

# Instruction Manual

## Pallet Truck with Scale



**Note: Owner/Operator must read and understand this instruction manual before using the pallet truck with scale.**

Thank you for using this hand pallet truck with scale. For your safety and correct operation of the scale, please read these instructions carefully before using it.

**NOTE:** (1) All of the information reported herein is based on data available at the moment of printing. The factory reserves the right to modify its own products at any moment without notice and incurring any sanction. So it is suggested to always verify possible updates.

(2) Prior to use this hand pallet truck with scale, the battery of scale must be charged enough.

## 1. GENERAL SPECIFICATIONS

Model	Capacity	Graduation	Weighing Accuracy	Forksize		
				Length	Outerforkwidth	ForkWidth
WH-25/30ES	2500/ 3000kg	0.5kg	±0.05%	1150mm	540mm	160mm
WH-25/30ES	2500/ 3000kg	0.5kg	±0.05%	1220mm	685mm	160mm

Materials and specifications are subject to change without notice.

## 2. TO ATTACH HANDLE TO PUMP UNIT

2.1 Remove the handle component (H100), insert it into the pump shell (P06).

2.2 Remove the axle from plastic bag (P07)

2.3 Insert the axle (P07) at one end of the pump shell (P06), then pump shell (P06) and handle components (H100) connection. Please note axle (P07) the position of the hole, Let the steel wire and nut on the chain (H09) through the axle (P07) hole (See the hydraulic system diagram and the handle component diagram).

2.4 Spring pin (P08) fixed the axle (P07).

2.5 Handle (H01) press the pump plunger (P21), and remove the pin (P09).

2.6 Raise the crank link (P48) and put the pin on rod and chain (H09) into the groove of crank link (P48).

## 3. TO ADJUST RELEASE DEVICE

On the handle of the pallet truck, you will find the control lever (H01) which can be set in three positions (See Fig. 1): LOWER=to lower the forks; NEUTRAL=to move the load; ASCENT=to raise the forks. After assembling the handle, you can adjust the three positions.

3.1 First tighten the setting screw (P50) on the crank link (P48) until the LOWER position function works.

3.2 If the forks elevate while pumping in the NEUTRAL position, turn the setting screw (P50) clockwise until pumping the handle does not raise the forks and the NEUTRAL position functions correctly.

3.3 If the forks descend while pumping in the NEUTRAL position, turn the setting screw (P50) counter-clockwise until the forks do not lower.

3.4 If the forks do not descend when the control lever (H01) is in the LOWER position, turn the setting screw (P50) clockwise until raising the control lever (H01) lowers the forks. Then check the NEUTRAL position as per item 4.2 and 4.3.

3.5 If the forks do not lift while pumping in the ASCENT position, turn the setting screw (P50) counter-clockwise until the forks elevate while pumping in the ASCENT position. Then check the NEUTRAL and LOWER position as per item 4.2, 4.3 and 4.4.

## 4. MAINTENANCE

### 4.1 OIL

Please check the oil level every six months. Total oil amount is about 260 ml, add injection oil 50-100 ml, this must be with the forks in the lowered position.

Add or change the hydraulic oil according to the table below.

Temperature	Oil
-20 °C ~ +40 °C	L-HV46 Hydraulic oil

#### 4.2 HOW TO EXPEL AIR FROM THE PUMP UNIT

Air may enter the unit when the seals are replaced. Lift the control lever (H01) to the LOWER position, then move the handle up and down for several times.

#### 4.3 DAILY CHECK AND MAINTENANCE

Daily check of the pallet truck can limit wear and tear of the unit. Pay special attention to the wheels (P34, AF06), the axles (AF08, AF10, AF15), the handle (H01), the forks (AF01) and lift and lower control.

#### 4.4 LUBRICATION

Use motor oil or grease to lubricate all moveable parts.

### 5. GUIDETO SAFEOPERATION

For safe operation of the truck, please read all warning signs and instructions here and on the truck before using this truck.

- 5.1 Do not operate the pallet truck unless you are familiar with it and have been trained or authorised to do so.
- 5.2 Do not operate the truck unless you have checked its condition. Give special attention to the wheels, the handle assembly, the forks, lift and the lower control.
- 5.3 Do not use the truck on sloping ground.
- 5.4 Never place any part of your body in the lifting mechanism or under the forks or load. Do not carry passengers.
- 5.5 The operator should wear gloves and safety shoes for protection.
- 5.6 Do not handle unstable or loosely stacked loads.
- 5.7 Do not overload the truck.
- 5.8 Do not subject to unbalanced load, either side to side or along the length of the frame (refer to Fig. 2/B).
- 5.9 The capacity of the truck assumes an evenly distributed load with the centre of the load being at the halfway point of the length of the forks (refer to Fig. 2)
- 5.10 Make sure that length of the forks matches the length of the pallet.
- 5.11 Lower the forks to lowest height when the truck is not being used.
- 5.12 At other specific conditions or places, the operator should operate the pallet truck carefully.

### 6. TROUBLESHOOTING

NO	TROUBLE	CAUSE	ACTION
1	The forks do not lift to maximum height.	-Not enough hydraulic oil.	-Add more oil.
2	The forks do not lift up.	-Not enough hydraulic oil. -The oil has impurities. -Discharge valve is out of adjustment. -Air in the hydraulic oil.	-Pour in more filtered oil. -Change the oil. -Adjust the setting screw (P50). -Expel the air.
3	The forks do not descend.	-The rod (P101) and the pump cover (P02) are deformed resulting from a seriously unbalanced load. -A part has been broken or been deformed resulting from unbalanced load. -The setting screw (P50) is not in the correct position.	-Replace the rod (P02) or pump cover (P101).  -Repair or replace component.  -Adjust the setting screw (P50).

4	Leaks	-Seals worn out or damaged.  -Some parts may be cracked or worn out.	-Replace seals with new ones. -Check and replace with new ones.
5	The forks descend without being lowered.	-Impurities in the oil cause the discharge valve (B) to fail to close. -Air in the oil. -Seals worn or damaged. -Discharge valve (B) is out of adjustment.	-Replace with filtered oil.  -Expel the air. -Replace with new ones. -Adjust the setting screw (P50H).

## 7. WEIGHING OPERATION

- 7.1 Put the control lever in the LOWER position and lower the truck to lowest position.
- 7.2 Press the ① key to turn the system on. After the start-up sequence the indicator will display the weight.
- 7.3 Weighing method for gross weight:  
Press the ZERO key to set the gross weight to 0. Put the forks under the pallet and check that the load is properly balanced. Put the control lever in the ASCENT position, pump the handle to make the forks rise until the pallet has left the ground. When the indicator is stable, the gross weight of the goods (total weight of the pallet and the goods) is shown.
- 7.4 Weighing method for net weight:  
To display the weight of the goods without the weight of the pallet (or other container):
- 7.4.1 Weigh single standard pallet, for example: weight of pallet: 40kg.
- 7.4.2 Press the ZERO key, the indicator will display "0kg".
- 7.4.3 Remove the pallet from the forks, the indicator will display "-40kg".
- 7.4.4 Weigh the goods on the pallet as shown in 7.3, when the indicator is stable, the net weight of the goods is shown.
- 7.5 Switch between kg and lb.  
When the weight is shown in kg's, Press on the ZERO key will soon be kg to switch to the pound. Press on the ZERO key again and the unit shown will switch back to kg.
- 7.6 Turn off the Indicator  
Press on the ON / OFF key until the indicator displays "OFF ". Releasing the key will turn off the indicator.

## 8. BATTERY POWER DATA AND REPLACEMENT

- 8.1 How to change batteries:
- 8.1.1 Loosen the screws on the battery cover and remove the cover.
- 8.1.2 open the screw on battery and pull out battery ,out the socket.
- 8.1.3 put the new battery and insert the socket.
- 8.1.4 Screw the battery cover plate back into position.

Fig.1

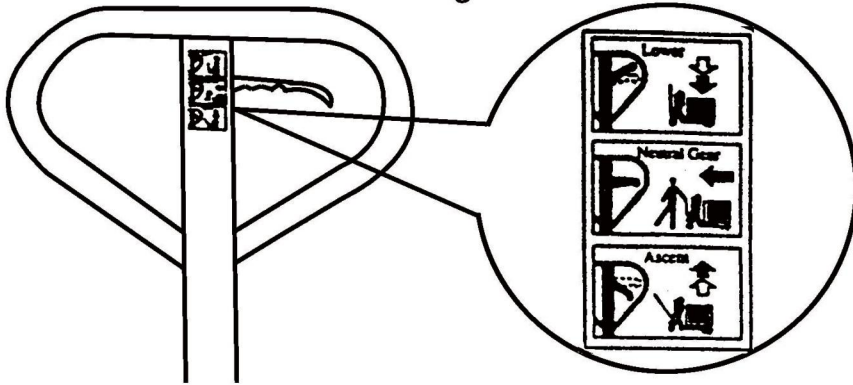
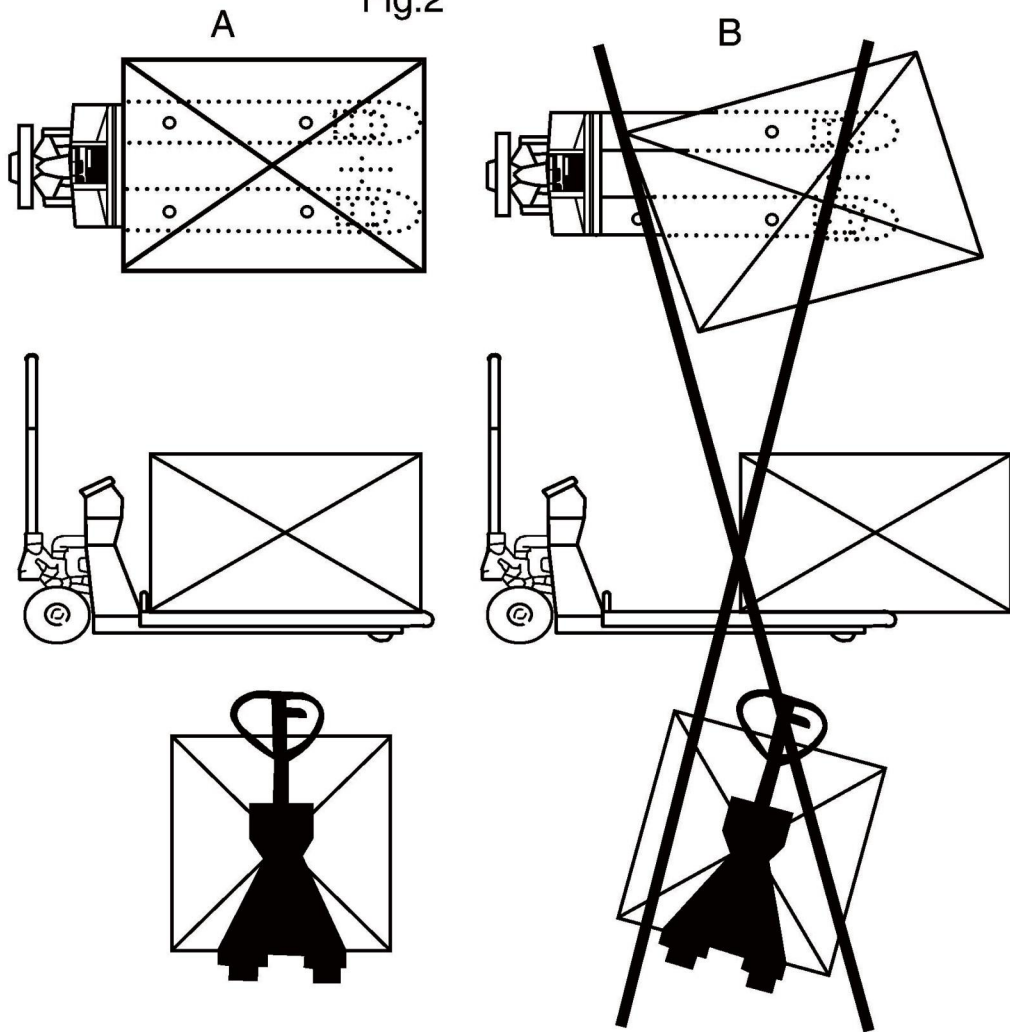
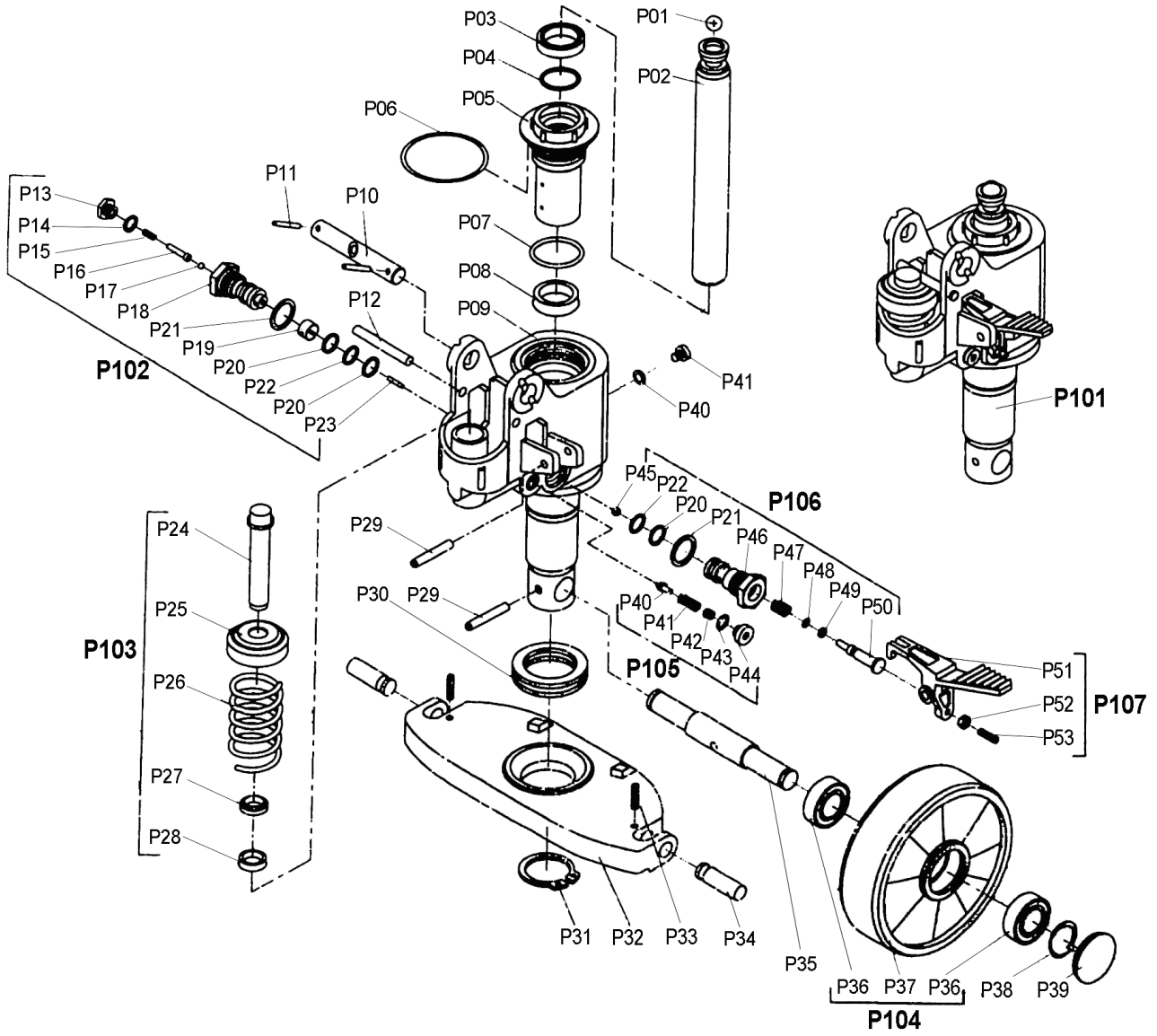


Fig.2



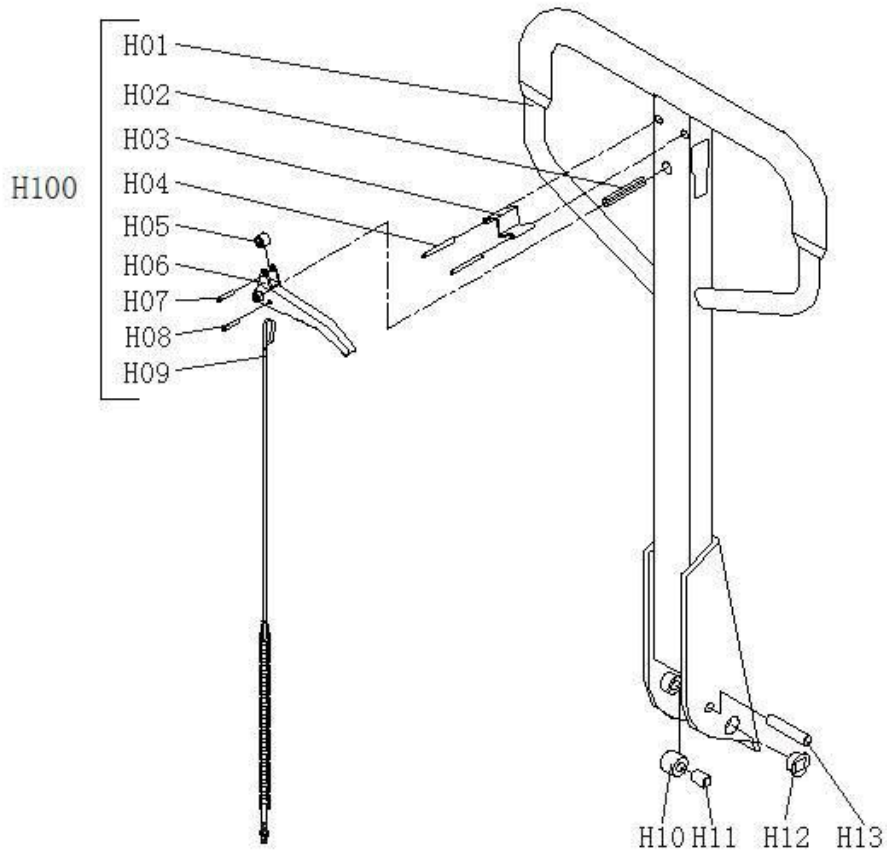
# PARTS DRAWING OF PUMP ASSEMBLY



## PARTS LIST OF PUMP ASSEMBLY

Item No.	Part No.	Designation	QTY	
P01	20010101	Steel ball	1	
P02	20010102	Piston rod	1	
P03	20010103	Dust ring	1	
P04	20010104	O-ring	1	
P05	20010105	Cylinder	1	
P06	20010106	Seal washer	1	
P07	20010157	O-ring	1	
P08	20010107	Seal ring	1	
P09	20010108	Pump body	1	
P10	20010109	Axis pin	1	
P11	20010110	Elastic pin	2	
P12	20010111	Pin	1	
P24	20010118	Pump rod	1	
P25	20010119	Spring cover	1	
P26	20010120	Spring	1	
P27	20010121	Dust ring	1	
P28	20010122	Seal ring	1	
P29	20010124	Elastic pin	2	
P30	20010126	Bearing	1	
P31	20010127	Retaining ring	1	
P32	20010128	Rhombus plate	1	
P33	20010129	Elastic pin	2	
P34	20010130	Movable pin	2	
P35	20010131	Tralling axle	1	
P36	20010132	Bearing	4	
P37	20010133	Steering wheel	2	
P38	20010134	Retaining ring	2	
P39	20010135	Dust cover	2	
P51	20010146	Crank link	1	
P52	20010147	Nutsert	1	
P53	20010148	Adujusting screw	1	
P101	20010149	Oil cylinder assy.	1	
P102	P13~23	20010150	Pressure valve assy.	1
P103	P24~28	20010151	Pump piston assy.	1
P104	P36~37	20010152	Steering wheel assy (With bearing)	1
P105	P40~44	20010153	Overflow valve assy,	2
P106	P20~22, P46~50	20010154	Bleed-off valve assy.	1
P107	P51~53	20010155	Pedal assy.	1
P108	P3/4/7/8/27/28	20010156	Seal kits	1

## PARTS DRAWING OF HANDLE

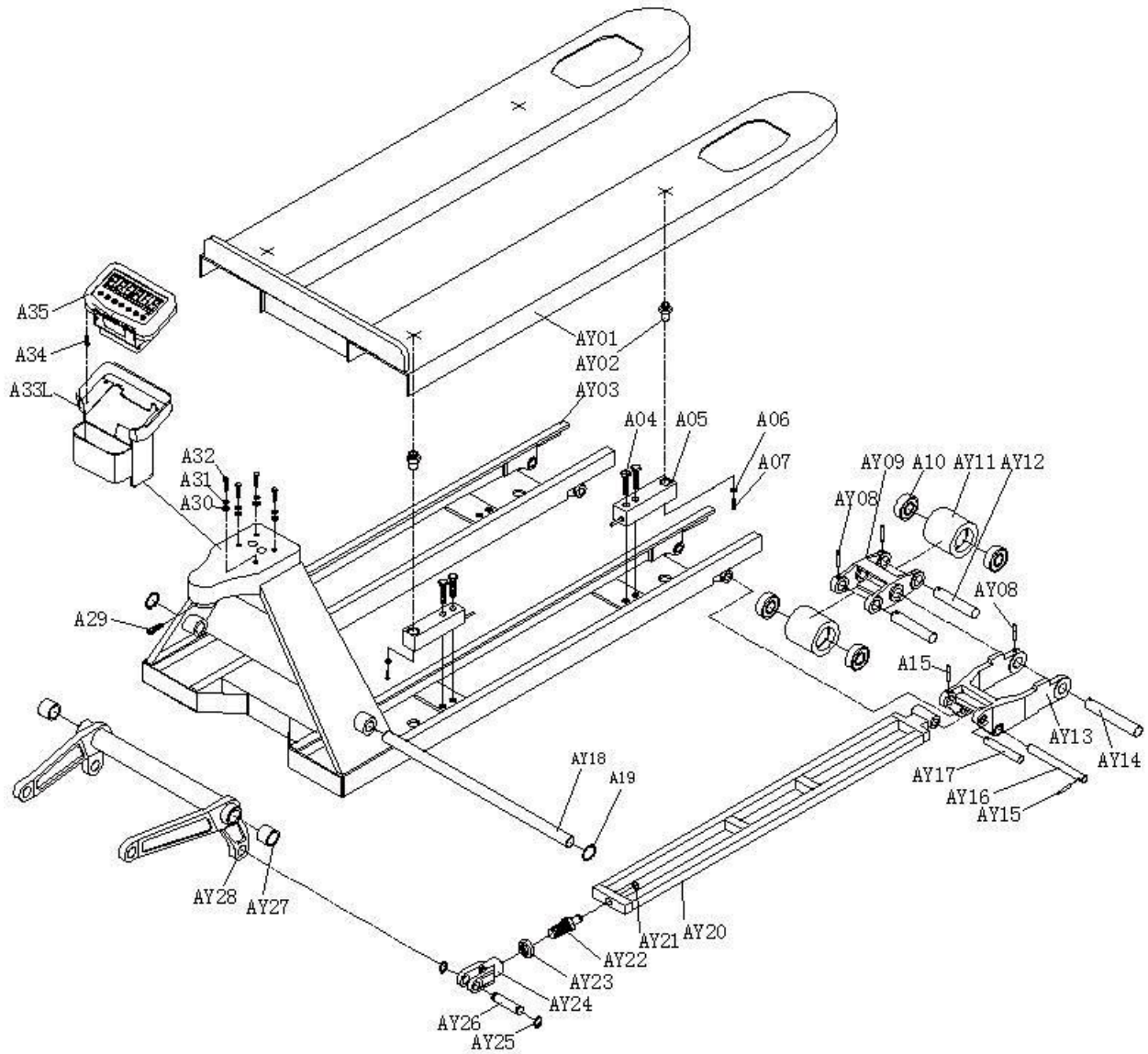


## PARTS LIST OF HANDLE

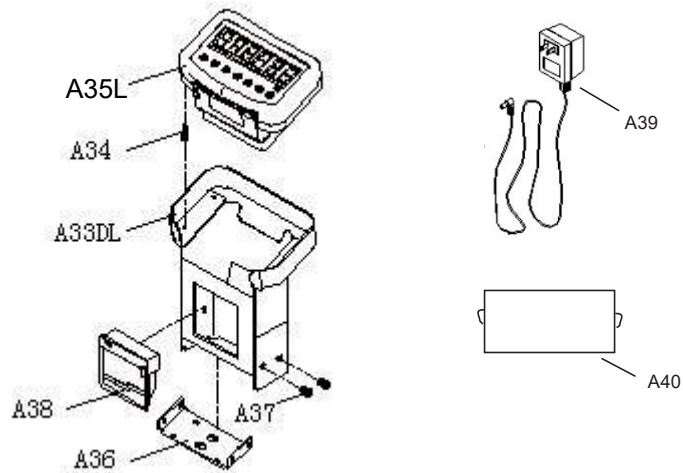
Item No.	Part No.	Designation	QTY
H01	20010201	Handle body	1
H02	20010202	Spring pin	1
H03	20010203	Blade Spring	1
H04	20010204	Spring pin	2
H05	20010205	Roller	1
H06	20010206	Control Handle	1
H07	20010207	Spring pin	1
H08	20010208	Spring pin	1
H09	20010209	Release Rod and chain assy.	1
H10	20010210	Pressure Roller	1
H11	20010211	Roller Axle	1
H12	20010212	Bushing	1
H13	20010213	Handle axle	1
H100 (H01~09)	20010214	Handle assy.	1



## PARTS DRAWING OF FRAME



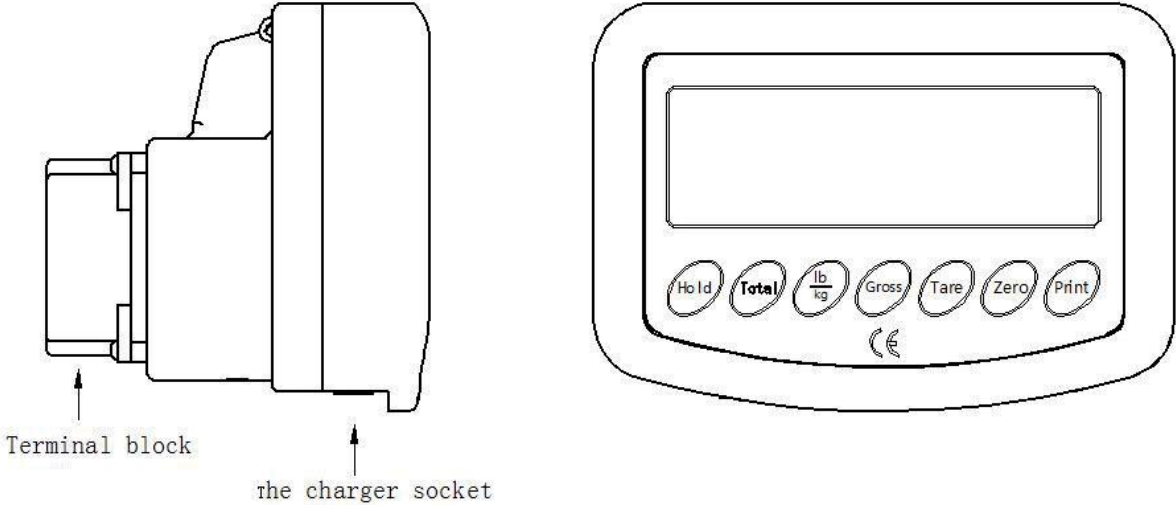
## Meter printer configuration



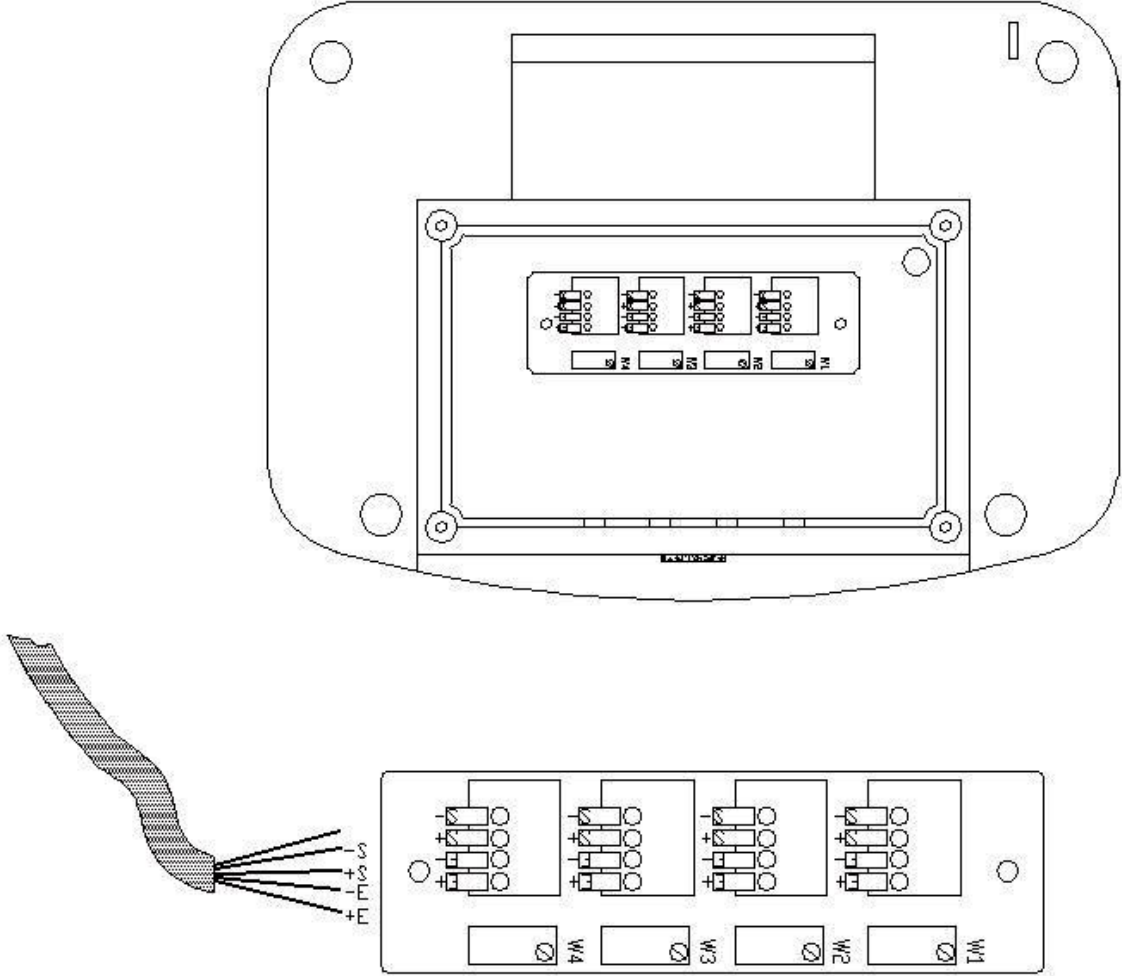
## PARTS LIST OF FRAME

Item No.	Part No.	Designation	QTY
AY01	20010301	Weighing plate	1
AY02	20010302	Positioning screw	4
AY03	20010303	Frame	1
A04	20010304	Screw	8
A05	20010305	The weighing sensor	4
A06	20010306	Spring washer	4
A07	20010307	Screw	4
AY08	20010308	Spring pin	6
AY09	20010309	The movable wheel frame	2
A10	20010310	Bearing	8
AY11	20010311	The wheel	4
AY12	20010312	Wheel arle	4
AY13	20010313	The swing wheel frame	2
AY14	20010314	Shaft	2
AY15	20010315	Spring pin	4
AY16	20010316	Shaft	2
AY17	20010317	Pin shaft	2
AY18	20010318	The major axis	1
A19	20010319	Ring	2
AY20	20010320	Pull rod	2
AY21	20010321	The wire ring	2
AY22	20010322	Screw shaft	2
AY23	20010323	Nut	2
AY24	20010324	Fork joint	2
AY25	20010325	Ring	4
AY26	20010326	Joint pin	2
AY27	20010327	Bush	2
AY28	20010328	Connecting rod	1
A29	20010329	Screw	1
A30	20010330	Washer	4
A31	20010331	Spring washer	4
A32	20010332	Screw	4
A33L	20010333	Instrument box	1
A34	20010334	Screw	4
A35	20010335	Weight meter	1
A36	20010336	Installed board	1
A37	20010337	Screw	4
A38	20010338	Printer	1
A39	20010339	Charger	1
A40	20010340	Battery	1
A33DL	20010341	Instrument box with printer	1
A35L	20010342	Weight meter with printer	1

**9. WIRING DIAGRAM OF SCALE, JUNCTION BOX, SENSOR**



Instrument on the back, opened the box lid, wiring diagram



J1~J4 Connect sensor connector	
-S	white
+S	green
-E	black
+E	red

## 10. CHANGING THE PAPER

10.1 Pull the lever to open the cover of the printer. Place the paper roll. Make sure the flap is at the top of the printer, facing towards you. Hold on to the paper when closing the printer. Push the cover closed firmly.

## 11. TROUBLESHOOTING OF WEIGHING UNIT

NO	TROUBLE	CAUSE	SHOOTING
1	The instrument shows : OVER	-The load is too big for the scale	-Remove the load immediately.
2	Text is not printed clearly on the ticket	-Battery voltage is too low	-Charge the batteries.
3	The scale is not accurate	-The fork shoe is touching the bottom part of the scale -Cable in junction box is loose.  -1 of the load cells is broken	-Remove anything that restricts the movement of the scale. -Check the connection in junction box after confirming safe. -Stand on the 4 corners of the scale. The load cell in the corner with a different weight should be replaced.
4	Indicator can't be turned on.	-Battery voltage is too low. -Battery life is complete. -Charger is damaged.	-Charge the batteries. -Replace rechargeable battery with new ones. -Check charger output voltage replace charger with new one.
5	Battery can't be charged.	-Battery is damaged.  -Charger is damaged.	-Replace rechargeable battery with new ones. -Check charger output voltage replace charger with new one.