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CB-1501XS/1502XS

Model 01/02 Pallet Truck

Usage and Maintenance Instructions



Warning

You must read the operating instructions in this manual before use.



Notice

- Please check the last page of this document and the nameplate for all current product type markings.
- Keep the item safe for further use.

Preface

Before operating this pallet truck, please read this operation manual carefully and fully understand how to use the truck. Improper operation can easily lead to danger.

This manual describes the usage methods for different types of electric pallet trucks.

When maintaining the truck, please ensure it matches your company's vehicle model.

Please keep this manual for future reference. If this manual or any warning/caution labels are damaged or lost, please contact your local dealer for replacement.

In accordance with the requirements of standards EN 12895 (Industrial Trucks - Electro-magnetic Compatibility) and EN 12053 (Safety of Industrial Trucks - Test Method for Measurement of Noise Emission), it must be ensured that this truck is used for the aforementioned purposes.

Note:

Hazardous waste harmful to the environment, such as waste batteries, waste oil, and electronic products, if improperly disposed of, will have negative impacts on the ecological environment or human health.

Waste packaging should be sorted by material and placed in solid waste bins, to be collected and processed by the local specialized environmental protection bureau. To avoid pollution, indiscriminate littering is prohibited.

To prevent oil leakage during product use, users should prepare some absorbent materials (waste wood chips or dry rags) to promptly absorb any leaked oil. To avoid secondary environmental pollution, used absorbent materials should be handed over to specialized departments in accordance with local authority regulations.

Our products are continuously improved. Since this manual is intended solely for the operation and maintenance of the pallet truck, it cannot guarantee coverage of special circumstances beyond this scope. Your understanding is appreciated.

Note:

In this manual, the symbols on the left indicate warnings and hazardous situations that, if not followed, could result in death or serious injury.

Copyright

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Proper Use

This electric pallet truck may only be used in accordance with this instruction manual.

The pallet truck described in this manual is a self-propelled electric pallet truck with electrically operated height lifting functionality. This truck is designed for lifting, lowering, and transporting palletized loads.

Improper use can lead to personal injury or machine damage.

The operator/operating company must ensure correct usage and guarantee that this truck is operated only by personnel who have been trained and authorized to use it.

This truck must be used on solid, flat, intact surfaces and appropriate ground conditions.

It is intended for indoor use in ambient temperatures ranging from +5°C to +40°C, for various load applications that do not involve crossing permanent obstacles or pits. During operation, the load must be positioned approximately at the truck's load center.

Lifting or transporting persons is strictly prohibited.

If used on lift gates or loading docks, please ensure these are used correctly according to their operating instructions.

The rated load capacity is marked on the load label and the nameplate; operators must pay attention to these warning signs and safety instructions.

Operating illumination must be at least 50 lux.

Modifications

Any modifications or changes that could affect the vehicle's rated load capacity, stability, or safe operation must receive prior written approval from the original vehicle manufacturer, its authorized manufacturer, or its successor. This includes changes affecting braking, steering, visibility, and the addition of movable attachments. When the manufacturer or its successor approves a modification or change, the load nameplate, labels, identification marks, and operation and maintenance manuals must be updated accordingly.

Vehicle damage resulting from failure to follow these instructions will void the warranty.

1.Vehicle Overview

a.Overview of Main Components

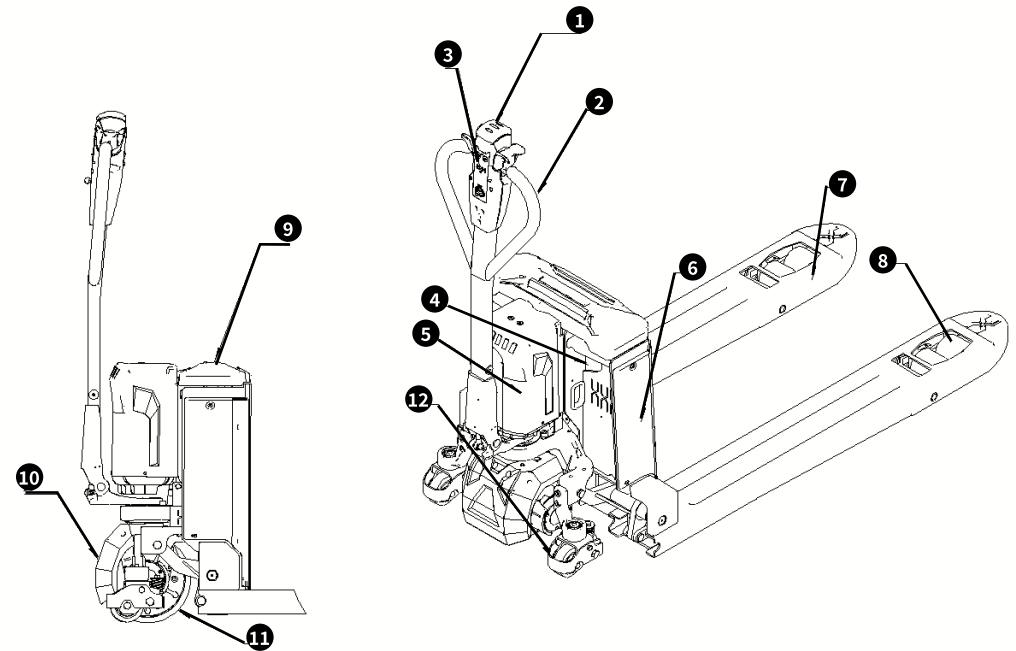


Fig. 1:Overview of Main Components

1	Belly Button Switch	7	Fork Legs
2	Handle	8	Load Wheel
3	Battery Indicator	9	Power Assembly
4	Power Connector	10	Drive Cover
5	Motor Guard	11	Drive Assembly
6	Chassis	12	Balance Wheel

b.主要技术数据

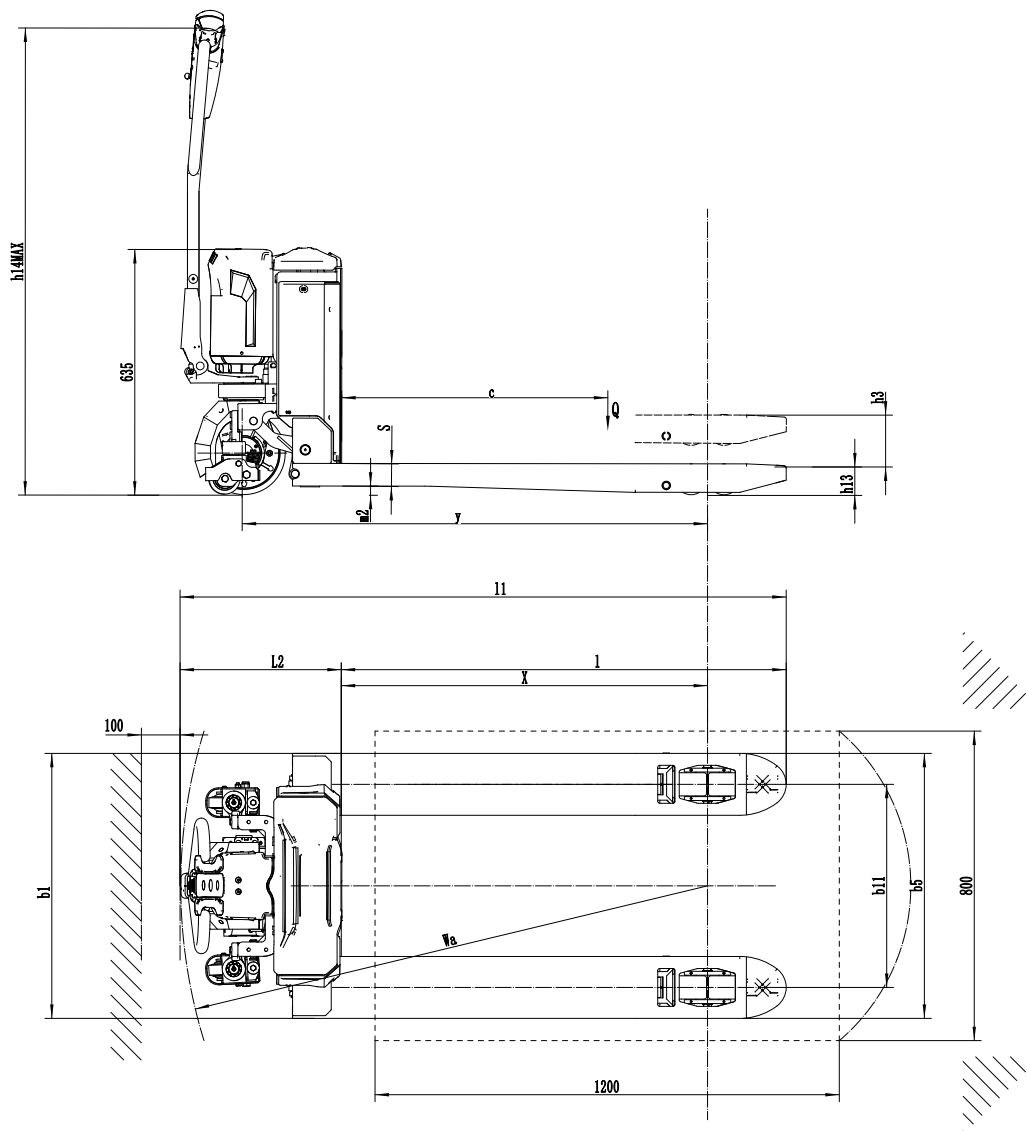


Fig. 2:Technical Parameters

Table of Industrial Vehicle Types According to VDI 2198 Standard

Characteristic	1.1	Model	/	SE-HPWS1501	SE-HPWS1502
	1.2	Power	/	Electric	Electric
	1.3	Operation Type	/	Pedestrian Operated	Pedestrian Operated
	1.4	Rated Load Capacity	Q (kg)	1500	1500
	1.5	Load Center Distance	c (mm)	600	600
	1.6	Front Overhang	x (mm)	947	947
	1.7	Wheelbase	y (mm)	1189	1189
Weight	2.1	Self Weight	kg	130	180
	2.2	Axle Load (Loaded), Drive/Load Side	kg	526/1104	535/1145
	2.3	Axle Load (Unloaded), Drive/Load Side	kg	97/33	140/40
Wheel	3.1	Wheel	/	Polyurethane (PU)	Polyurethane (PU)
	3.2	Wheel Dimensions, Drive side	$\varnothing \times w$ (mm)	$\varnothing 210 \times 75$	$\varnothing 210 \times 75$
	3.3	Wheel Dimensions, Load side	$\varnothing \times w$ (mm)	$\varnothing 80 \times 70$	$\varnothing 80 \times 70$
	3.4	Number of Wheels (x=Drive), Drive/Load Side	/	1x+4/4	1x+4/4
	3.5	Track Width, Load Side	b11 (mm)	525	525
Dimensions	4.1	Lift Height	h3 (mm)	195	195
	4.2	Handle Height (Min/Max) during Operation	h14 (mm)	740/1225	740/1225
	4.3	Fork Lowered Height	h13 (mm)	82	82
	4.4	Overall Length	l1 (mm)	1530	1650
	4.5	Chassis Length	l2 (mm)	414	500
	4.6	Overall Width	b1 (mm)	685	685
	4.7	Fork Dimensions (Thickness/Width/Length)	s/e/l (mm)	60/160/1150	60/160/1150
	4.8	Outer Fork Width	b5 (mm)	685	685
	4.9	Min. Ground Clearance	m2 (mm)	20	20
	4.10	Aisle Width (800x1200 pallet, 200mm safety)	Ast (mm)	2005	2005
	4.11	Turning Radius	Wa (mm)	1332	1332
Performance	5.1	Travel Speed (Loaded/Unloaded)	km/h	4.0/4.4	4.0/4.4
	5.2	Lifting Speed (Loaded/Unloaded)	m/s	0.016/0.021	0.015/0.020
	5.3	Lowering Speed (Loaded/Unloaded)	m/s	0.05/0.026	0.05/0.024
	5.4	Max. Gradeability (Loaded/Unloaded)	%	6/20	6/20
	5.5	Service Brake	/	Electromagnetic braking	Electromagnetic braking
Motor	6.1	Drive Motor Power (S2 60min)	kW	0.75	0.75
	6.2	Lift Motor Power (S3 10%)	kW	0.5	0.5
	6.3	Battery Type (per DIN 43531/35/36 A, B, C)	/	No	No
	6.4	Battery Voltage / Rated Capacity (K5)	V / Ah	24/20	24/61
	6.5	Battery Weight (+/-5%)	kg	7.5	40
	6.6	Energy Consumption per VDI Cycle	kWh/h	/	/
Other	7.1	Drive Control Method	/	DC Speed Control	DC Speed Control
	7.2	Noise Level at Driver's Ear (per EN12053)	dB(A)	≤ 75	≤ 75

c. Description of Safety Devices and Warning Labels

- A. Read Manual Label
- B. Filling Port
- C. Read After Sales Service Manual Label
- D. Label
- E. No Riding Label
- F. Pinch Hazard Label
- G. Lifting Hook Label
- H. Nameplate
- I. Component Nameplate

This pallet truck is equipped with a power connector (4). Pulling out the power connector will stop all lifting, lowering, and driving functions, and will also disengage the electromagnetic brake.

This pallet truck is equipped with a belly button switch (1). When the vehicle is moving towards the operator, activating the belly button switch within the handle's operating range will cause the vehicle to move away from the operator. Please also follow the instructions shown on the labels; if they are damaged or missing, replace them promptly.

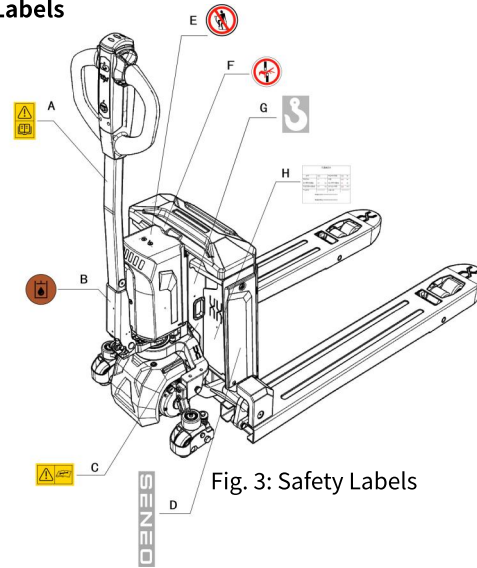


Fig. 3: Safety Labels

d. Nameplate

The layout and content of the nameplate shall be subject to the one affixed to the equipment.

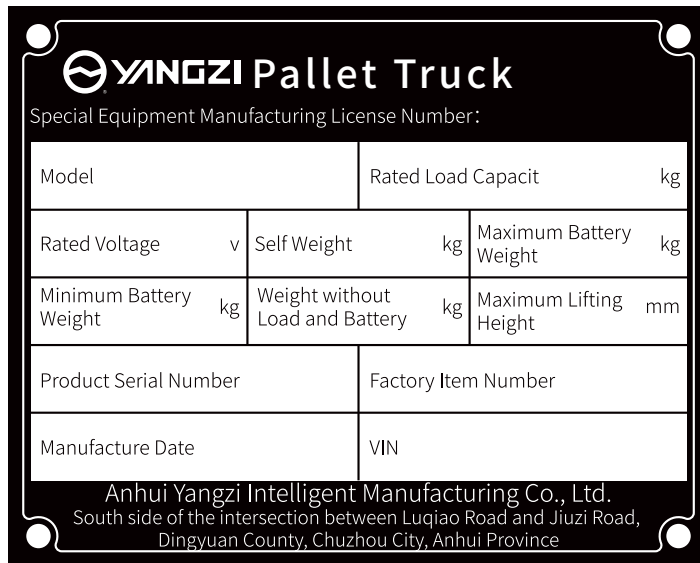


Fig. 4: Nameplate

2.1. Warning, Residual Risks, and Safety Instructions

Do not

- Place feet or hands under or inside the lifting mechanism
- Allow unauthorized personnel to stand in front of or behind the truck while it is moving or lifting/lowering
- Overload
- Place feet in front of the wheels, as this may cause injury
- Lift personnel; falling may result in serious injury
- Push or pull loads with this truck
- Carry off-center or rear-loaded cargo; loads must be evenly distributed on the forks
- Use this truck to carry unstable or unbalanced loads
- Operate without the manufacturer's operation manual
- Be aware that wind can destabilize lifted loads. Do not lift loads in windy conditions
- Use emergency mode on slopes. Brake release is strictly for emergency vehicle repositioning and must not be used for normal operations. The use of this function on slopes is prohibited

Observe variations in ground level while driving, as loads may fall or the vehicle may lose control.

Regularly check the load status. If the load becomes unstable, stop operating the vehicle immediately.

If the load slides or shifts on the truck, brake immediately and disconnect the power connector (4). If any malfunction occurs, refer to Chapter 8.

Perform regular inspections for maintenance. This truck is not waterproof; please use it in a dry environment.

Prolonged continuous operation may damage the battery compartment. Stop operation if the hydraulic oil temperature becomes too high.

Warning

- Operators must wear safety shoes when operating the electric pallet truck
- This truck is designed for indoor use only, within an ambient temperature range of +5°C to +40°C
- Minimum operating lighting levels must reach 50 lux
- To prevent unexpected sudden movement of the vehicle when not in use (e.g., caused by others), disconnect the power supply when the truck is unattended

3.Trail Run, Transportation, and Decommissioning

a.Trail Run

Table 2:Test Run Data

Model	SE-HPWS1501	SE-HPWS1502
Delivery Weight[kg]	130kg	180kg
Size [mm]	1570x685x1225	1650x685x1225

After receiving our new pallet truck or when re-commissioning is required, please perform the following steps before operating the vehicle for the first time:

- Verify that all parts are included and undamaged.
- Ensure the handle is correctly installed.
- Charge the battery (refer to Chapter 6).
- Conduct daily inspections and functional checks of the machine.

b. Transportation

During transport, remove all loads, lower the forks to their lowest position, and securely fasten the truck using dedicated lifting equipment according to the chart below.

⚠ Lifting

Use professional cranes and lifting equipment
Do not stand under swinging loads

Lower the forks and park the vehicle safely
As shown in Figure 6, secure the truck body using lifting-specific tie-down straps, anchoring the other end to the transport vehicle

⚠ Transport

During transport, the pallet truck must be securely fastened to the truck or lorry.

C.Decommissioning

Before storage, remove all loads and lower the pallet truck to its lowest position. Apply grease to all lubrication points mentioned in this manual (perform regular inspections) to strictly prevent rust and dust accumulation. Remove the battery and inspect safety equipment to ensure the vehicle is not subjected to crushing forces during storage.

When the vehicle is permanently decommissioned, hand it over to a designated recycling company. In accordance with regulations, oil, batteries, and electronic components must be recycled.

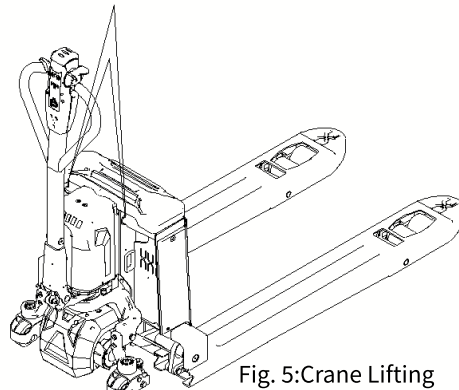


Fig. 5:Crane Lifting

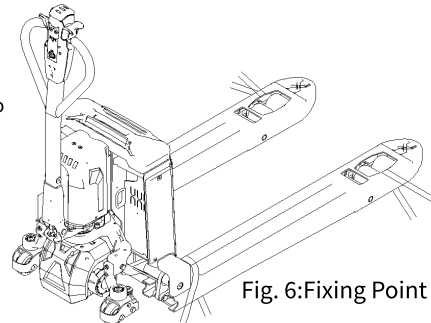


Fig. 6:Fixing Point

4. Daily Inspections

This chapter outlines the pre-operation inspections required before using the vehicle.

Daily inspections can promptly identify faults or malfunctions. The following points must be checked before operation:

Remove all loads from the truck and lower the forks.

⚠ If any fault is detected, stop using the vehicle immediately.

- Check for scratches, deformations, or cracks.
- Inspect the hydraulic cylinder for oil leaks.
- Ensure the wheels rotate freely.
- Test the travel function with the handle in the upright position.
- Test the braking function of the handle proximity switch.
- Operate the buttons to check the lifting and lowering functions.
- Verify that all bolts and nuts are tightened.
- Visually inspect for any damaged wiring.

5.Operating Instructions

Before operating this vehicle, please adhere to all warnings and safety instructions (see Chapter 3). Ensure that the load is placed on a pallet and remains stable, and complete the daily inspection

Verify that the load is securely positioned on the pallet and perform daily checks

Starting the Vehicle: Turn on the power to activate the vehicle

Press the horn button (Fig. 7, 13) to activate the audible alarm signal

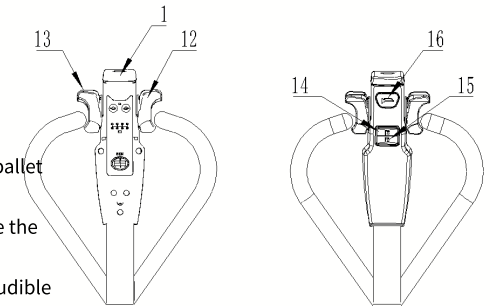


Fig.7:Handle Control

a.Parking

⚠ Do not park on inclines.

This truck is equipped with an electromagnetic fail-safe stop and parking brake system. Always ensure the forks are fully lowered and disconnect the power supply.

b.Lifting

Do not overload. The maximum capacity for models HPWS1501/1502 is 1500 kg.

When traveling, keep the forks fully lowered until lifting the load is required. Press the lift button (Fig. 7, 14) until the desired height is reached.

c. Lowering

Carefully press the lowering button (Fig. 7, 15). Lower the load until the forks are down to the chassis of the pallet truck, then carefully drive the vehicle away from the load area.

d. Traveling

- ⚠ **Travel on inclines only with the load facing uphill.**
Do not operate on slopes exceeding the specified technical parameters

Start the vehicle and move the handle to the operating zone ('F', Fig. 9).

Turn the acceleration button to the desired direction: Forward ('Fw.') or Reverse ('Bw.') (Fig. 9).

If the acceleration button is returned to the neutral (center) position, the controller will decelerate the vehicle until it stops. Once stopped, the parking brake engages automatically.

Drive the vehicle carefully to your destination, observing road conditions and adjusting speed via the acceleration knob.

The vehicle features a "creep speed" mode and an "upright walking" function:

Creep Speed Mode: Press the creep speed button (Fig. 7, 16) once to enter this mode. Rotating the acceleration button will result in slow-speed travel. Press the button again to return to normal operation.

Upright Walking Function: With the handle in the upright position, press and hold the creep speed button (Fig. 7, 16) for 2 seconds. While holding, rotate the acceleration button to drive the vehicle at a slow speed. This function is designed for maneuvering in confined spaces. Release the creep speed button to exit this mode.

e. Steering

Steer the vehicle by moving the handle to the left or right.

f. Braking

- ⚠ **Please check the vehicle's braking distance before use.**
Braking performance depends on road conditions and the vehicle's load. The braking function can be activated in the following ways:
 - **Regenerative Braking via Accelerator:** Move the acceleration button (12) to the '0' position or release it. This activates regenerative braking, decelerating the vehicle until it stops.
 - **Direction Reversal:** Move the acceleration button (12) directly from one drive direction to the opposite direction. The vehicle will undergo regenerative braking until it begins moving in the reverse direction.
 - **Handle Brake Zone:** Move the handle up or down into the braking zone ('B'), or simply release the handle. The handle will automatically return to the upper braking zone ('B'), applying the brakes until the vehicle stops.

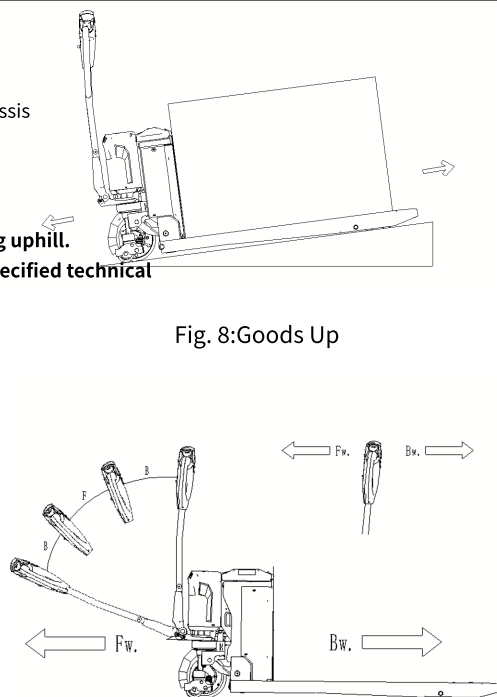


Fig. 8: Goods Up

Fig. 9: Operating Direction

g. Faults

If any malfunction occurs or the vehicle becomes inoperable, stop using it immediately. If possible, park the vehicle in a safe area and cut off the power supply. Notify your supervisor or contact your after-sales service personnel immediately. If necessary, use dedicated towing or lifting equipment to remove the truck from the operating area.

h. Emergency Situations

In an emergency or if the vehicle tips over, maintain a safe distance. If possible, disconnect the power connector (4); all electrical functions will then cease.

6. Battery Safety, Charging, and Replacement



- Only qualified personnel are permitted to perform maintenance or charge the battery. Always follow the instructions in this manual.
- The vehicle uses a Lithium-ion (Li-ion) battery.
- Battery recycling must comply with national regulations. Please adhere to these rules.
- Do not use open flames when handling batteries.
- Combustible materials or liquids are prohibited in the battery charging area. Smoking is strictly forbidden. Ensure the area is well-ventilated.

Park the vehicle securely before starting to charge or installing/replacing the battery

Before completing any maintenance work, ensure all cable connections are correct and do not interfere with other vehicle components.

HPWS1501 Battery Specification:

- 24V20Ah, Li-ion, 7.5kg

HPWS1502 Battery Specification:

- 24V61Ah, Lead-acid battery, 40kg



Only Lithium-ion batteries are permitted

Please consider the battery's operating temperature range and the permissible temperature range for charging.

a. Safety Guidelines

Please adhere to the following requirements. Failure to do so may result in property damage, injury, or death.

Fire Prevention

- Do not operate at temperatures above 60°C
- Do not place the battery near heat sources such as stoves or fireplaces
- Avoid direct sunlight
- Do not place the battery near flammable or explosive materials

Explosion Prevention

- Do not strike or collide with the battery
- Avoid objects penetrating the battery case; ensure there is no risk of damage to the battery enclosure
- Do not throw the product into fire or water

Installation Environment

To ensure optimal battery performance, it must be kept under normal operating conditions: ambient temperature between 0°C and 40°C, with normal humidity. Avoid significant temperature differences between the two ends of the battery (greater than 5°C)

Emergency Management

The following are examples of methods to handle potential emergencies:

- **Smoke or Fire:** Immediately stop using the equipment, take appropriate measures according to operating instructions, and evacuate the area
- **Water Immersion:** If the battery is immersed in water, immediately stop using the equipment, take appropriate measures according to operating instructions, and evacuate the area
- **Unusual Odor:** Immediately stop using the equipment, remove the battery, take appropriate measures according to operating instructions, and evacuate the area. Avoid contact with any leaked liquid or gas from the battery (if contact occurs, wash immediately)
- **Manual Movement in Emergency:** If manual movement of the vehicle is required during an emergency, follow the emergency mode procedure to release the parking brake and push the vehicle manually.

Leakage Prevention

- Do not disassemble the battery
- Do not touch with wet hands
- Do not expose to moisture or liquids
- Keep the battery out of reach of children and animals

Preventing Damage to the Battery System

- Do not allow contact with liquids or corrosive chemicals
- Do not expose the battery to high temperatures and/or high pressure
- Do not step on, disassemble, or crush the battery
- Do not charge via the discharge terminals or discharge via the charging terminals

Necessary safety equipment

- Self-contained breathing apparatus (SCBA) and personal protective equipment (PPE)
- Heptafluoropropane (HFC-227ea) fire suppression system

b. Precautions

- If the temperature of the cells inside the battery case falls below +5°C, the Battery Management System (BMS) may prevent charging. Ensure the battery's internal temperature is above this threshold and evenly distributed.
- Absolutely prohibited to use emergency mode on slopes. Brake release is strictly for emergency vehicle repositioning and must not be used for normal operations.
- Charging at low temperatures is strictly prohibited. Occasional use in low-temperature environments is permitted (refer to the vehicle's allowed normal operating conditions), but a reduction in effective capacity under such conditions is normal.

Environment Temperature	Remaining Discharge Capacity
25°C	100%
0°C	90%
-20°C	70%
-30°C	40%

! Note: Although the battery can discharge at extremely low temperatures, charging under these conditions can easily cause condensation, which may damage internal electronic components and create unknown potential hazards. The battery must be slowly warmed to the minimum allowable charging temperature before the charging function activates and charging can commence (this typically takes about 4 hours to return to normal temperature). Forced heating (e.g., using heaters, heat guns, etc.) is strictly prohibited.

The relationship between actual capacity and ambient temperature is for reference only and should not be used as a guarantee or permission condition for low-temperature operation. Refer to Chapter 1 for correct usage conditions.

- The battery has an ingress protection rating of IP40. Do not rinse the battery directly with water.
- If the lithium-ion battery pack will not be used for an extended period, store it with a charge level between 30% and 50% to extend its service life.
- When the vehicle is in a "No-Drive" state (indicated by the flashing red light on the handle's battery indicator), charge it immediately to avoid the risk of deep discharge. It is recommended to perform a charging cycle within 7 days of entering this state.

c. Replacement

Park the vehicle safely, disconnect the power connector, open the battery cover, and lift the battery out vertically. Installation is the reverse of the removal procedure.

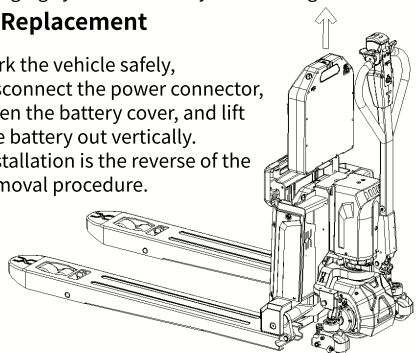


Fig.10 :Battery Replacement

d. Battery Display Panel

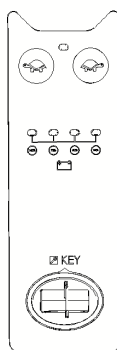


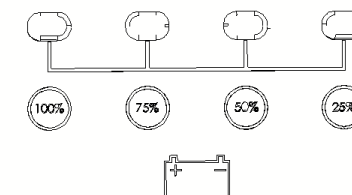
Fig.11:Battery Display Panel

Fault Codes

When a fault code is generated, all four battery indicator LEDs will illuminate steadily. Subsequently, the first LED will flash to indicate the tens digit, followed by the fourth LED flashing to indicate the units digit. The fault code is calculated as: (Number of flashes from the 1st LED × 10) + (Number of flashes from the 4th LED).

Battery Charge Indicator

The charge level is displayed via 4 LED indicators: Green: Charge > 75%; Blue: 50% < Charge ≤ 75%; Yellow: 25% < Charge ≤ 50%; Red: Charge ≤ 25%; Flashing Red: Charge < 10% (Charge immediately when low).



Creep Speed Mode

Under normal conditions, the creep speed symbol is off. If the creep speed symbol remains illuminated, it indicates that the vehicle is in speed reduction (creep) mode.

e. Charging

- Only use the supplied charger. Before charging, ensure the correct charger is used and all safety measures have been considered.
- Read the charger manual thoroughly before use.

Adhere to these regulations.

- The charging room must be well-ventilated
- A fully charged status can only be verified via the discharge indicator on the vehicle. To verify this, interrupt the charging process and start the vehicle
- Do not attempt to charge if the battery has been impacted and the battery case is damaged

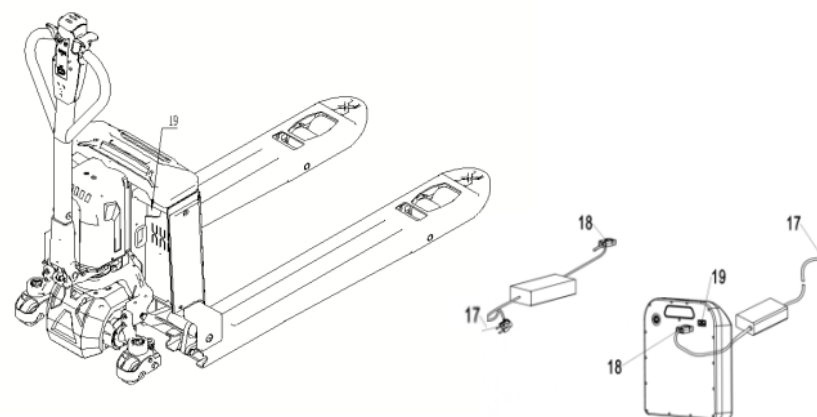


Fig. 12:Charging

Table 4: Charger Indicator Status

Indicator Signal	Function
Red	Battery is charging normally
Green	Battery is fully charged

Table 5: Charger Specification for HPWS1501/ HPWS1502

HPWS1501			
Model	Specification	Input	Output
SWCH24V10A	24V10A	100-240VAC,50-60HZ 2.1A	29.2VDC 10A

HPWS1502			
Model	Specification	Input	Output
SY300-24V10A	24V10A	100-240VAC,50-60HZ 2.1A	29.2VDC 10A

7.Periodic Maintenance

- ▲ ● Only qualified and trained personnel are permitted to perform maintenance on this vehicle.
- ▲ ● Before maintenance, remove all loads from the forks and lower them to their lowest position.
- ▲ ● If lifting the vehicle is required, follow the procedures in Chapter 4 using designated tie-down or lifting equipment. Before starting work, place safety devices (such as specified lifting jacks, wedges, or wooden blocks) under the vehicle to prevent accidental falling, moving, or sliding.
- ▲ ● Exercise caution with the handle assembly. The gas pressure spring is pre-installed under compression; carelessness can cause injury.
- ▲ ● Use only original spare parts approved and supplied by the dealer
- ▲ ● Be aware that hydraulic oil leaks can lead to machine failure and accidents
- ▲ ● Only trained maintenance technicians are allowed to adjust the pressure relief valve

If you need to replace the wheels, please follow the instructions above. Casters must be round and free of abnormal wear.

Check the key items listed on the maintenance checklist.

a.a.Maintenance Checklist

		Interval(M)			
		1	3	6	12
Hydraulic System					
1	Check hydraulic cylinder and piston for damage, noise, and leaks		●		
2	Check hydraulic connectors for damage and leaks		●		
3	Check hydraulic oil level; refill if necessary.		●		
4	Refill hydraulic oil after 12 months or 1500 operating hours.				●
5	Check and adjust hydraulic valve function				●
Mechanical System					
6	Check forks for deformation and cracks.		●		
7	Check chassis for deformation and cracks		●		
8	Check that all screws are securely fastened		●		
9	Check push rod for deformation and damage		●		
10	Check gearbox for noise		●		
11	Check wheels for deformation and damage		●		
12	Lubricate steering bearings if necessary				●
13	Check and lubricate pivot points if necessary		●		
14	Lubricate grease nipples	●			
Electrical System					
15	Check electrical wiring for damage		●		
16	Check electrical connections		●		
17	Test power connector function		●		
18	Check electric drive system for noise and damage		●		
19	Test display unit		●		
20	Check for correct fuses		●		
21	Test warning signals		●		
22	Check current contactors		●		
23	Check chassis for leakage (insulation test)		●		
24	Check drive controller function and wear		●		
25	Check electrical system of the drive motor		●		
Brake System					
26	Check braking performance; replace brake discs or adjust air gap if necessary		●		
Battery					
27	Check battery voltage		●		
28	Check terminals for corrosion and damage; lubricate terminals		●		
29	Check battery casing for damage		●		
Charger					
30	Check main cable for damage			●	
31	Check start-up protection procedure during charging			●	
Function					
32	Check horn function	●			
33	Check solenoid valve air gap	●			
34	Test emergency braking	●			
35	Check steering function	●			
36	Test belly switch function	●			
37	Check steering function	●			
38	Check lifting and lowering functions	●			
39	Check handle proximity switch function	●			
General					
40	Check that all labels are clear and intact	●			
41	Check load wheels and adjust height; replace if worn		●		
42	Perform a test run	●			

b.Lubrication Points

Lubricate the points marked on the maintenance checklist. The required grease specification is: Grease according to DIN 51825 standard

c.Checking and Refilling Hydraulic Oil

Recommended Hydraulic Oil Types Based on Temperature:

Environment Temperature	-5°C~25°C	>25°C
VIN	HVLP 32, DIN 51524	HLP 46, DIN 51524
Viscosity (mm ² /s)	28.8-35.2	41.4 - 47
Oil Capacity	0.4L	

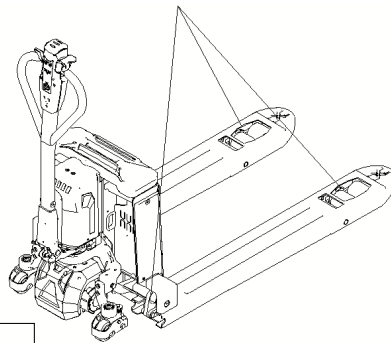


Fig. 13:Lubrication

d.Checking Electrical Fuses

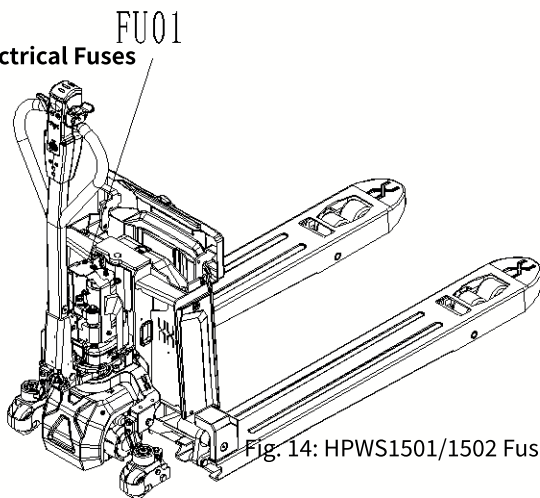


Fig. 14: HPWS1501/1502 Fuse Location

Table 7:Fuse Specifications

Fuse 01	Specification
	10A

Waste materials such as used oil, waste batteries, or other materials must be disposed of and recycled in accordance with national regulations. If necessary, hand them over to a certified recycling company.

When the forks are lowered to their lowest position, the oil level should be between the minimum and maximum marks.

If necessary, add oil up to the filling point.

8.Troubleshooting

Fault	Cause	Remedy
Load cannot be lifted	Load weight exceeds capacity	Only lift loads up to the maximum capacity indicated on the nameplate.
	Low battery charge	Charge the battery.
	Lift contactor failure	Inspect and replace the lift contactor.
	Hydraulic oil level too low	Check and refill hydraulic oil.
	Oil leakage	Inspect and repair cylinder seals.
Suction leak (Air in system)	Oil viscosity too high	Use oil with lower viscosity
Vehicle inoperable	Battery is charging	Fully charge the battery, then disconnect the main power plug from the outlet.
	Battery not connected	Connect the battery correctly.
	Fuse blown	Check and replace the fuse.
	Low battery charge	Charge the battery.
	Power connector not plugged in	Properly connect the power connector
	Handle not in operating zone	First, move the handle to the braking zone.

If the vehicle malfunctions and cannot be operated out of the work area, lift the vehicle, place a load-handling device underneath to ensure stability and safety, and then move the vehicle out of the aisle.

10.Wiring/Circuit Diagrams

a. Circuit Diagram

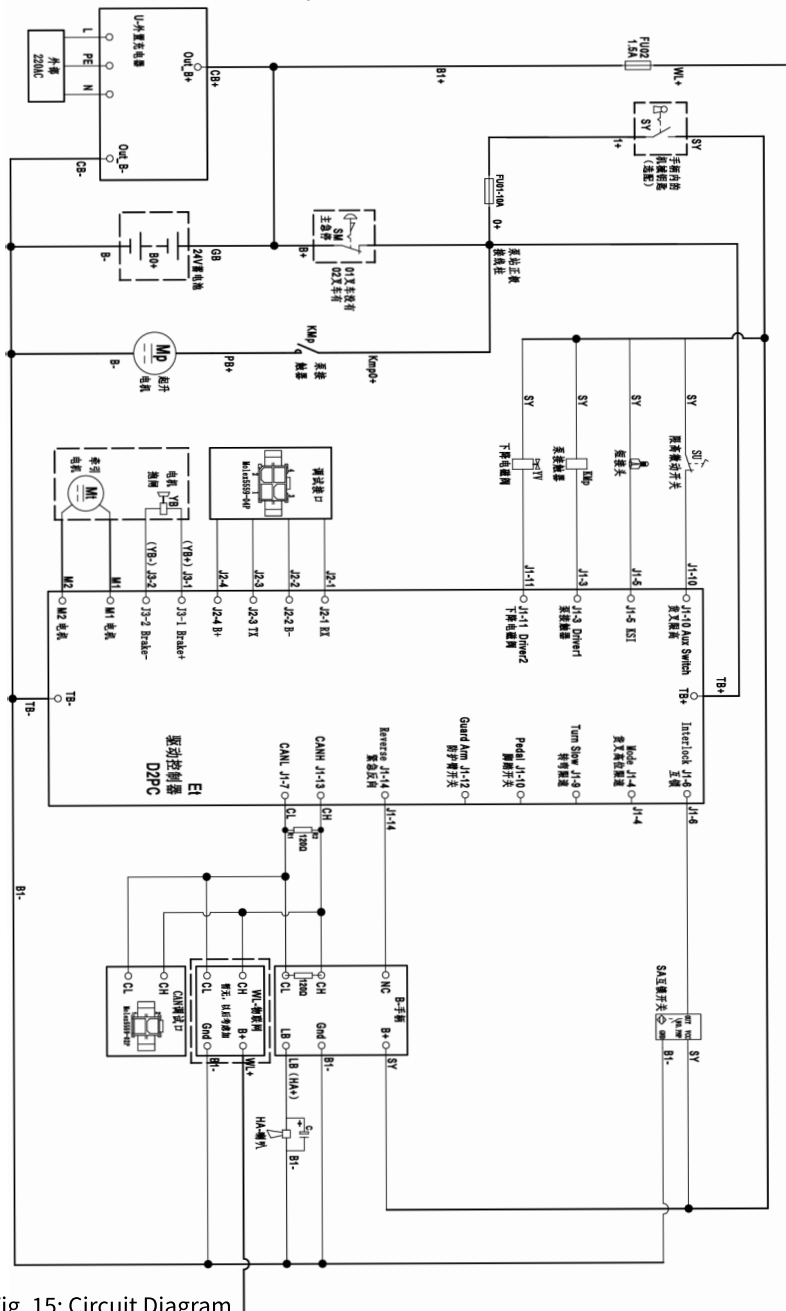


Fig. 15: Circuit Diagram

b. Hydraulic Circuit

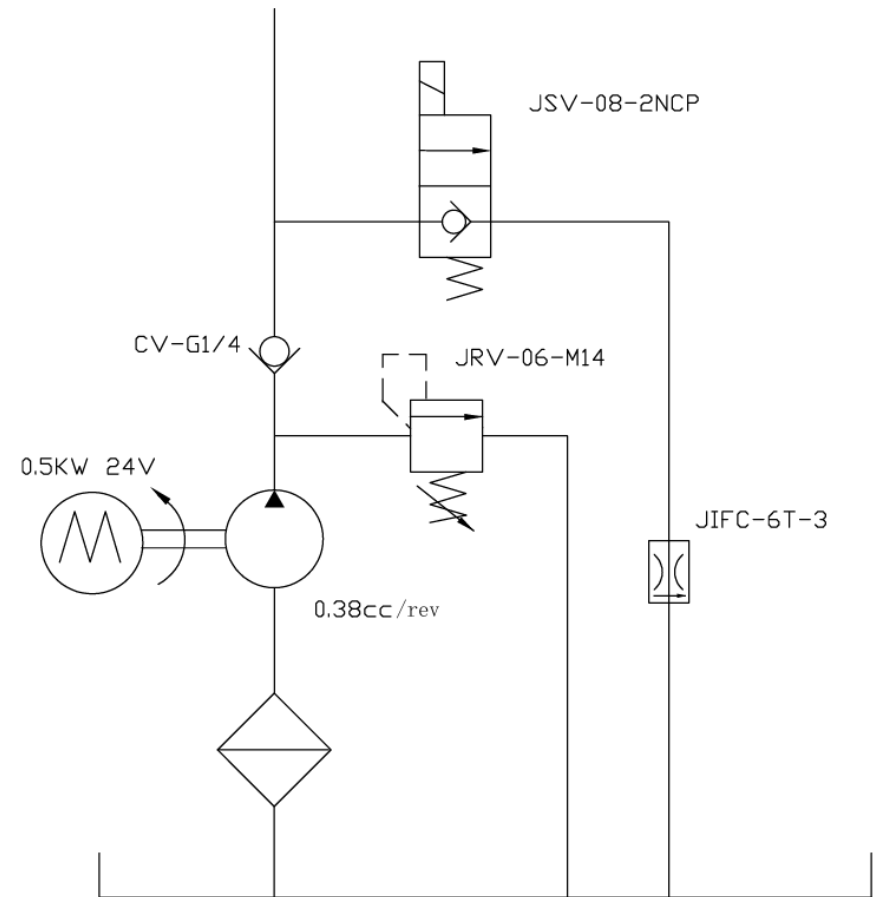


Fig. 16: Hydraulic Circuit

c.Braking System Schematic

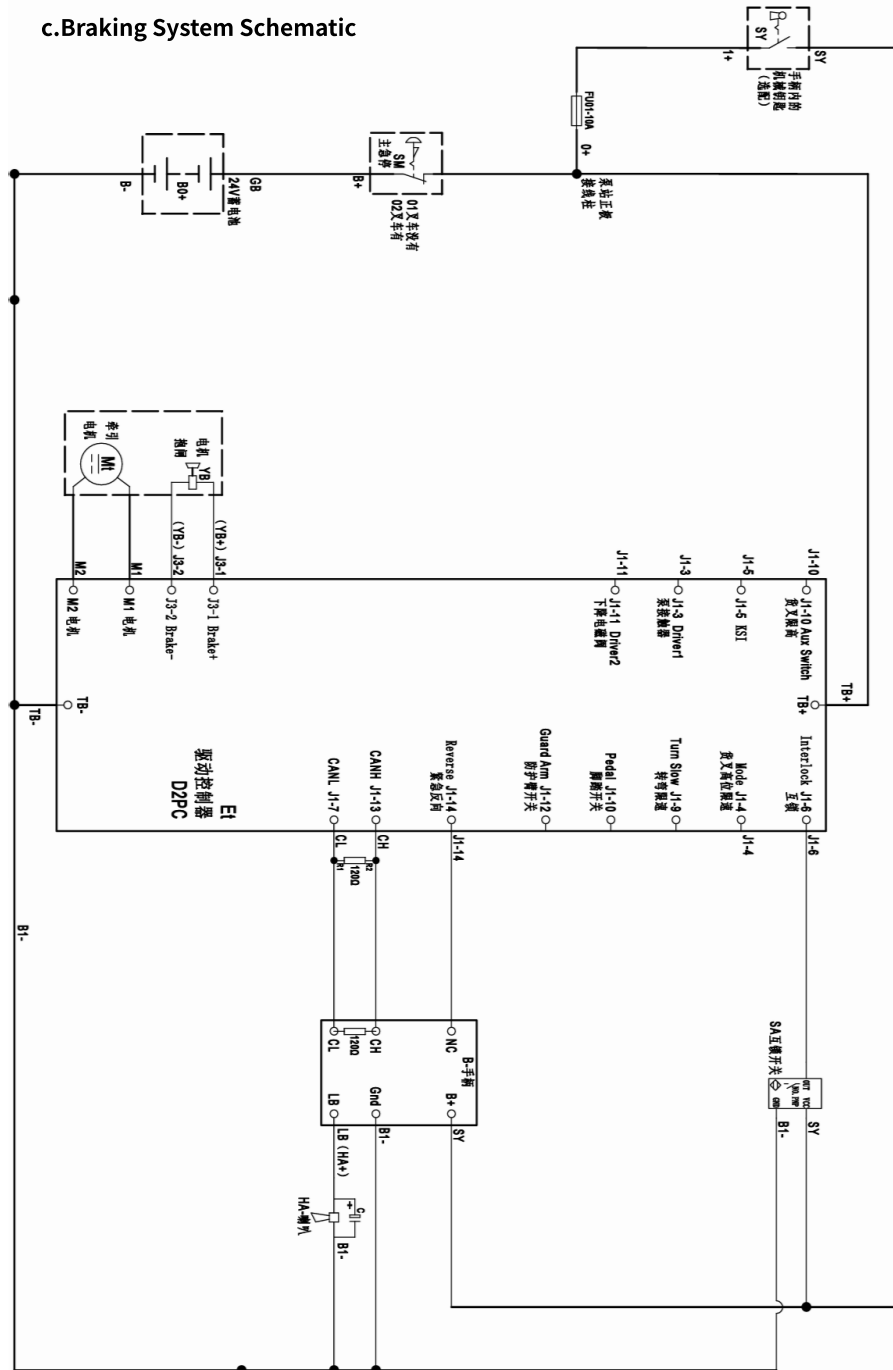


Fig. 17: Brake System Schematic

User Notice :

— Warranty Period:
1. The warranty per:

1. The warranty period for warehouse forklifts is 12 months from the date of sale or 1000 hours of use, whichever comes first.
2. Parts covered by a 12-month or 1000-hour warranty include: frame, mast, motor, electronic control system, battery, charger assembly, accelerator, chain forks, gas springs, instruments, hydraulic cylinders, steering gear, multi-way valve, gear pump, and various bearings;
3. Parts covered by a 6-month or 500-hour warranty include: hoses, brakes, master cylinder, wheel cylinders, front wheel assembly, caster wheel assembly, drive wheel outer ring, horn, various seals, handlebar panel buttons, etc.
4. Components covered by a one-month or 200-hour warranty include: various sensors, various relays (starting, intermediate, safety, solenoid valves, etc.), various switches (brake, steering, reversing, lights), electronic regulators, and warning lights;
5. The above-mentioned malfunctions not caused by quality issues are not covered by warranty. The warranty period is whichever comes first.
6. For detailed warranty information, please consult Yangzi Forklift After-Sales Service Department or your local dealer.

II.Warranty Principles:

1. During the warranty period, routine maintenance of the machine must be performed.
2. Under normal use, if any parts have defects in material, manufacturing, or assembly, and are determined by Yangzi Forklift's professionals to be non-human-caused damage, the defective parts will be repaired or replaced free of charge.
3. Defects in forklifts may cause damage or downtime, reputational or economic losses (such as economic or moral, direct or indirect, anticipated, etc.) to users other than the machine itself. Yangzi Forklifts is only responsible for the repair and replacement of defective parts of the machine itself, and is not liable for compensation for losses other than those caused by the machine itself.

III. The following objects and situations are not covered by the warranty, even within the warranty period:

1. Losses or defects caused by accidents, improper driving, violations of regulations, negligence, or force majeure events such as overloading.
2. Defects and losses caused by unauthorized additions or modifications to the machine, alterations to the machine's structure or purpose, or impacts on the machine's performance and stability, without the consent of relevant personnel from Yangzi Forklift.
3. Unauthorized disassembly or intentional damage to the timer's operation will be handled as if the vehicle's warranty has expired.
4. Failure to stop and troubleshoot the machine when it malfunctions, resulting in losses due to operation while faulty, or losses artificially amplified by the operator.
5. Unauthorized adjustment, disassembly, or repair of system pressure settings or machine components, or incomplete parts, missing nameplates, etc., making it impossible to identify the cause of the malfunction and the responsible party.
6. Failure to perform routine maintenance on the machine, resulting in malfunctions.
7. Malfunctions caused by using substandard or unsuitable fuels for the local climate and temperature.
8. Faults where responsibility cannot be determined due to the loss of faulty parts.
9. Electrical components such as plugs, sockets, light bulbs (including combination lights), fuses, motor carbon brushes, and other easily damaged parts are not covered by the warranty.

Forklift Warranty Regulations

category	Warranty coverage	Warranty period
Complete machine	Motors: (walking motors, lift motors, gearboxes, etc.) Electrical components: (accelerators, controllers, chargers, batteries, etc.) Hydraulic components: (cylinders, pumps, chains, etc.) Structural components: (frames, forks, steering systems, etc.)	12 months
Consumable parts	Bearings, shafts, key switches, emergency stop switches, rollers, instruments, combination switches	6 months
Consumables	Plastic parts, brake pads, tires, light bulbs, fuse boxes, springs, paint, etc.	No warranty