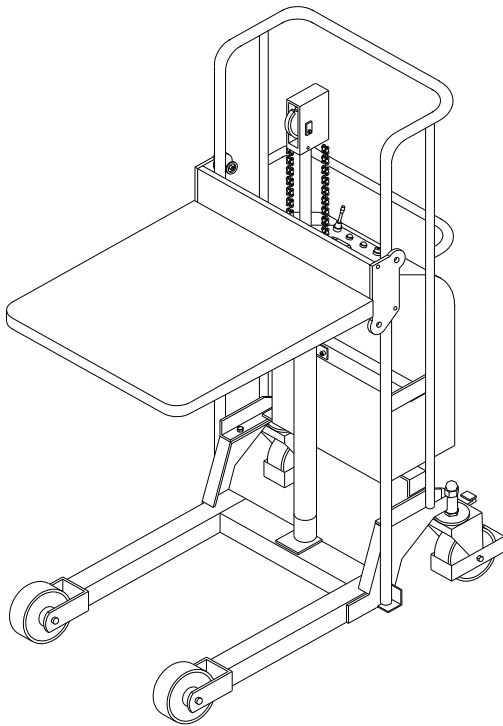


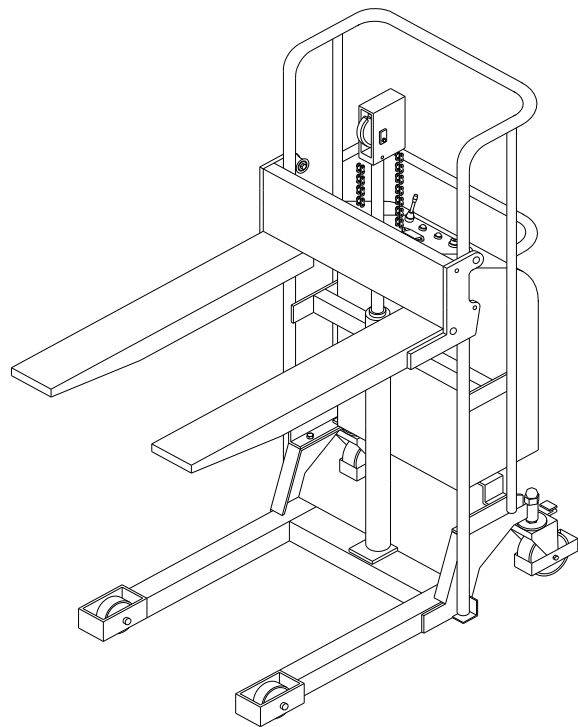
Instruction Manual

Electric Platform (Fork) Stacker

Model: EPA EFA EJA



EPA. Series Stacker



EFA (EJA). Series Stacker

NOTE: Owner and Operator must read and understand this instruction manual before using the Electric Stacker.

CONTENTS

1. Brief Introduction.....	2
2. Specification.....	2
3. Nomenclature Of Each Section.....	5
4. Safety Instruction.....	5
5. Inspection Before Use.....	5
6. Operation Instruction.....	6
7. Daily Maintenance & Periodical Inspection.....	6
8. Problems & Solution.....	7
9. Diagram of Hydraulic System.....	8
10. Diagram of Electric Control System.....	8
11. Exploded View & Parts List.....	9

Thank you very much for selecting our ELECTRIC STACKER!

This instruction manual describes correct operating method to ensure prolonged service life. Please read and completely understand this manual before operating the Electric Fork Stacker. Always keep this manual at an appropriate place. If the manual or warning decal is missing, please contact your vender.

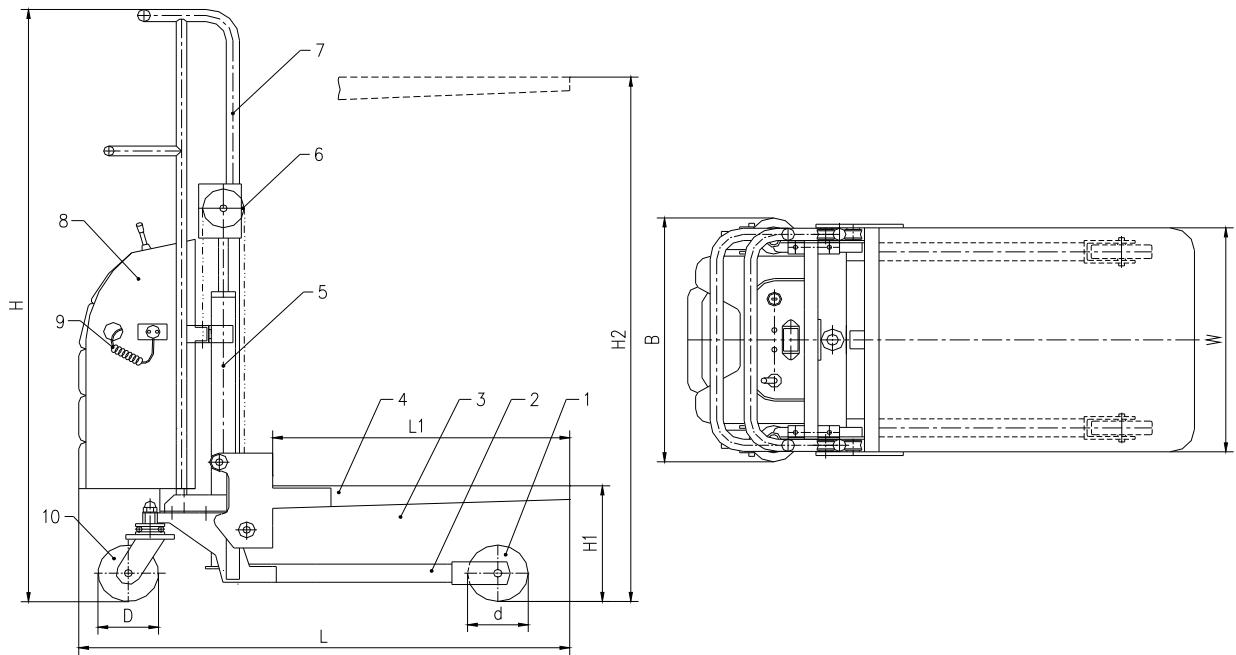
NOTE: All information reported herein is based on the data available at the time of printing. The factory reserves the right to modify its own products at any time without notice or incurring in any sanction. Please verify with the supplier for possible updates.

1. Brief Instruction

EPA. EFA. EJA series Stacker is designed on the basis of Manual series Stacker. With a power pack and a high quality free-service battery, it is able to lifting or lowering load when operate. It can release labor and improve working efficiency. It mainly applies to transporting, lifting and stacking goods on level place. It is applicable widely in factory, store, hospital, warehouse etc. It becomes a most popular transporter with its many features such as easily operated, safety, automatic, high working efficiency. Low profile forks can lift the pallet easily. Meanwhile place the optional attachment (platform) on the fork, it will be used as a platform stacker.

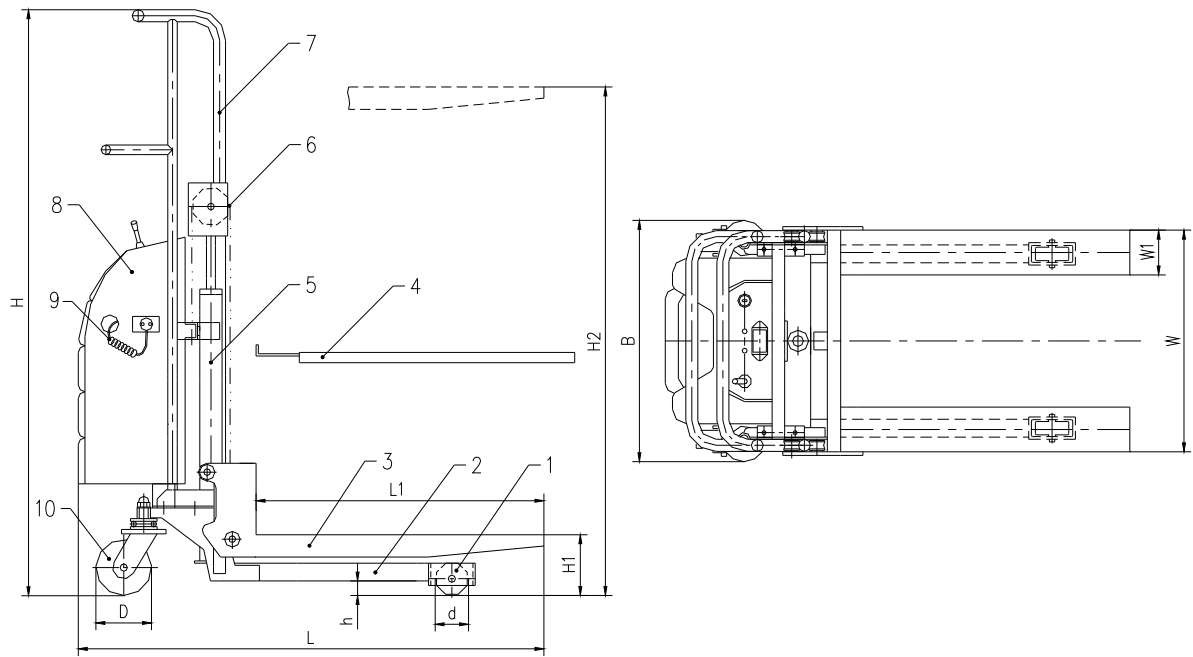
2. Specification

(1) EPA Series Stacker



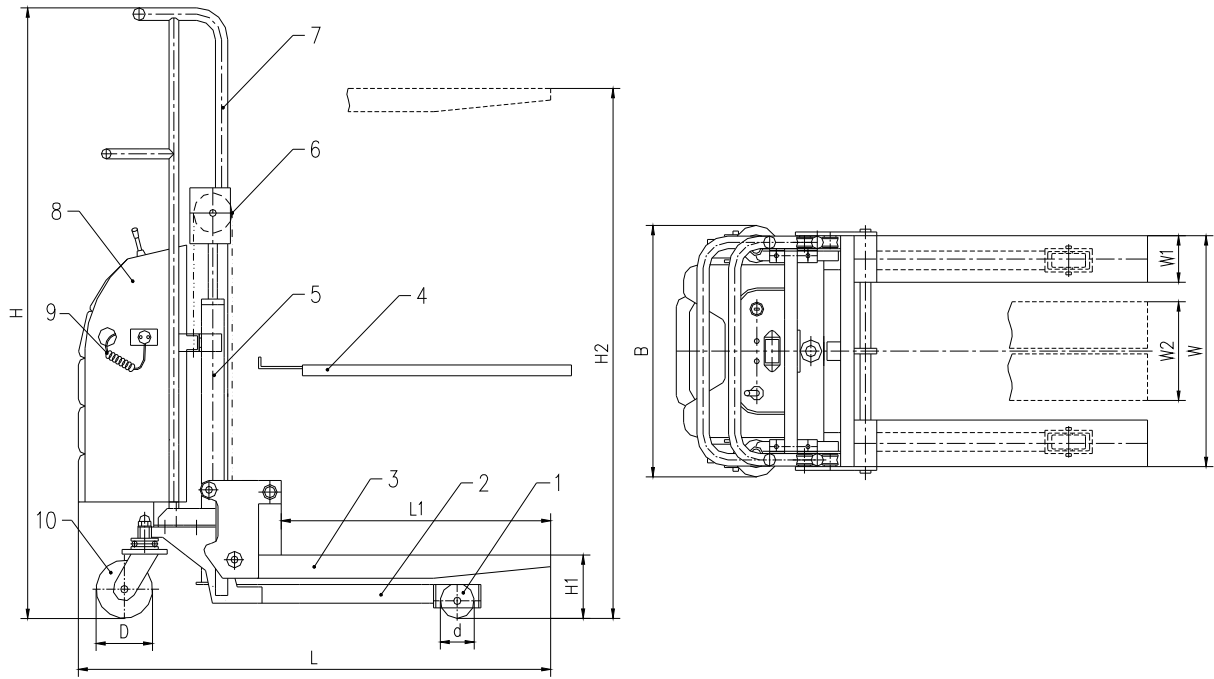
Model	EP2120A	EP4120A	EP4150A
Capacity (Kg)	200	400	400
Min. Platform Height H1(mm)	200	200	200
Max. Platform Height H2(mm)	1200	1200	1500
Platform Length L1(mm)	600	650	650
Platform Width W (mm)	500	550	550
Dia of Front Wheel d (mm)	Φ125	Φ150	Φ150
Dia of Steering Wheel D(mm)	Φ125	Φ150	Φ150
Power Pack Motor (KW)	0.8	0.8	0.8
Battery (v/Ah)	12/60	12/70	12/70
Overall Length L(mm)	1020	1100	1100
Overall Width B(mm)	540	580	580
Overall Height H(mm)	1320	1320	1620
Net Weight (Kg)	93	113	118

(2) EFA Series Stacker



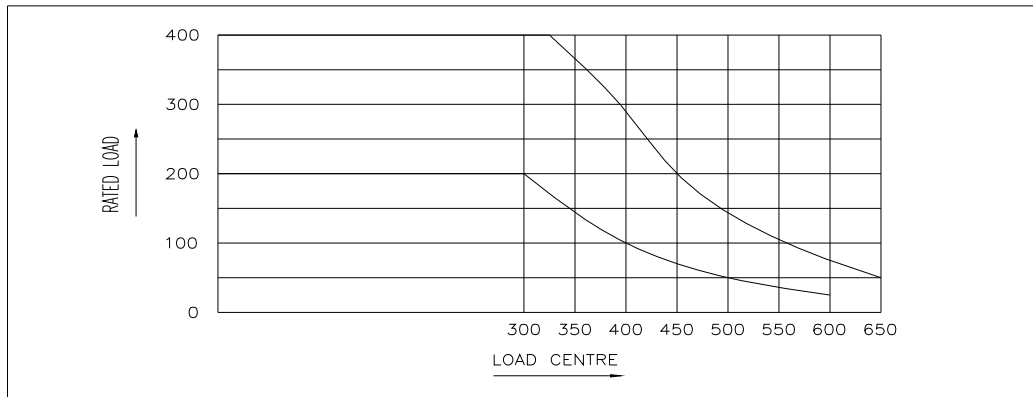
Model	EF2120A	EF4120A	EF4150A
Capacity (Kg)	200	400	400
Min. Fork Height H1(mm)	85	85	85
Max. Fork Height H2(mm)	1200	1200	1500
Fork Length L1(mm)	600	650	650
Fork Width W (mm)	500	550	550
Single Fork Width W1(mm)	100	100	100
Dia of Front Wheel d (mm)	Φ75	Φ75	Φ75
Dia of Steering Wheel D(mm)	Φ125	Φ125	Φ125
Chassis Height h(mm)	32.5	22.5	22.5
Power Pack Motor (KW)	0.8	0.8	0.8
Battery (v/Ah)	12/60	12/70	12/70
Overall Length L(mm)	1040	1120	1120
Overall Width B(mm)	540	580	580
Overall Height H(mm)	1430	1430	1730
Option Platform (mm)	LP10(610×530)	LP20(660×580)	
Net Weight (Kg)	97	117	122

(3) EJA Series Stacker



Model	EJ2120A	EJ4120A	EJ4150A
Capacity (Kg)	200	400	400
Min. Fork Height H1(mm)	85	85	85
Max. Fork Height H2(mm)	1200	1200	1500
Fork Length L1(mm)	600	650	650
Fork Width W (mm)	500	550	550
Single Fork Width W1(mm)	100	100	100
Dia of Front Wheel d (mm)	Φ75	Φ75	Φ75
Dia of Steering Wheel D(mm)	Φ125	Φ125	Φ125
Power Pack Motor (KW)	0.8	0.8	0.8
Battery (v/Ah)	12/60	12/70	12/70
Overall Length L(mm)	1080	1160	1160
Overall Width B(mm)	540	580	580
Overall Height H(mm)	1430	1430	1730
Option Platform (mm)	LP10(610×530)	LP20(660×580)	
Net Weight (Kg)	100	121	126

(4) Loading Capacity Chart:



3. Nomenclature of Each Section

- | | |
|----------------------------|------------------------------|
| 1 — Front Wheel | 6 — Chain Wheel |
| 2 — Chassis | 7 — Handle Rack |
| 3 — Fork Assembly (Drawer) | 8 — Electric Control Box |
| 4 — Optional Platform | 9 — Power Cable for Charging |
| 5 — Pump Assembly | 10 — Steering Wheel |

4. Safety Instruction

- 4.1 Use it on a level paved surface.
- 4.2 Don't load over the maximum capacity and ensure the balance of loading.
- 4.3 To cooling the temperature of power pack motor, it should be paused working for minutes after continuous working with load. Otherwise, it might cause damage to power pack.
- 4.4 Recharge the battery when it has no enough power. Ensure local electric power matches the charge. Do not discharge the battery completely.
- 4.5 Don't touch the chain or any other moving parts.
- 4.6 Please close the electric control box before use.

5. Inspection before Use

As EPA. EFA. EJA series Stacker is integer packing, it was adjusted. The owner should inspect the stacker before use as follows:

- 5.1 Ensure all parts complete and in good condition. Do not use the stacker and contact local supplier in case of any parts missing or defective.
- 5.2 Check electric control box.
- 5.3 Ensure oil is full and no oil leakage in the hydraulic system.
- 5.4 Ensure battery has enough power. The battery has been charged before shipment.
But due to long time delivery, it would be low in power. When turn on the stacker, the Voltage meter shows 10.5V, or when lifting loaded, the coulometer shows 3 graduation and green lights, it needs recharged.
- 5.5 Connect the power, the performance of lifting and lowering platform (fork) is normal when unloaded.
- 5.6 Connecting power, when loaded platform (fork) lift and lower, there is no oil leak.
- 5.7 Place the charger at a safety place.

6. Operation Instruction

6.1 Lift/lowering the platform (fork)

- 6.1.1 Lock the parking brake.
- 6.1.2 Turn the switch to **ON**, there is power and all graduation of coulometer is light or voltage meter shows over 10.5V.
- 6.1.3 Press the **LIFT** button, the platform (fork) will lift up. Loose the button, the platform (fork) will stop at any position as you like. It will not slide down.
- 6.1.4 Press the **LOWER** button, the platform (fork) will lower down. Loose the button, the platform (fork) will stop at any position as you like. It will not slide down.
- 6.1.5 To prolong the service life of electric pump, it is necessary to loose the button when the platform (fork) reach the top position.
- 6.1.6 The electric pump is provided with a relief valve. When the load is over 120% of the capacity, the platform (fork) will not lift.
- 6.1.7 Do not keep the stacker work with load continuously to prevent the motor burned.
- 6.1.8 When moving the stacker, the clearance between the platform (fork) and ground should be more then 200mm.
- 6.1.9 In order to keep the stability of stacker should move slowly and the distance is short to the full when stacking the load.
- 6.1.10 To ensure the safety, turn the switch to **OFF** and take away the switch key after operation.

6.2 How to use charger

- 6.2.1 After continuous working, the battery will be low in power. The coulometer is becoming green (3 graduation) or voltage meter shows 10.4V, it will be recharged.
- 6.2.2 The **red light < 3 graduation** on coulometer is showing or voltage meter shows **under 10.4V**, and lifting speed slow down obviously, it **must be recharged**. If not, it will shorten the service life of electric pump and battery.
- 6.2.3 Before recharging the battery, please carefully read and fully understand the attached instruction manual of charger.
- 6.2.4 Before plugging the charger into a power socket. Make sure local electric power matches the charger. Then connect the charger to socket in the electric control box, the battery will be recharged automatically.
- 6.2.5 When charging, there will separate out hydrogen and oxygen. So please keep ventilated and away from the fire in case of danger.

7. Daily Maintenance & Periodical Inspection

- 7.1 Inspect the each section for loose bolts and nuts monthly.
- 7.2 Inspect the each section, wheel, hydraulic system, electric pump for distortion, worn, and abnormal noise monthly.
- 7.3 Inspect performance of lifting and lowering the fork and other device monthly.
- 7.4 Inspect the battery surface for clean and dry monthly. Dirty and wetness may cause leakage of electricity and descent of voltage.
- 7.5 Inspect the terminals, inserters, fuse electric component for loose, broken monthly.
- 7.6 Change the hydraulic oil after 20 working hours in the beginning. Then, change the oil every 300 working hours. If the stacker is not used frequently, please change the oil every 18 months.
- 7.7 Refer to following sheet when change or fill the oil.

Temperature	Oil
-5°C ~ +45°C	L-HM68 Hydraulic oil (equivalent to ISO VG68)
-15°C~-5°C	L-HM46 Hydraulic oil (equivalent to ISO VG46)

7.8 When changing the oil, put the piston at the lowest position, then open the electric control box, remove the bolt on the bottom the valve plate and the bolt connecting motor and valve plate, the pump section is disassembled.

7.9 Clean the valve plate and the oil tank, then fill oil to 80% of oil tank content. And inspect the connection to avoid oil leakage.

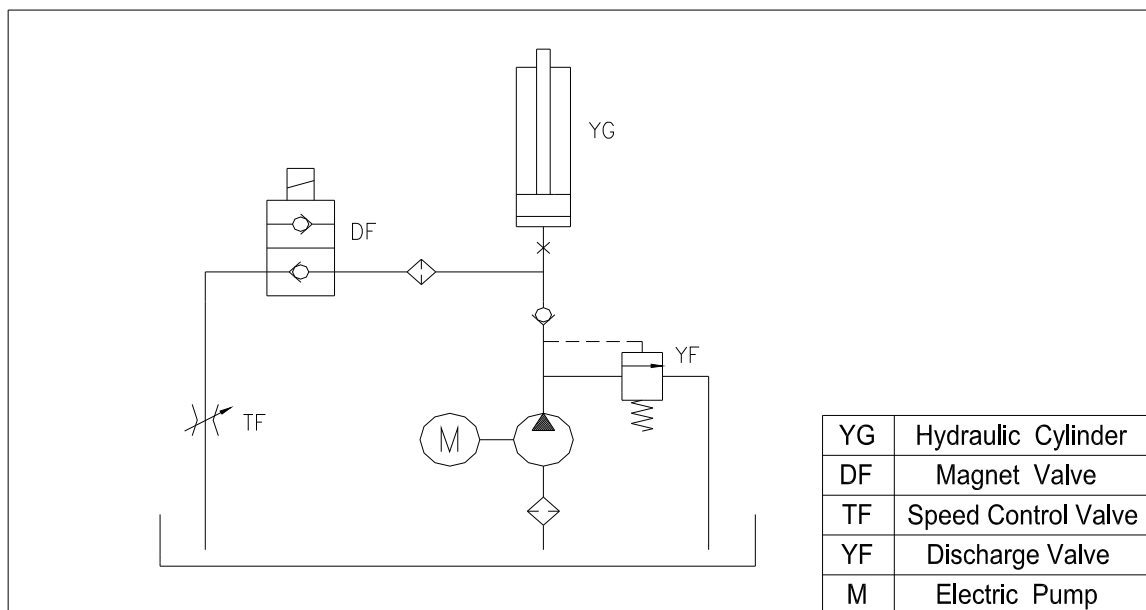
7.10 Assemble the section and ensure all parts fastness.

8. Trouble Shooting & Maintenance

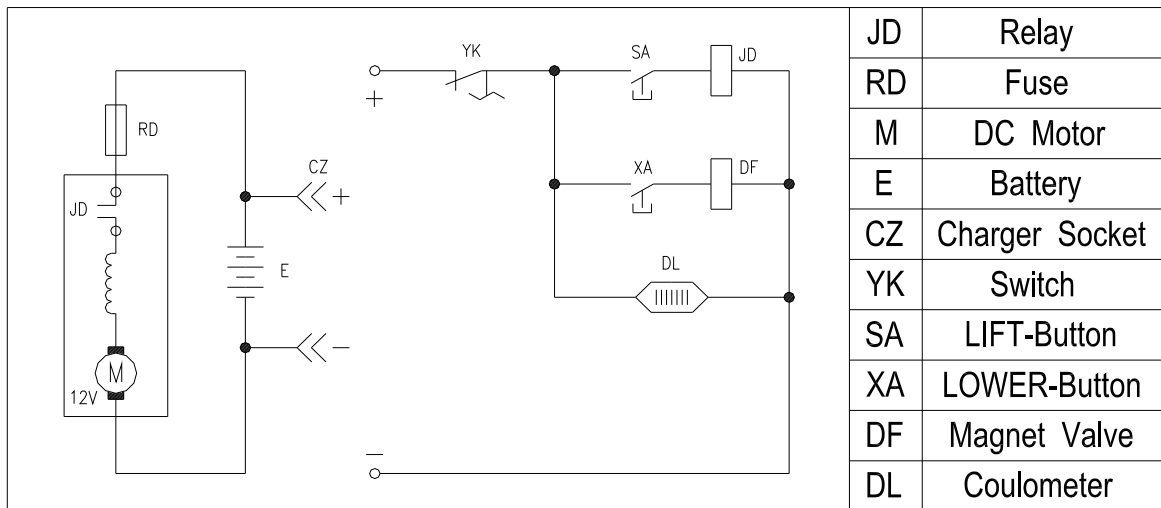
No.	Problem Description	Cause	Remedy
1	Turn the key switch to ON , coulometer doesn't indicate.	1.Switch is out of order. 2.Terminals and inserters are loose.	1.Check and change switch. 2.Check terminals and inserters.
2	Platform(Fork) does not lift up when pushing LIFT button	1.Switch is out of order. 2.Fuse is broken. 3.Terminals and inserters are loose. 4.Electric pump is empty of oil.	1.Check and change switch. 2.Replace fuse. 3.Check terminals and inserters. 4.Fill oil to prescribe position.
3.	Lifting speed is too slow when pushing LIFT button.	1.Battery is not enough power. 2.Relief valve is not in proper position.	1.Recharge the battery. 2.Adjust the relief valve.
4.	Fork can't lift to top.	Electric pump is short of oil.	Fill oil to prescribe position.
5.	Electric pump does not work.	1.Electric pump is broken. 2.Terminals and connector are loose. 3.Battery is not enough power.	1.Check and change. 2.Check terminals and inserters. 3. Recharge the battery.
6.	Platform(Fork) does not lower down when pushing LOWER button	1. Switch is out of order. 2. Fuse is broken. 3.Magnet contactor is broken. 4.Other object block..	1.Check and change switch. 2. Replace fuse. 3. Check and change. 4.Remove the object.

7.	Coulometer shows nothing, or the red light flash, or battery has no enough power	1.Terminals and inserters are loose. 2.Charging time is not enough. 3.Battery is out of order.	1.Check terminals and inserters. 2. Charge longer time. 3.Check and replace the battery.
8	Hydraulic system has oil leakage.	Oil seals are broken.	Replace oil seals.
9	After recharging, the coulometer shows low electricity, and lifting speed is slow.	1.Battery has not enough recharging. 2. Battery is worn out. 3.Charger is worn out.	1.Recharge the battery. 2.Replace the battery. 3.check and replace the charger.

9. Diagram of Hydraulic System

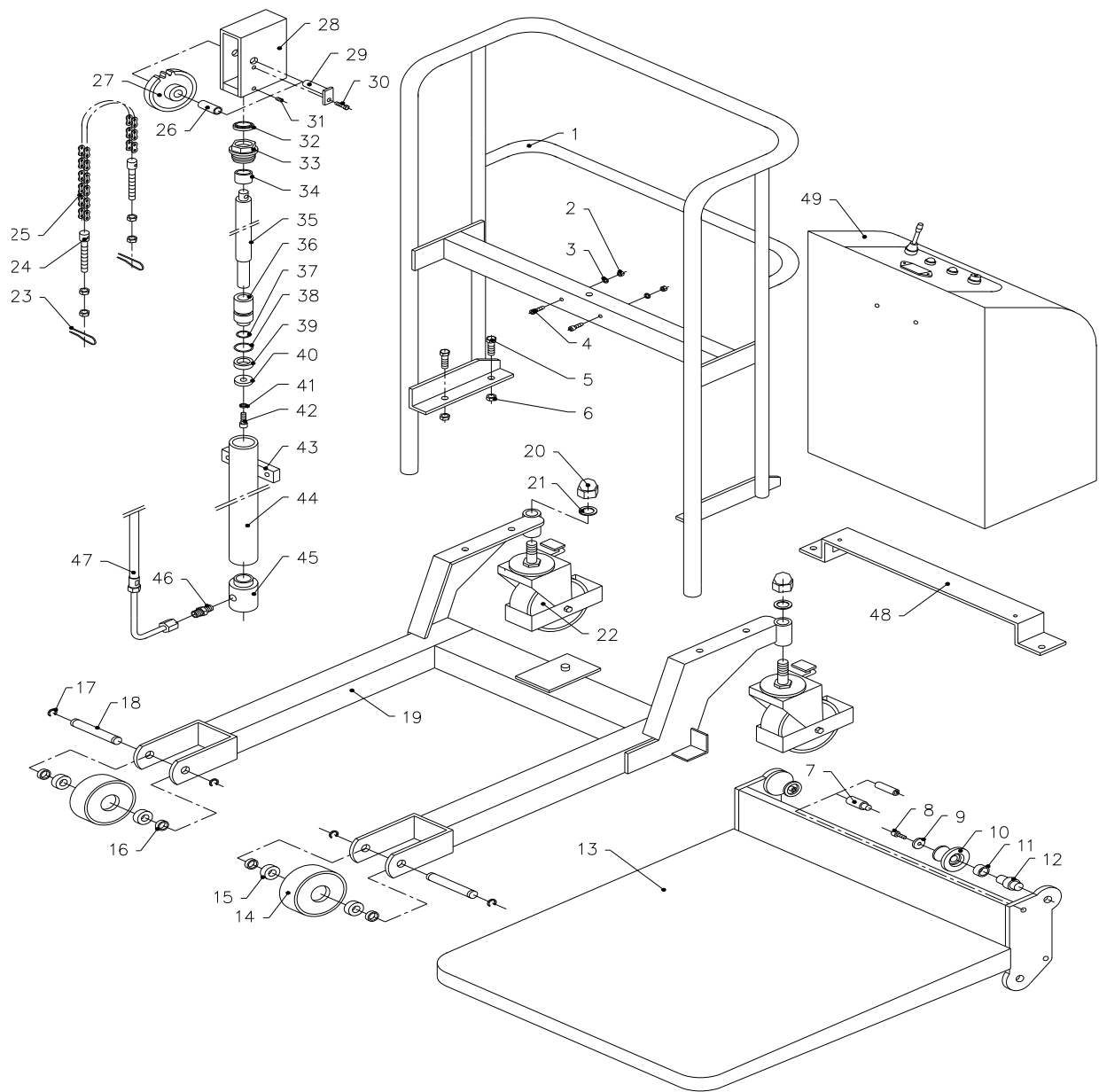


10. Diagram of Electric Control System



11. Exploded View & Parts List

11.1 Exploded View of EPA Series Stacker

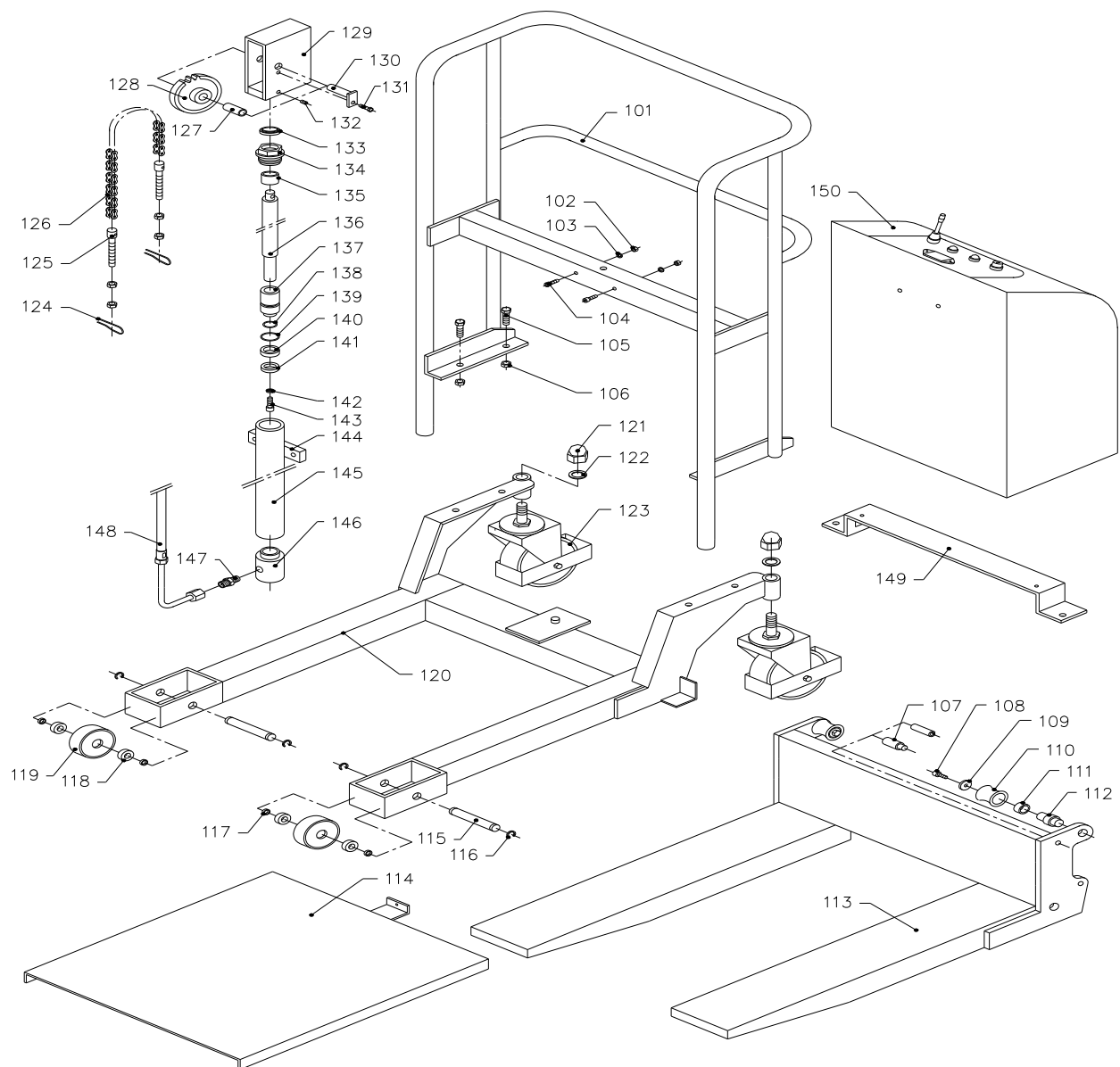


11.2 Parts List of EPA Series Stacker

No.	Description	Qty	Remark	No.	Description	Qty	Remark
1	Handle rack	1		26	Chain	1	

2	Nut	2		27	Bearing	1	
3	Washer	2		28	Chain roller	1	
4	Screw	2		29	Chain roller cover	1	
5	Bolt	4		30	Pin	1	
6	Nut	4		31	Blot	2	
7	Retaining ring	4		32	Screw	1	
8	Bolt	4		33	Dustproof ring	1	Easy-worn
9	Washer	4		34	Upper cover	1	
10	Roller	4		35	Location ring	1	
11	Bearing	4		36	Piston rod	1	
12	Pin for roller	4		37	Piston	1	
13	Platform	1		38	O ring	1	Easy-worn
14	Drawer	1		39	O ring	1	Easy-worn
15	Front Wheel	2		40	Y Sealing ring	1	Easy-worn
16	Bearing	4		41	Retaining ring	1	
17	Retaining Ring	4		42	Washer	1	
18	Retaining Ring	4		43	Screw	1	
19	Pin for Front Wheel	2		44	Location plate	1	
20	Chassis	1		45	Cylinder	1	
21	Nut	2		46	Base for oil cylinder	1	
22	Lock washer	2		47	Union	2	
23	Steering wheel	2		48	Oil tube	1	
24	Pin	2		49	Base for electric box	1	
25	Bolt for chain	2		50	Electric control box	1	

11.3 Exploded View of EFA Series Stacker

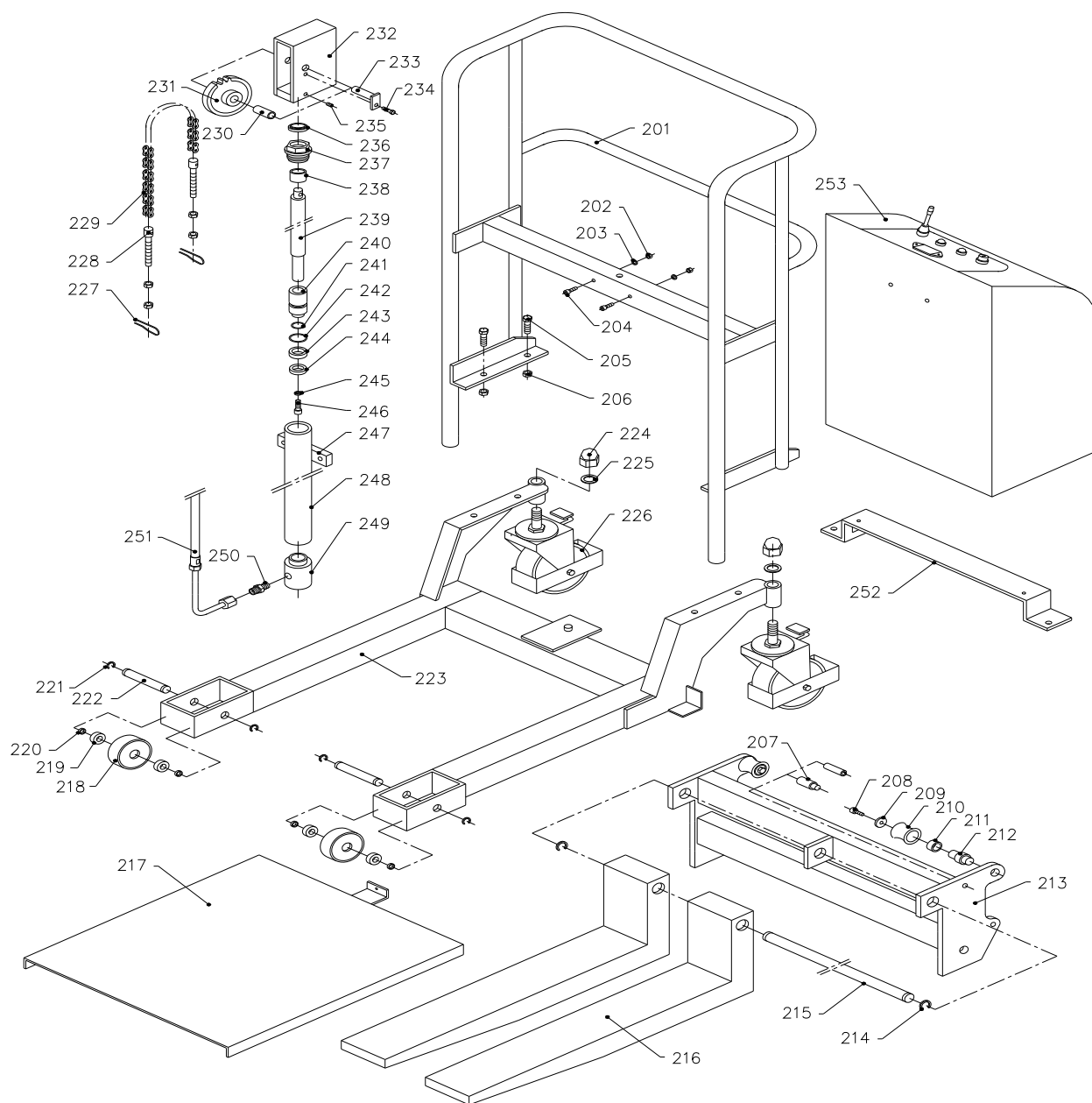


11.4 Parts List of EFA Series Stacker

No.	Description	Qty	Remark	No.	Description	Qty	Remark
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101	Handle rack	1		126	Chain	1	
102	Nut	2		127	Bearing	1	
103	Washer	2		128	Chain roller	1	
104	Screw	2		129	Chain roller cover	1	
105	Bolt	4		130	Pin	1	
106	Nut	4		131	Blot	1	
107	Retaining ring	4		132	Screw	1	
108	Bolt	4		133	Dustproof ring	1	Easy-worn
109	Washer	4		134	Upper cover	1	
110	Roller	4		135	Location ring	1	
111	Bearing	4		136	Piston rod	1	
112	Pin for roller	4		137	Piston	1	
113	Fork	1		138	O ring	1	Easy-worn
114	Platform	1		139	O ring	1	Easy-worn
115	Pin for front wheel	2		140	Y Sealing ring	1	Easy-worn
116	Retaining ring	4		141	Retaining ring	1	
117	Retaining ring	4		142	Washer	1	
118	Bearing	4		143	Screw	1	
119	Front wheel	2		144	Location plate	1	
120	Chassis	1		145	Cylinder	1	
121	Nut	2		146	Base for oil cylinder	1	
122	Lock washer	2		147	Union	2	
123	Steering wheel	2		148	Oil tube	1	
124	Pin	2		149	Base for electric box	1	
125	Bolt for chain	2		150	Electric control box	1	

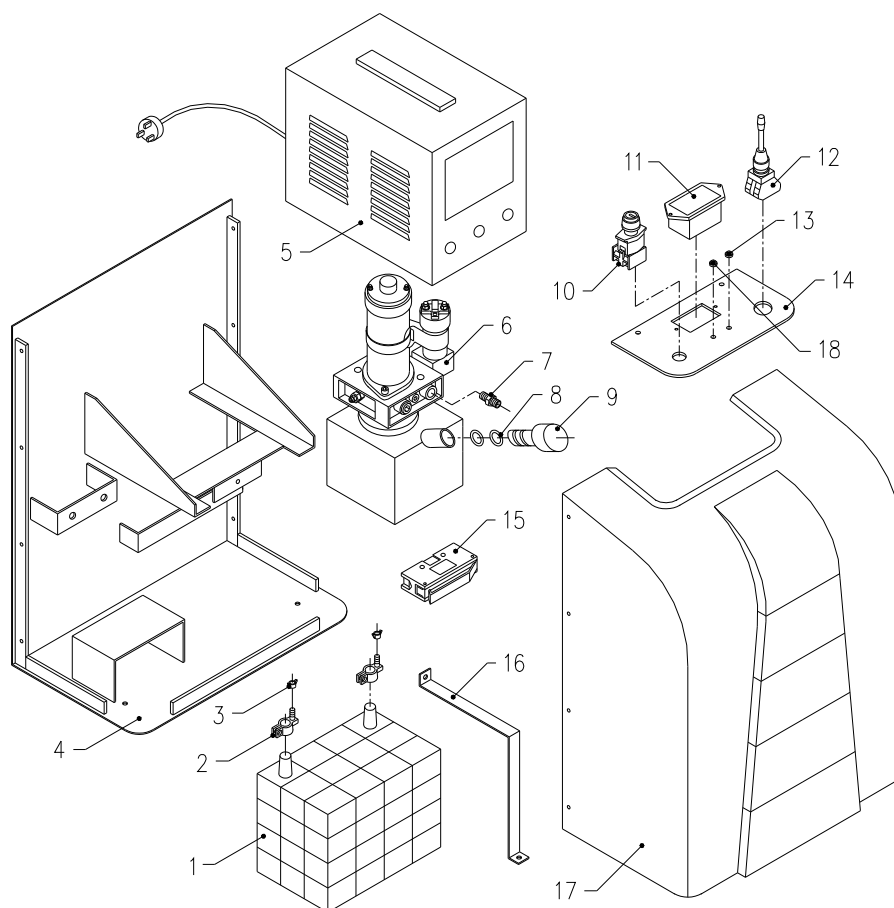
11.5 Exploded View of EJA Series Stacker



11.6 Parts List of EJA Series Stacker

No.	Description	Qty	Remark	No.	Description	Qty	Remark
201	Handle rack	1		228	Pin	2	
202	Nut	2		229	Bolt for chain	2	
203	Washer	2		230	Chain	1	
204	Screw	2		231	Bearing	1	
205	Bolt	4		232	Chain roller	1	
206	Nut	4		233	Chain roller cover	1	
207	Retaining ring	4		234	Pin	1	
208	Bolt	4		235	Blot	1	
209	Washer	4		236	Screw	1	
210	Roller	4		237	Dustproof ring	1	Easy-worn
211	Bearing	4		238	Upper cover	1	
212	Pin for roller	4		239	Location ring	1	
213	Shelf	1		240	Piston rod	1	
214	Retaining ring	2		241	Piston	1	
215	Long Shaft	1		242	O ring	1	Easy-worn
216	Bushing	2		243	O ring	1	Easy-worn
217	Fork	2		244	Y Sealing ring	1	Easy-worn
218	Platform	1		245	Retaining ring	1	
219	Front Wheel	2		246	Washer	1	
220	Bearing	4		247	Screw	1	
221	Retaining ring	4		248	Location plate	1	
222	Retaining ring	4		249	Cylinder	1	
223	Pin for front wheel	2		250	Base for oil cylinder	1	
224	Chassis	1		251	Union	2	
225	Nut	2		252	Oil tube	1	
226	Lock washer	2		253	Base for electric box	1	
227	Steering wheel	2		254	Electric control box	1	

11.7 Exploded View of Electric Control Box



11.8 Parts List of Electric Control Box

No.	Description	Qty	Remark	No.	Description	Qty	Remark
1	Battery	1		10	Switch	1	
2	Connector	2		11	Coulometer	1	
3	Nut	2		12	Operation handle	1	
4	Case	1		13	Charging Status	1	
5	Charger	1		14	Faceplate	1	
6	Electric Pump	1		15	Fuse	1	Easy-worn
7	Oil pipe adapter	1		16	Clamper	1	
8	O Ring	2		17	Cover	1	
9	Plug	1		18	Power Indicator	1	