# **Operating Manual**

## EPS04-SMS-001\_EN



# EPS04 Series Power Platform Stackers

Note: Please be sure to read and understand this manual and all warning labels on the power stacker before using it.

Welcome to use our EPS Series Power Platform Stackers. Made of special-purpose profiles, our stackers feature aesthetic exterior design, durability and simple operation. For your safety and correct operation, please be sure to understand this manual and all warning marks on the stackers.

Note: All the parameters here are as of the publishing date of this manual. We reserve the right to change our products without a prior notice. For the latest product parameters, please contact us.

Туре			EPS0412	EPS0415
Load capacity		kg	400	400
Lift height		mm	1200	1500
Fork dimension		mm	650*110	650*110
Entire height		mm	1425	1725
Lowest Fork Height		mm	85	85
Lift	Idle load		185	185
Speed	Full load	mm/sec	80	80
Fall	Idle load		0~75	0~75
speed	Full load		0~115	0~115
Storage battery			DC12V,	DC12V, 60AH
		60AH		
Pump station motor		DC12V,	DC12V, 700W	
			700W	

**1. Technical Parameters** 

#### 2. Safety Instructions

- 2.1 Before using the platform stacker, the operator must read and understand this manual and all warning signs on the stacker to prevent personal injuries or damage caused by improper operation.
- 2.2 No untrained or unauthorised personnel should be allowed to operate this platform stacker.

- 2.3 Please examine this stacker before use, in particular the status of the wheels, the brake, the rollers and the storage battery.
- 2.4. Do not use this stacker on slopes or oblique surfaces.
- 2.5 This stacker shall never be used to carry personnel, to avoid injuries because of fall.
- 2.6 It is strictly forbidden to touch the part of the roller operation area on the handle when the goods are lifted.
- 2.7 Never put the feet in front of the steering wheel, to avoid injuries caused by the falling object.
- 2.8 Irrelevant personnel shall be at least 6 m away from the stacker when the stacker lifts or transports goods. Personnel shall be strictly forbidden to stand below the fork.
- 2.9 The goods weight shall be evenly distributed on both forks whenever possible. It is prohibited to load only one fork or place the center of gravity of the goods beyond both forks.
- 2.10 Please don't move the stacker when it rises. After loading goods, please lower the forks to a lower position before moving, to avoid injuries caused by falling objects.
- 2.11 Overload shall be avoided.
- 2.12 It is strongly recommended to check the battery power before use. Please immediately recharge the battery in the case of low power. During the charging, the ambient environment shall be dry, well ventilated and away from sparks.
- 2.13 The stacker shall be protected from rain and water. Please put it in a dry place after use, and lower the forks to the lowest position.
- 2.14 Repair and maintenance shall be carried out in accordance with the service manual.

2.15 Operators shall use the stacker carefully in other special places without protection.

## 3. Maintenance

## 3.1 Hydraulic Oil

The oil mass shall be checked every month. It is recommended to use #32 hydraulic oil (GB11118-89). Its kinematical viscosity is 32cSt at  $40^{\circ}$ , and the total quantity is about 1.3 liters. The hydraulic oil shall be changed every 12 months.

### 3.2 Daily Check

The daily check can effectively find faults and defects. Please check the following before operation:

- 1. Check the stacker for scrape, bend, distortion and crack.
- 2. Check the oil tank for oil leakage.
- 3. Check whether the voltage of the storage battery is normal.
- 4. Check whether the wheels are flexible.
- 5. Check whether the brake is safe and reliable.
- 6. Check whether all the screws and nuts are tight.

Warning: Be sure not to use the stacker if there is any fault or defect.

#### 3.3 Lubrication

Lubricant oil shall be injected to each lubricating point each month.

Lubricating points

- (1) Mandrels and bearings of the wheels Lubricating oil
- (2) Connecting pins and shafts Lubricating oil
- (3) Rollers and shafts Lubricating oil
- (4) Chains and chain wheels Lubricating oil
- (5) Oil nipple Lubricating oil.

## 4. Operation

4.1 How to Use the Brake

Note: When the stacker does not move, please brake to avoid accidents.

The brake is installed on the left side of the steering wheel.

- 1) Press the brake pedal to brake
- 2) Lift the brake pedal to release
- 4.2 Fork Lift/Fall

1) Avoid overloading, and try to use the stacker within the rated load.

- 2) The load should be at least distributed onto 80 percent of the platform area. It is forbidden to place a load on either side or on the front edge of the platform. When the forks of the stacker are used to transport and stack pallets, please dismount the panel on the forks.
- 3) Turn the emergency start button on the control platform clockwise, connect the power supply, and operate the lift button in the centre of the control platform, and the forks will rise; release the button, and the forks will immediately stop rising; press the fall button, and the forks will fall, and release the button, the forks will immediately stop falling.

Warning: Never put any part of the body below the panel and the forks.

## 5. Charging of Storage Battery

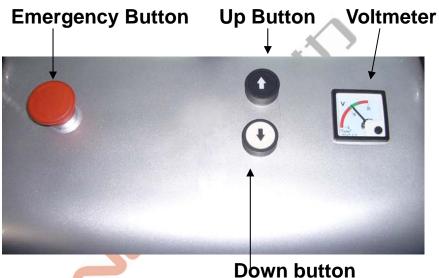
- 5.1 When the voltage of the storage battery is lower than 10V, the battery shall be charged.
- 5.2 This stacker uses the maintenance-free storage battery, which does not involve adding water until the service life of the storage battery ends in the normal condition.
- 5.3 The ambient environment shall be dry, well ventilated and

away from sparks during the charging.

- 5.4 To charge, please pull out the charger plug on the left side of the stacker, insert the plug into the socket with the specified voltage, and pull out the charger plug after the full charge indicator light on the panel goes on.
- 5.5 The storage battery shall be charged once each week when the stacker is out of use for a long time, and each charging shall last at least two hours.

5.6 The voltage displayed on the indicating gage shall be lower than 16V during the charging.

5.7 It is strictly prohibited to use the stacker during the charging.



## 6. Control Platform

#### 6.1 Emergency Button

When you press down this button, the power supply of the pump station motor will be disconnected; when you turn it clockwise again, the power supply of the motor will be connected again.

#### 6.2 Voltmeter

This meter displays the voltage of the storage battery.

When the displayed voltage is below 10V, the storage battery must be charged.

### 6.3 Up/Down Buttons

These buttons are used to control the rise or fall of the forks.

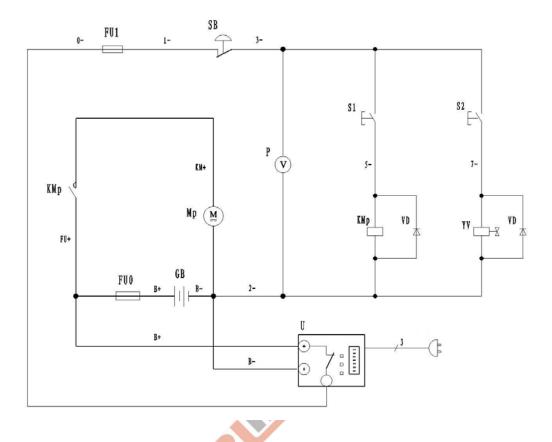
## 7. Troubleshooting

No.	Fault Cause		Countermoscures
			Countermeasures
1	The forks can't	- Low hydraulic oil level	<ul> <li>Inject hydraulic oil</li> </ul>
	reach the		
	maximum height		
2	The forks can't be	- No hydraulic oil	- Inject hydraulic oil
	raised	- Hydraulic oil is impure	- Replace the hydraulic
			oil
		- Emergency button is not	- Turn the emergency
3	Pump station switched on.		button clockwise.
	motor can't run	- Low voltage of the storage	- Charging the battery.
		battery.	- Fasten the wiring
		- Wiring terminal of the power	terminal
		line gets loose.	- Replace the parts
		- Motor contactor is	
		damaged.	
		- Uneven center of gravity of	- Replace the large
		goods or overloading causes	piston rod or the oil tank
		deformation of the large	body.
4	The forks can not	piston rod or the oil tank	
	fall	body.	- Please lower the forks
		- The forks are rusted and	to the lowest position
		hard to move due to	when you do not use the
		long-term exposure to air	crane, and make sure to
		when the platform stays in the	lubricate the piston rod
		higher position for an	in time

		extended period of time.	- Replace the release	
		- The release valve of the	valve of the pump	
		hydraulic pump station is	station	
		worn or damaged, and thus		
		can't be opened.		
5	Oil leakage	- Sealing parts are aged or	- Replace the parts	
		damaged	- Replace the parts	
		- Some parts are broken		
		- The relief valve is unable to	- Replace the hydraulic	
6	Forks lower itself	be shut tightly due to impure	oil	
		hydraulic oil		
		- Sealing parts are aged or	- Replace the parts	
		damaged	- Replace the parts	
		- Release valve is damaged		
7	Storage battery	- Storage battery is damaged	- Replace the parts	
	can't be charged	- Charging plug gets loose	- Insert it tightly	

Note: It is strictly forbidden to repair the stacker without authorization or training.

## 8. Schematic Diagrams of Electric and Hydraulic System 8.1 Electric Schematic Diagram



No.	Element Number	Element Name
1	U	Charger
2	GB	Storage battery
3	FU0	Fuse
4	КМр	Contactor
5	Мр	Motor
6	FU1	Fuse tube
7	SB	Emergency stop switch
8	Р	Voltmeter
9	S1 & S2	Micro-switch
10	YV	Solenoid valve
11	VD	Diode

8.2 Schematic Diagram of Hydraulic System

