Owner's manual



# **Caution:**

Before use, Always read Instructions And procedures Carefully for safe operation

# High Lift Pallet Truck Hand operated

**Operation Maintenance** 

# **Specifications**

Model	HL1.0-520	HL1.0-680	HL1.5-520	HL1.5-680
Rated lifting capacity	1000 kgs		1500 kgs	
Max. Fork height	800 mm		800 mm	
Min. Fork height	85 ±2 mm		85 ±2 mm	
Fork length	1140 mm		1100 mm	
Fork width (outside)	520 mm	680 mm	520 mm	680 mm
Fork width (inside)	196 mm	356 mm	196 mm	356 mm
Lifting speed	9 mm/stroke			
Descending speed	∠0.1 mm/second			
N.W.	105 kgs	112 kgs	118 kgs	125 kgs

### **Safety Instructions**

- 1. The truck shall be used in accordance with instructions handbook.
- 2. Don't put the hand & foot under the fork at any time.
- 3. Don't work on the slope surface.
- 4. Quick lifting is prohibited for loads of more than 300 kgs. Any manipulation of the pressure relief valve is strictly prohibited. All assembling, adjusting and maintenance shall only be done by industrial mechanics trained people. These people must be familiar with all safety regulations of European and national where the item is in use relating to the operation and maintenance of pedestrian controlled industrial trucks.
- 5. Load should be put on the fork center. Side-load is strictly prohibited.
- 6. The truck shall not be used to transport persons.
- 7. It is recommended to the driver to wear security shoes.
- 8. No modifications shall be carried out which adversely affect the compliance of the truck with prEN 1757-4.

## **Installation & Adjustment**

#### 1. Screw(part No.158)

- To prevent oil-leaking from oil tank during transportation, Air Screw (part No.158) is replaced with Oil-sealing Screw in the factory. But it has to be replaced back when you put this truck in use.
- How to change: Screw out Oil-sealing Screw, then screw in Air Screw With which the Pump housing(No.160) is hung, thus keep oil tank always connecting with atmosphere.

### 2. Handle

During transportation, the handle is disassembled from the truck and packed separately. It has to be assembled back and adjusted properly and carefully before use.

### A Handle installation:

- Take 3 pieces of M10 Nut (No.185) & Spring washer from spare parts bag. Select handle to match the truck with the same fitting numbers.
- Assemble the handle on the Handle Base (No.181) with 3 pieces of M10 Nut & Spring Washer tightly.
- Put the chain's Eve Bolt (No.110) in the slot at the front end of Pendulum Arm (No.112).

#### B Handle adjustment

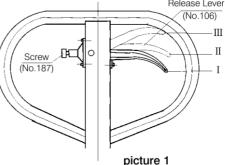
• There are 3 different positions with different functions for the Release Lever (part No.106). Release Lever

See picture 1

Position I: Quick lifting for fork.

Position II: Slow lifting for fork.

Position III: Descending for fork.



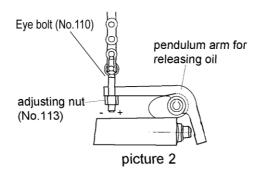
• Test different functions by putting the Release Lever in 3 different positions respectively. If it does not function properly, then adjusting Lock Nut (No.113) by following process. See picture 2

Problems	Turning direction of Lock Nut	
Fork not lifted up	<ul> <li>(counter-clockwise)</li> </ul>	
Fork not lowering down	+ (clockwise)	
Slow lifting no function	+ (clockwise)	
Quick lifting no function	– (counter-clockwise)	

#### • Function of Adjusting Screw (No.187) for Release Lever (see picture 1)

To fix release lever (No.106) into its 3 positions properly by adjusting the screw, you can adjust the operating force of the release lever.

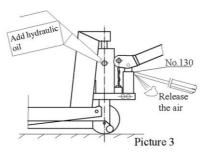
To prevent accidental touch of the Release Lever which could cause sudden sliding down of the fork. You can tighten the Screw (No.187) in the position I or II of the Release Lever (No.106). See picture 1



#### • How to release the air from the pump.

See picture 3

When pushing the handle down, the fork can't be lifted instantly. Please loosen the Screw (No.130) on the pump while pushing the handle down slowly to release the air from the pump. Then tighten the screw.



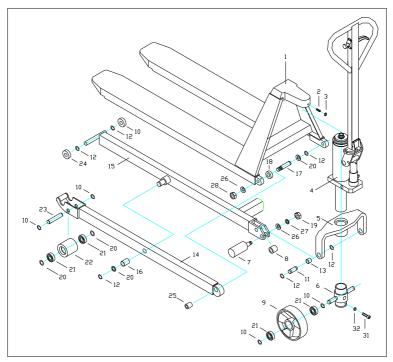
When to add oil

See Picture 3

If the fork can't be pumped up to its rated highest position, you may have to add hydraulic oil into the oil tank. The hydraulic fluid to be used must have a quality of ISO VG22 or equivalence. Mixing of different fluids is prohibited!

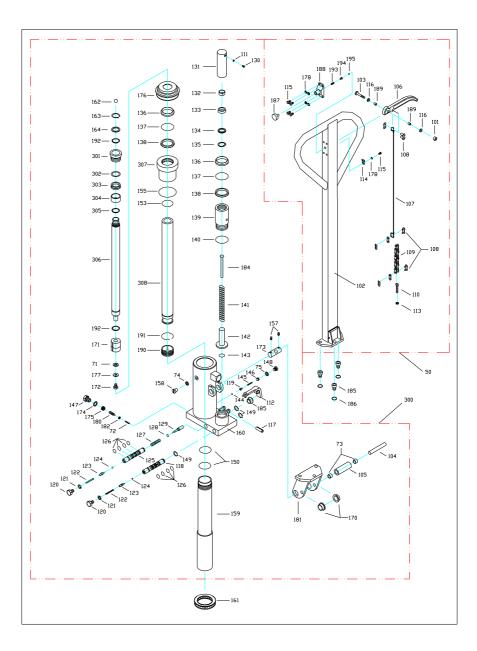
# **TROUBLE SHOOTING GUIDE**

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Items	Symptom	Possible cause	Aliments
		<ol> <li>Exist air in the hydraulic system.</li> <li>Adjusting nut is not adjusted properly.</li> </ol>	<ol> <li>Adjust adjusting nut. (see picture 2)</li> </ol>
2	Fork can't be released down	<ol> <li>Fork blocked.</li> <li>Adjusting nut not adjusted properly.</li> </ol>	<ol> <li>Check and remove the block.</li> <li>Adjust adjusting nut properly. (see picture 2)</li> </ol>
3	Fork can't be pumped up to rated highest position.	Oil is not enough.	Add hydraulic oil. (see picture 3)
	Fork lifting speed has no difference between position I and position II of release lever.	Adjusting nut is not adjusted	Adjust adjusting nut. (see picture 2)



Parts List

No.	Description	Qťy	No.	Description	Qťy
1	Fork	1	18	Washer	2
2	Screw	1	19	Nut	2
3	Nut	1	20	Washer	8
4	Power Unit	1	21	Ball Bearing	8
5	Hold Yoke	1	22	Front Wheel	2
6	Wheel Yoke	1	23	Wheel Axle	2
7	Centrifugal Axle	2	24	Roller	4
8	Spacer	2	25	Bush	2
9	Steering Wheel	2	26	Washer	4
10	Snap Ring	8	27	Spring Washer	2
11	Pin	2	28	Nut	2
12	Snap Ring	12	31	Screw	1
13	Bush	2	32	Nut	1
14	Leg	2	20	Steering Wheel Assembly	4
15	Leg	1	30	(incls.6,9,10,21、31、32)	1
16	Bush	2			
17	Pin	2			



#### Part No. Part No. DESCRIPTION QTY DESCRIPTION QTY Washer Spring Bush Washer Gasket Locknut Handle Screw Pin Roller Release Rod Release Lever Chain Connector Chain Eye Bolt ×111 Washer Pendulum Arm Pendulum Arm Nut Positioner Screw Washer Pin Valve Insert Seat Screw Gasket **Release Valve** Spring Ball Valve Insert O-Ring Spring ※ 128 O-Ring Release Indicator ※ 130 Screw Pump Piston Guide Ring Y-Ring Snap Ring Washer Scraper Ring O-Ring Y-Ring Pump Cylinder O-Ring Spring Hi-pressure Piston O-Ring Ball Spring Adjusting Screw Sealing Screw Screw Snap Ring O-Ring O-Ring Screw O-Ring Air Screw Cylinder Pump Housing Thrust Bearing

# Parts list

Part No.	DESCRIPTION	QTY	Part No.	DESCRIPTION	QTY
162	Ball	1	163	Snap Ring	1
164	Washer	1	170	Bush	2
171	Piston	1	172	Screw	1
173	Axle	1	174	Gasket	1
175	Lock Screw	1	176	Rubber Sleeve	1
177	Washer	1	178	Washer	5
180	Adjusting Screw	1	181	Handle Base	1
182	Adjusting Washer	1	183	Rubber Sleeve	1
184	Spring Guide	1	185	Screw	3
186	Spring Washer	3	187	lock Screw For Release Lever	1
188	Spring Socket	1	189	Spacer	2
190	Copper Piston	1	191	Snap Ring	1
192	Snap Ring	2	193	Spring	1
194	Pin	1	195	Ball	1
301	Bush	1	302	Back-Up ring	1
303	Y-Ring	1	304	Bush	1
305	Snap Ring	1	306	Piston Rod	1
307	Cylinder Head	1	308	Lifting Ram	1
300	Pump unit (incls.71,72,73,74,75,104,105,111,112,117,118,119,120,121,122,123, 124,125,126,127,128,129,130,131,132,133,134,135,136,137,138, 139, 140,141,142,143,144,145,146,147,148,149,150,153,155,157,158,15 9, 160,163,164,170,171,172,173,174,175,176,177,180,181,182,183, 184, 185,186,190,191,192,301,302,303,304,305,306,307,308)				1
	Handle assembly (incls.101,102,103,106,107,108,109,110,113,114,115,116,178,187,18 8,189,193,194,195)				1
Remark: Parts with "※" mark are supplied together with the High Lifter and packed in the poly bags.					

\* VERSION TWO