



OPERATING INSTRUCTIONS

Semi-electric pallet stacker

HSE1000/3



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

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FOREWORD

Congratulations on the purchase of your new semi-electric pallet stacker HSE1000/3. The easy to use pallet stacker is made of high-quality materials, specially designed for long lasting and reliable operation.

For your own safety and for the correct operation of the truck, please read and observe this manual before using the truck. It is best to keep this operating manual.

Check the truck for transport damage. Damaged electric pallet stackers must not be taken into use.

SAFETY INSTRUCTIONS

- Read warning signs on the truck and instructions in this manual before use.
- Only operate the truck if you are familiar with it and have been trained to do so.
- Only use the stacker when 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 explosive environments.
- Do not transport persons on the forks.
- When lifting the forks make sure that nobody stands or walks under the forks.
- Wear gloves when using it.
- Do not transport goods if the forks are at a height of 300 mm or higher. An exception is made for storage and retrieval from shelves.
- When transport / lifting goods, all persons should keep a safety distance of 600 mm.
- Always distribute the weight of the goods evenly on both forks. Never use only one fork. The center of gravity of the goods should be in the middle of the two forks.
- Do not charge beyond the maximum capacity.
- Check the battery fluid regularly before using or charging the battery, if it is not sufficient, top it up with distilled water. Please always wear suitable protective clothing (glasses, gloves)!
- The battery should be charged in a dry and ventilated place and away from open fire.
- Set the forks to lowest position when the stacker is not in use.
- During longer standstill periods and when parking the pallet truck, operate the emergency switch to disconnect the power supply.
- Modifications and changes to the device not approved by the manufacturer will void the warranty.

TECHNICAL DATA

Type	Unit	Value
Model		HSE1000/3
Load capacity	kg	1000
Lifting height	mm	3000
Fork Size	mm (L x B x H)	1100 x 150 x 60
Mast height, lowered	mm	2077
Fork height, lowered	mm	85
Lifting speed	mm/s	143
	unload	
	load	76
Lowering speed	mm/s	104
	unload	
	load	93
Battery		DC, 12 V, 120 AH
Hoist motor		DC, 12 V, 1500 W

MAINTENANCE

HYDRAULIC OIL

Please check the oil level every 6 months. The oil should be hydraulically Oil: ISO VG32, its viscosity should be 32 cSt at 40°C, the total volume is about 4.0 liters.

DAILY OPERATIONAL CONTROL AND MAINTENANCE

Check the truck daily before use, paying special attention to the wheels and axles. Foreign object like cloth / cloths etc. can block wheels, fork, mast or the chain. After finishing the work with the pallet stacker truck, unload the forks and lower them to the lowest position.

CARE OF MOVING PARTS

Use suitable lubricants to lubricate all moving parts.

HOW TO CHARGE THE BATTERY

After approximately 4 hours (normal load) the battery of the truck must be charged. Only charge the battery in well ventilated places. When charging is complete, disconnect the plug from the mains and store it safely in the chassis. If the battery is completely discharged, the charging process takes about 6 hours. Charge the battery when the voltage is less than 10 volts. Avoid discharging the battery by more than 80 % of its charge capacity to ensure a long life of the battery.

- Please have the water level of the battery fluid checked at every UVV inspection. If necessary, fill distilled water into the battery cells. Be sure to wear suitable protective clothing (goggles, gloves)!
- The charging environment should be ventilated and far away from fire sources.
- If the pallet stacker is not used for a long time, you should charge it for at least 2 hours per week.
- The voltage at the display should not exceed 15 volts when charging.
- Do not use the pallet stacker when charging.



Press the emergency switch during charging so that the battery can be charged.

CONTROL PANEL



No.	Name
1	Power plug
2	Emergency switch
3	Lifting and lowering lever
4	Voltmeter

EMERGENCY SWITCH

When actuated, the power supply is disconnected, by turning the emergency switch clockwise, the power supply is restored.

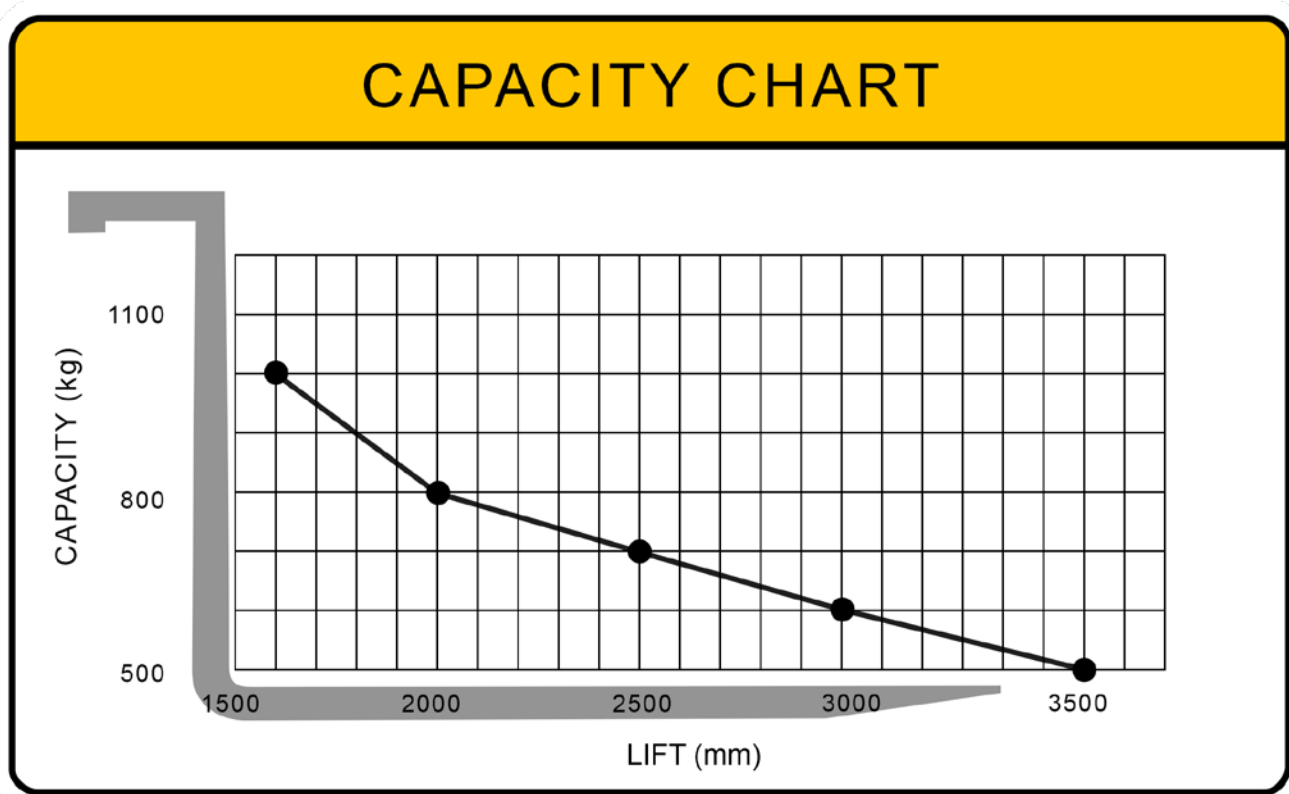
VOLTMETER

Display of the battery voltage. If the voltage is below 10 volts, do not use the truck, but first recharge.



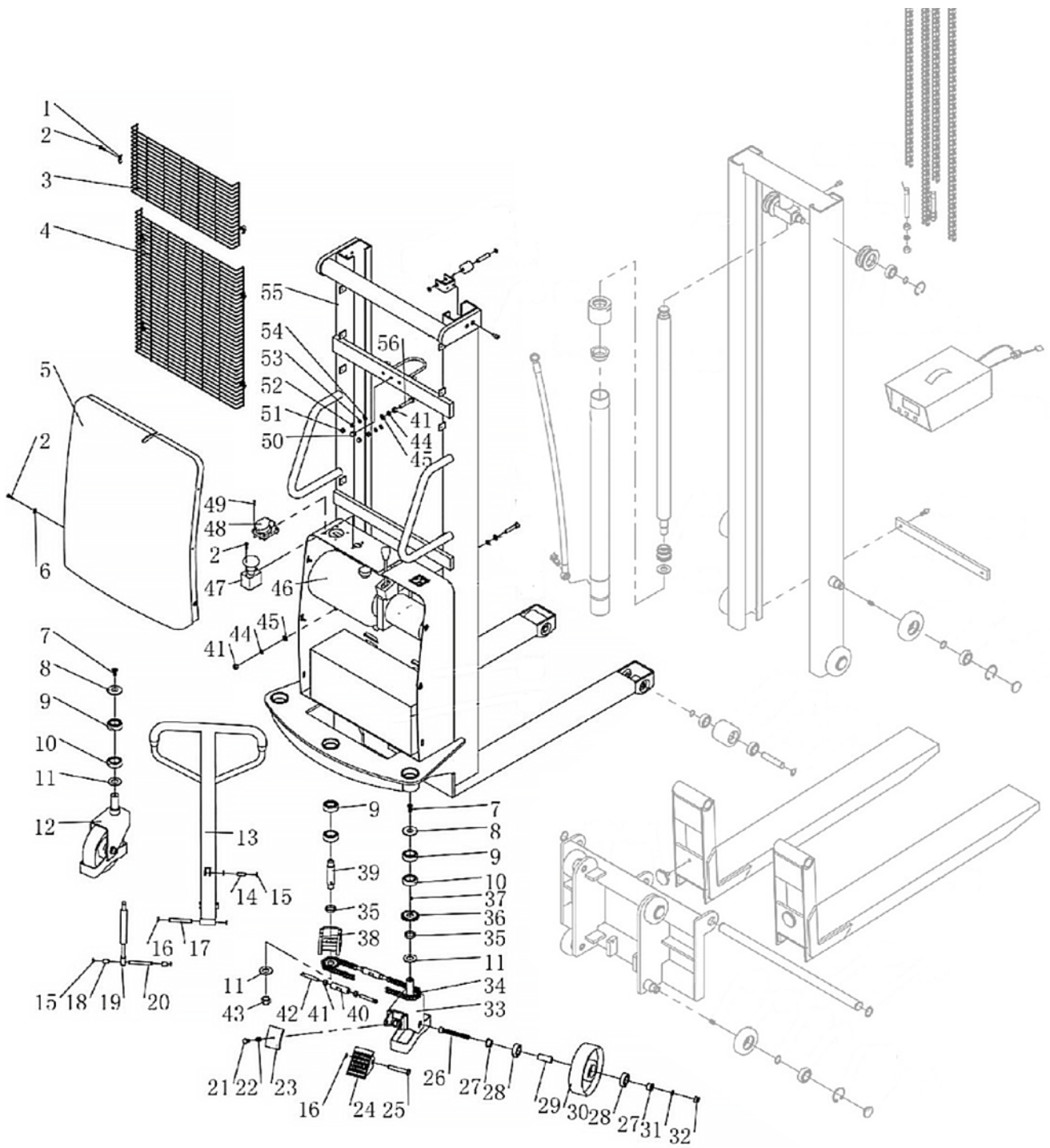
Press the emergency switch when the HSE1000/3 is not in use to save battery power and prevent deep discharge.

LOAD CURVE



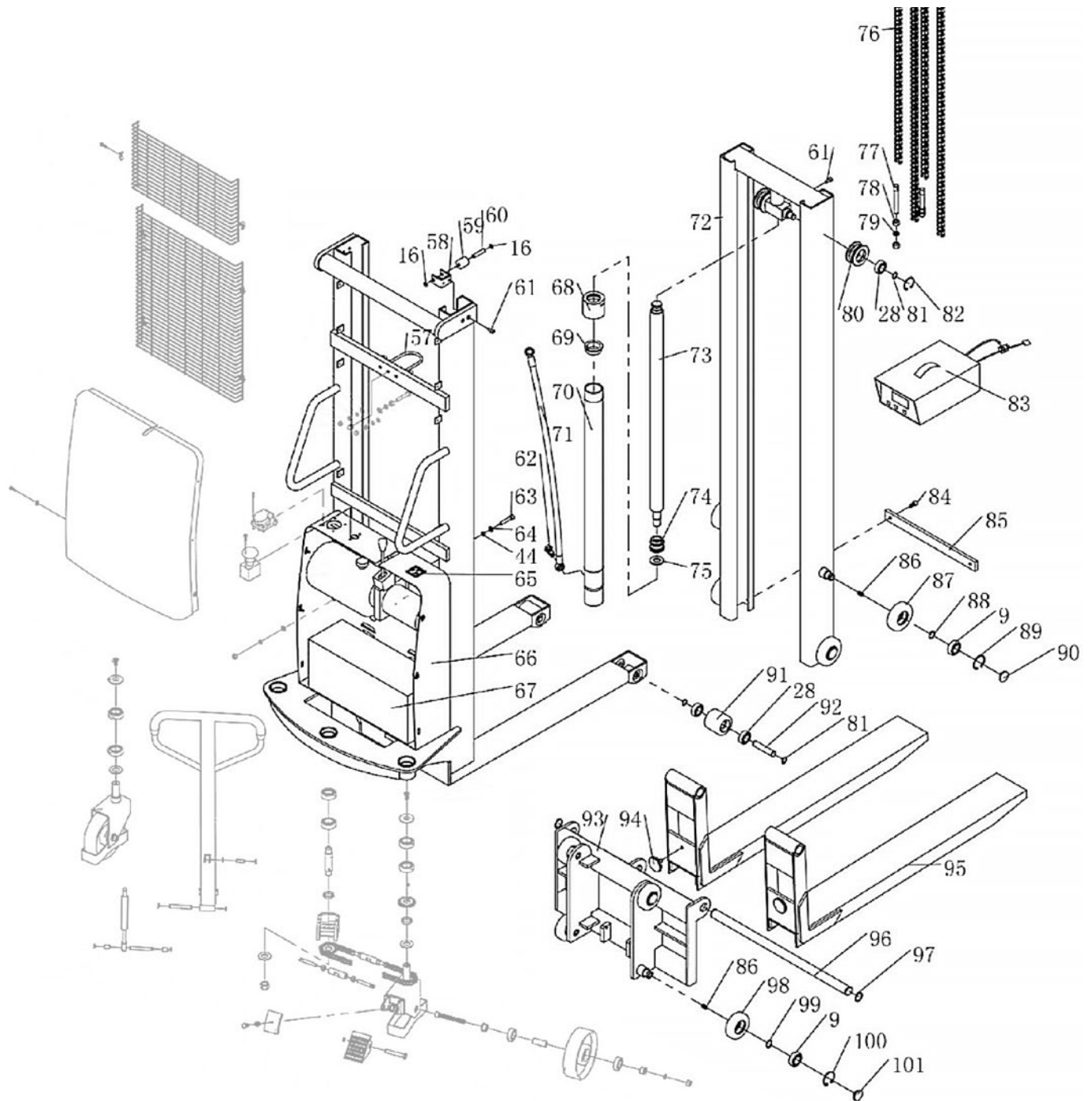
The load curve shows the horizontal load capacity of the largest load **Q** [kg] and the lifting height **H** [mm] corresponding to the vehicle with a load center of 600 mm.

PARTS LIST PART 1



No.	Code No.	Name	Quantity
1	SPN10.0-6	Protective cover splint	6
2	GB/T 818-2000	Cross recess pan head screw M6 x 20	14
3	SPN10.0-4B	Protective cover	1
4	SPN10.0-4C	Protective cover	1
5	SPN10.9-2	Electrical cover	1
6	GB/T 96.2-2002	Large (big) plain washer ϕ 6	6
7	GB 2674-86	Allen cup head screws M10 x 25	2
8	SPN10.4-3	Gland	2
9	GB/T 276-94	Deep groove ball bearing 6205	12
10	GB/T 297-94	Tapered roller bearing 30205	2
11	GB/T 97.1-2002	Flat washer ϕ 24	3
12	SPN10.6.1	Driven gear carrier	1
13	SPN10.4.1	Steering handle	1
14	SPN10.4-1	Pin roll	1
15	GB 894.1-86	Circlip for shaft ϕ 10	4
16	GB 894.1-86	Circlip for shaft ϕ 12	7
17	SPN10.4-2	Connecting shaft	1
18	SPN10.4-6	Spacer bush	2
19	SPN10.4-7	Gas spring	1
20	SPN10.4-4	Gas spring shaft	1
21	SPN10.5-7	The push rod screw	1
22	GB_T 2084-94	Cylindroid helical-coil compression spring	1
23	SPN10.5-4	Skate brake	1
24	SPN10.5-8	CAM pedal	1
25	SPN10.5-3	Pin roll	1
26	GB/T 70.1-2000	Hexagon socket cap screws M12 x 100	2
27	SPN10.5-2	Axle sleeve	4
28	GB/T 276-94	Deep groove ball bearing 6204	10
29	SPN10.5-1	Bushing	2
30	SPN10.5.2	Nylon wheel	2
31	GB/T 93-1987	Spring washer ϕ 12	2
32	GB/T 6170-2000	Hex nut M12	2
33	SPN10.5.1	The brake wheel frame components	1
34	ISO08A	Chain	2
35	SPN10.5-5	Shaft filler washer	2
36	SPN10.4-80	Steering Chain wheel	2
37	GB/T 1096-2003	General flat key 6 x 8	1
38	SPN10.4.2B	The handle base	1
39	SPN10.4-5	Steering shaft	1
40	SPN10.4.3-2	Strainer	2
41	GB/T 41-2000	Hex nut M10	9
42	SPN10.4.3-1,4	Tension bolt	4
43	GB/T 6176-2000	Hex nut M18 x 1.5	1
44	GB/T 93-1987	Spring washer ϕ 10	7
45	GB/T 95-2002	Flat washer ϕ 10	5
46	CMB1-VB1303060-120	Pump station	1
47	TY-01.36	Emergency Stop Switch	1
48	TY-01.42	SPN charging plug	1
49	GB/T 818-2000	Cross recess pan head screw M4 x 20	4
50	GB 923-88	Acorn nut M10	1
51	GB 923-88	Acorn nut M8	2
52	GB/T 41-2000	Hex nut M8	2
53	GB/T 93-1987	Spring washer ϕ 8	2
54	GB/T 95-2002	Flat washer ϕ 8	2
55	SPN10.20.1	The door frame component	1
	SPN10.25.1	The door frame component	1
	SPN10.30.1	The door frame component	1
	SPN10.35.1	The door frame component	1
56	GB/T 5781-2000	Hex bolt thread M10 x 55	1

PARTS LIST PART 2



No.	Code No.	Name	Quantity
57	SPN10.0-2	Oil cylinder hoop	1
58	SPN10.7-3	Stent	2
59	PN10.7-1	Nylon guide wheel	2
60	SPN10.7-2	Pin roll	2
61	GB/T 70.1-2000	Hexagon socket cap screws M8 x 16	5
62	SPN10.8-6	Oil connection	1
63	GB/T 70.1-2000	Hexagon socket cap screws M10 x 25	2
64	GB/T 97.1-2002	Flat washer ϕ 10	2
65	TY-01.43	Coulombmeter	1
66	SPN10.9.1	Distribution box	1
67	12V120Ah	Battery	1
68	SPN10.8-2T	Block cover	1
69	SPN10.8-3	Bushing	1
70	SPN10.8-4	Oil cylinder body 2.0	1
	SPN10.8-4	Oil cylinder body 2.5	1
	SPN10.8-4	Oil cylinder body 3.0	1
	SPN10.8-4	Oil cylinder body 3.5	1
71	GB/T3683-92	High-pressure oil pipe	1
72	SPN10.20.2	The inner frame welded components	1
	SPN10.25.2	The inner frame welded components	1
	SPN10.30.2	The inner frame welded components	1
	SPN10.35.2	The inner frame welded components	1
73	SPN10.8-1	Piston rod 2.0	1
	SPN10.8-1	Piston rod 2.5	1
	SPN10.8-1	Piston rod 3.0	1
	SPN10.8-1	Piston rod 3.5	1
74	SPN10.8-5	Piston rod	1
75	SPN10.8-9	Detent ring	1
76	ISO12A	Chain 2.0	2
	ISO12A	Chain 2.5	2
	ISO12A	Chain 3.0	2
	ISO12A	Chain 3.5	2
77	SPN10.0-1	ChainPull rod	2
78	GB/T 6170-2000	Hex nut M14	4
79	GB/T 93-1987	Spring washer ϕ 14	2
80	SPN10.2-5(G)	Chain wheel	2
81	GB 894.1-86	Circlip for shaft ϕ 20	4
82	GB 893.1-86	Circlip for hole ϕ 47	1
83	12V20A	Charger	1
84	GB/T 70.1-2000	Hexagon socket cap screws M10 x 20	2
85	SPN10.2-2	Pull rod	1
86	GB/T 77-2000	Hexagon socket set screw with flat point M12 x 20	8
87	SPN10.2-1	Inner frame idler wheel	4
88	GB 894.1-86	Circlip for shaft ϕ 25	4
89	GB 893.1-86	Circlip for hole ϕ 52	4
90	SPN10.3-3	Lateral pressure pad	4
91	SPN10.0-1	Front wheel	2
92	SPN10.0-3	Small shaft	2
93	SPN10.3.1	Fork Frame welded	1
94	SPN10.3.2-2	Adjusted baffle plate	2
95	SPN10.3.2	Fork	2
96	SPN10.3-2	Major axis	1
97	GB 894.2-86	Circlip for shaft ϕ 32	2
98	SPN10.3-1	Pallet rack roller	4
99	GB 894.2-86	Circlip for shaft ϕ 25	4
100	GB 893.2-86	Circlip for hole ϕ 52	4
101	SPN10.3-3	Lateral pressure pad	4

REGULAR INSPECTIONS

The respective inspection points (plus equipment identification) for the periodic inspections/thorough examinations are to be checked in an integrated manner in the associated inspection report of the lifting equipment, taking into account the mandatory fulfilment of the Lifting Operations and Lifting Equipment Regulations 1998 (LOLER). (Recommendation: FEM4.004)

TROUBLESHOOTING

Problem	Cause	Solution
The battery cannot be charged	The hydraulic oil is not sufficient	Top up the oil
The forks can not lift up (Engine running)	No hydraulic oil	Top up the oil
	The oil has impurities	Change the oil
The motor does not run	The emergency switch was pressed and the power was switched off	Turn the emergency switch clockwise to turn on the power
	The voltage is too low	Charge the battery
	The connections of the electrical cable are loose	Tighten it
	The contact of the DC motor is bad	Replace them with new ones
The forks cannot be lowered	The piston rod or mast was deformed by a partial load or overload on one side	Replace these with a new one
	The fork was held in the high position for a long time, with the piston rod exposed due to rust and jamming of the rod	Keep the fork in the lowest position when not in use and pay more attention to the lubrication of the rod
	The drain valve of the pump is not opened	Check it, if it is damaged, replace it with a new one
Leaks	Sealing parts are worn or damaged	Replace them with new ones
	Some parts are cracked or worn	Replace them with new ones
The fork lowers, without the drain valve working	The impurities in the oil mean that the drain valve cannot close tightly	Replace with new oil
	Sealing parts worn or damaged	Replace them with new ones
	The drain valve is damaged	Replace them with new ones
The battery cannot be charged	The battery is bad	Replace it with a new one
	The charging plug is loose	Tighten it



It is strictly forbidden to carry out repairs without permission or training!

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.co.uk/en/service

Responsible for the content:

TOPREGAL GmbH
 Industriestrasse 3
 70794 Filderstadt
 GERMANY
www.topregal.com

UKCA Declaration of Conformity

The manufacturer

TOPREGAL UK Ltd.
Carlton Drive Crumlin
Gwent NP11 4EA

hereby declares that the following product

Product name:

SolidHub
semi-electric forklift

Type:

HSE1000/3, lifting height 3000mm,
load capacity 1000kg

Serial number:

HSE1000/3-1000000000 - HSE1000/3-9999999999

that the equipment is in conformity with the following relevant UK legislations and applied standards:

2006/42/EC Machinery Directive
2014/30/EC EMC Directive

EN ISO 12100, EN 1175-1+A1,
EN 12053+A1,
EN 13059+A1,
EN 16307-1+A1,
EN ISO 3691-1/AC,
EN 12895, EN 61000-6-1,
EN 61000-6-3+A1

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

TOPREGAL UK Ltd.
Carlton Drive Crumlin
Gwent NP11 4EA



Place: Crumlin UK
Date: 24.05.2022

Juergen Effner
Chief Executive Officer

SolidHub