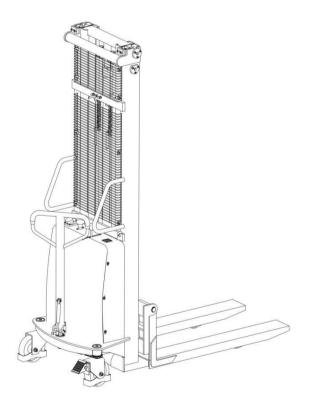


# Service Manual

# Part Manual

# EA15C Semi-Electric Fork-Over Stacker



Note: You must read this manual, and all warning labels on the Fork-Over Stacker BEFORE USE!

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### Preface

EKKO Lifts would like to thank you for your recent purchase of an EA15 series semi-electric stacker. The stacker is made with high-quality steel and is designed to be durable, dependable, and easy to use. For your safety and correct use during operation, please carefully read this instruction manual, and all warnings on this stacker before use.

Note: All the information reported herein is based on data available at the time of printing. We reserve the right to modify our products at any moment without notice and incur any sanction. So, it is suggested to always check for possible updates.

Model		EA15C
Load Capacity	(lb)	3300
Load Capacity on Max. height	(lb)	1980
Lifting height Max.	(in)	119.4
Load center distance	(in)	24
Fork length	(in)	45.3
Single fork width	(in)	3.94
Overall fork width	(in)	8-35
Lowered fork height	(in)	235
Fixed leg length	(in)	36.4
Fixed leg width, single	(in)	3.94
Width between fixed legs	(in)	17.3
Turning radius	(in)	53.2
Overall length	(in)	74
Overall width max	(in)	25.2
Extended mast height	(in)	140.5
Lowered mast height	(in)	84.5
Battery Voltage	(in)	12V/120AH, 10-12V
Charger		12V/15A
Lift Motor		DC, 12V/1.5KW

#### Structural data form

	Service Weight	(lb)	870
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# 1. Safety guidance

1.1 Operators must read all warning signs and instructions on the stacker before use.

1.2 Do not operate this stacker unless you are familiar with it, have been professionally trained in its operation and functionality, and are also authorized to do so.

1.3 Do not operate this stacker unless you have checked its condition. Give special attention to the chain, the wheels, the handle, the guide frame, the pilot wheel, the mast, battery, etc.

1.4 Do not use it on sloped ground or in an explosive or dangerous environment.

1.5 Do not ever lift people on the forks.

1.6 While the forks are elevated it is prohibited for anyone to stand under the forks or pass through the forks.

1.7 The operator should use gloves for protection.

1.8 Do not move the stacker when the goods are lifted to a height of more than 11.8 in.

1.9 When the goods are lifted, people should stay clear from the forks by at least 2 feet.

1.10 Evenly distribute the weight of goods onto both forks, do not use only one fork. The center of gravity of the goods should be in the middle of the two forks on the load center of 24".

1.11 Do not overload maximum capacity.

1.12 Before using or charging it you must check battery fluids, if it is insufficient, please fill with distilled water ONLY.

1.13 Charge the equipment in a dry and ventilated location, and far away from heat.

1.14 Always keep the forks in the lowest position if not in use.

1.15 The operator should always be responsible and careful when operating the stacker.

# 2. Maintenance

#### 2.1 Hydraulic oil

Please check the oil level every six months. The oil can be hydraulic oil: ISO VG32, its viscosity should be 32cSt at 40°C, total volume is about

4.0 liters.

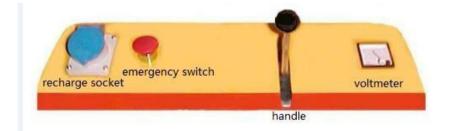
#### 2.2 Daily check and maintenance

It is necessary to check the stacker daily. Pay special attention to the wheels and axles for debris stuck in between, which may block the wheels. Check the forks, the mast, the chain, and the battery. The forks should be unloaded of goods and lowered to the lowest position when not in use.

#### 2.3 Lubrication

Use motor oil or grease to lubricate all movable parts every 3 months.

# 3. Control panel



Pic.1

#### 3.1 Emergency switch

Whenever you press this switch downwards, it will immediately switch the power

off, and when you pull it back up it will switch the power back on. 3.2 Voltage meter

It indicates the voltage of battery. When its voltage is less than 10 Volts, you should recharge it.

#### 3.3 Control handle

This control handle lowers and raises the forks. 3.4 Recharging socket

Plug the charger into any 110V outlet, then plug the charger into the unit of the recharging socket. It will automatically stop charging when the charge is complete.

No	Trouble	Cause	Solution	
1	The forks cannot lift to the max. height.	-Low on hydraulic fluid	-Add hydraulic fluid.	
2	The forks cannot lift at all.	-No hydraulic fluid. -The tank or fluid has impurities.	-Add hydraulic fluid. -Change fluid.	
3	Does not power up.	<ul> <li>The emergency switch is pressed down.</li> <li>The battery is too low.</li> <li>The electrical wiring connectors are loose.</li> <li>The contact of DC motor is bad.</li> </ul>	-Pull emergency switch up. -Charge the unit. -Tighten the bolts. -Replace with new one.	
4	The forks cannot be lowered.	<ul> <li>The piston rod or mast is malformed resulting from partial loading slanting to one side or over-loading.</li> <li>The forks were kept in an elevated position for long time with piston rod bare which resulted in rusting and jamming of the rod.</li> <li>The pump release valve is not open.</li> </ul>	<ul> <li>Replace it with a new one.</li> <li>Keep the forks in the lowest possible position if not in use and pay more attention to lubricating the piston rod.</li> <li>Check it, if damaged, replace with new one.</li> </ul>	
5	Leaks	-Seals appear worn and/or damaged.	-Replace with the new one.	
6	The fork descends by itself	-The impurities in the fluid caused the release valve not properly seal shut. -Sealing parts worn or damaged. -The release valve is damaged.	-Replace it with new oil. -Replace it with a new one. -Replace with the new one.	
7	Battery will not be charge	-Battery is bad. -The charging plug is loose.	- Replace it with a new one. - Tighten the clamps or bolts	

### 4. Troubleshooting

#### Note: Without authorization or training, it is strictly prohibited

to repair the Stacker!

# 5. Parts List

No.	Code	Name	Specificatio n	Quantity
1	GB/T 818-2000	Cross recess pan head screw	M6×20	14
2	EA10.0-6	Guard clamp		6
3	EA1016.0-4	Protective cover		1
4	EA10.9-2	Electrical cover		1
5	GB/T 96.2-2002	Large (big) plain washer	φ6	6
6	GB 2674-86	Socket button head screws	M10×25	2
7	EA10.4-3	Cover		2
8	GB/T 276-94	Deep groove ball bearing	6205	8
9	GB/T 297-94	Tapered roller bearing	30205	2
10	GB/T 97.1-2002	Plain washer	φ24	3
11	EA10.6.1	Wheel frame welded parts of driven pulley		1
12	EA10.4.1	Steering handle		1
13	EA10.4-1	Pin roll		1
14	GB 894.1-86	External circlip	φ10	4
15	GB 894.1-86	External circlip	φ12	3
16	EA 10.4-2	Connecting shaft	·	1
17	EA10.4-6	Spacer bush		2
18	EA10.4-7	Gas spring		1
19	EA10.4-4	Gas spring shaft		1
20	EA10.5-7	The push rod screw		1
21	GB_T 2084-94	Cylindroid helical-coil compression spring		1
22	EA10.5-4	Skate brake		1
23	EA10.5-8	CAM pedal		1
24	EA10.5-3	Pin roll		1
25	GB/T 70.1-2000	Hexagon socket cap screws	M12×100	2
26	EA10.5.2	Nylon wheel		2
27	EA10.5-1	Bushing		2
28	GB/T 276-94	Deep groove ball bearing	6204	10
29	EA10.5-2	Axle sleeve		4
30	GB/T 93-1987	Spring washer	φ12	2
31	GB/T 6170-2000	Hex nut	M12	2
32	EA10.5.1	The brake wheel frame welded pieces		1
33	ISO08A	Chain		2
34	EA10.5-5	Shaft filler washer		2
35	EA10.4-8	Steering chain		2
36	GB/T 1096-2003	General flat key	6×8	1
37	EA10.4.2B	The handle base		1
38	EA10.4-5	Steering shaft.		1
39	EA10.4.3-1,4	Draw-in bolt		4
40	GB/T 41-2000	Hex nut	M10	9
41	EA10.4.3-2	Strainer		2
42	GB/T 6176-2000	Hex nut	M18×1.5	1

43	GB/T 93-1987	Spring washer	φ10	7
44	GB/T 95-2002	Flat washer	φ10	5
45	CMB1-VB1303060- 120	pump station		1
46	TY-01.36	Emergency Stop Switch		1
47	TY-01.42	SPN charging plug		1
48	GB/T 818-2000	cross recess pan head screw	M4×20	4
49	GB 923-88	acorn nut	M10	1
50	GB 923-88	acorn nut	M8	2
51	GB/T 41-2000	Hex nut	M8	2
52	GB/T 93-1987	Spring washer	φ8	2
53	GB/T 95-2002	Flat washer	φ8	2
54	EA10.16.1	The door frame component		1
55	GB/T 5781-2000	Hex bolt thread	M10×55	1
56	EA10.0-2	Oil cylinder hoop		1
57	EA10.8-6	Fuel pipe union		1
58	GB/T 70.1-2000	Hexagon socket cap screws	M10×25	2
59	GB/T 97.1-2002	Flat washer	φ10	2
60	TY-01.43	Coulombmeter		1
61	EA 10.9.1	Distribution box		1
62	12V120Ah	Battery		1
63	EA10.8-2T	Block cover		1
64	EA10.8-3	Bushing		1
65	EA10.8-4	Oil cylinder		1
66	GB/T3683-92	High-pressure oil pipe		1
67	ISO12A	Chain		2
68	EA10.0-1	Chain pull rod		2
69	GB/T 6170-2000	Hex nut	M14	4
70	GB/T 93-1987	Spring washer	φ14	2
71	EA10.2.2-3	Footstock		1
72	GB/T 70.1-2000	Hexagon socket cap screws	M8×16	1
73	EA10.2-5(G)	Chain wheel		2
74	GB 894.1-86	Circlip for shaft	φ20	6
75	GB 893.1-86	Circlip for hole	φ47	2
76	EA 10.8-1	Piston rod		1
77	12V20A	Charger		1
78	EA10.8-5	Piston rod		1
79	EA10.8-9	Detent ring		1
80	EA10.0-1	Front wheel		2
81	EA10.0-3	Small shaft		2
82	EA10.3.1	Fork frame welded		1
83	EA10.3.2-2	Adjust baffle plate		2
84	EA10.3.2	Fork		2
85	EA10.3-2	Major axis		1
86	GB 894.2-86	Circlip for shaft	φ32	2
87	GB/T 77-2000	Hexagon socket set screw with flat point	M12×20	4
88	EA10.3-1	Pallet rack roller		4
89	GB 894.2-86	Circlip for shaft	φ25	4
90	GB 893.2-86	Circlip for hole	φ52	4
91	EA10.3-3	Lateral pressure pad		4

