

# **Operations & Maintenance Manual**

## **GP40CLI/GP44CLI/GP50CLI**



## Instructions for use

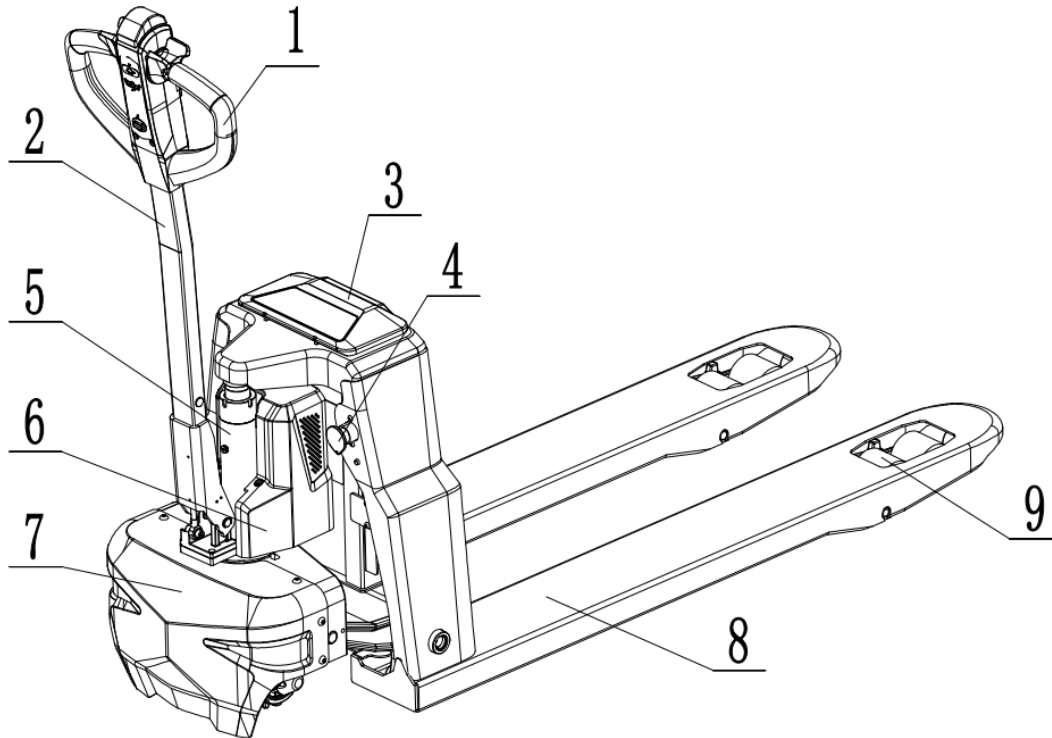
Please read this manual carefully and operate the vehicle safely.

- Do not operate this vehicle without training.
- Please comply with ISO3691 “Safety Specification for Motor Vehicles Industry”.
- Please do not modify or change the repair parameters, including adjusting the pressure. Any loss or damage to the vehicle resulting from such actions will be your responsibility, and doing so will void our warranty commitment.

### SPECIAL WARNING:

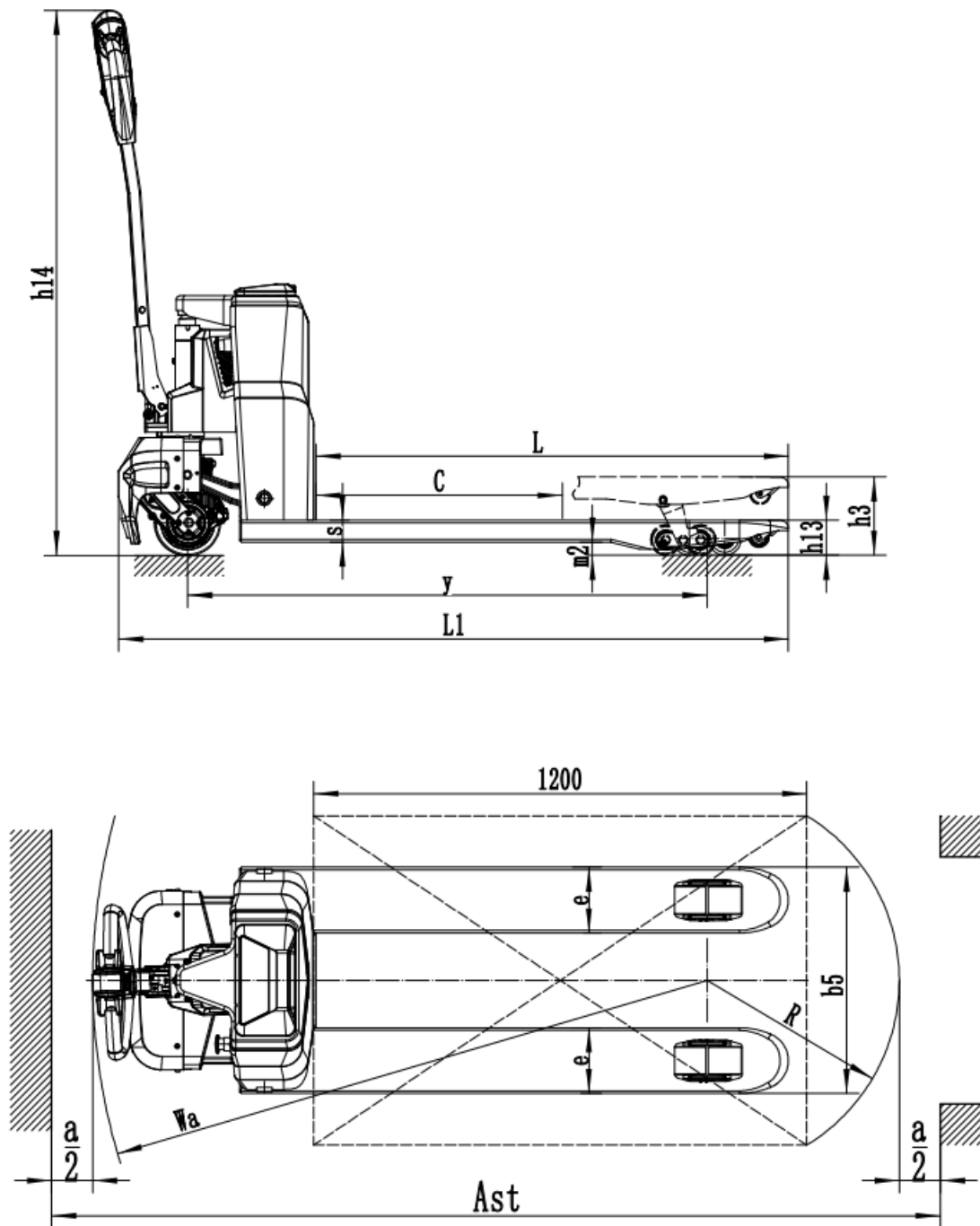
The company is committed to innovation and sustainable development. As part of this commitment, we continually improve the technology of our products. Therefore, we reserve the right to make changes and improvements to any product described in this specification without prior notice.

## 1. Parts Description



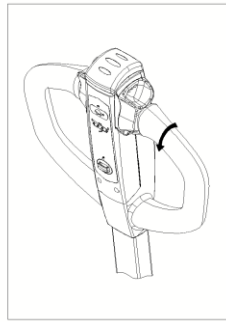
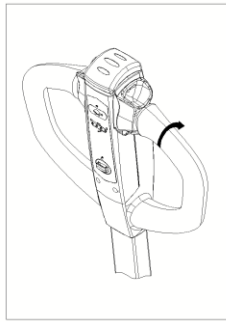
1, operation handle 2, handle lever 3, electric bin cover 4. Scram switch 5, oil pump  
6, hydraulic station cover shell, 7, Fender 8, frame 9. Fork wheel (bearing wheel)

## 2. Main Performance Parameters

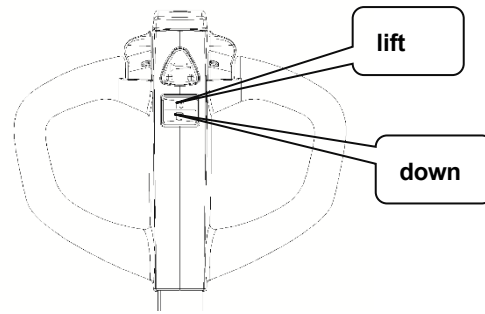


<b>Peculiarity</b>	<b>Model number</b>		<b>Model number</b>	GP40CLI/GP44CLP/GP50CLI	
	<b>Power</b>		<b>Power</b>	Electric	
	<b>Rated load</b>		<b>Rated load</b>	4000/4400/5000	
	<b>Load center distance</b>		<b>Load center distance</b>	24	
<b>Weight</b>	Service Weight w/ Battery		Service Weight w/ Battery	260/291/	
<b>Wheel</b>	<b>Wheel size</b>	<b>Drive wheel</b>	in	Φ6.29×2.16	
		<b>Fork wheel</b>	in	Φ3.15×2.75	Φ2.91×2.75
	<b>Wheel layout</b>		<b>Wheel layout</b>	Three supports	
<b>Basic sizes</b>	<b>High height</b>		<b>High height</b>	7.67	
	<b>Low height</b>		<b>Low height</b>	3.35/2.95	
	<b>Total length</b>		<b>Total length</b>	64.56	
	<b>Body width</b>		<b>Body width</b>	21.65/26.77	
	<b>Fork size</b>		<b>Fork size</b>	2.24×6.29×45.27	
	<b>Turning radius</b>		<b>Turning radius</b>	58.85	
	<b>Maximum lever</b>		<b>Maximum lever</b>	52.16	
<b>Property</b>	<b>Travel speed, full/empty</b>		<b>Travel speed, full/empty</b>	2.48/2.8	
	<b>Climbing ability, full load/no load</b>		<b>Climbing ability, full load/no load</b>	6/10	
<b>Motor</b>	<b>Drive motor power</b>		<b>Drive motor power</b>	850	
	<b>Boost motor power</b>		<b>Boost motor power</b>	700	
	<b>Battery voltage/rated capacity</b>		<b>Battery voltage/rated capacity</b>	48/10	48/20

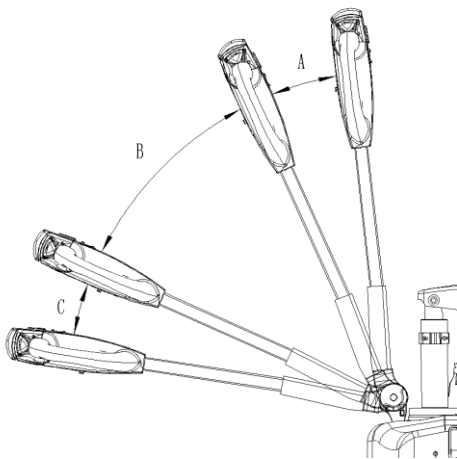
### 3. Operation Guide



**Spin forward    Spin backward**

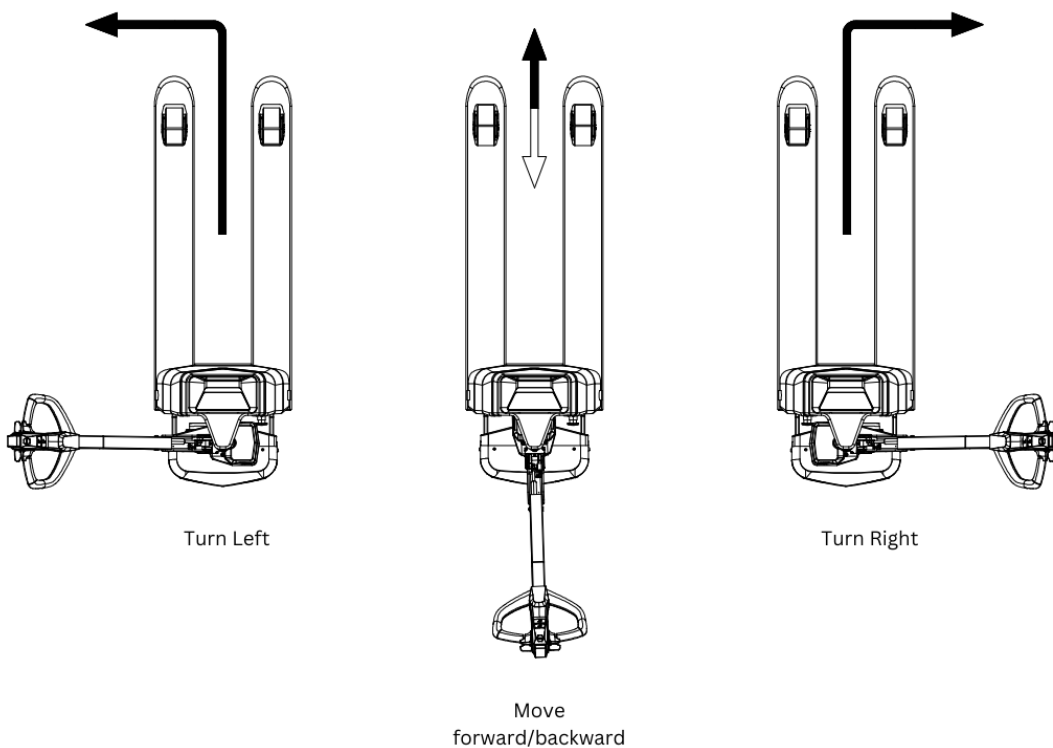


#### Running and braking

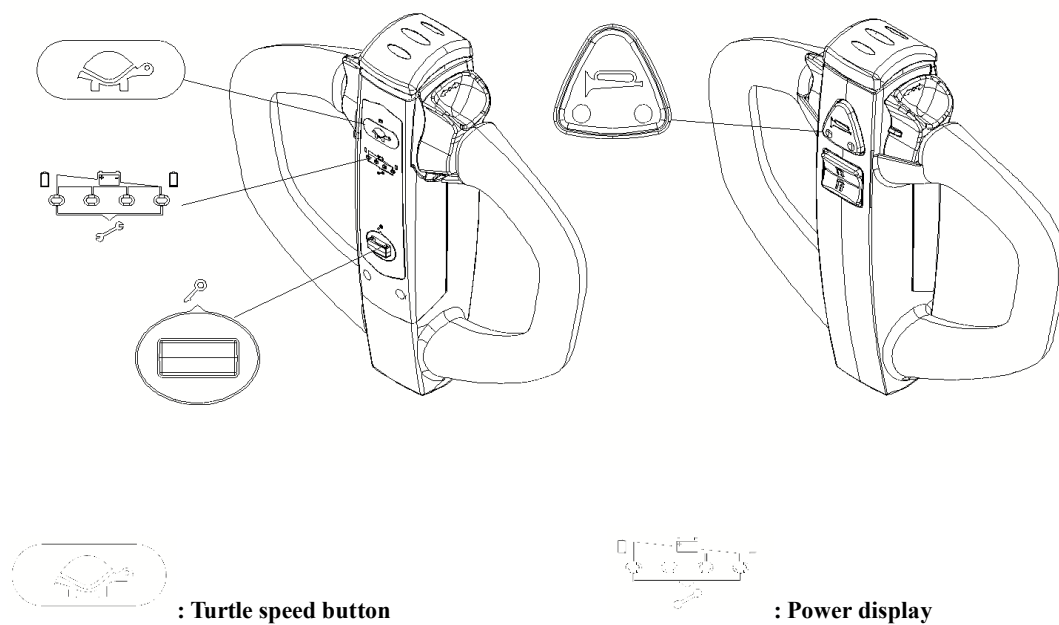


The rudder handle is divided into three sections A, B and C in the vertical plane, and the two zones A and C are the braking zones. When the rudder handle is located in zone A or zone C, the vehicle is in the braking state. If the rudder handle is located in area B, the vehicle is in normal running condition.

## Vehicle running

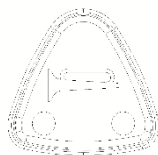


## Handle accelerator function





: Key switch



: horn button

## 4. Battery Operating Environment



Please use the battery at -14°F ~ 113°F



Avoid water, beverages, and corrosive liquids



Keep batteries away from heat sources, open flames, flammable and explosive gases (liquids)



Keep metal objects away from the battery box

### Battery charging environment



Please charge the BBA battery at the ambient temperature of 32°F ~ 35°F



Charging time should not exceed 12 hours, avoid overcharging affecting battery life

Tip:

1, If the battery is faulty, please call the official customer service to make an appointment for maintenance. If



you remove the battery without permission, it may cause the battery to leak, heat, smoke, and seriously lead to fire or explosion.

2, when the ambient temperature is lower than 32°F, the system in order to protect the battery, the charging function will be turned off, please charge the battery in the environment above 32°F.

3, the use of non-original charger may lead to battery leakage, heat, smoke, serious will lead to fire or explosion.

4, if your battery charges for more than 12 hours is still not full, please stop charging and call you authorized EKKO dealer to make an appointment for maintenance.

5, In order to ensure battery life and excellent performance, please recycle between 20% and 90% of the power as far as possible. When starting normally, please operate the accelerator knob slowly.

6, do not place the battery in an environment of 104°F to avoid irreversible capacity attenuation of the battery, affecting your normal use.

7, due to the special properties of lithium batteries, the battery capacity at low temperature will have different degrees of attenuation, specific reference: 14°F available capacity is 70%, 32°F is 80%, 77°F is 100%.

8, if you want to store your battery for a long time, please keep the battery at 50%, keep the ambient temperature at 32°F ~ 68°F, and complete the battery charging and discharging at least once a month. If the power is less than 20% or more than 90% for a long time, it will lead to irreversible power attenuation of the battery in the future.

9. Please avoid storing the battery in places at risk of falling, as to avoid falling resulting in battery leakage, heat, and serious fire or explosion.

## 5. Troubleshooting

Problem		
phenomenon		
The fork does not rise	The viscosity of the working oil is too large, or the hydraulic oil is not injected	Check the hydraulic oil replacement
	There are impurities in the oil	Remove impurities in the oil circuit and update the hydraulic oil
	The unloading device is abnormal	Readjust the unloading device
	Over rated load	Maximum load capacity according to nameplate
	Low battery	Battery charging
	Fuse failure	Change the fuse
	Oil leakage	Check seal condition
Vehicle inoperable	The valve is stuck with debris	Open the valve, remove and clean the parts, and reinstall them
	Low battery	Battery charging
	The battery is charging.	When the battery is fully charged, remove the power cable from the battery
	Battery not connected	Proper battery connection
	The scram switch is activated	Turn up the scram switch
	The operation handle is not in the operation area	Turn the handle to the operation area

## 6. Maintenance/Repair

In order to make your vehicle last longer, we recommend that you check and maintain your vehicle regularly, and if your vehicle is out of use for a long time, please also check regularly.

### Periodic maintenance inspection

We recommend that you do your first maintenance one month after purchasing your vehicle, followed by regular maintenance checks every six months.

The official EKKO authorized dealer will provide you with maintenance services to keep your vehicle in the best handling condition.

### Daily maintenance check

If you find anomalies during the inspection and maintenance process, please call the official customer service hotline to make an appointment with the official authorized service center of the forklift truck for inspection.

### Vehicle storage method:

- 1, please store the vehicle in a flat, stable, well-ventilated, dry location.
- 2, please avoid the vehicle sun and rain, to prevent parts damage or aging.
- 3, please scrub the body with tap water and neutral detergent.
- 4, if you store the vehicle for a long time, please refer to the "battery instructions" section, after long-term storage, please fully charge the battery before use.

### Regular maintenance check items:

Maintenance item	Maintenance purpose
brake	Check brake performance to prevent work-related accidents during handling
wheel	Detect wheel damage to prevent heavy lifting or excessive power consumption during use
Electric door lock, battery lock	Detect electric locks and battery locks to prevent inflexibility or occasional failure
Drive large wheel, oil pump	Detect the driving wheel and oil pump lift, to prevent the vehicle cannot be stacked to transport goods
line	Detect whether the line connector is loose, or the knot is broken to prevent the line failure
screw	Check whether the screws in the key part are firm and prevent loosening and falling off
battery	Detect battery appearance and cell performance to prevent line failure and extend service life
recharger	Check whether the charger cable is broken, broken, disconnected, and whether the input and output connectors are intact and reliable
oiling	Check whether the bearing needs to be lubricated
clean	Clean the surface with dust removal

**Warm reminder**

- 1, when you receive the vehicle, please check the car on the spot.
- 2, If you need to repair or replace the electric vehicle and its parts in the process of using the vehicle, please keep the corresponding after-sales service card after repair or replacement.

**Warranty policy**

- 1, we will provide you with 12 months of vehicle core components warranty (core components including accelerator, controller, frame), gear box, motor, cylinder warranty for half a year, other parts warranty please refer to the "storage forklift parts three guarantees standard".
- 2, During the warranty period, the EKKO Authorized dealer will provide you with repair and replacement services. If your vehicle exceeds the "three guarantees" service period and scope, please according to the local market conditions and maintenance prices, warehousing forklift authorized service center will provide you with paid services.
- 3, the warranty service period of the sold products is calculated from the day of shipment of the goods.

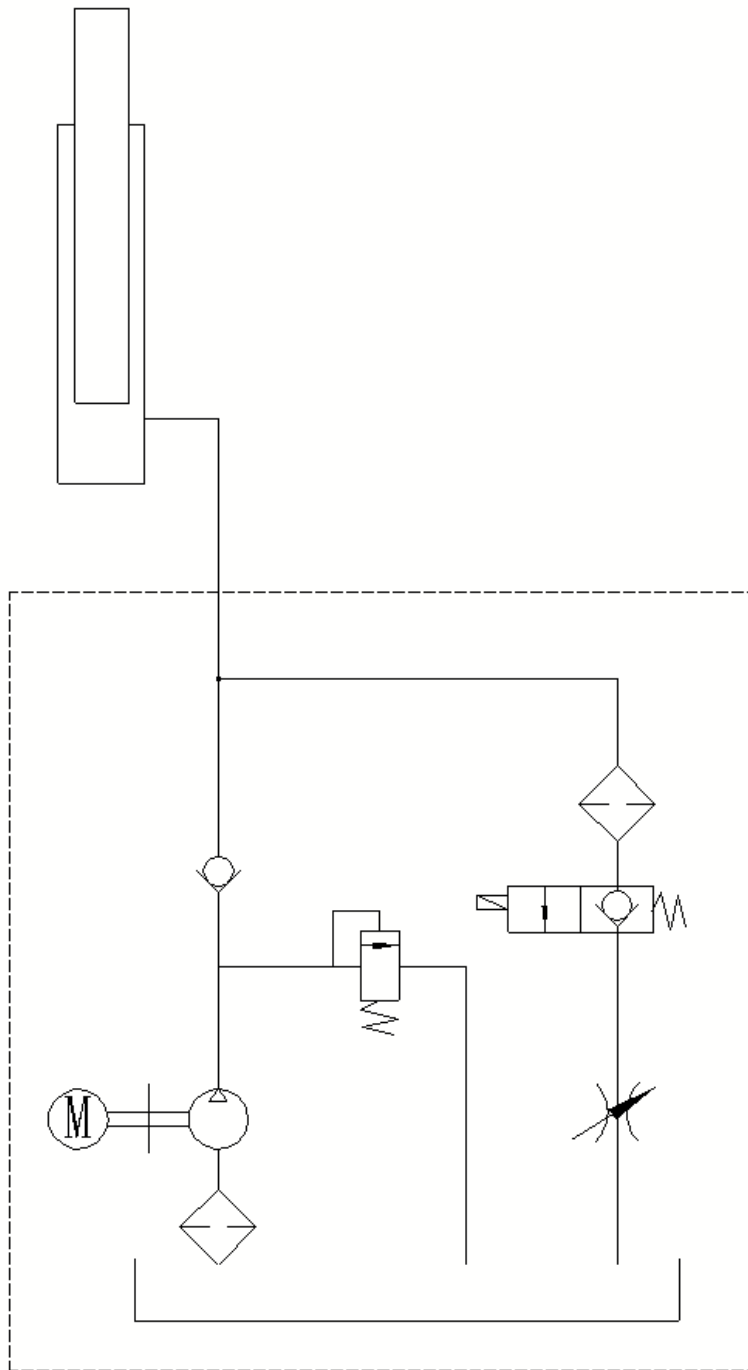
**Non-warranty policy**

The following conditions do not belong to the scope of warranty service, we will provide you with paid maintenance and related services.

- 1, according to the "forklift parts three guarantees standard" as the basis, exceed the specified service period and scope.
2. Failure and damage to the products caused by the correct use, handling, stacking and maintenance of the storage forklift products according to the instructions.
3. Damage or natural damage caused by rain, ice and snow soaking, smoking, drugs, chemical corrosion, etc., is not covered by the warranty, and failure or damage caused by force majeure (including but not limited to earthquake, typhoon, fire, flood, social events, group events, violent crimes, etc.).
- 4, not in the storage forklift authorized service center for maintenance, modification, decomposition, maintenance of the machine damaged the overall product and parts of the normal use of the state.
- 5, the use of non-original parts caused by the storage forklift parts damage or unauthorized change of the circuit, line, hydraulic configuration.
6. Product failure or damage caused by human factors such as crashes, fall, overload, and manned during use.
- 7, improper loading of goods, heavy objects quickly loaded on the fork; The center of gravity of the goods is not in the two cargo forks, stacking bulk cargo.
- 8, the goods are placed on the car body for a long time, resulting in the deformation of the frame and other failures.
- 9, there is no valid three-package voucher, after-sales service card or purchase product invoice, voucher or card number does not match the product.
- 10, unauthorized alteration, change the storage forklift products and parts of the three guarantee service date.
- 11, not the quality of the product itself, such as the purchase of the product after the color, shape, appearance, etc.
- 12, the vehicle and the main parts of the warranty and anti-counterfeiting label damage.

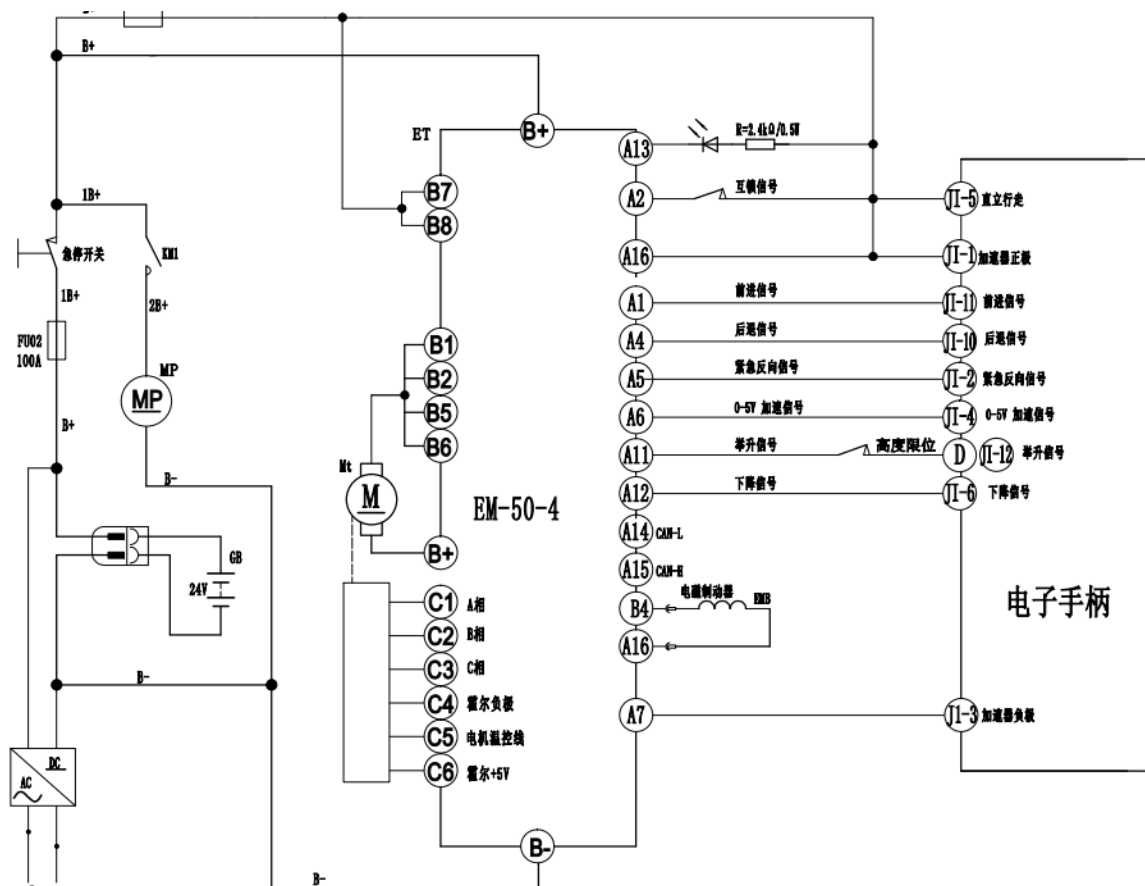
## 7. Hydraulic Schematic Diagram

QBM1504



## 8. Electrical Schematic Diagram

QBM1504



## 9. Maintenance Record

Date	Fault situation/cause	Troubleshooting situation	Date of submission	Maintenance personnel