

Instruction Manual

WH-25ES/WH-30ES
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	Fork size		
				Length	Width over forks	Fork Width
WH-25/30ES	2500/3000 kg	0.5 kg	± 0.05%	1150mm	540mm	160mm
				1220mm	680mm	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. GUIDE TO SAFE OPERATION

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. TROUBLE SHOOTING

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.	-Replace the rod (P02) or pump cover (P101). -Repair or replace component. -Adjust the setting screw (P50).

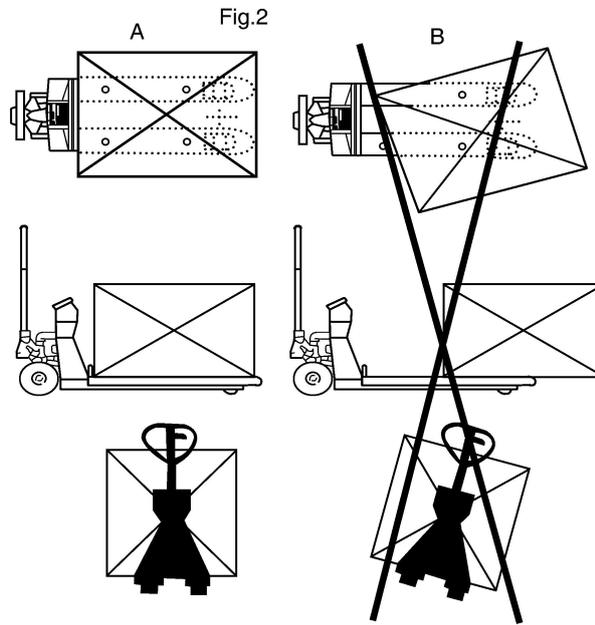
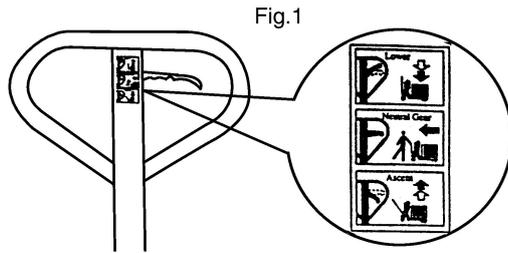
		-The setting screw (P50) is not in the correct position.	
4	Leaks	-Seals worn out or damaged. -Some parts may be cracked or worn out.	-Replace seals with new ones. -Check and replace with new ones.
5	The forks descend without being lowered.	-Impurities in the oil cause the discharge valve (B) to fail 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

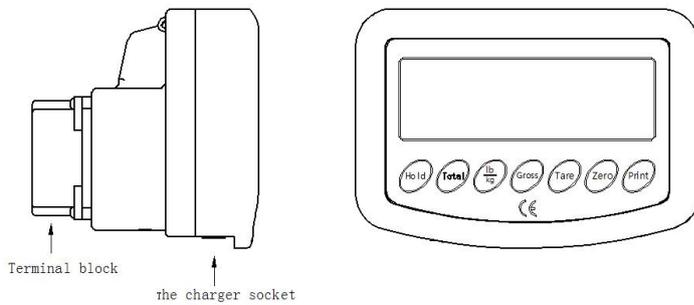
- 7.1 Put the control lever in the LOWER position and lower the truck to lowest position.
- 7.2 Press the ① key to turn the system on. After the start-up sequence the indicator will display the weight.
- 7.3 Weighing method for gross weight::
Press the ZERO key to set the gross weight to 0. Put the forks 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

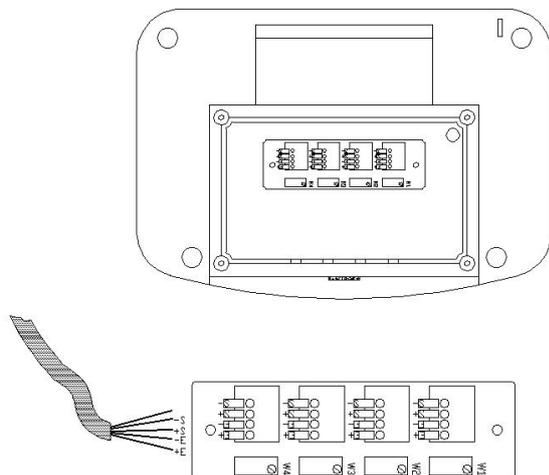
- 8.1 How to change batteries:
- 8.1.1 Loosen the screws on the battery cover and remove the cover.
- 8.1.2 open the screw on battery and pull out battery ,out the socket.
- 8.1.3 put the new battery and insert the socket.
- 8.1.4 Screw the battery cover plate back into position.

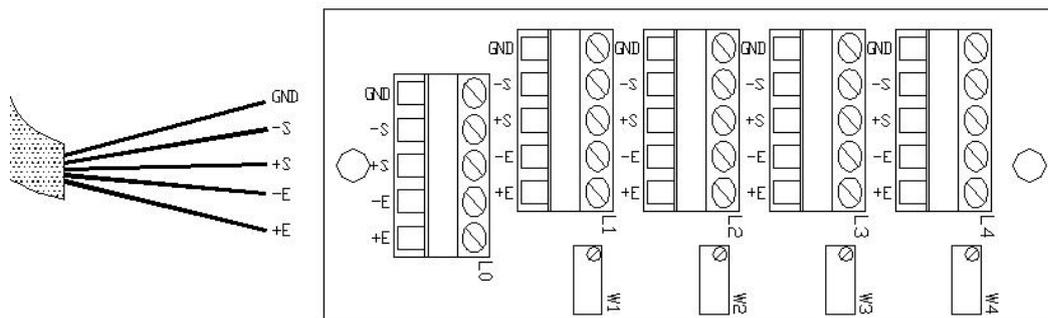


9. WIRING DIAGRAM OF SCALE, JUNCTION BOX, SENSOR



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





L0 —Connect meter connector	
GND	silver
-S	white
+S	green
-E	black
+E	red

L1~L4 Connect sensor connector	
GND	silver
-S	white
+S	green
-E	black
+E	red

10. CHANGING THE PAPER

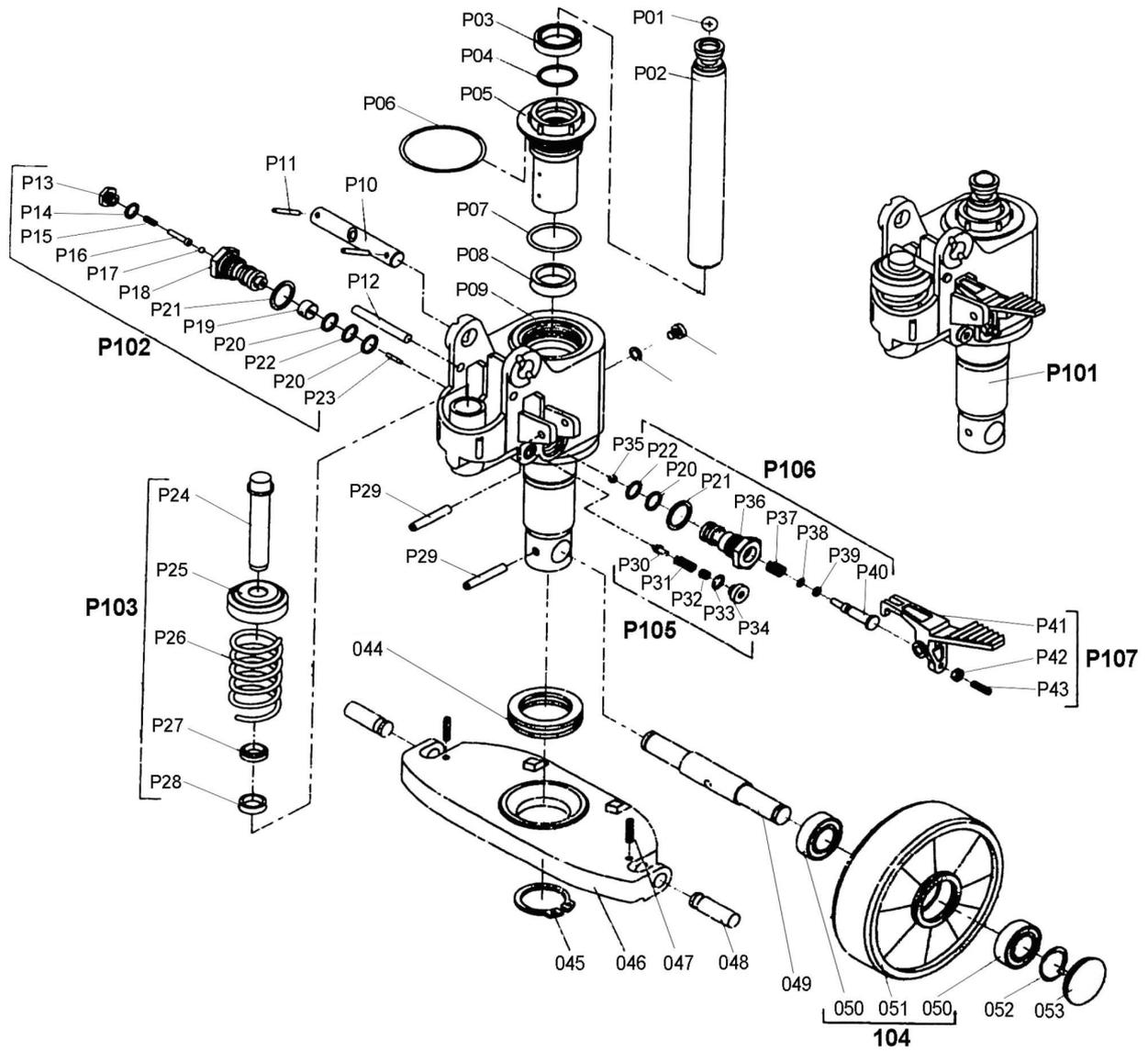
10.1 Pull the lever to open the cover of the printer. Place the paper roll. Make sure the flap is at the top of the printer, facing towards you. Hold on to the paper when closing the printer. Push the cover closed firmly.

11. TROUBLE SHOOTING 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.

PARTS DRAWING OF **old** PUMP ASSEMBLY

(~2020.01.01)

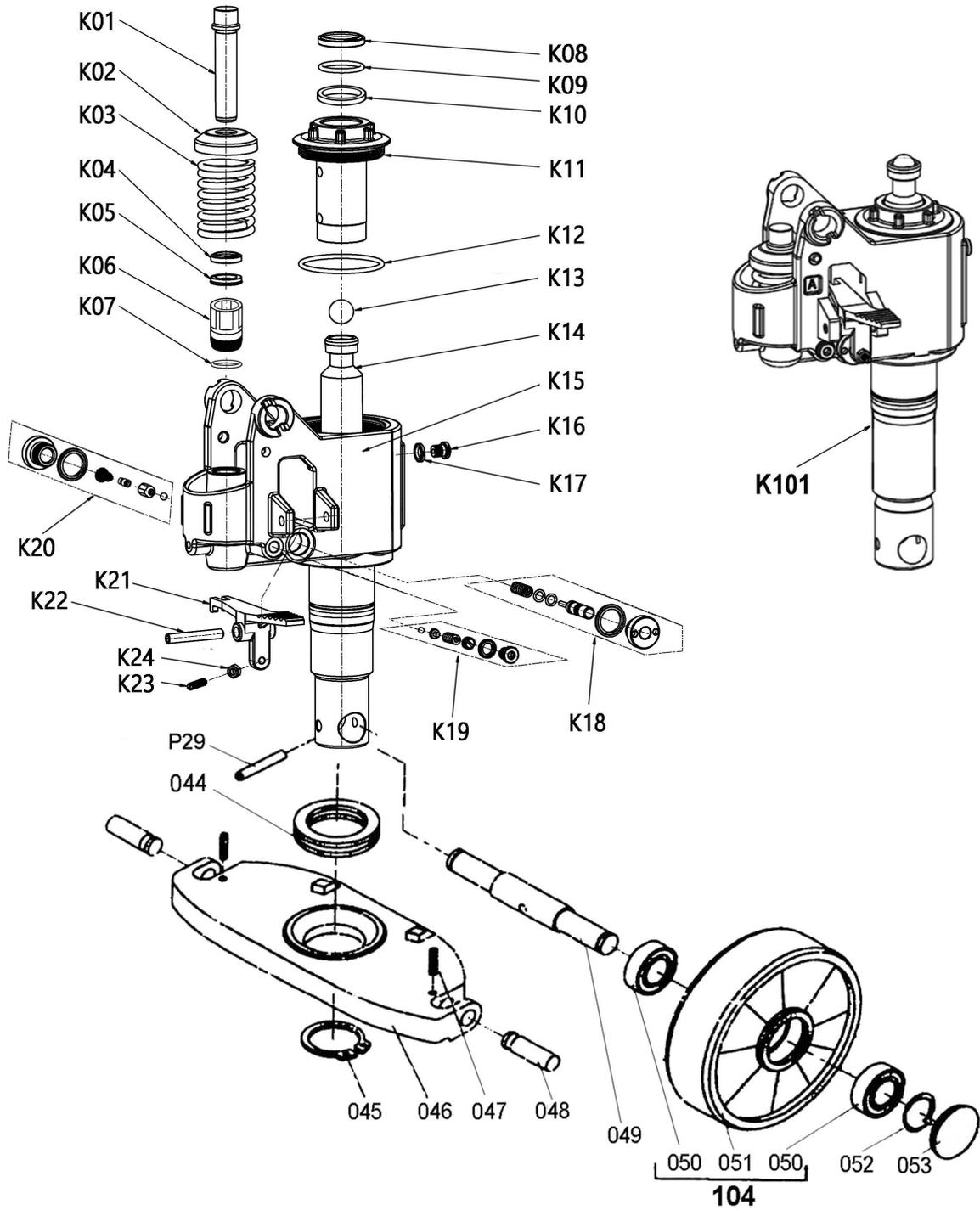


PARTS LIST OF PUMP ASSEMBLY

Item	Part No.	Designation	QTY	Item	Part No.	Designation	QTY	
P01	20010101	Steel ball	1	P42	20010147	Nutsert	1	
P02	20010102	Piston rod	1	P43	20010148	Adjusting screw	1	
P03	20010103	Dust ring	1	044	20010126	Bearing	1	
P04	20010104	O-ring	1	045	20010127	Retaining ring	1	
P05	20010105	Cylinder	1	046	20010128	Rhombus plate	1	
P06	20010106	Seal washer	1	047	20010129	Elastic pin	2	
P07	20010156	O-ring	1	048	20010130	Movable pin	2	
P08	20010107	Seal ring	1	049	20010131	Tralling axle	1	
P09	20010108	Pump body	1	050	20010132	Bearing	4	
P10	20010109	Axis pin	1	051	20010133	Steering wheel	2	
P11	20010110	Elastic pin	2	052	20010134	Retaining ring	2	
P12	20010111	Pin	1	053	20010135	Dust cover	2	
P24	20010118	Pump rod	1	P101	20010149	Oil cylinder assy.	1	
P25	20010119	Spring cover	1	P102	P13~23	20010150	Pressure valve assy.	1
P26	20010120	Spring	1	P103	P24~28	20010151	Pump piston assy.	1
P27	20010121	Dust ring	1	104	050~51	20010152	Steering wheel assy	1
P28	20010122	Seal ring	1	P105	P30~34	20010153	Overflow valve assy,	2
P29	20010124	Elastic pin	2	P106	P20~22, P35~40	20010154	Bleed-off valve assy.	1
P41	20010146	Crank link	1	P107	P41~43	20010155	Pedal assy.	1

PARTS DRAWING OF **New** PUMP ASSEMBLY

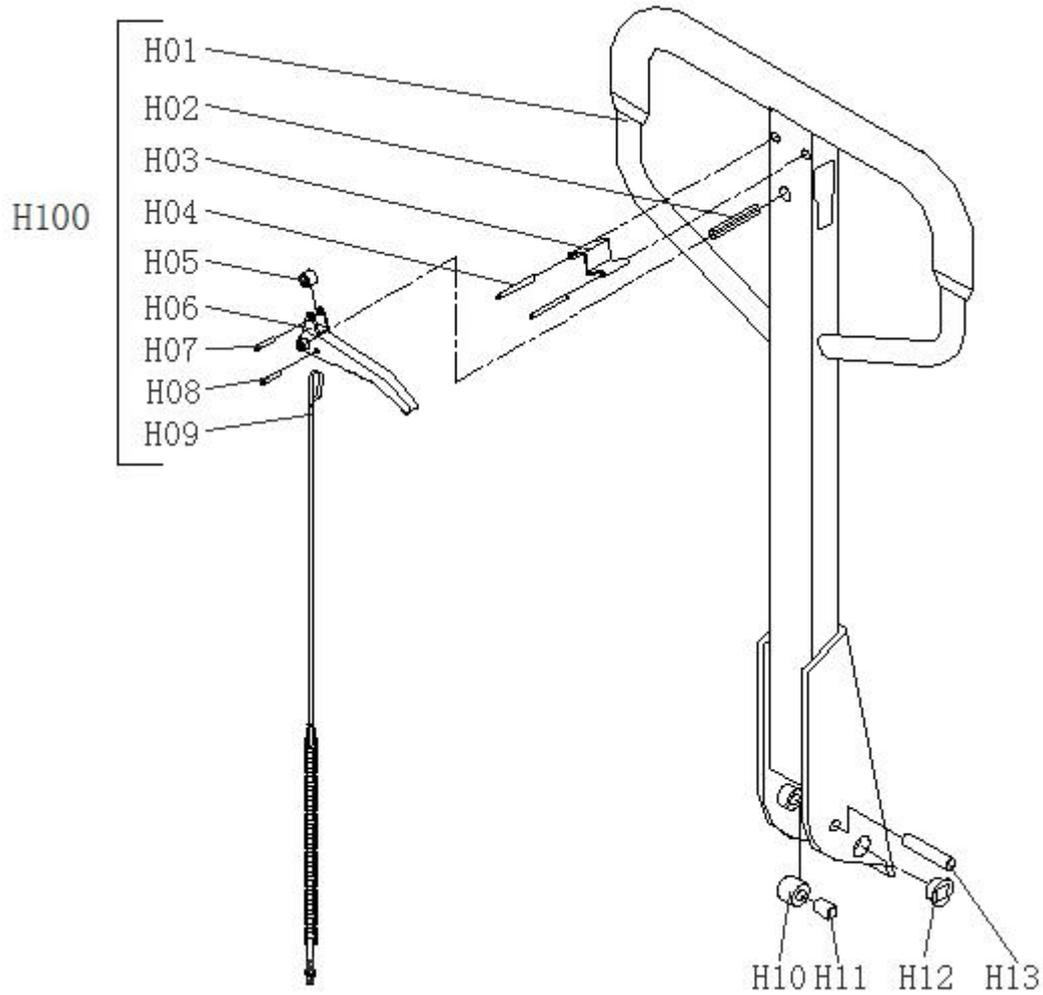
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PARTS LIST OF PUMP ASSEMBLY

Item	Part No.	Designation	QTY	Item	Part No.	Designation	QTY
K101	20010400	New pump assy.	1	K19	20010419	Safety valve	1
K01	20010401	Small pump core	1	K20	20010420	Check valve	1
K02	20010402	Cover of spring	1	K21	20010421	Lever plate	1
K03	20010403	Big spring cap	1	K22	20010422	Spring pin	1
K04	20010404	Dust ring Ø18*26*4.5/6	1	K23	20010423	Bolt	1
K05	20010405	Seal washer Ø18*26*5	1	K24	20010424	Nut	1
K06	20010406	Small cylinder	1	K102	20010425	Pump seal kits (K04/05/08/09/10)	1
K07	20010407	Copper gasket	1	P29	20010124	Elastic pin	2
K08	20010408	Dust ring Ø31.5	1	044	20010126	Bearing	1
K09	20010409	O-ring Ø31.5	1	045	20010127	Retaining ring	1
K10	20010410	Seal washer Ø31.5	1	046	20010128	Rhombus plate	1
K11	20010411	Slide bushing	1	047	20010129	Elastic pin	2
K12	20010412	O-ring	1	048	20010130	Movable pin	2
K13	20010413	Steel ball Ø19	1	049	20010131	Wheel axle	1
K14	20010414	Piston rod	1	050	20010132	Bearing	4
K15	20010415	Pump body	1	051	20010133	Steering wheel	2
K16	20010416	Bolt	2	052	20010134	Retaining ring	2
K17	20010417	Seal	2	053	20010135	Dust cover	2
K18	20010418	Relief valve	1	104 (050~51)	20010152	Steering wheel assy	1

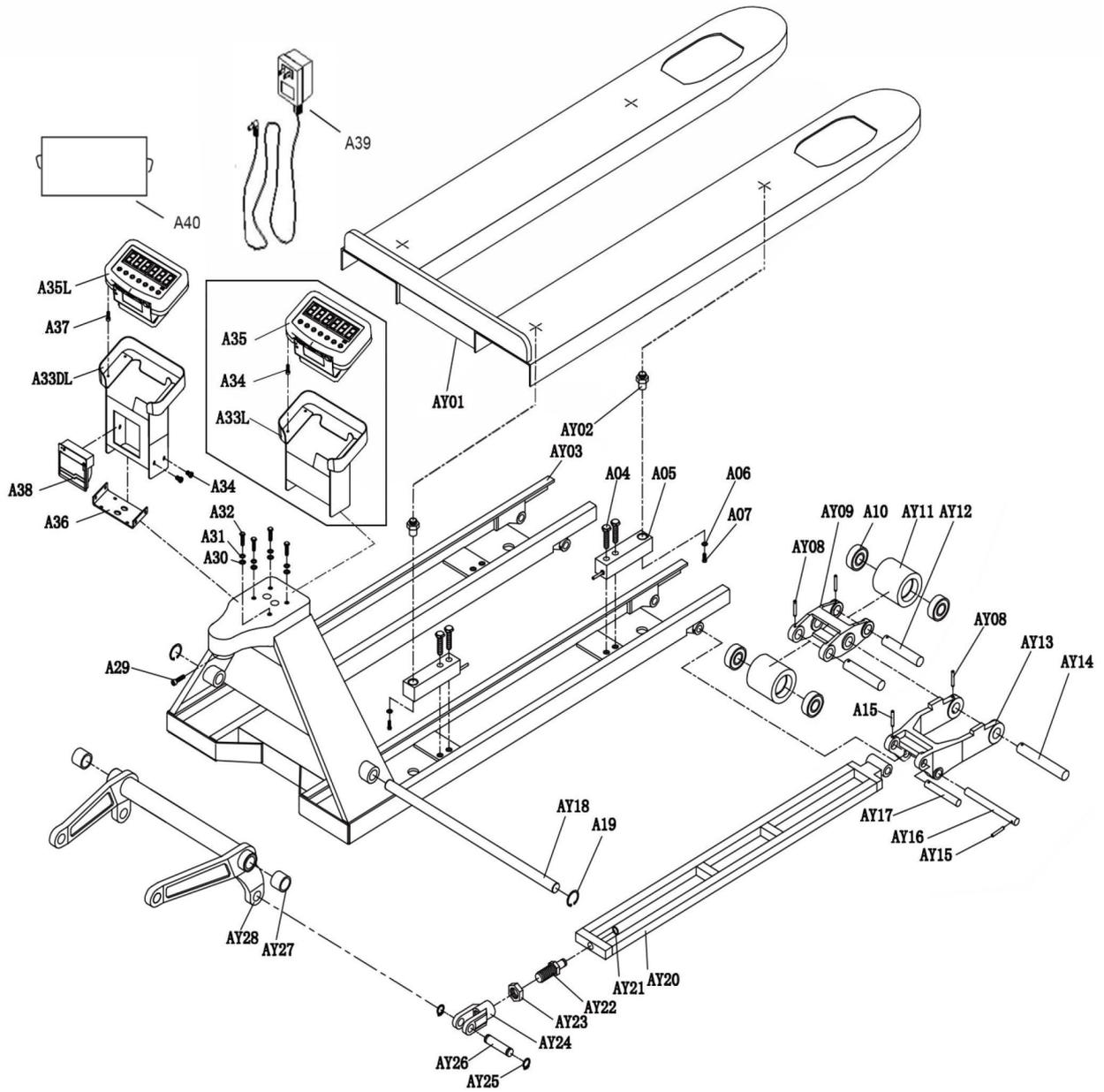
PARTS DRAWING OF HANDLE



PARTS LIST OF HANDLE

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

PARTS DRAWING OF FRAME



PARTS LIST for Frame

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

Note*: Quantity for tandem roller is 8, for single roller is 4.