# Operating instructions Parts List



# EMS Electric Stacker

Note: Operator MUST read and understand this operating instructions before use this Electric Stacker

Thanks for using our EMS series of Semi-Electric Stacker. Your Electric Stacker is made by special profiles. It is designed compactly and durably. It is easy to handle. For your safety and correct operation, please read this instructions carefully before using.

NOTE: All of the information reported herein is based on data available at the moment of printing. The factory reserves the right to modify its own products at any moment without notice and incurring in any sanction. So, it is suggested to always verify possible updates.

model			EMS10	EMS15	EMS20		
Capacity		Kg	1000	1500	2000		
Max.Height		mm	1600/2000/2500/3000/3500		1600/2000/2500/3000/3500 16		1600/2000
Farls Oine			570X1000 (1	570X1000			
FORK SIZE		11111	(330—680) ×1000 (1100/1150)		(330—680) ×1000		
Single Fork Size		mm	160X1000 (1500)		160X1000 (1500) 160X1000 (1500)		160X1000 (1500)
Overall min.Height		mm	1980/1780/2030/2380/2310		1980/1780		
Fork Min.Height		mm	85 85		85		
Lifting	Empty		130		130		
speed	Full		80	70			
Decline	Empty	11111/5	0~19	0~200			
speed	Full		0~400		0~300		
Battery			DC12V 120Ah		DC12 150Ah		
Pump Motor			DC12V 1.6Kw		DC12V 1.6Kw		

#### 1. STRUCTURAL DATA FORM

### 2. SAFETY GUIDANCE

2.1 Operators should read all warning sings and instructions here and on the Electric Stacker before using it.

2.2 Please don't use this Electric Stacker before training or authorizing.

2.3 Please check up this Electric Stacker carefully before operating. Especially the wheels, the handles, the rollers, the masts, the battery . ect.

2.4 Please don't use it on a slopping ground.

2.5 please don't take up any people on the forks.

2.6 Please don't touch the masts when lifting the goods.

2.7 The operator had better take on gloves and non-slip shoes for labor protecting.

2.8 Please don't make the forks over 300mm height when transporting goods.

2.9 All non-essential personnel should leave the stacker more than 600mm when lifting or transporting goods. People forbid standing under the forks.

2.10 Cargo weight should be distributed as evenly as possible on the two forks, do not use only one fork. The center of gravity of goods should be in the center of two forks.

2.11 Please don't load over maximum capacity.

2.12 Please check up the Battery fluid before using or charging. Add distilled water when it is insufficient.

2.13 The surrounding environment should be dry, well-ventilated and away from flames while charging.

2.14 The fork should be reduced to the lowest point when not using.

2.15 At other special condition or place, the operator should be more carefully to operate the electric stacker.

#### **3 Maintenance**

#### 3.1 Hydraulic oil

Please check the oil level every six mouths. The oil can be hydraulic oil: ISO VG32, its viscosity

should be 32cSt at 40°C, total volume is about 2.0lt.

#### 3.2 Daily check and maintenance

In order to keep good using status, the operator should make the necessary check and maintain for the electric stacker daily. At this point the focus should be checked: (1)wheels and mandrel, such as wound on wheels, mandrels' lines, rags and other objects;(2) the forks and mast are deformation or not;(3) the voltage of battery is normal or not. Please unload the goods and decline the forks to the lowest position when used up.

#### 3.3 Lubrication

Operator should often put butter or lubrication into all movable parts.

#### 4. Battery charging

4.1 Please charge when the battery voltage is lower than 10V.

4.2 Please check up the Battery fluid before charging. Adding distilled water when it is insufficient.

4.3 The surrounding environment should be dry, well-ventilated and away from flames while charging.

4.4 Please charge once a week if unused for a long time and every time shouldn't be shorter than 2 hours.

4.5 The voltage by instruction sheet shows should lower than 16V.

4.6 Prohibited using when charging.

### **5.Control Platform**



1 Emergency switch 2 charging indicator 3 operating handle 4 coulomb meter 5 key switch 6 charging plug

5.1 Emergency switch

The Pump motor power supply will be powered off when press the button down; The motor power will be powered on when you turn it clockwise.

5.2 Voltmeter

This meter will show the voltage of battery. If it shows lower than 10V the electric stocker should be

charged.

5.3 Operating Handle

This handle is used to control the forks up and down.

5.4 Charging Plug

It is used for charging specially.

## 6.Trouble Shooting

No.	Trouble	Clause	Fixing Methods		
1	The forks can not be up the Max. height.	— The hydraulic oil is not enough.	—Pour in the hydraulic oil.		
2	The forks can not be lifted up.	<ul> <li>Without hydraulic oil.</li> <li>The hydraulic oil has impurities.</li> </ul>	<ul><li>—Fill in the hydraulic oil.</li><li>—Change the htdraulic oil.</li></ul>		
3	The pump can't turn.	<ul> <li>Without put on the emergency switch.</li> <li>The battery voltage is too low.</li> <li>The power cord connector is loose.</li> <li>The motor contactor is broken</li> </ul>	<ul> <li>Turn the emergency switch clockwise.</li> <li>Charge it.</li> <li>Screw it.</li> <li>Replace with the new one.</li> </ul>		
4	The forks can not be descended.	<ul> <li>The piston rod or pump body</li> <li>is deformed resulting from</li> <li>piston rod or partial loading</li> <li>slanting to one side or</li> <li>over-loading.</li> <li>The fork was kept in the</li> <li>high position for long time with</li> <li>piston rod bared to arise in</li> <li>rusting and jamming of the rod.</li> <li>Hydraulic pump station</li> <li>release valve due to wear or</li> <li>damage, can not be opened.</li> </ul>	<ul> <li>—Replace the piston rod or pump body.</li> <li>—Keeping the fork in the lowest position if not using, and pay more attention to lubricate the rod.</li> <li>—Change the pump release valve.</li> </ul>		
5	Oil spill	-Seals aging or damaged -some parts is broken	Change new one. Change new one.		

6	The fork descends without the release valve worked.	<ul> <li>The impurities in the oil cause the release valve to be unable to close tight.</li> <li>Some parts of hydraulic system is cracked or bored.</li> <li>The relief value is broken.</li> </ul>	<ul><li>—Change the hydraulic oil.</li><li>—Change new one</li><li>—Change new one</li></ul>
7	The battery can't charge.	<ul><li>—The Battery is broken.</li><li>—Charging plug is loose.</li></ul>	<ul><li>—Change new one</li><li>—Interpolate tightly</li></ul>

## NOTE: DO NOT ATTEMP TO REPAOR THE ELECTRIC STACKER

## UNLESS YOU ARE TRAINED AND AUTHORIZED TO DO SO.



No.	Name	Quantity	No.	Name	Quantity	No.	Name	Quantity
1	Top beam seat	1	40	Screw	6	79	Bearing	4
2	Bolt	1	41	Pin	2	80	Rear wheel	2
3	Top beam axis	1	42	Guide frame	2	81	Right wheel frame	1
4	Hole Collar	2	43	Roller	2	82	Sprocket wheel	2
5	Bearing	2	44	Frame	1	83	Pin	1
6	Sprocket wheel	2	45	Fixing ring	1	84	Bearing	1
7	Shaft Collar	2	46	Nut	3	85	Bearing	1
8	Screw	1	47	Screw	1	86	Dust cap	1
9	Lifting mast	1	48	Nut	2	87	Screw	1
10	Chain	04A	49	Fence	1			
11	Links head	2	50	Washer	4			
12	Pin	2	51	Washer	4	90	Chain	1
13	Bolt	2	52	Screw	4	91	Handle Block	1
14	Nut	2	53	Gauntlets Components	2	92	Pin	1
15	Nut	2	54	Charge Indicator	1	93	Screw	1
16	Fixed width fork tripod	1	55	Emergency switch	1	94	Screw	2
17	Shaft circlip	4	56	Cover		95	Battery fixing ring	1
18	Guide wheel	4	57	Under cover	1	96	Battery	1
19	Bearing	4	58	Screw	2	97	Jacket	1
20	Hole circlip	4	59	Dust cap	2	98	Screw	4
21	Shaft circlip	4	60	Bearing	2	99	Voltage instruction sheet	1
22	Guide wheel	4	61	Bearing	2	100	Key lock	1
23	Bearing	4	62	Left wheel frame	1	101	Hydraulic power unit	1
24	Hole circlip	4	63	Handle assembly	1	102	Charger	1
25	Rocker	4	64	Gas spring	1			
26	Axis	4	65	Axis	1	104	Shaft Collar	2
27	Spacer	8	66	Screw	1	105	Stop collar	1
28	Bearing	8	67	Bushings	2	106	The hydraulic cylinder	1
29	Front wheel	4	68	Pin	1	107	Tubing connector	1

30	Screw	2	69	Pedal	1	108	Tubing	1
31	Lower support plate	1	70	Shaft Collar	1	109	Tubing connector	1
32	Nut	2	71	Axis	1	110	Gasket	2
33	Seals	1	72	Brake Pads	1	111	Spring pin	8
34	Oriented band	1	73	Screw	1	112	Shaft circlip	2
35	O-Seals	2	74	Spring	1	113	Axis	1
36	Piston	1	75	Screw	2	114	Prong	2
37	Rod	1	76	Nut	2	115	Guide plate frame	1
38	Nut	1	77	Spacer	4			
39	Dust ring	1	78	Bushings	2			