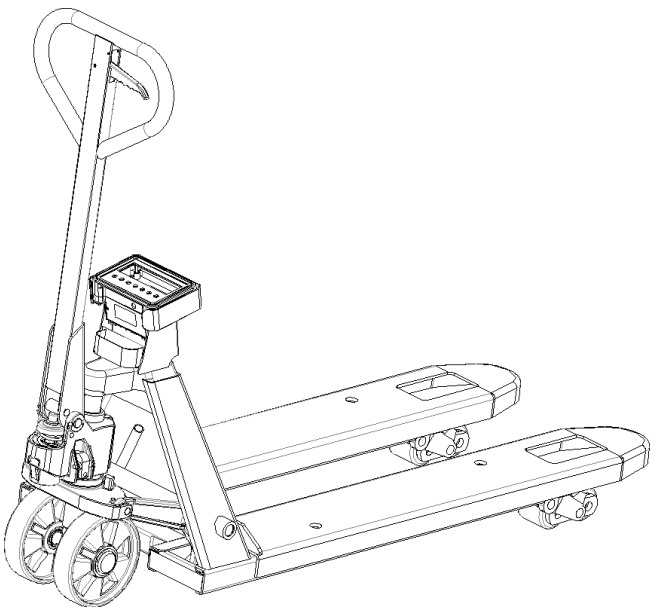
User Manual HPT20S



Note: Operator MUST read and understand these operating instructions and warning labels before using this Hand Pallet truck.

Thank you for using this pallet truck with scale. Your pallet truck with scale is made of high quality steel and was designed to give you a durable, reliable and easy to use product. For your safety and correct operation, please carefully read this instruction before using it.

NOTE: All of the information reported herein is based on data available at the moment of printing. We reserve the right to modify our own products at any moment without notice and incurring in any sanction. So, it is suggested to always verify possible updates.

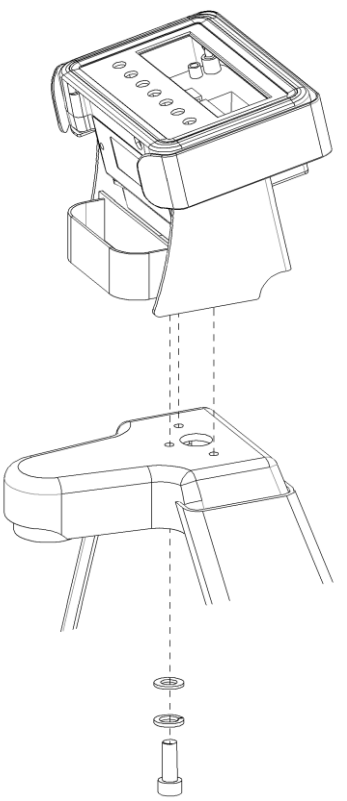
OPERATIONAL MANUAL

1. GENERAL SPECIFICATIONS

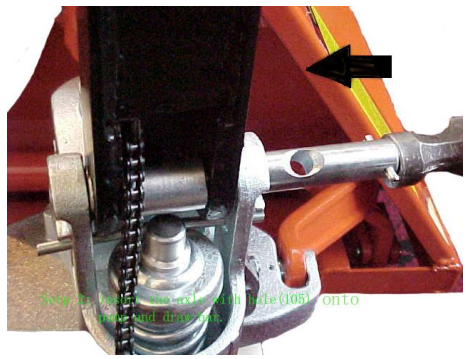
Capacity	2000kg/5000lbs	
Power Source	6V DC	
Environment	General purpose, dry	
Operating temperature	-10ºC — 40ºC (14ºF to 104ºF)	
Min/Max fork height	76mm/190mm	85mm/200mm
Features weighing accuracy	±1.0kg for loading 2,000kg	
Width over forks	570mm/690mm	555mm/690mm
Fork Length	1150mm/1220mm	

2. OPERATING PROCEDURES

2.1. Assemble the indicator



2.2. Assemble the tiller and pump unit



2.2.1. Insert the draw-bar onto the pump piston (303), then use a hammer to insert the axle with hole (G105) into the hydraulic pump and draw bar from the right to the left (see figure 1).

2.2.2. Put the control handle (G117) to the lower position, then pass the adjusting nut (G104), adjusting bolt (G103) and chain (G102) through the hole of the axle (G105) with your hand.

2.2.3. Press the draw-bar (G110) down, take away the spring which fixes the Spring Cap (301).

2.2.4. Put the control handle (G117) to then raise position, the raise the lever plate (319) with the pin and insert the adjusting bolt (G103) into the front slot of the lever plate (319). Note: keep the adjusting nut (G104) underneath the lever plate.

2.2.5. Use a hammer to tap another elastic pin (G106) into the axle with hole (G105). The draw-bar is now assembled to the pump.

3. Adjust the release device

On the tiller grip of the truck, you can find the finger tip control handle lever (G117) with three positions:

Lift Position - pull up the finger tip control

Neutral Position - place the finger tip control at center position

Lower Position- push down the finger tip control

The three positions of the finger tip control have been adjusted before delivery. If there are some changes due to unexpected reasons, make adjustment according to the following instructions:

3.1. Place the finger tip control (G117) in the **Neutral Position** and swing the tiller up and down. At this time, the forks should neither go up nor go down. If:

A) the forks go up, turn the nut (G104) clockwise until the forks stop lifting.

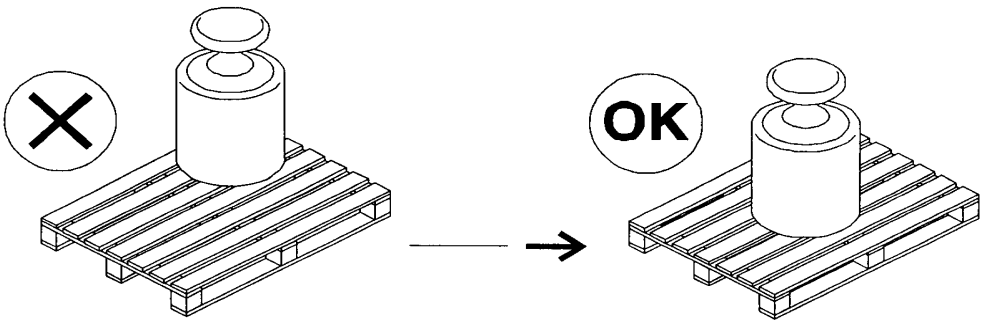
B)the forks go down, turn the nut (G104) counterclockwise until the forks stop lowering.

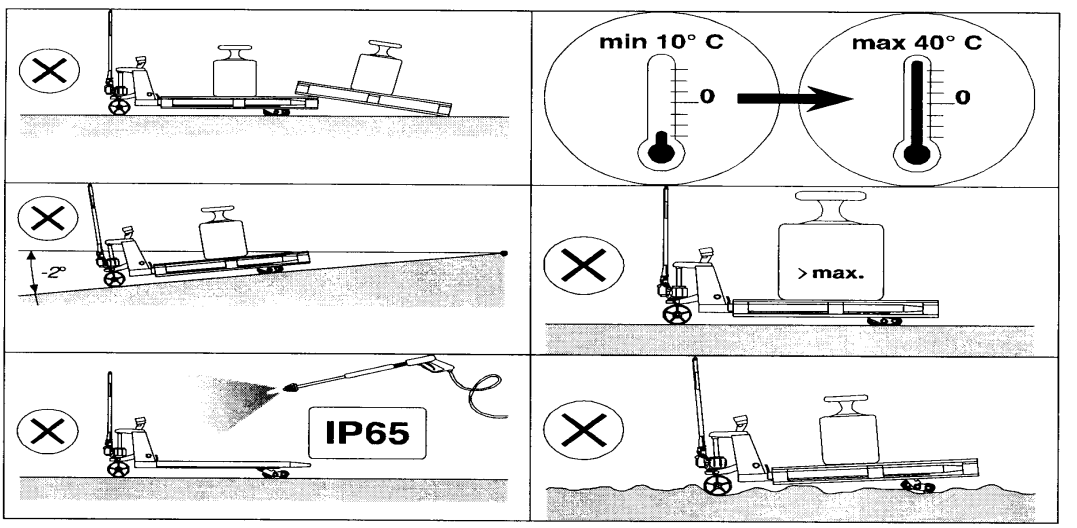
3.2 Pull up the finger tip control (G117) in the **Lift Position**, and swing the tiller up and down. At this time, the forks should lift steadily. If not, turn the nut (G104) counterclockwise until it starts lifting, then repeat step 3.1.

3.3 Push down the finger tip control (G117) in the **Lower Position**. If the forks can not go down. Turn the nut (G104) or screw (318) clockwise until the lifting control (G117) can lower the forks. Then follow step 3.1 to check the neutral position to make sure the nut (G104) and screw (318) are in place.

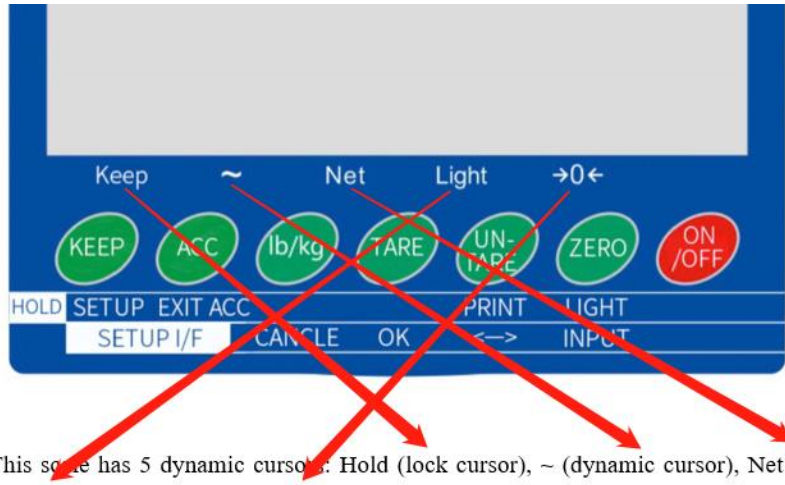
4. USE OF WEIGHING PALLET TRUCK

4.1 Accurate weighing





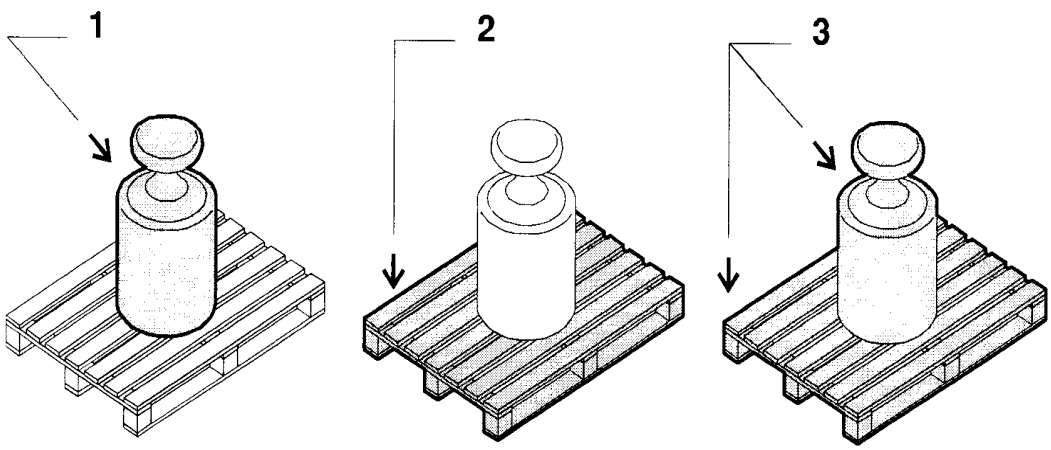
4.2 Touch panel indicator



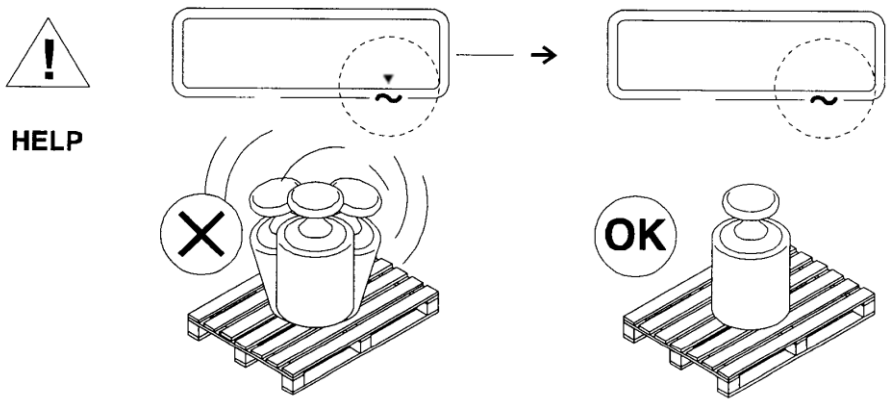
Note: This scale has 5 dynamic cursors: Hold (lock cursor), ~ (dynamic cursor), Net (N.W. cursor), Light (backlight cursor),-> 0 <-(zero cursor) and 7 buttons: "Keep" , "Acc", "lb / kg", "Tare", "Untare", "Zero", "On / Off".

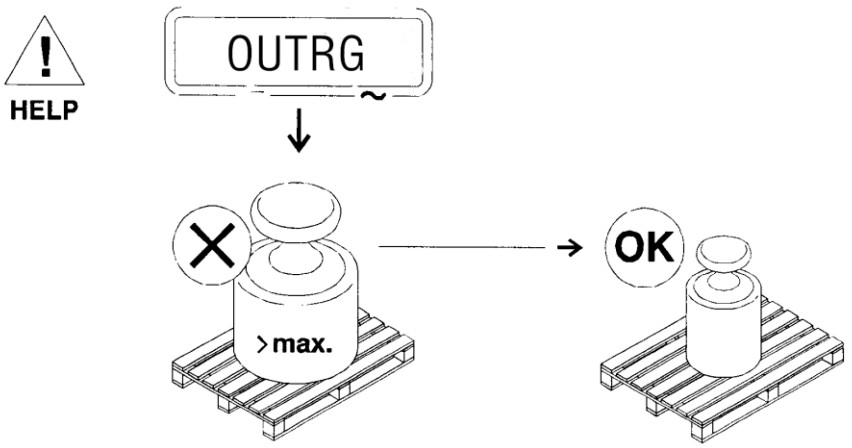
Press, long-press, or press 2 buttons at the same time to achieve different functions

4.3 1 (Net) + 2 (Tare) = 3 (Gross)

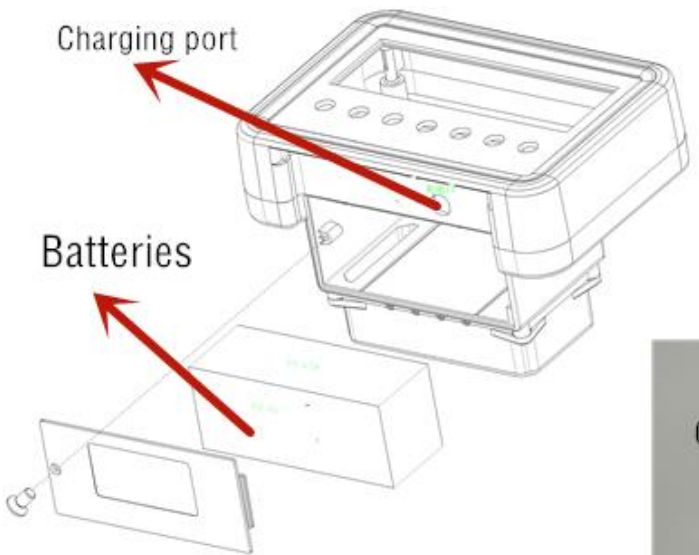


4.4 Error messages

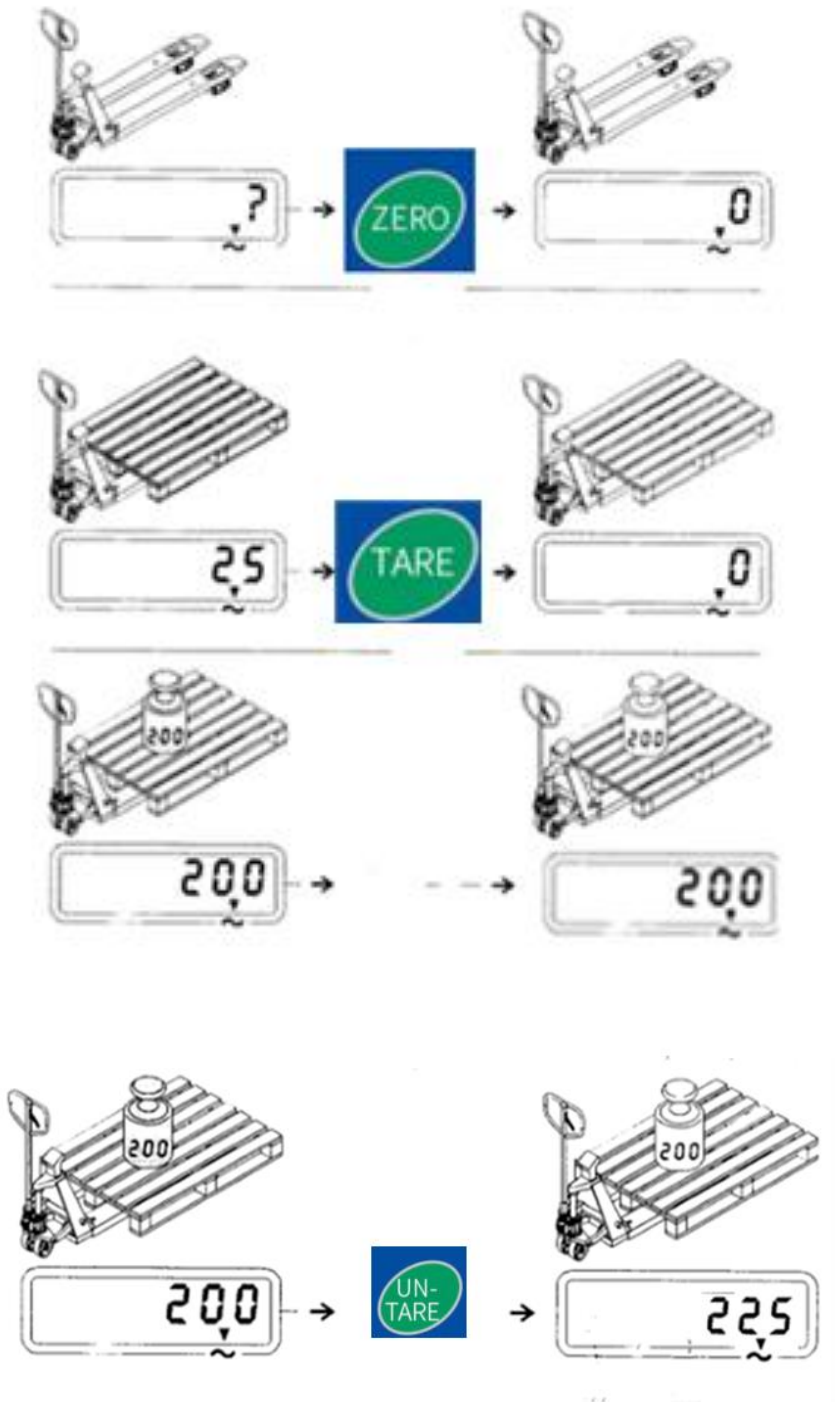

HELP
OK


HELP
OUTRG
>max.
OK

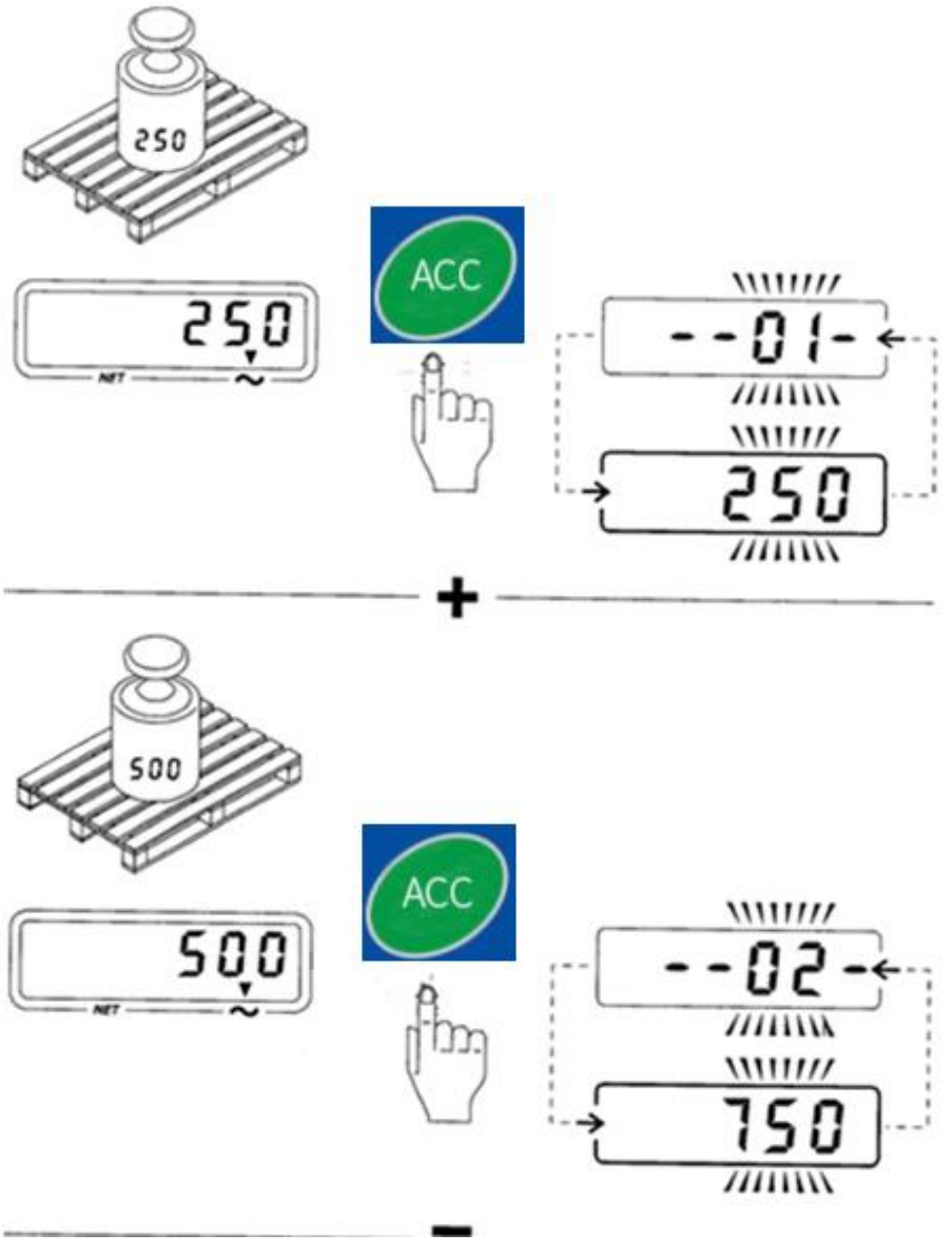
4.5 Low power display and charging



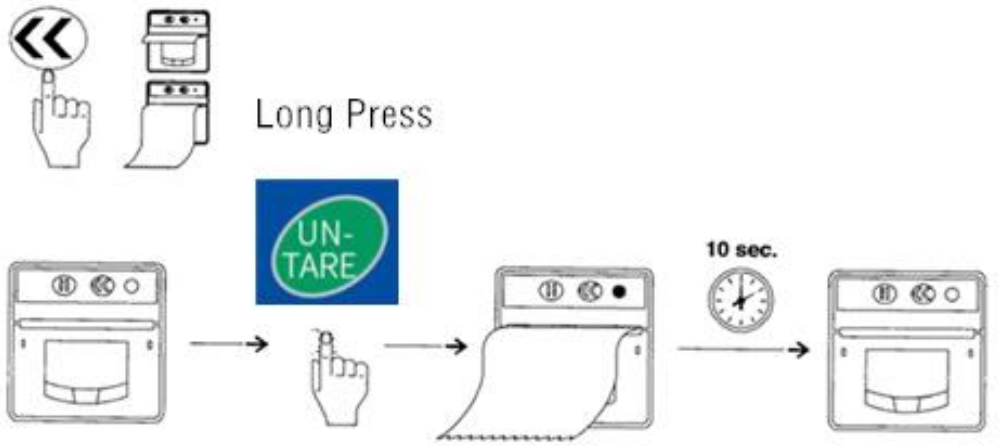
4.6 Zero and tare functions



4.7 Summation function

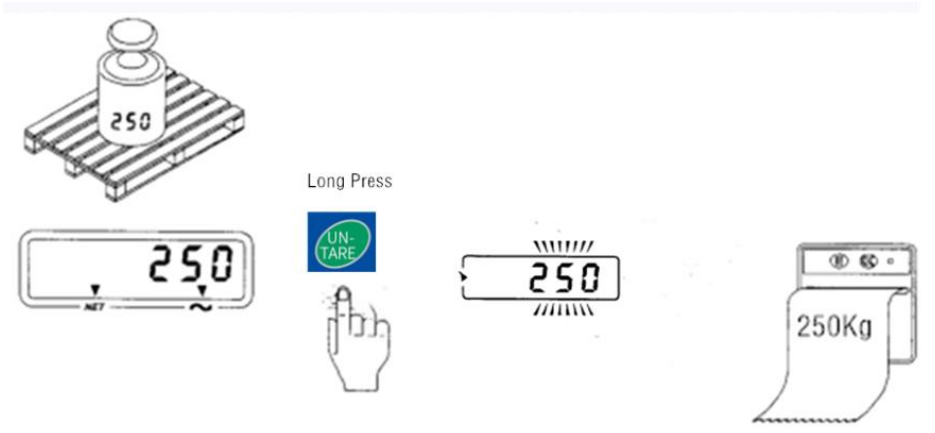


4.9 Printer (Option)

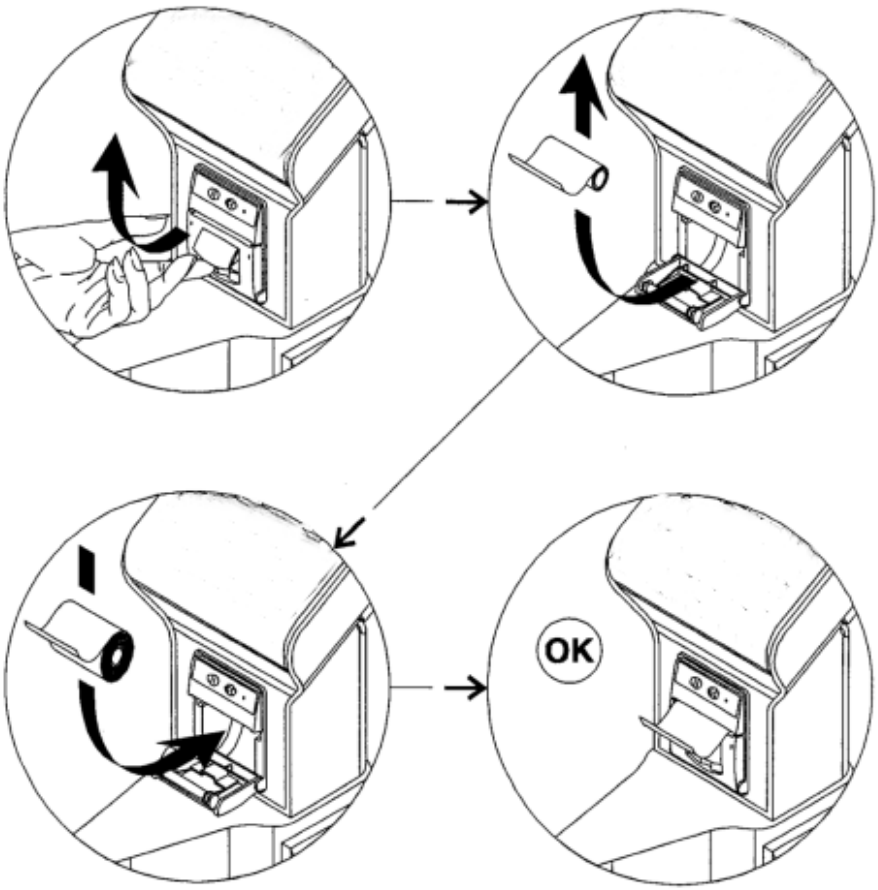


Printer	Thermal Printer	Print speed	Up to 65 mm/sec (Max)
Function	Front side paper feed, easy to install paper	Temperature range	-10~55℃
Paper	Thermal roll, roll diameter Maximum 50mm, width58mm	Dimensions	85x85x54mm
Resolution	8 dots/ mm, 384 dots/ line	Power supply	DC5V, DC5V-9V (optional)

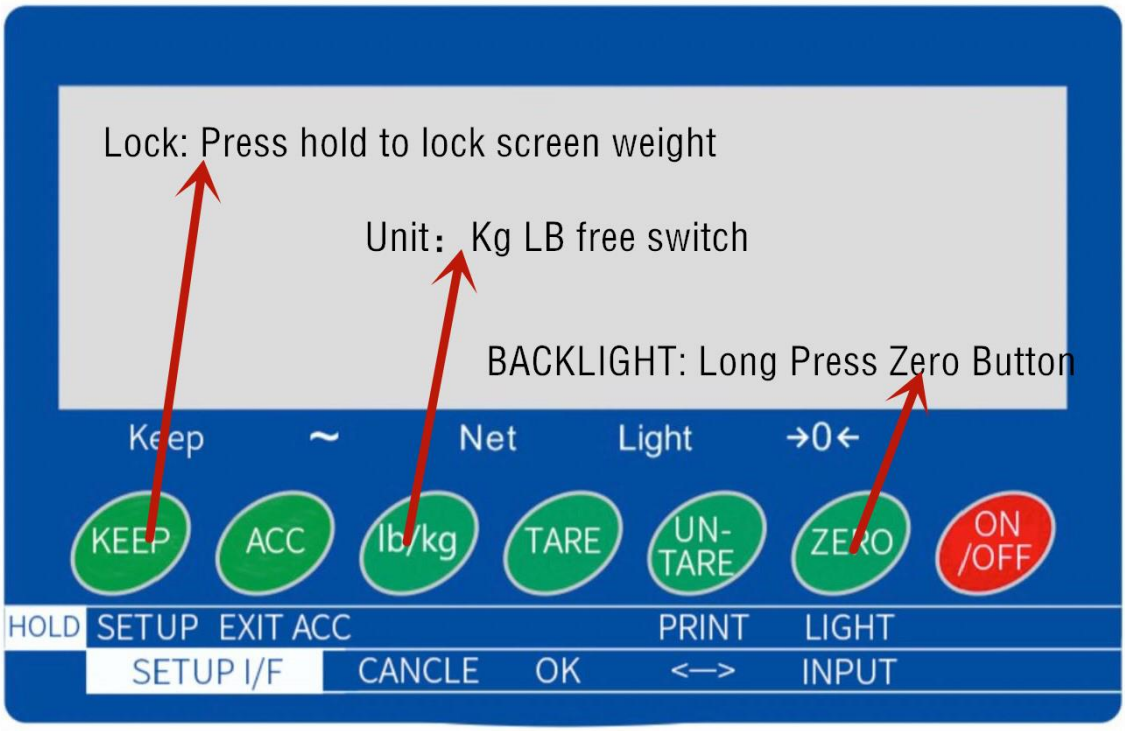
4.10 Printout (Option)



4.11 Paper change



5.0 Backlight, Screen lock and Unit switch



5. MAINTENANCE

5.1 Oil

Please check the oil level every six months. The oil can be hydraulic oil: ISO VG32, its viscosity should be 30cSt at 40° C, total volume is about 0.4lt.

5.2 To remove air from the pump

Air may come into the hydraulic oil during transportation or if the pump has been turned upside down. It can cause the forks not to elevate while pumping in the **raise** position. The air can been removed in the following way: put the control handle (117) to the **lower** position, then move the draw-bar up and down several times.

5.3 Daily check and maintenance

Daily check of the pallet truck with scale can limit wear as much as possible. Special attention should be paid to the wheels, the axles, as thread, rags, etc. may block the wheels. The forks should be unloaded and lowered in the lowest position when the job is over.

5.4 Lubrication

All bearings and shafts are provided with long-life grease at the factory. You only need add long-life grease at monthly intervals or after each time the lubrication points of the truck are cleaned thoroughly.

6. GUIDE ON SAFE OPERATION

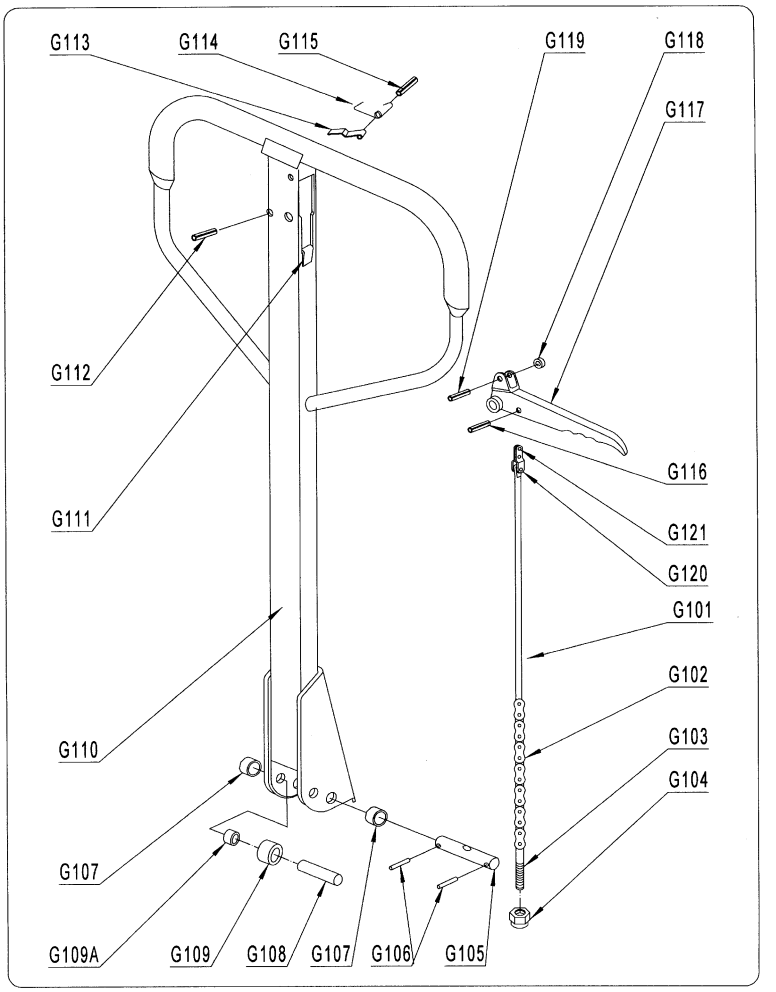
6.1 Operator should follow the instructions to operate the truck.
6.2 Do not operate the truck unless you are familiar with it or have been trained to do so.
6.3 Do not operate the truck until you have checked its condition. Give special attention to the wheels, the tiller, the finger lever, etc.
6.4 Do not use on a slopping ground.
6.5 Do not take any people on the pallet truck when moving.
6.6 The operator had better wear on gloves for labour protecting.
6.7 When lift or transport the goods, all the people should be at least 600mm away from the forks.
6.8 The goods shall be evenly distributed on two forks. Load on one fork is not allowed, and the position of goods gravity center should be between two forks.
6.9 Do not load over maximum capacity.
6.10 At others special condition or area without protection, the operator should be careful to operate the pallet truck.

7. TROUBLE SHOOTING

No	Trouble	Clause	Fixing Methods
1	The forks can not be up to the max. height.	**-**The hydraulic oil is not enough.	-Pour in the oil.
2	The forks can not be lifted up.	-Without hydraulic oil. -The oil has impurities. -The nut (104) is too high, keep the pumping valve open. -Air come into the hydraulic oil.	-Fill in the oil. -Change the oil. -Adjust the nut(104) or screw (318) (see item 3.4) -Banish the air. (see item 4.2)
3	The forks can not be lowered.	-The piston rod(328) or pump (322) is deformed resulting from partial loading slanting to one side or over-loading. -The fork was kept in the high position for long time with piston rod bared to arise in rusting and jamming of the rod. -The adjusting nut (104) or screw (318) is not in correct position.	-Replace the piston rod (328) or pump (322). -Keeping the fork in the lowest position if not using, and pay more attention to lubricate the rod. -Adjust the nut (104) or screw (318) (see item 3.3)
4	Leakage	-Sealing parts worn or damaged. -Some part cracked or worn into small.	- Replace with the new one. - Replace with the new one.
5	The forks go down without switching on the release valve.	-The impurities in the oil cause the release valve to be unable to close tight. -Some parts of hydraulic system is cracked or bored. -Air come into the oil. -Sealing parts worn or damaged. -The adjusting nut (104) or screw (318) is not in the correct position.	-Replace with new oil. -Inspect and replace the waste parts. -Banish the air. (See item 4.2) -Replace with the new one. -Adjusting the nut (104) or screw (318). (See item 3.2)
6	Abnormal work on scale	- The bolts (224) scrape the platform (223) - The platform scrapes the fork (218)	-Adjust the bolts (224) -Face lifting the platform.
7	Nothing is displayed by the terminal.	- The battery power is too lower.	-Replace with new one.
8	Appear error codes on scale	See chapter	

NOTE: DO NOT ATTEMPT TO REPAIR THE PALLET TRUCK UNLESS YOU ARE TRAINED AND AUTHORIZED TO DO SO.

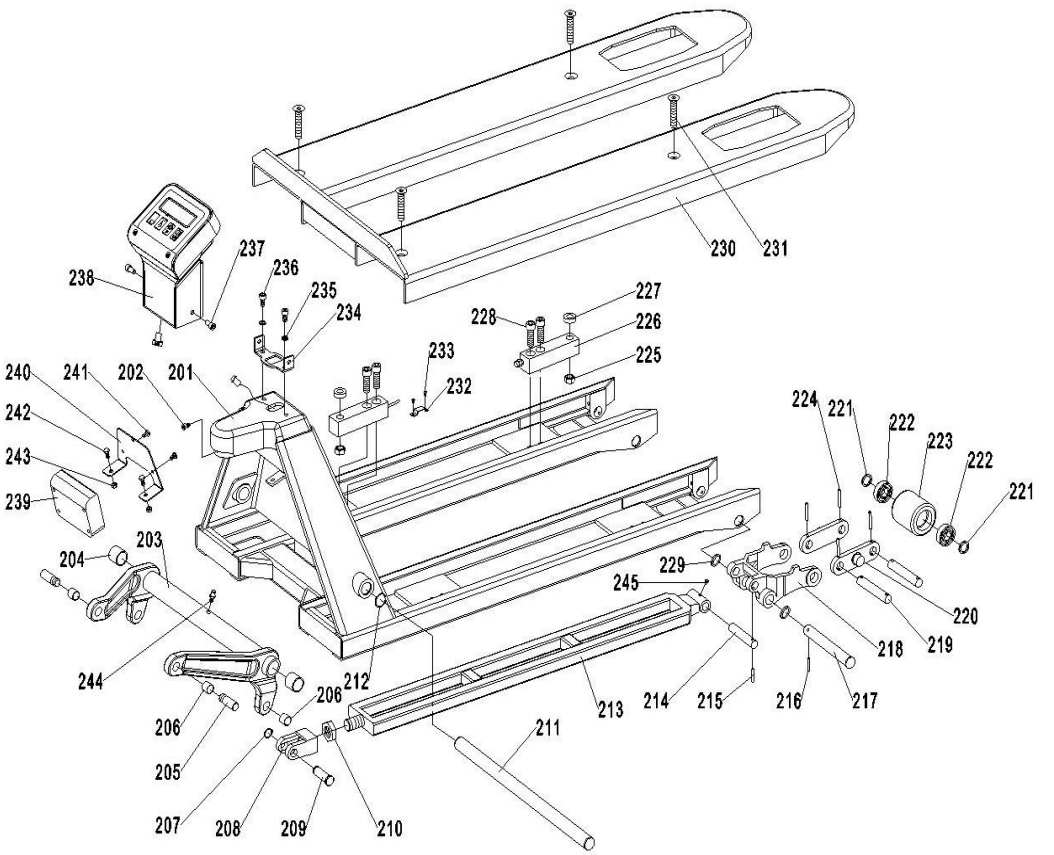
Tiller components



Tiller components

No.	Description	Qty.	No.	Description	Qty.
G101	Release Rod	1	G111	Stop Rubber	1
G102	Chain	1	G112	Elastic Pin	1
G103	Adjusting Bolt	1	G113	Blade Spring	1
G104	Adjusting Nut	1	G114	Spring	1
G105	Axle with Hole	1	G115	Elastic Pin	1
G106	Elastic Pin	2	G116	Elastic Pin	1
G107	Bushing	2	G117	Finger tip control	1
G108	Roller Pin	1	G118	Roller	1
G109	Pressure Roller	1	G119	Elastic Pin	1
G109A	Bushing	1	G120	Pin	1
G110	Tiller bar	1	G121	Linking plate	1

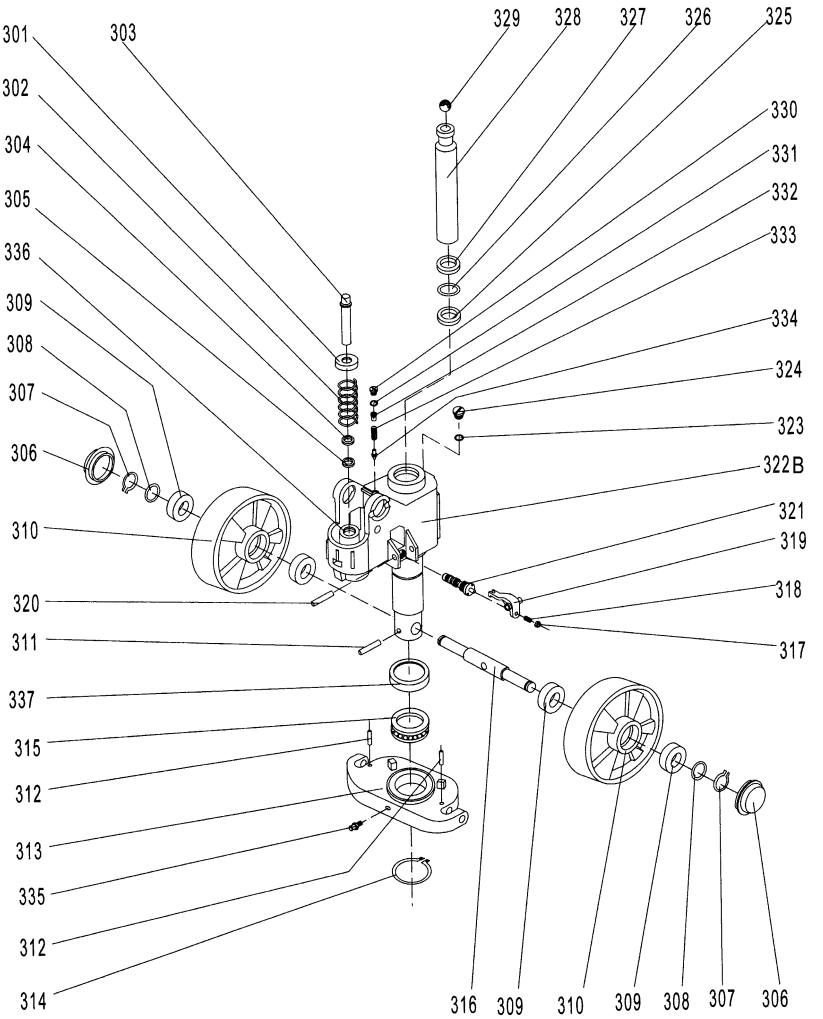
Chassis components



Chassis components

No.	Description	Qty.	No.	Description	Qty.
201	Chassis	1	224	Elastic pin	8
202	Bolt	1	225	Nut	4
203	Crank	1	226	Sensor	4
204	Bushing	2	227	Washer	4
205	Hinge pin	2	228	Bolt	8
206	Bushing	4	229	Washer	4
207	Circlip	2	230	Cap plate	1
208	Joint	2	231	Screw	4
209	Hinge pin	2	232	Cable clamp	2
210	Nut	2	233	Screw	4
211	Long axle	1	234	Indicator support mounting bracket	1
212	Circlip	2	235	Spring washer	2
213	Push rod	2	236	Screw	2
214	Push rod axle	2	237	Screw	2
215	Elastic pin	2	238	Display unit	1
216	Elastic pin	2	239	Junction box	1
217	Hinge pin	2	240	Mounting bracket	4
218	Frame of roller	2	241	Screw	2
219	Roller axle	4	242	Screw	2
220	Linking plate	4	243	Nut	2
221	Washer	8	244	Grease cup	1
222	Bearing	8	245	Grease cup	1
223	Load roller	4			

Hydraulic Pump Unit



Hydraulic Pump Unit

No.	Description	Quantity	No.	Description	Quantity
301	Spring Cap	1	320	Elastic pin	1
302	Spring	1	321	Valve cartridge	1
303	Pump piston	1	322B	Oil pump body	1
304	Dust ring	1	323	Seal washer	1
305	Y seal	1	324	Screw plug	1
306	Dust cover	2	325	Y seal	1
307	Lock ring	2	326	O ring	1
308	Washer	2	327	Dust ring	1
309	Bearing	4	328	Piston rod	1
310B	Steering wheel	2	329	Steel ball	1
311	Elastic pin	1	330	Screw plug	1
312	Elastic pin	2	331	O ring	1
313	Thrust plate	1	332	Screw	1
314	Circlip	1	333	Spring	1
315	Bearing	1	334	Safety valve core	1
316	Axle	1	335	Grease cup	1
317	Nut	1	336	Cylinder	1
318	Screw	1	337	Bearing cover	1
319	Lever plate	1			