



OPERATING INSTRUCTIONS

Electric walkie stacker

HE1200/3



Please read this manual before using the product and follow the instructions it contains!

GENERAL

Foreword	3
Definitions	3
Safety instructions	4
Technical data	5
Overview of the main components	6
Safety devices and warning signs	6
Pallet compability	7
Operating instructions	7

MAINTENANCE

Regular inspections	10
Troubleshooting	11
Service & contact	11
EU Declaration of Conformity	12

FOREWORD

Congratulations on the purchase of your new electric forklift. The HE1200/3 has been manufactured from high quality materials, specially designed for durable and reliable use. For your own safety and for the correct operation of the high lift truck, it is essential that you read and observe these operating instructions before commissioning.

Keep these operating instructions. Check the HE1200/3 for transport damage. Damaged reciprocators must not be put into use.

The HE1200/3 is used to electrically raise and lower the transport load to the desired height. Improper handling may result in injury or damage to the equipment.

Any liability for damage resulting from improper use of the reciprocator or failure to observe the specifications and rules of conduct in this operating manual is excluded. The operator is responsible for ensuring correct use by trained and authorized personnel.

DEFINITIONS

AUTHORIZED PERSON

Trained and assigned personnel who use this machine, prepare it for use and provide appropriate, as well as sufficient, operator instruction. These instructions refer to:

- | | |
|-----------------------------------------------------|------------------------|
| 1. Mechanics and auxiliary equipment of the device | 5. Tasks of the setter |
| 2. Fluid quality maintenance and filter replacement | 6. Test strokes |
| 3. Protective devices | 7. Operation |
| 4. Causes and prevention of accidents | |

OPERATOR

Trained personnel authorized by the authorized person to use this machine for, among other things, safe use, setup, maintenance, cleaning, avoiding all hazards. Hazards include, but are not limited to, lifting and lowering, swinging out components, lifting too heavy loads, driving without sufficient visibility, and disregarding safe travel paths.

INTENDED USE

Use this machine in accordance with the information provided in these operating instructions.

DEVICE

This electric forklift with the tools provided.

PPE

Personal protective equipment, such as hard hats, safety glasses, hearing protection, safety shoes, protective gloves, protective clothing, etc.




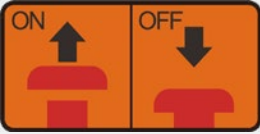

REASONABLY FORESEEABLE MISAPPLICATION

Use of this equipment in a manner not intended by the constructor, but which may result from readily foreseeable human behavior.

TARGET GROUP

Group of persons for whom these operating instructions are intended by the manufacturer (authorized representative, operator).

USED MARKINGS

Graphic	Category	Description
	Warning	Safety rules
	Warning	Danger of crushing
	Prohibition	Do not stand on or below forks
	Note	Marking of emergency stop switch
	Note	Marking of lifting points

SAFETY INSTRUCTIONS

- Be sure to read the warning labels on the truck and the instructions in this manual before use.
- Do not operate the truck unless you are familiar with its functions and have received detailed instruction.
- Do not use the truck unless you have checked that it is in perfect condition. Pay particular attention to the chain, wheels, drawbar, chassis, control unit, mast, battery, etc.
- Do not use on heavily soiled floors or in explosive environments.
- Use only on level ground. Do not carry out work on slopes.
- It is forbidden to carry people on the fork.
- When lifting the fork, make sure that no one is standing or walking under the forks.
- Wear gloves when using the pallet stacker.
- Do not transport goods at a height above 11.81". The heights above 11.81" are exclusively for storing and retrieving goods.
- Maintain a safety distance of 23.62" when transporting / lifting goods.
- Always distribute the weight of the goods evenly on both forks. Never use only one fork. The centre of gravity of the goods should be in the middle of the two forks.
- Observe the goods during transport. If the goods become unstable and threaten to fall / tip, stop the operation immediately with the emergency stop button.
- Do not load beyond the maximum capacity.
- Operation must take place in at least 50 lux lighting.
- Suitable for indoor operation at a room temperature between 41 °F and + 104 °F.
- Carry out maintenance according to the regular inspection.

- Charging the battery should be done in a dry and ventilated place, away from open fire.
- Comply with country-specific standards and regulations.
- Do not modify the pallet stacker, without a written consent of the manufacturer.

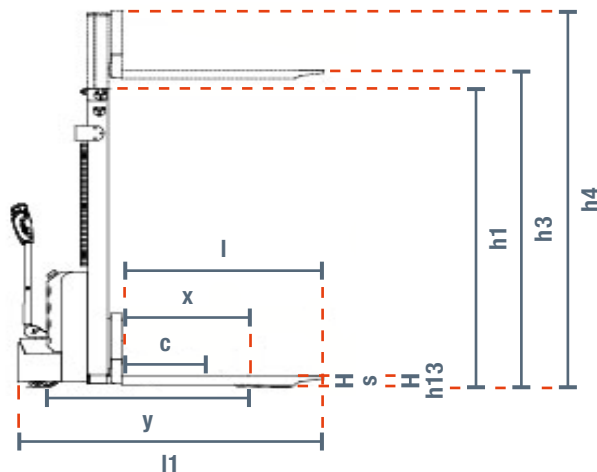
TECHNICAL DATA

General

Type	Unit	Value
Model		HE1200/3
Max. load [Q]	lbs	2645
Lifting height [h3]	"	118
Capacity at max. height	lbs	1653
Service weight (incl. battery)	lbs	1025
Load center [c]	"	24
Axle center to fork face [x]	"	28
Wheel base [y]	"	45
Controller		CURTIS

Dimensions

Type	Unit	Value
Height of mast, lowered [h1]	"	79
Height of mast, extended [h4]	"	135
Fork height, lowered [h13]	"	3
Overall length [l1]	"	69
Length to fork face [l2]	"	24
Overall width [b1 / b2]	"	31
Fork dimensions [s / e / l]	"	2 / 6 / 45
Width of fork [b5]	"	22
Min. ground clearance [m2]	"	0.9
Aisle width with pallet 39.37" x 47.24" across forks [Ast]	"	81
Aisle width with pallet 31.5" x 47.24" across forks [Ast]	"	80
Min. turning radius [Wa]	"	54



Wheels

Type	Unit	Value
Wheels material		Polyurethane
Driving wheel size (ø x w)	"	ø 8 x 2.7
Bearing wheel size (ø x w)	"	ø 3 x 2.7
Additional wheels (dimensions) (ø x w)	"	ø 6 x 2.3
Wheels, numbers front / rear (x = driven)		1 x + 1 / 4

Performance

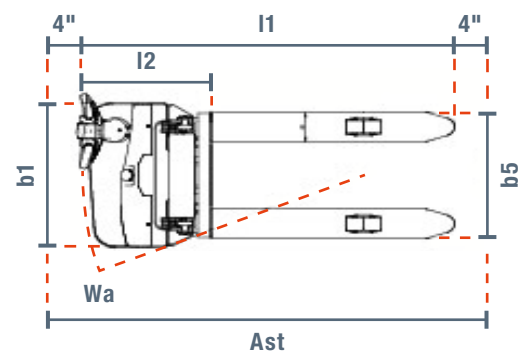
Type	Unit	Value
Travel speed, with / without load	mph	2.5 / 2.6
Lifting speed, with / without load	"/s	3.6 / 136
Lowering speed, with / without load	"/s	4.4 / 98
Max. gradeability, with / without load	%	6 / 8
Service brake		Electromagnetic brake

Drive

Type	Unit	Value
Drive motor, output S2 60 Min.	kW	0.75
Lift motor rating at S3 15 %	kW	2.2
Battery according to DIN 43531 / 35736 A, B, C, no		No
Battery voltage	V	2 x 12
Nominal capacity	Ah	100
Battery weight (+ / - 5 %)	lbs	2 x 60

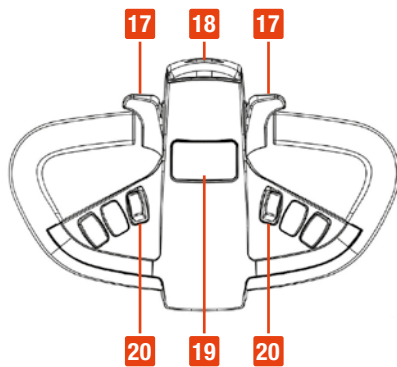
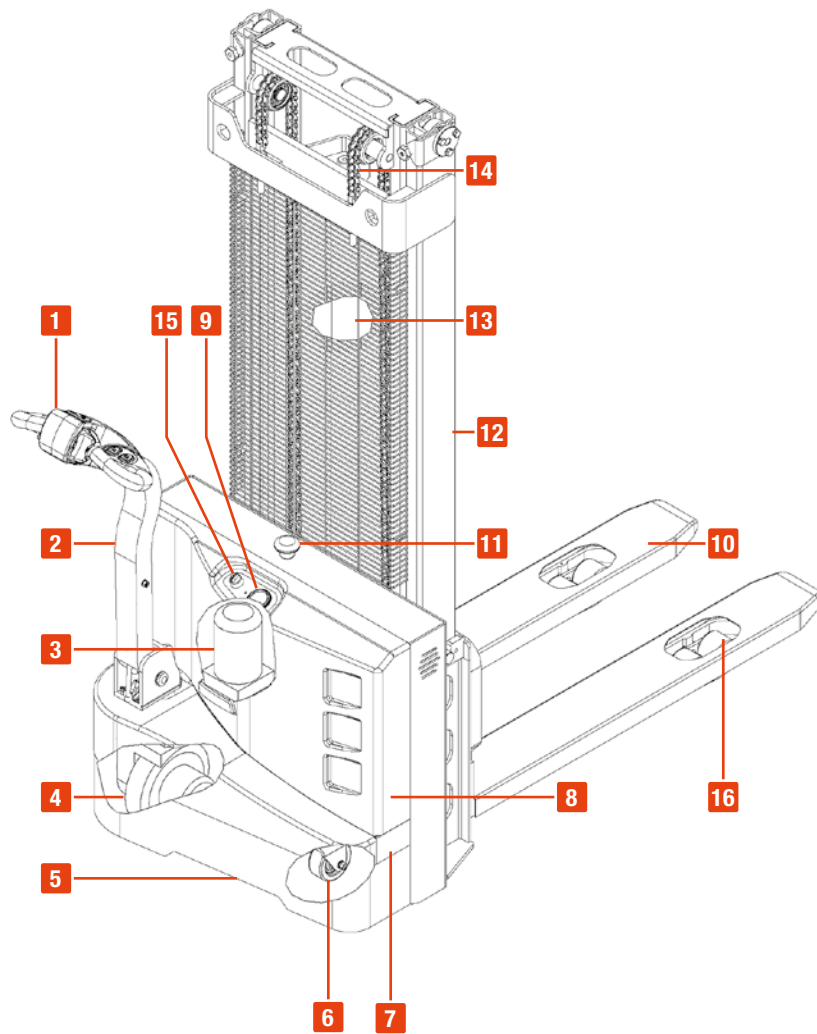
Others

Type	Unit	Value
Noise level at operator's ears	dB (A)	69
Steering type		Mechanical steering



OVERVIEW OF THE MAIN COMPONENTS

Nr.	Designation
1	Control handle
2	Drawbar
3	Engine
4	Steering wheel
5	Foot cover
6	Caster wheel
7	Lower cover
8	Top cover
9	Battery discharge indicator
10	Fork
11	Emergency switch
12	Mast
13	Lift cylinder
14	Lifting chain
15	Key switch
16	Tandem wheels
17	Butterfly switch
18	Emergency stop belly switch
19	Horn
20	Lifting / lowering button



SAFETY DEVICES AND WARNING SIGNS

A Warnings: - Do not stand under the forks
- Do not ride on forklift truck

B Load curve symbol

C Note: Read and follow the instructions

D Nameplate

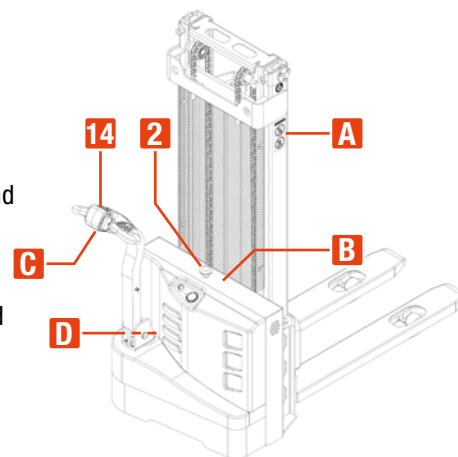
2 Emergency stop switch

14 Safety switch, belly switch

The truck has an emergency stop switch (2), which stops all lifting, lowering and driving functions and activates the electromagnetic brake. After activating this function pull the switch out again.

Insert the key (15) and turn it clockwise. For safety and to prevent unauthorised use, the key must be turned anticlockwise and pulled out.

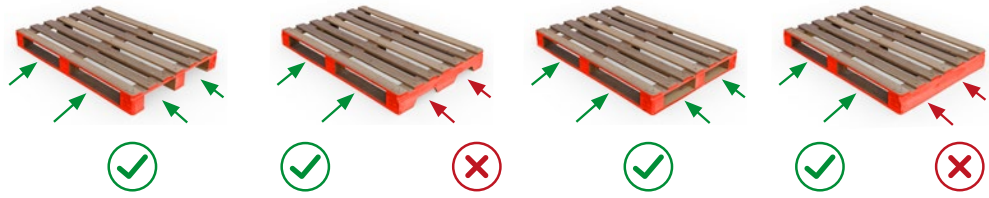
The instructions on the safety labels must be followed. Please replace any damaged or missing safety stickers immediately.



PALLET COMPABILITY



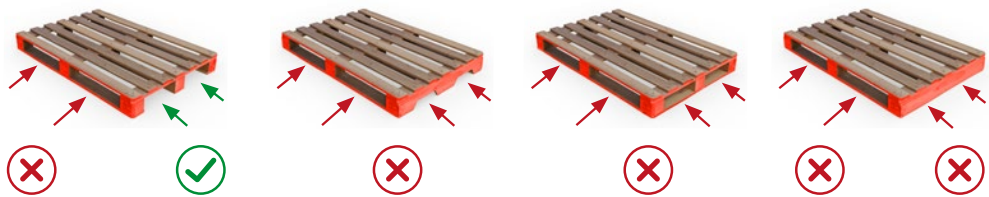
HE-S12/3



Please make sure that the dimensions of the pallet match the electric walkie straddle stacker.



HE1200/3



The pallet must be completely open in one direction. Please also make sure that the dimensions of the pallet match the dimensions of the electric walkie stacker because the forks and legs are not adjustable.

OPERATING INSTRUCTIONS

STARTING

When operating this truck, please observe the warning and safety instructions. Make sure that you always look in the direction of travel and that no goods or objects obstruct or restrict your view. Ensure that goods are placed stably and securely in the centre of the forks for transport. To start turn the key clockwise to the ON position. Press the horn (trumpet symbol) to start the signal tone.

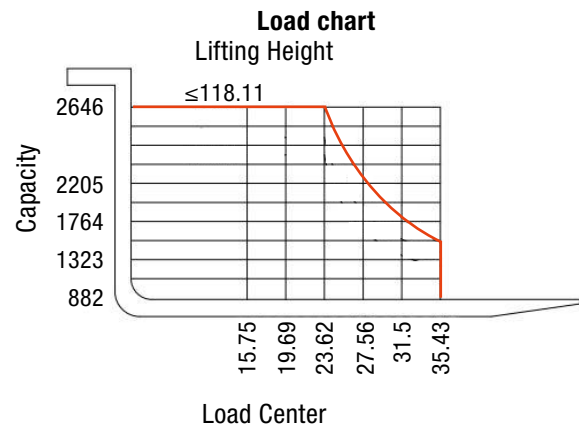
PARKING

Never park the truck on a slope or sloping terrain! This truck is equipped with an electromagnetic parking brake. Always set the forks to the lowest position when not in use and park the truck in a safe area. Turn the key anticlockwise to the OFF position and remove the key. Push the emergency stop button to to disconnect the device from the power supply.

LOAD CHART

The load chart shows a given load centre C [inch], the horizontal load capacity of the largest load Q [lbs] and the lifting height H [inch] corresponding to the vehicle.

With a load centre of 23.62" and a maximum lifting height H of 118.11", the maximum load capacity Q is about 2645.55 lbs.



LIFTING LOADS

Never load the truck beyond the specified capacity. The maximum load capacity of this high lift truck is 2645.55 lbs. Place the fork completely under the goods to be lifted and operate the lift button until the goods have reached the desired lift height.

LOWERING LOADS

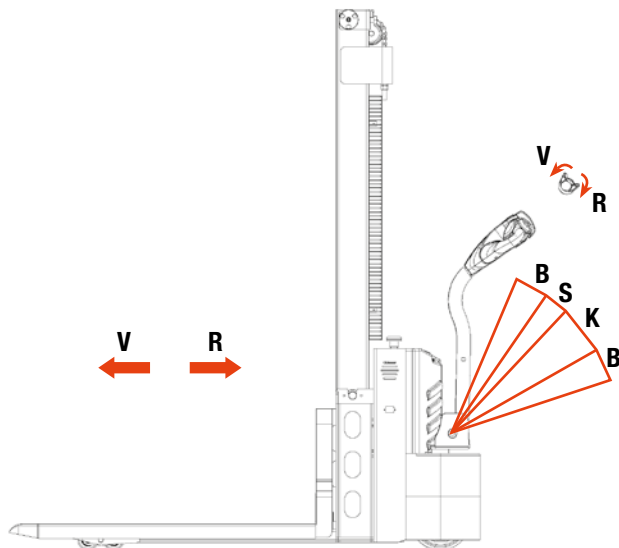
Carefully press the down button and observe the goods. As soon as the weight has been reduced and the pallet is secure, carefully pull out the forks.



Unsecured and incorrectly positioned loads can cause accidents.

CONTROL

Start the truck, move the tiller to a tilted position S or K. Operate the direction lever on the handle: Forward V or Reverse R. By carefully moving the direction lever, you control the speed until the desired speed is reached. Position the direction lever in the centre to slow the truck to a complete stop / parking position. When the vehicle is permanently stopped, apply the parking brake. Always drive carefully and keep an eye on the roads - regulate the speed if necessary.



APPLY BRAKES

The performance of the load braking system depends on the ground conditions and the load of the truck. Activate the brake function as followed:





- By moving the directional lever back to the position 0 or by releasing this lever the vehicle brake is activated.
- Or by moving the direction lever in the opposite direction until it starts to move in the other direction.
- When the drawbar is moved up or down into braking zone B, the vehicle braking is activated.
- When the emergency stop switch is actuated, the handle is automatically brought into the braking zone and the parking brake is activated.
- By means of the belly switch at the head of the drawbar, this function can also be triggered with the upper body. The truck slows down and comes to a standstill up to reverse R.

CHARGING THE BATTERY

- Only qualified personnel should carry out battery repair. Follow the instructions in the user manual.
- Battery recycling must comply with government laws and regulations. Please comply with
- Improper handling, e.g. use near fire or gas, can cause an explosion! The storage of flammable materials or flammable liquids is prohibited in the battery charging area. Smoking is prohibited and the area must be well ventilated.
- Before charging or installing the battery, park the truck safely (parking position).
- Carry out maintenance work before connecting the wiring harness correctly and trouble-free to other parts of the vehicle.
- Only the use of the sealed lead-acid battery is permitted, the additional battery weight has an influence on the behaviour of the vehicle.

1. Remove the battery plug.
2. Connect the battery plug with the charging lead of the stationary charger.
3. Turn on the charger.

The LED-light shows the actual charging status:

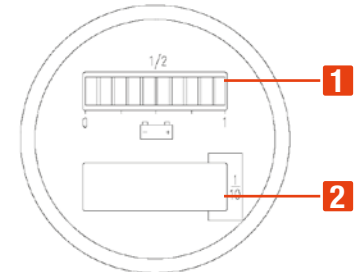
LED-light	Description
 Red	Battery is charging
 Green	Battery is fully charged
 Yellow	Battery error
 Yellow light flashes	Charge error

After approximately 3.5 hours (normal load) the battery of the electric truck must be charged. Charge the battery only in well ventilated areas. When charging is complete, disconnect the plug from the mains and store it safely in the in the chassis. When the battery is completely discharged, the charging process takes approx. 7.5 hours. Avoid discharging the battery of more than 80 % of the charging capacity to ensure a long battery life.

OPERATING HOURS DISPLAY

The display can show a range between 0.0 and 99,999.9 hours. It runs from the moment the pallet stacker is turned on. Please turn off the lifting device to avoid incorrect hour counting.

No.	Declaration
1	Battery status
2	Operating hours



REPLACING THE BATTERY

Park the truck securely and turn off the power before removal and installation battery. Push the emergency stop button, to make sure, that no more electric current flows.

Battery removal and installation steps:

1. Remove the eight screws from the cover and take out the side plate.
2. Remove the battery cables. Only try to remove the battery, when you've made sure that every cable has been removed.
3. Lift the battery out of the housing, with another lifting device.
4. Put a new battery in the housing and process the former steps in reverse order.



Please observe the maximum operating temperature of the battery.

REGULAR INSPECTIONS

		Monthly intervals		
		1	3	12
Hydraulics				
1.1	Check the hydraulic oil cylinder, of leakages		•	
1.2	Check the hydraulic connections and hoses for damage and leaks		•	
1.3	Check the hydraulic oil level and top up with oil if necessary		•	
1.4	Replace hydraulic oil (at least all 1500 hours of operation)			•
1.5	Check the setting of the pressure valve function (at 2204.62 lbs max. 10 %)			•
Mechanics				
2.1	Check the fork for deformation or cracks		•	
2.2	Check the chassis for deformation or cracks		•	
2.3	Check that all bolts are tight		•	
2.4	Check the chassis and chain for corrosion, deformation or damage. Replace the chain if necessary	•		
2.5	Check the gearbox for unusual noises and leaks		•	
2.6	Check the wheels / rollers for deformation and / or damage. Replace if necessary		•	
2.7	Lubricate the steering			•
2.8	Check and grease nipple	•		
2.9	Protective and / or guard board, replace if damaged	•		
Electrical system				
3.1	Check if wires are damaged		•	
3.2	Check electrical connections and the terminal block		•	
3.3	Check the function of the emergency stop button		•	
3.4	Check the electric motor for unusual noises		•	
3.5	Check the battery and operating hours indicator		•	
3.6	Check inserted fuses, replace if necessary		•	
3.7	Horn		•	
3.8	Check that the frame is tight (insulation test)		•	
3.9	Check the function and wear of the accelerator		•	
Brake system				
4.1	Check the braking performance; if necessary, replace the brake discs or adjust the distance between the brakes		•	
Battery				
5.1	Check the battery voltage		•	
5.2	Clean and check for corrosion or damage		•	
5.3	Check if the battery housing is damaged		•	
Functions				
6.1	Checking the electromagnetic brake with air gap	•		
6.2	Test the emergency brake function	•		
6.3	Testing the reverse braking and regenerative braking function	•		
6.4	Test the emergency stop belly switch	•		
6.5	Check the steering function	•		
6.6	Check the lifting and lowering function	•		
6.7	Check the drawbar functions	•		
6.8	Check the key switch for damage	•		
6.9	The limit switch for the detection speed (the lifting height is > ~11.811")	•		
Other				
7.1	Check that all safety instructions and warning signs are complete	•		
7.2	Check if the protective grille is damaged	•		
7.3	Check the tiller if it is worn for height adjustment or replacement		•	
7.4	Carry out a test run	•		

TROUBLESHOOTING

Problem	Cause	Solution
The forks cannot be lifted to the maximum height	Max. capacity exceeded	Never exceed the maximum capacity
	Battery is discharged	Check the battery and recharge it
	The fuse is off	Check and replace the fuse
	The hydraulic oil is not sufficient	Check and, if necessary, top up the hydraulic oil
The forks cannot be lowered	The oil pressure is too low; oil leaks	Check and if necessary replace sealing hoses and / or cylinders
	Locking valve is dirty / blocked	Check the hydraulic oil and control valve. Change the hydraulic oil if necessary
The stacker does not react	Electromagnetic valve opens or is damaged	Check or replace solenoid valve
	The battery is charging	When the battery is fully charged, unplug the truck
	The battery is not connected	Connect the battery correctly to the charger
	The fuse is off	Check and possibly replace the fuse
	Battery is too weak	Check the battery and recharge it
Forklift only moves in one direction	Check the battery and recharge it	Pull out the emergency stop switch
	The drawbar is not in the correct position	Move the drawbar out of the braking zone
Stacker runs very slow	Accelerator / connections are damaged	Check the accelerator and the connection
	Battery is too weak	Check the battery charge level and recharge it
	The electromagnetic brake is activated	Release the electromagnetic brake
The stacker starts suddenly	The tiller is not connected properly or cable is damaged	Check the wiring
	Damage to the control unit	Replace the control unit
	The accelerator does not return to the centre position	Repair or replace the accelerator

IN CASE OF AN EMERGENCY

In an emergency, press the emergency stop button. All electrical functions are stopped. Keep a safe distance. Inform the authorized person and / or contact the customer service.

SERVICE & CONTACT

Contact our product experts and find help and solutions for your product. Here you will find all contact information listed by country and language: www.topregal.us/en-us/service

Responsible for the content:
 TOPREGAL US Corp.
 729 North Route 83, Suite 309
 Bensenville, IL 60106
 United States of America
www.topregal.us

EU Declaration of Conformity

The manufacturer

**TOPREGAL US Corp.
729 North Route 83
Suite 309
60106 Bensenville, IL
USA**

hereby declares that the following product

Product designation:

**SolidHub
Electric walkie stacker**

Type:

HE1200/3

Serial number:

HE1200/3-1000000000 – HE1200/3-9999999999

complies with all relevant provisions of the applicable legal regulations (hereinafter) - including their amendments in force at the time of the declaration. The sole responsibility for issuing this declaration of conformity lies with the manufacturer. This declaration refers only to the machine in the condition in which it was placed on the market; parts and / or interventions subsequently fitted by the end user are not taken into account.

Conforms to the provisions of the following European directives:

2006/42/EC Machinery Directive

Conforms to the provisions of the following standards:

**EN ISO 12100
EN ISO 3691-1
EN 16307-1**

**EN 1175
EN 12053
EN 13059**

Name and address of the person who is authorized, compile the technical documentation:

TOPREGAL US Corp.
729 North Route 83
Suite 309
60106 Bensenville, IL
USA



Place: Bensville
Date: 12-23-2022

Juergen Effner
Chief Executive Officer

SolidHub