger indicate the following:

Table 8: LEDs

LED lit	Status
Green	The battery is fully charged
Red	Battery is charging

If the green LED does not light up or if the red LED lights up permanently or not at all, this indicates a fault.

The trucks are equipped with the following batteries:

Table 9: Available batteries

Model	Battery options	Weight
15EP-XB	24V20Ah lithium battery	5.8kg
1367-70	24V36Ah lithium battery	7.7kg
20EP-XB	48V20Ah lithium battery	7.7kg

### Charging the battery

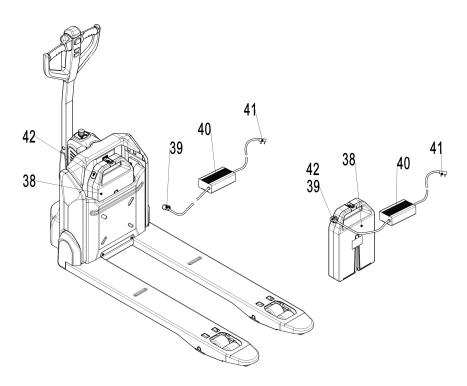


Fig. 13: Charging the battery

### Requirements

- The truck is parked securely.
- The battery charger is approved for the battery type in use.

### Tools and Material Required

• Battery charger

### Procedure

- Open the charging socket (42) of the battery and connect the charge connector (39) of the battery charger (40).
- Then connect the mains plug (41) of the battery charger (40) to the power supply.
- The status of charging process is indicated by the illumination of the red LED.
- Check the charging status; also refer to the instructions of the battery charger (40).

- The charging process is completed when the green LED lights up.
- Once the battery (38) is charged, disconnect the battery charger (40) from the power supply before unplugging it from the battery.
- Close the charging socket (42) with the cap.

### Battery is charged.

Alternatively, the battery can also be charged outside the truck. The process for charging the battery remains the same.

# e. Battery removal and installation

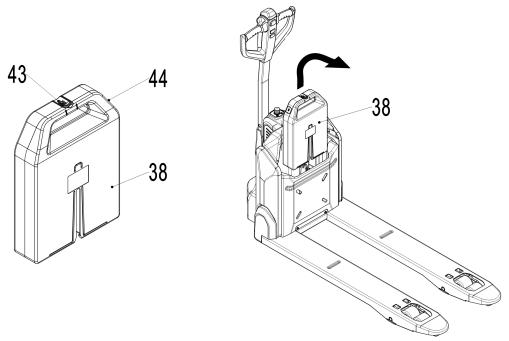


Fig. 14: Removing the battery

# Removing the battery

### Requirements

- The truck is parked securely.
- The emergency disconnect switch is actuated.

### Procedure

- Unlock the battery latch (43).
- Lift the battery (38) up by the battery handle (44).

The battery has been removed.

# **Battery installation**

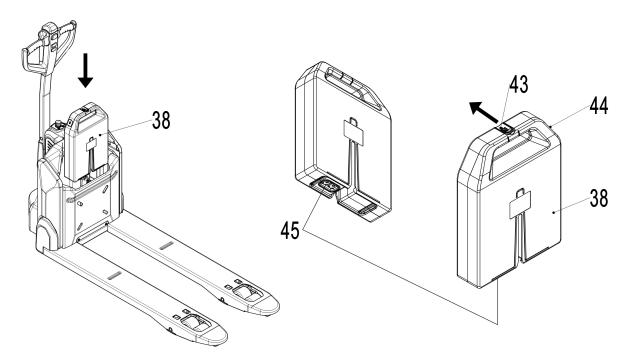


Fig. 15: Battery installation

### Installing the battery

### Requirements

- The truck is parked securely.
- The emergency disconnect switch is actuated.

### Procedure

- Insert the battery (38) into the battery compartment.
- The plug connection (45) between the battery and truck must be fully connected.
- Lock the battery latch (43).
- Release the emergency disconnect switch.

The battery is now installed.

### 9. 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 preloaded 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.

Check the items emphasized in maintenance checklist.

### a. Maintenance checklist

Table 12: Maintenance checklist

2 CI	heck the hydraulic cylinder for damage noise and leakage heck the hydraulic joints for damage and leakage	1	•	6	12
1 Cl 2 Cl	heck the hydraulic cylinder for damage noise and leakage heck the hydraulic joints for damage and leakage		•		
2 CI	heck the hydraulic joints for damage and leakage		•		
<del></del>	·		_		
3 In	and the businessis all level matility accesses.		•		
3 111	spect the hydraulic oil level, refill if necessary		•		
4 R	eplace the hydraulic oil ( 12 month or 1500 working hours )				•
5 CI	heck and adjust the pressure valve (1500kg/3300lbs (PTE15N/PTE33N)+0/+10% or				•
20	000kg/4500lbs (PTE20N/45N)+0/+10%)				
Mecha	anical system				
6 In	spect the forks for deformation and cracks		•		
7 CI	heck the chassis for deformation and cracks		•		
8 CI	heck if all screws are fixed		•		
9 CI	heck the push rods for deformation and damages		•		
10 CI	heck the gearbox for abnormal sound and noise		•		
11 In:	spect the wheels for deformation and damages		•		
12 In:	spect the steering bearing				•
13 In:	spect and lubricate the pivot points if necessary		•		
14 Lu	ubricate the grease nipples	•			
Electrical system					
15 In:	spect the electric wiring for damage		•		
16 CI	heck the electric connections and terminals		•		
17 Te	est the Emergency switch function		•		
18 CI	heck the electric drive motor for noise and damages		•		
19 Te	est the display		•		

20	Check if correct fuees are used				
	Check, if correct fuses are used		•		
21	Test the warning signal		•		<del>                                     </del>
22	Check the contactor		•		<u> </u>
23	Check the frame leakage (insulation test)		•		
24	Check function and mechanical wear of the accelerator		•		
25	5 Check the electrical system of the drive motor				
Bra	king system				
26	Check brake performance, if necessary, replace the brake disc		•		
Batt	ery				
27	Check the battery voltage		•		
28	Clean the terminals for corrosion and damages		•		
29	Check the battery housing for damages		•		
Cha	ırger				
30	Check the main power cable for damages			•	
31	Check the start-up protection during charging			•	
Fun	ction				
32	Check the horn function	•			
33	Check the air gap of the electromagnetic brake	•			
34	Test the emergency braking	•			
35	Test the reverse and regenerative braking	•			
36	Test the safety (belly) button function	•			
37	Check the steering function	•			
38	Check the lifting and lowering function	•			
39	Check the tiller arm switch function	•			
Ger	neral				
40	Check if all decals are legible and complete	•			
41	Inspect the castors, adjust the height or replace if worn out.		•		
42	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.

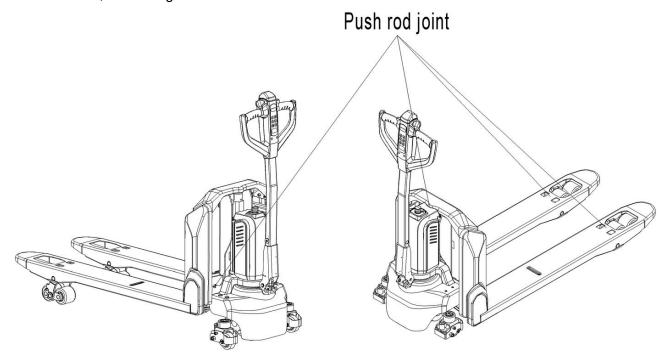


Fig. 16: Lubricating points

# c. Check and refill hydraulic oil

It is recommended to use hydraulic oil in connection with average temperature:

Environment temperature	5℃~25℃	>25℃
Туре	HVLP 32,	HLP 46,
	DIN 51524	DIN 51524
Viscosity	28.8-35.2	41.4 - 47
Amount	0.4L	

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

The oil level in the oil tank should be between min and max marks with fully lowered forks.

If necessary, add oil at the filling point.

# d. Checking electrical fuses

Remove the main cover. The fuses are located according to Fig. 17; the size is according to table 13.

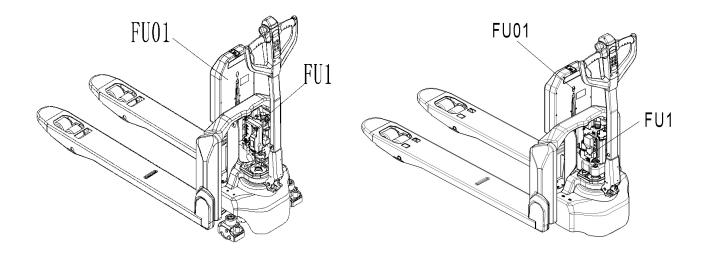


Fig. 17: Location of fuses for 20EP-XB

Fig. 18 Location of fuses for 15EP-XB

Table 13: Rate of the fuses

	Rate	
FU 1	10A	
FU 01	70A	

## 10. TROUBLE SHOOTING



• If the truck has malfunctions follow the instructions, mentioned in chapter 6.

Table 14: Trouble shooting

TROUBLE	CAUSE	REPAIR
	Load weight too high	Lift only the max. capacity, mentioned on the ID-plate
Load can't be	Battery low power	Charge the battery
	Lifting contactor failure	Check and contact with service support for
lifted		replacement if necessary
iiited	Hydraulic oil level too	Check and eventually refill hydraulic oil
	low	
	Oil leakage	Repair the sealing of the cylinder
Oil leakage		
from air	Excessive quantity of oil.	Reduce oil quantity.
breathing		
	Battery is charging	Charge the battery completely and then remove the
	Dattery is charging	main power plug from the electrical socket.
Truck not	Battery not connected	Connect the battery correctly
Truck not	Fuse faulty	Check and eventually replace fuses
starts operating	Low battery	Charge the battery
	Emergency switch is	Turn the emergency switch clockwise
	activated	Tan are emergency extrem dockwide
	Tiller in the operating	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.

### 11. WIRING/ CIRCUIT DIAGRAM

# a. Electrical circuit diagram

### 15EP-XB without speed reduction on curves

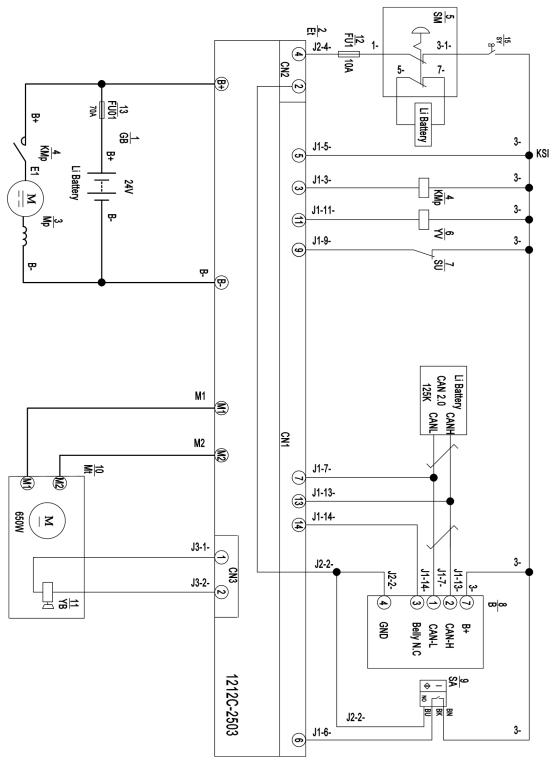


Fig.19: Electric diagram

Table 15: Description of electrical diagram

		9	
Code	Item	Code	Item
GB	Battery	В	CAN tiller
Et	Controller	SA	Proximity switch
Мр	Pump motor	Mt	Traction motor
КМр	Pump contactor	YB	Electromagnetic brake
SM	Emergency switch	FU1	10A fuse
YV	Electromagnetic valve	FU01	70A fuse
SU	Micro switch		

### 15EP-XB with speed reduction on curves

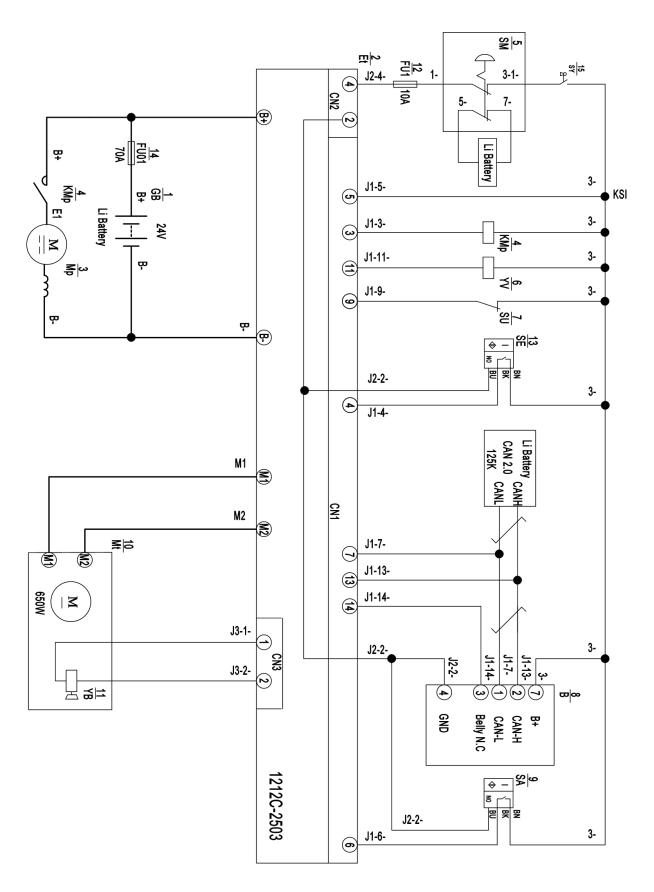


Fig. 20: Electric diagram

Table 16: Description of electrical diagram

		-	
Code	Item	Code	Item
GB	Battery	В	CAN tiller
Et	Controller	SA	Proximity switch
Мр	Pump motor	Mt	Traction motor
KMp	Pump contactor	YB	Electromagnetic brake
SM	Emergency switch	FU1	10A fuse
YV	Electromagnetic valve	SE	Proximity switch
SU	Micro switch	FU01	70A fuse

### 15EP-XB without speed reduction on curves(EN1175-2020)

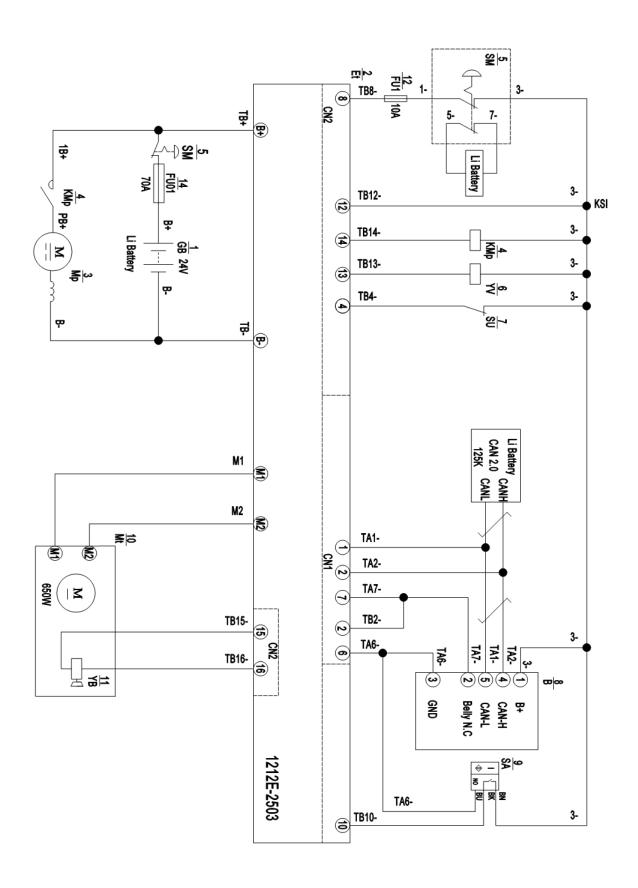


Fig. 21: Electric diagram

Table 17: Description of electrical diagram

Code	Item	Code	Item
GB	Battery	В	CAN tiller
Et	Controller	SA	Proximity switch
Мр	Pump motor	Mt	Traction motor
KMp	Pump contactor	YB	Electromagnetic brake
SM	Emergency switch	FU1	10A fuse
YV	Electromagnetic valve	FU01	70A fuse
SU	Micro switch		

### 15EP-XB speed reduction on curves(EN1175-2020)

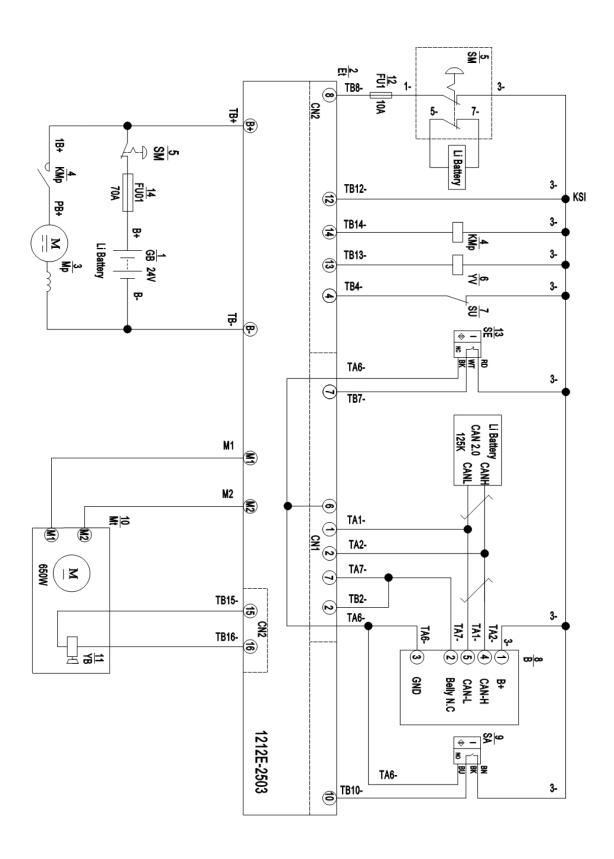


Fig. 22: Electric diagram

Table 18: Description of electrical diagram

		•	
Code	Item	Code	Item
GB	Battery	В	CAN tiller
Et	Controller	SA	Proximity switch
Мр	Pump motor	Mt	Traction motor
KMp	Pump contactor	YB	Electromagnetic brake
SM	Emergency switch	SE	Proximity switch
YV	Electromagnetic valve	FU1	10A fuse
SU	Micro switch	FU01	70A fuse

### 20EP-XB without speed reduction on curves

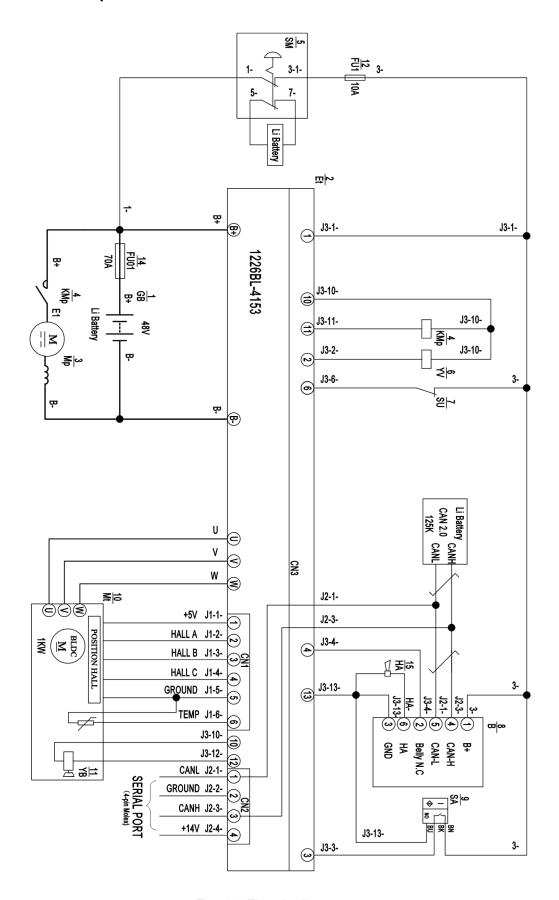


Fig. 23: Electric diagram

Table 19: Description of electrical diagram

Code	Item	Code	Item
GB	Battery	В	CAN tiller
Et	Controller	SA	Proximity switch
Мр	Pump motor	Mt	Traction motor
КМр	Pump contactor	YB	Electromagnetic brake
SM	Emergency button	FU1	10A fuse
YV	Electromagnetic valve	FU01	70A fuse
SU	Micro switch	НА	Buzzer

### 20EP-XB with speed reduction on curves

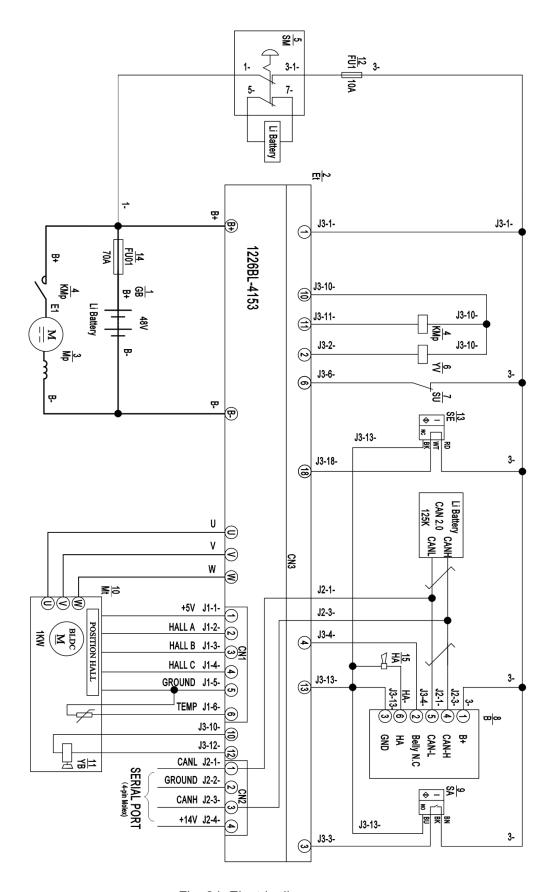


Fig. 24: Electric diagram

Table 20: Description of electrical diagram

Code	Item	Code	Item
GB	Battery	В	CAN tiller
Et	Controller	SA	Proximity switch
Мр	Pump motor	Mt	Traction motor
KMp	Pump contactor	YB	Electromagnetic brake
SM	Emergency button	FU1	10A fuse
YV	Electromagnetic valve	FU01	70A fuse
SU	Micro switch	HA	Buzzer
SE	Proximity switch		

### 20EP-XB with speed reduction on curves(EN1175-2020)

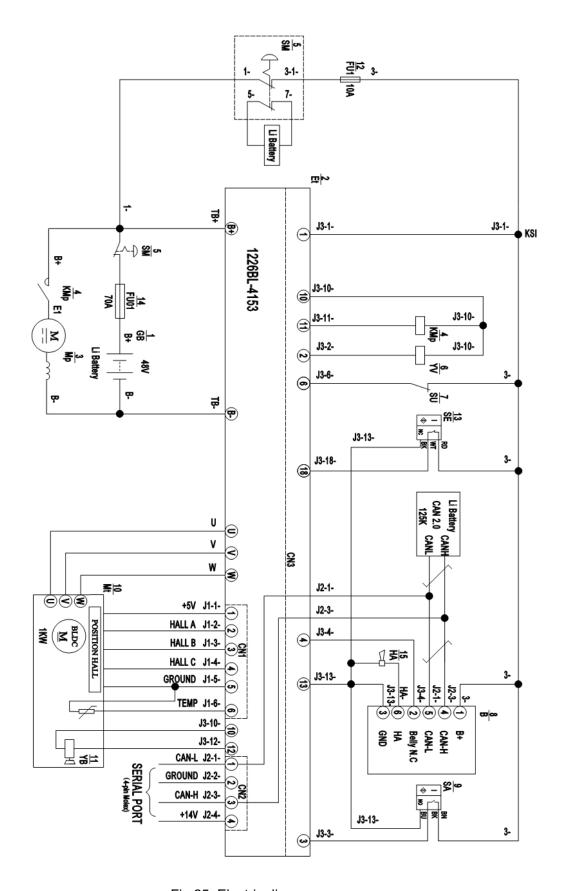


Fig.25: Electric diagram

Table 21: Description of electrical diagram

Code	Item	Code	Item
GB	Battery	В	CAN tiller
Et	Controller	SA	Proximity switch
Мр	Pump motor	Mt	Traction motor
КМр	Pump contactor	YB	Electromagnetic brake
SM	Emergency button	FU01	10A fuse
YV	Electromagnetic valve	FU1	70A fuse
SU	Micro switch	НА	Buzzer
SE	Proximity switch		

# b. Hydraulic circuit

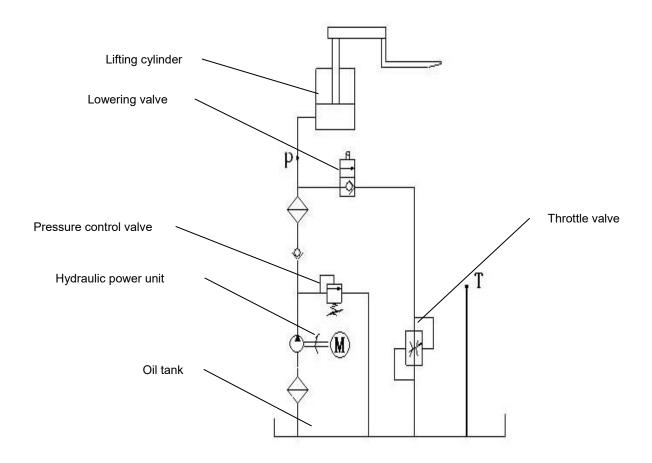


Fig. 26: Hydraulic circuit

### **Original CE Declaration of conformity**

#### [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:

#### [ВС] Оригинален ЕВРОПЕЙСКА ОБЩНОСТ - ДЕКЛАРАЦИЯ ЗА СЪОТВЕТСТВИЕ

С настоящото подписалото лице декларира, че посочената машина отговаря на Директива на ЕО 2006/42/ЕС (Директива за машини) и 2014/30/EU (Електромагнитна съвместимост, ЕМС), включително техните изменения, преведени в националното законодателство на страните-членки. Подписалото 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-OVERENSSTEMMELSESERKLÆRING

Underskriveren erklærer hermed, at den specificerede maskine er i overensstemmelse med EF-direktivet 2006/42/EC (maskindirektivet) og 2014/30/EU (elektromagnetisk kompatibilitet, EMC) inklusive deres ændringer som oversat til national lovgivning i medlemslandene. Underskriveren 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

Allakirjutanu 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. Allakirjutanul 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 ΔΗΛΩΣΗΣΥΜΜΟΡΦΩΣΗΣΕΟΚ

Ο υπογράφοντος δηλώνει με το παρόν ότι το συγκεκριμένο μηχάνημα συμμορφώνεται με την Οδηγία 2006/42/ΕΚ (Οδηγία Μηχανών) και 2014/30/ΕΕ (Ηλεκτρομαγνητική Συμβατότητα, ΕΜC) συμπεριλαμβανομένων των τροποποιήσεών τους όπως έχουν μεταφραστεί στην εθνική νομοθεσία των χωρών μελών. Ο υπογράφοντος 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 jogszabályaiba lefordítva. 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 apliecina, 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 apliecina, ka ir piemēroti šādi standarti, tostarp tajos ietvertās normatīvās procedūras:

#### [N] Opprinnelig EU-KONFORMITETSERKLÆRING

Underskriveren 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. Underskriveren 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 electromagnetică, 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 EC

Настоящим подписывающая сторона заявляет, что указанная машина соответствует Директиве EC 2006/42/EC (Директива по машинам) и 2014/30/EC (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:

#### [S] Original EG-KONFORMITETSFÖRKLARING

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 procedurerna 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-propelied industrial truck

(2) Serial No: XXXXXXX

(3) Year of constr.:

(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> M UMIS Case ask

(6) Date: <Place>, YYYY.MM.DD

(7) Authorized signatory: <Position> โร๋า. โรสาราย

- (1) Type/ Typ/ Tipo/ Modello/ Tyyppi/ Tipo / ΤΥΠΟΣ/ Típus/ Tip/ Тип/ Tips/ Tipas/ Tüüp:
- (2) Serial No./ Serien-Nr./ N°. de série/ Serienummer/ Nº de serie/ Numero di serie/ Serienr./ Sarjanro/ αυξάνωναριθμός/ Seriové číslo/ Szériaszám/ Nr.Seryjny/ Serijska številka/ Výrobné číslo/ Серийныйномер/ Seri No./ Seerianr./ Sērijas Nr./ Serijos numeris:
- (3) Year of constr./ Baujahr/ Année de constr./ Bouwjaar/ Año de constr./ Annó di costruzione/ Produktionsår/ Byggeår/ Tillverkningsår/ Valmistusvuosi / Ano de fabrico / ἐτοςκατασκευής/ Rokvýroby/ Gyártásiév/ Rokprodukcji / Letnik / Годизготовления / Üretimyılı / Väljalaskeaasta / Izgatavošanas gads / Gamybosmetai
- (4) Manufacturer/ Hersteller/ Fabricante/ Fabricant/ Fabricant/ Fabricante/ Produttore/ производител/ Výrobce/ Fabrikant/ Tootja/ Valmistaja/ Κατασκευαστής/ Gyártó/ Gamintojas/ Ražotājs/ Produsent/ Producent/ Producent/ Προυзводитель/ Tillverkare/ Výrobca/ Proizvajalec/ Üretici firma
- (5) Résponsible for compiling the technical documentiton/ 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/ Zodpovídá za sestavení technické dokumentace/ Ansvarlig for udarbejdelse af den tekniske documentation/ Vastutab tehnilise dokumentatisiooni koostamise eest/ Vastaa teknisen dokumentaation laatimisesta/ Υπεύθυνος για τη σύνταξη της τεχνικής τεκμηρίωσης/ Felelős a műszaki dokumentáció összeállításáért/ Atsakingas už techninès dokumentacijos sudaryma/ Atbildīgs par tehniskās dokumentācijas sastādīšanu/ Ansvarlig for sammenstilling av teknisk dokumentasjon/ Odpowiedzialny za kompletowanie dokumentacji technicznej/ Responsabil cu intocmirea 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/<u>naτa</u>/ Dátum/ dátum/ tarih/ <u>ημερομηνία</u>
- (7) Authorised signatory/ ImAuftrag/ pour ordre/ Incaricato/ Por orden de/ por procuração/ op last van/ påvegneaf/ påuppdrag/ Etteroppdrag/ psta./ Ülesandel / pavedus / v.i. / Ποποργчению / megbízásából /длъжностнолице / z pověření / z poverenia / po nalogu / napolecenie / din sarcina / adına / θαη' εληνιή