

Warning:

Please read the Instruction before using the product. It will be beneficial for both you and product.

CWseriesHandPalletTruck

Assembly,Maintenanceand

InstructionsforUsers



I Overview

Welcome to use our hydraulic pallet truck with scale series. For your first use and safety operation, please refer to this manual book and warning signs on the truck. They will be helpful for your operation of this product.

Hydraulic pallet truck with scale is assembled with XK3119M intelligent weighing equipment which has a micro processing unit. It can not only weigh accurately and conveniently, but also possesses some other characters like low power consuming, compact structure, stainless panel, water-proofing and low self-weight etc. It's an ideal weighing tool among many other tools.

Remark: This series keeps improving. Manufacturers remain the right to change the design and specifications. Sorry for not informing timely of any changes. All these specifications are applicable only at this issue of edition. If you want to know our latest product information, you can contact us.

II Major Technical Parameters

Rated Capacity (kg)	2000/2500
Lifting Height(mm)	195
Low Height(mm)	85
Fork Length(mm)	1220/1150
Fork outer width(mm)	685/550
Single fork width (mm)	180
Front Wheel(mm)	φ64x70
Steering Wheel(mm)	φ180x50
Self Weight (kg)	118
Accuracy Level	III
A/D transfer speed	40Times/S
Resolution ration outside	1/3000~1/15000
Nonlinearity error	<0.016%FS
Input range of weighing sensor signal	1.0~2.0mv
Communication connector	RS232 connector and RS232 connector printer available
Display	Sixteen digit dot matrix display, font height 26.4mm
Power supply	(1)AC/DC 12V 500mA adaptor or built-in transformer (2)DC 6V/4Ah rechargeable battery(Please notify when ordering)
Power consumption	0.53VA
Using temperature	-10~40℃
Scale dimension	258X154X68mm
Scale weight	About 2.32Kg

III Major Functions

- 1.Standardizing keyboard automatically; weighing range is adjusted by software automatically
- 2.Reminding message for errors
- 3.Options for Automatically shut down in 3-30 minutes
- 4.Signal for insufficient power source voltage and automatically shut down when power source voltage is low.
- 5.Reducing shaking function

- 6.Changing from lb to kg or vice versa at any time
- 7.Painting connector; painting weight or accumulated weight. Connector available: RS-232
- 8.Strong ability in preventing interference; mal-operation will not lose important data, program will restore them automatically
- 9.Radix point setting; different resolution ratios available
- 11Automatic zero point following; Abnormal zero point notice, warning function when overload, etc.
- 12.Signifying Symbols

(1)→O←: Lighting when no weight	(2)  : Lighting when eliminating tare weight
(3)  : Lighting when weighing stable	(4)  : Lighting when charging
(5) HI: Lighting when reaching over high load	(6) LO: Lighting when below low weight
(7) OK: Lighting when weighing normal	(8) PCS: For calculating times of weighing
(9)  : When battery is low	
- (10)Measurement Units(Kg、 Lb、 t、 g):When certain measurement unit chosen

IV Assembling Handle and Control Panel

If the hand pallet truck with scale is packed within an iron pallet or wooden pallet, then you should proceed some simple assembling before using. You might need some tools, like a hammer, a pair of pliers and so on; some spare parts: an axle with hole, two spring pins (one is on the axle106 already). This two spare parts have been put into a plastic bag and tied up on the handle.

4.1 Refer to illustration 1 , plug out 107

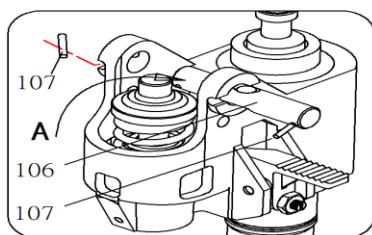


Illustration 1

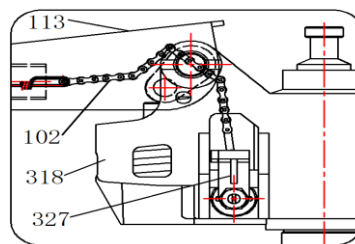


Illustration 2

4.2 Put the handle 113 into A section and use 106 to fix 113 with the pump 318

4.3 Use 107 to fasten the other side of 106

4.4 Penetrate the chain 102 through the hole on axle, See Illustration 2

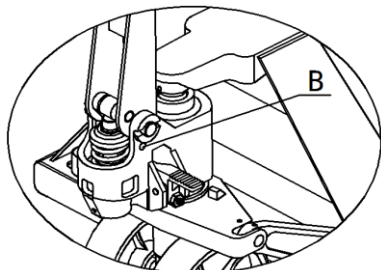


Illustration 3

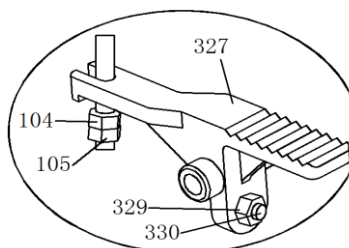


Illustration 4

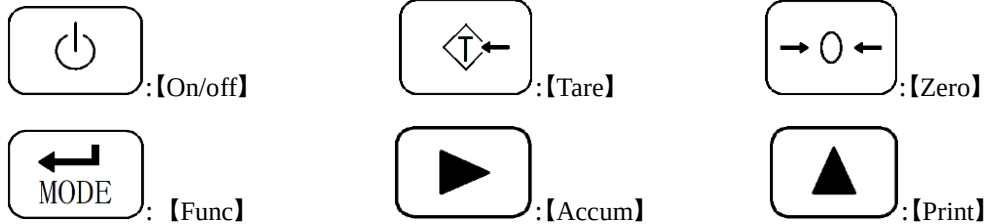
4.5 Hook the end of the chain nut 102 into the sink of control arm 327, See illustration 2 and 4

4.6 Pull handle 113 and plug out pin B. Keep safe pin B for next use. See illustration 3.

4.7 Panel Function, see illustration 5.



Illustration 5



V Truck Adjusting and Panel Function

5.1 After assembling of the handle, try to pump the handle for a while. Put the little control handle on three positions respectively and test its function. See if it's normal. (See illustration 6)

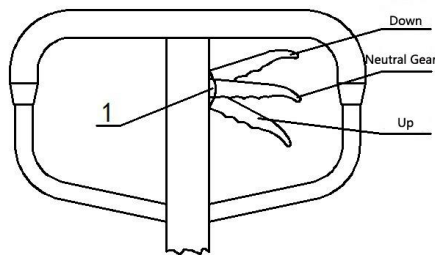


Illustration 6

5.2 Screw 330 on Illustration 4 is used to adjusting the condition of the truck. If the fork is lifted up and then down immediately, turn the screw 330 anti-clockwise for a little and try again; if it can't be lowered after being lifted, turn screw 330 clockwise for a little and try again. Please loose nut 329 before adjusting and fasten it when finishing.

5.3 Panel Function

- (1) **【On/Off】**The on/off of power supply; From 0-9 self-checking into weighing mode; Press the button for 1.5s, screen will display remaining battery percentage then cut off power supply
- (2) **【TARE】**Excluded current weight as Tare Weight and Net Weight light is on
- (3) **【ZERO】**Make the screen display zero digit, $\pm 2\%$
- (4) **【FUNC】**Used to set functions and changing weighing unit; to light on background light if display screen is LED

(5) **【ACCUM】**Print the whole weight and display times of weighing n**; It displays for 1.5 seconds; press ZERO to eliminate all of them. (with printer)

(6) **【PRINT】**Print current weight and display times of weighing n** and accumulated weight

YYYYYY each for 1.5 seconds; Press ZERO to eliminate all of them. (with printer)
Printing format (See illustration 7):

Press **【ACCUM】**to print current weight; press **【PRINT】** to print All accumulated weight.

NO	WET	
1	2.23	kg
2	1.76	kg
Add 2	3.99	kg

Illustration 7

VI Operation Instruction

6.1 Weighing proof

Make sure the JPI in electric circuit board is in “on” position and then proceed with the following operation:

Step	Operation	Screen Display	Functions
1	Press 【Tare】	【CRL SP】	into setting mode
2	Press 【】	【CRL O】	Into proofing state
3	Press 【FUNC】	【……】	Zero point adjusting, display the largest weight when finishing
4		【XXXXXX】	When display 【XXXXXX】 the largest weighing weight, add standard weight. When weight is stable, begin standardization. Press 【】 to select digit and press 【▲】 to select number between 0-9. Repeat this process until it displays the weight same as standard weight. Press 【FUNC】 to confirm.
5	Press 【FUNC】	【……】	Into self-adjusting state
		【XXXXXX】	Not the same as standard weight? Please try again

Remark: **【FUNC】** confirm, **【】** digit select, **【▲】** number select. Mark* means functions which are not available. (Please notify us to customize when purchase)

6.2 Indicator parameter setting

Make sure the JPI in electric circuit board is in “on” position and then proceed with the following operation:

Step	Operation	Screen Display	Functions
1	Press【Tare】	【CAL SP】	Hold the key for 3 seconds
2	Press【Func】	【-SEL-】	Into setting mode
3	Press【  】	【XXXXXX】	Division value is 0.0002, 0.0005……0.1, 0.2. You can select what you desire.
4	Press【FUNC】	【n xxxxx】	Meaning: number of divisions; n 3000 is the default setting. You can choose what you desire.
5	Press【FUNC】	【Ut ABXY】	X the basic unit, Y the second weighing measurement unit (00=KG, 01=KG to lb, 11=lb, 22=HL, 33=T) (*on=KG as measurement unit with counting function, *OA=KG as measurement unit with pricing function) A means zero-point range; B means decimal position.
6	Press【FUNC】	【rS-0】	Parameters of the outside connector RS232
7	Press【FUNC】	【rS-1】	Parameters of the outside connector RS485, Bluetooth.
8	Press【FUNC】	【bUF CD】	C means speed of response (0-4 available); D means stability (3-2 available). For weighbridge, 33 means fast display with best stability. Set according to real situation.
9	Press【FUNC】	【FLt X】	Setting for weighing moving stuff. X=0 normal weighing, X=1 to 4. Weigh moving stuff. Available under certain situation.
10	Press【FUNC】	【LCd X】	Setting for the level of light display, 0-7 available. Use 【  】 to reduce light level, 【  】 to plus light level.
11	Press【FUNC】	【PIO X】	Choose to connect outer screen or not. “0” means no, “1” means yes.
12	Press【FUNC】	【-PASS-】	Confirm all the settings, Press【Zero】to exit, Press【FUNC】to reset again.
13	Press【Zero】	【XXXXXX】	Display weighing mode(Setting finished)

6.3 Additional instruction for the Indicator parameter setting

When connected to “RS232、RS485” or “Bluetooth”:

6	Press【FUNC】	【rS-0】	Parameters for RS232, options: “rS=HI”
7	Press【  】	【b0.2400】	Current baud rate, options: 2400, 9600

8	Press【FUNC】	【ADS XX】	Ways of data transfer, XX=00, sending out data automatically, XX=1~98, ask and answer mode; XX=99, only send out data when pressing “▲” or “▶”
9	Press【FUNC】	【rS=HI】	RS232 sending data from High to Low, Press【▲】 to change to “rS=LO”, which means RS232 sending data from Low to High. Press【FUNC】to confirm.
10	Press【FUNC】	【rS-1】	Parameter of RS485 and Bluetooth. Options: “bUF CD”
11	Press【▶】	【b1.2400】	Current baud rate, options: 2400, 9600
12	Press【FUNC】	【ADS1 XX】	Ways of data transfer, XX=00, sending out data automatically, XX=1~98, ask and answer mode; XX=99, only send out data when pressing “▲” or “▶”
13	Press【FUNC】	【rS=HI】	RS232 sending data from High to Low, Press【▲】 to change to “rS=LO”, which means RS232 sending data from Low to High. Press【FUNC】to confirm.
14	Press【FUNC】	【bUF CD】	C means speed of response (0-4 available); D means stability (3-2 available). For weighbridge, 33 means fast display with best stability. Set according to real situation.
15	Press【FUNC】	【FLt X】	Setting for weighing moving stuff. X=0 normal weighing, X=1 to 4. Weigh moving stuff. Available under certain situation.
16	Press【FUNC】	【LCd X】	Setting for the level of light display, 0-7 available. Use 【▶】 to reduce light level, 【▲】 to plus light level.
17	Press【FUNC】	【PIO X】	Choose to connect outer screen or not. “0” means no, “1” means yes.
18	Press【FUNC】	【-PASS-】	Confirm all the settings, Press【Zero】to exit, Press【FUNC】to reset again.
19	Press【Zero】	【XXXXXX】	Display weighing mode(Setting finished)

6.4 Indicator Normal Function Setting

Under the condition of normal turning-on:

Step	Operation	Screen Display	Functions
1	Press【on/off】	【XXXXXX】	After self-checking(into zero-point state)

2	Press【Zero】	【OFF X】	Hold【Zero】for 2 seconds: X means time of turning off. 0-60 available. 0 means no turning off time.
3	Press【FUNC】	【bp on】	Buzzer setting ;ON, OFF
4	Press【Func】	【bAn XY】	“X” means mode of background light. “0” off, “1” manual mode, “2” on automatically when in weighing mode, “3” for 10 seconds in weighing mode. “Y” into save mode setting; “0” off, “1” into save state.
5	Press【Func】	【HI XXXX】	“HI” means setting upmost weight; For changing value, press【  】and【  】to set.
6	Press【Func】	【LO XXX】	“LO”means setting lowest weigh; For changing value. Press【  】and【  】to set. Press【Func】to confirm.
7	Press【Func】	【PLO XX】	Machine turning off battery voltage. “10” means when battery is lower than 10% of full battery, machine will turn off.
8	Press【Func】	【S-C1】	Setting for time and date
9	Press【  】		Display last setting time and date
10	Press【Func】		Display last setting time and date
11	Press【Func】	【C=ABC】	Background light color setting. ABC(000~111)8 colors available. C=000 no background light, C=001 green; C=011 light blue; C=111 blue white; C=101 light green; C=110 purple...
12	Press【Func】	【XXXXXX】	Display weighing mode(Setting finished)

6.5 Counting operation of the Indicator

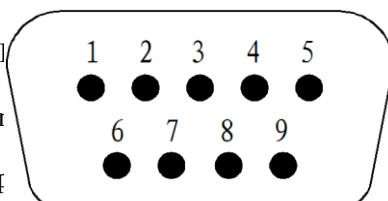
Under the condition of weighting mode, press【FUNC】to display “n 0”. Hold it for 2 seconds to reset counting condition. At this time, “n” will blink. Use the way we mentioned above to set what you desire. (Under the condition of counting state, press【FUNC】to cancel back to weighing state.)

VII Connector Assembly

7.1 XK3119WM-B Indicator

1) Communication connector

RS-232 adopts D-SUB-9



2: leg RXD

3: leg TXD 1

4: leg GND

Illustration 8

2) Communication connector adopts RS232C. All data is presented by ASCII. Every weight data is composed by 11 variables (=XXXXXXXXXX); = means starting from here; from 1-8, they mean the weight from high to low (like 12.34Kg, display 12.34); the ninth variable signifies stable or not: S=stable, X=not stable; the tenth variable is the unit (0=Kg, 1=Lb, 2=t, 3=g).

7.2 Indicator connecting to weighing sensor (with terminal or five-hole circle socket)

In order to make all functions of the Indicator under best condition, please be sure that the connection is the same as below. (See illustration 9 and 10)

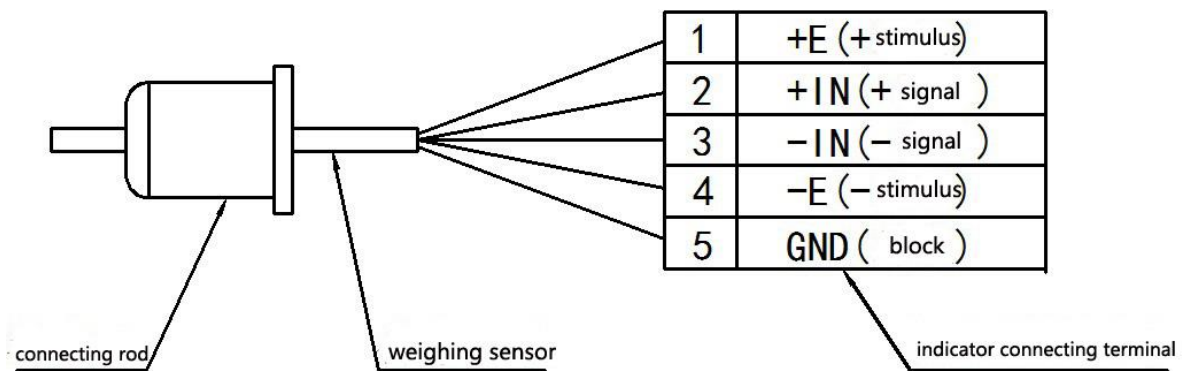


Illustration 9

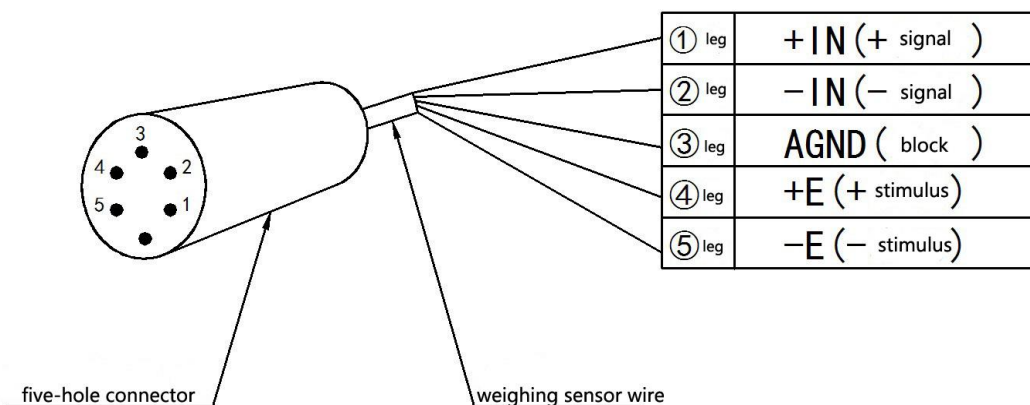


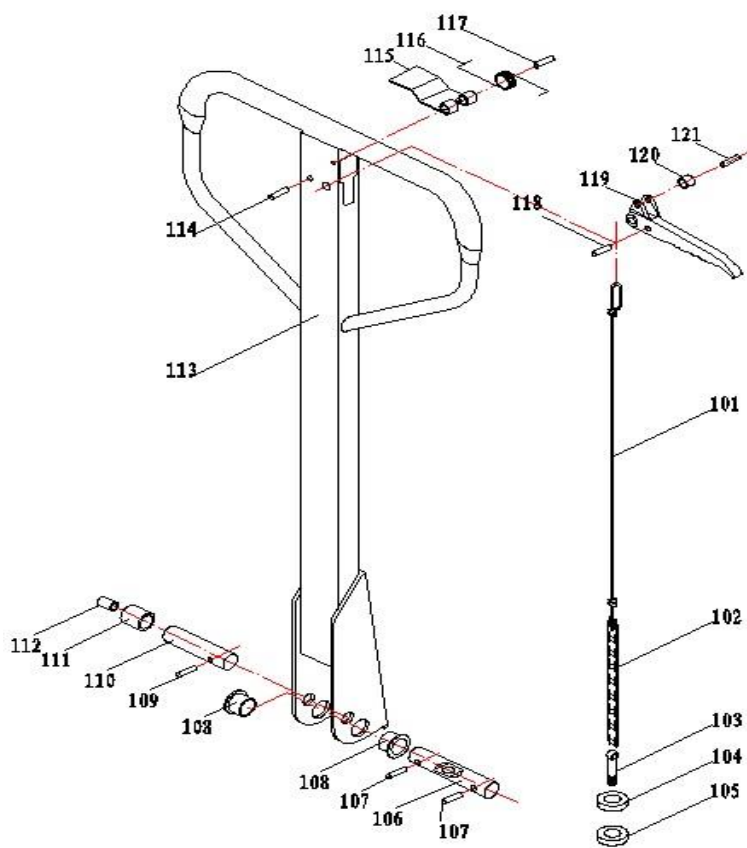
Illustration 10(connecting to five-hole connector)

Remark: If the weighing sensor adopts six-hole connector, please short circuit +E with +S, -E with -S

7.3 Error Message

- 1) Error1 the ADDED value is too small when calibrated.
- 2) Error2 the zero point is out of range when calibrated.
- 3) Error 3 LED does not have enough space to display when changing measurement unit.
- 4) ···H··· overload, value surpass rated capacity.

Handle Spare Parts (Illustration 11)



Numbe	Name	Quantity
101	Pulling rod	1
102	Chain	1
103	Drop bolt	1
104	Hexagonal nut	1
105	Metalloid nut	1
106	Positioning bearing	1
107	Elastic pin	2
108	Cover	2
109	Elastic pin	1
110	Roller bearing	1
111	Roller	1
112	Roller cover	1
113	Handle welding part	1
114	Elastic pin	1
115	Return shrapnel	1
116	Return spring	1
117	Elastic pin	1
118	Elastic pin	1
119	Control handle	1
120	Handle wheel	1
121	Elastic pin	1

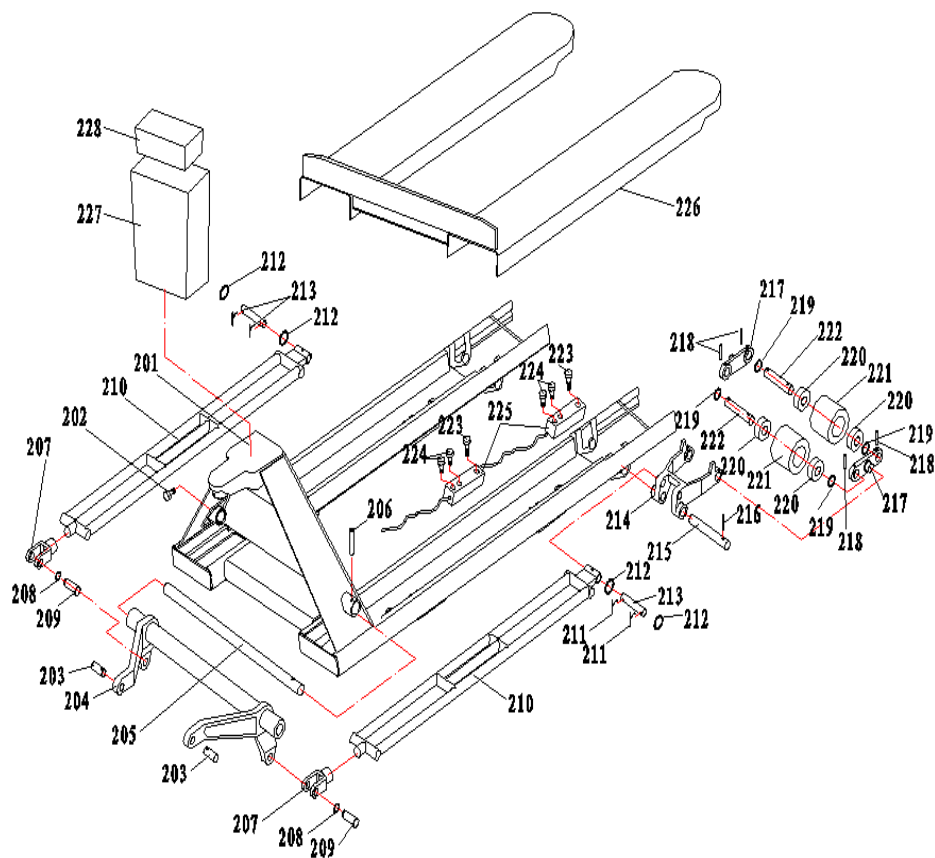
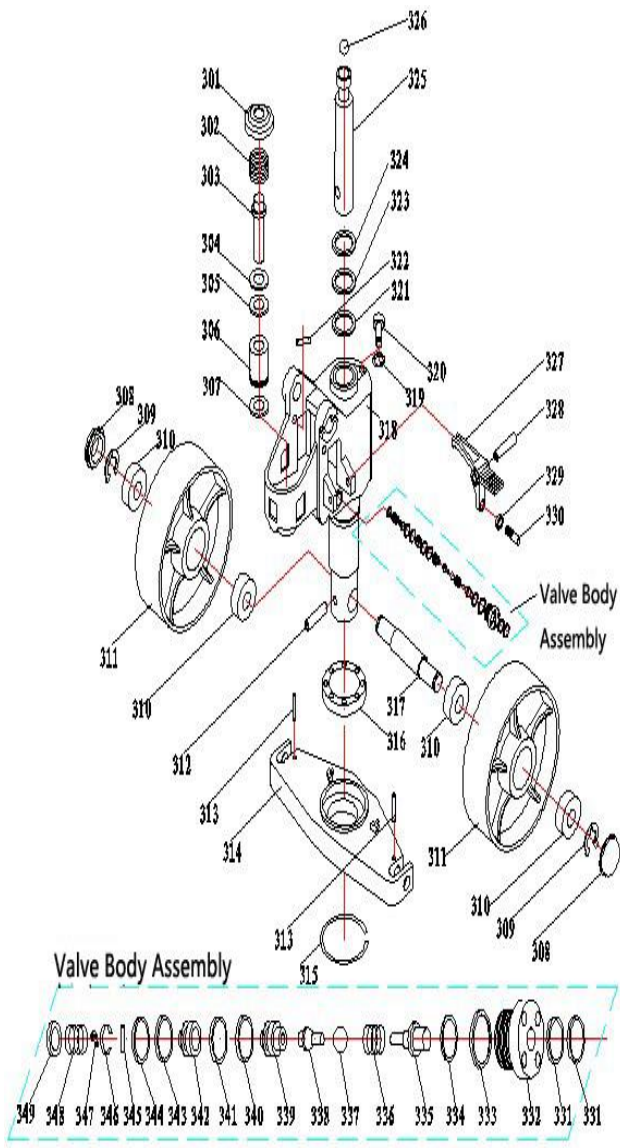


Illustration 12

Body Spare parts

Number	Name	Quantity	Number	Name	Quantity
201	Body frame	1	215	Positioning bearing	
202	Inner hexagonal screw	1	216	Elastic pin	
203	Connecting bearing	2	217	Double-wheel side board	
204	Lever frame	1	218	Elastic pin	
205	Lever bearing	1	219	Gasket	
206	Elastic pin	1	220	Bearing	
207	Fork ear	2	221	Front wheel	
208	Washer for bearing	2	222	Front wheel bearing	
209	Fork ear connector	2	223	Hexagonal screw	
210	Pushing rod welding	2	224	Inner hexagonal screw	
211	Open pin	4	225	Weighing sensor	
212	Gasket	4	226	Body truck cover	
213	Pushing rod connector	2	227	Control box	
214	Front wheel frame	2	228	Display Screen	

Pump Spare Parts

 Illustration 13				Numb	Name	Qua
				301	Spring gland	1
				302	Pump core spring	1
				303	PUMP CORE	1
				304	Anti-dust ring	1
				305	Sealing ring	1
				306	Small pump	1
				307	Copper sheet	1
				308	Anti dust cover	2
				309	Rand	2
				310	Bearing	4
				311	Rear wheel	2
				312	Elastic pin	1
				313	Elastic pin	2
				314	Bearing board	1
				315	Check ring	1
				316	Pulling ball bearing	1
				317	Rear wheel bearing	1
				318	Pump	1
				319	Grouped gasket	1
				320	Inner hexagonal screw	1
				321	Sealing ring	1
				322	Pump positioning bear	1
				323	O ring	1
				324	Anti-dust ring	1
				325	Piston rod	1
				326	Steel ball	1
				327	Pedal control arm	1
				328	Elastic pin	1
				329	Nut	1
				330	Fasten screw	1
Valve body assembly				Valve body assembly		
340	Cutting edge	1		331	O ring	2
341	O ring	1		332	Copper nut	1
342	High pressure	1		333	O ring	1
343	Cutting edge	1		334	O ring	1
344	O ring	1		335	Top rod	1
345	Elastic pin	2		336	Top rod spring	1
346	Spring sheet	1		337	Steel ball	1
347	Screw	1		338	High pressure	1
348	Valve core	1		339	Valve connector	1
349	Gland	1				

VIII Maintenance and Notice

CW Hand pallet truck with scale needs maintenance regularly.

8.1 Hydraulic Oil

Check the volume of oil every three months , about 0.3 liter.

Temperature	Hydraulic Oil
-20°C~+40°C	ISOUG32

8.2 Emitting air

In case air entering into pump, the pump needs to emit air sometimes. Pull control handle 119 to position Down and pull handle 113 back and forth for 4-5 times.

8.3 To guarantee indicator clarity and using life, the indicator shouldn't be placed directly under sunshine and should be set in the plain space.

8.4 The indicator can't be placed into the place where the dust pollution and vibration are serious.

8.5 Weighing sensor should connect with indicator reliably, and the system should be well connected into ground. The indicator must be protected from high electrical field and high magnetic field.

■ In order to protect the operator, indicator and relevant device, you should mount lightning rod in thunderstorm frequently happening area.

■ Weighing sensor and indicator are static sensitive device, you must adopt anti static measures.

8.6 It is strictly forbidden to clean the case of indicator with intensive solvents (for example: benzene and nitro oils)

8.7 Liquid and conducting particle should not be poured into the indicator, otherwise the electronic components will be damaged and electric shock is likely to happen.

8.8 You should cut off power supply of indicator and relevant device before you pull-in and out the connecting line of indicator and external device.

■ You must cut off power supply of indicator, before pulling out connecting line of load cell.

8.9 During operation, if trouble occurs, operator must pull off the power supply plug immediately, and user should return this indicator to our company for repair. Non-weighing manufacturer should not repair it, or by yourself, otherwise further destruction may happen.

8.10 The storage is not granted the free repair guarantee, because it is easily exhausted products.

■ In order to prolong using life, please charge the cell fully before using it. If you don't use the indicator for a long time, you must charge the cell every two month and for eight hours/each charging time.

■ Moving or installation must be carefully taken and must avoid strong vibration, impact and bump in order to protect the storage cell from being damaged.

8.11 Notices for Battery

1) Turing on the AC power, the indicator will charge the battery automatically. So if you don't use battery frequently, you should take battery out.

■ Note: **Red end is +, black end is -**. Wrong connection will destroy indicator.

■ Note: The built-in battery should be fully charged before it is used for the first time.

2) Only when you turn off the AC power and push start key, battery works. Displaying [L0u0L] means the insufficient of voltage, it needs charge.

3) When you use the battery first time, you should charge the battery for 12 hours in order to prevent low voltage resulted from the self leakage of the battery.

4) If you don't use battery for a long time, you should charge the battery for 10-12 hours for each 2 month to

prolong using life of battery.

5) The battery is easily exhausted products. And it is not granted free guarantee.

8.12 Malfunction Solving

Order	Trouble	Reason	Trouble Solving
1	Fork cannot be raised to Max. height	--Not enough hydraulic oil.	--Add oil.
2	Fork cannot be raised.	--No hydraulic oil; --Not pure oil; --Position of adjusting bolt (D104) is Too high and make relief valve open. --Air in hydraulic oil.	--Add oil; --Change oil; --Adjust bolt (104) (Refer to Item 3 and 4); --Exhaust air.
3	Fork cannot be lowered.	--Cargo offsets or overload and damaged big piston (328) or pump --Carrier stays at Raise Position for quite a long time and big piston gets exposed and rusted. --Adjusting bolt (104) is not at right position.	--Replace big . Piston (328) or oil pump (322). --Please lower the carrier to lowest position when it's not under operation, frequently lubricate piston. --Adjust (104)
4	Oil leakage	--Sealing aged or damaged. --Some parts broken.	--Replace; --Replace.
5	After fork being lifted, it comes down automatically	--Impure oil caused looseness of relief valve. --Some parts in hydraulic system broken or damaged. --Air in oil. --Sealing aged or damaged. --Adjusting bolt (104) is not at right --Adjusting bolt (104) is not at right	--Replace oil. --Check and replace damaged parts. --Exhaust air --Adjust bolt

Remark: Personnel with no special training should not try to repair the truck.

IX Guarantee

From invoice date, the product has a one-year free repair period. If any non-artificially caused problems about the product happen under correct using conditions within this period, the user is allowed to send the product with its guarantee card (of the correct number) back to our corporation for free repair. The indicator shouldn't be taken apart; otherwise free guarantee will be cancelled.

