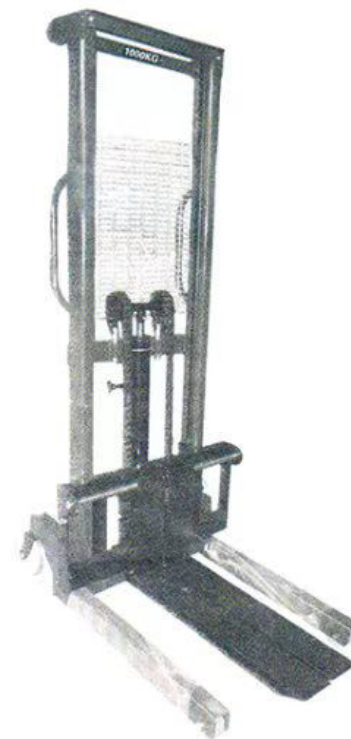


***DUROLL<sup>®</sup>***

***OPERATING MANUAL***

**AHD12-AHD130-AHD22**



- 3.8 Don't surcharge.
- 3.9 The goods should be placed on forks uniformly and never overload.
- 3.10 Heavy should not be allowed to remain on the forks for a longtime after operation is over.
- 3.11 The stacker is intended for use on flat and hard ground. During driving the forks must not be lifted more than maximum 300mm.
- 3.12 Forbid standing under the stacker forks.
- 3.13 When stacking with lifted forks, driving should be slow and over the shortest possible distance due to the stability.
- 3.14 Do not operate those not approved parts!
- 3.15 Don't try repairing the stackers without training.

#### 4. MAINTENANCE:

##### 4.1 HYDRAULIC OIL:

Please check the hydraulic oil per six month. The hydraulic oil brand No.:ISOVG32.Thecampaign viscosity is 32cst in 40°C .

The hydraulic oil needed by the oil pump is about 3.0 liter. The ISO oil quality standard shall be complied with under which ISOVG32 oil be used at -5~40°C and low at an ambient temperature of temperature working oil -35~-5°C.

##### 4.2 DAILY CHECK & MAINTENANCE:

Everyday routine examination is necessary for solving the abnormal operations at sight. Don't use the troubled stacker for the sake of lubricated by pump oil every three months, and see to that the wheels and axles are not in tangled by threads or other materials. All the wheels shall runs smoothly.

4.3 The user of the stacker should speed a few minutes every week on cleaning. special attention should be paid to the wheels and axles. see if there is thread, rags and the like blocked on.

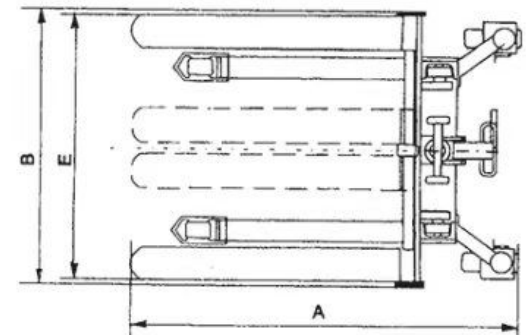
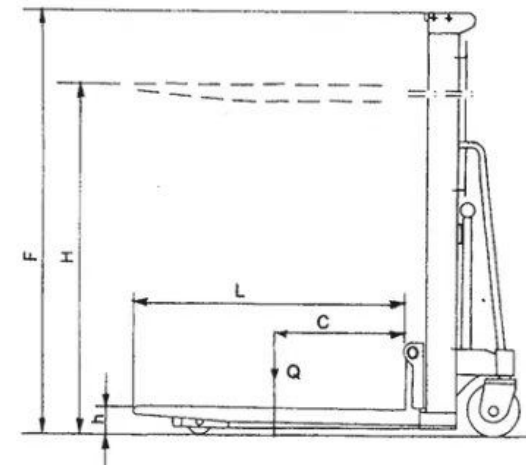
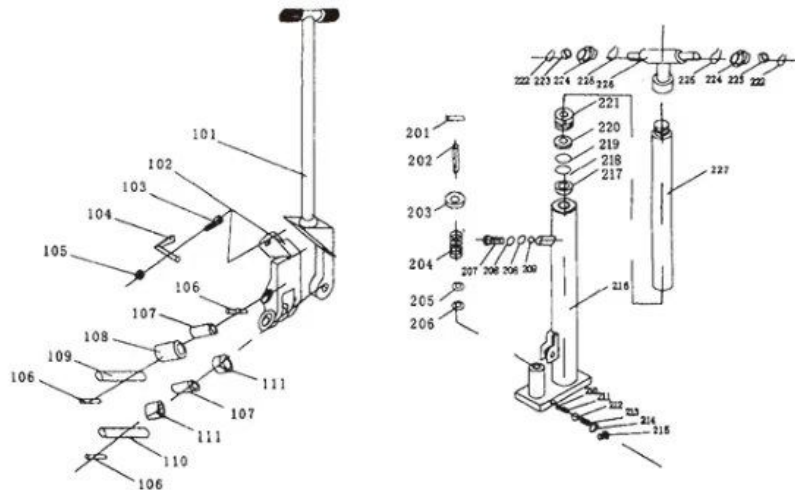
4.4 Lubricate the lifting chain. If the stacker is working in dust-laden circumstances, it should occasionally be cleaned with all oil impregnated towel. Check the chain for wear. Check and tighten possible loose screw and nuts.

#### 5. POSSIBLE FAILURES AND SOLUTIONS.

No.	Failure	Causes	Solution
1.	Insufficient lifting	The hydraulic oil is Not adequate.	Add appropriate filtered working oil
2.	The forks do not lift.	1. viscosity of working oil is too high or the working oil or not added enough. 2. impurity in oil. 3. abnormal of unloading device.	1. replace the working oil. 2. remove the impurities in the oil circuit and replace the oil. 3. re-adjust the unloading device.
3.	The forks do not lower after rising. parts.	1. abnormal in unloading devices. 2. deform and damage in parts.	1. re-adjusting the unloading device. 2. replace the deformed and damaged parts.
4.	Leakage of hydraulic	1. failure of oil seal. 2. light break or erosion on the surfaces of one or two parts. 3. relax in joints.	1. replace the seal. 2. replace the damaged parts. 3. tighten the joints.

# 6.CTY SERIES HAND STACK ANALYSIS DRAWING & PARTS:

No:	Description	Quantity	No:	Description	Quantity
101	Control pole	1	210	Ball	1
102	Paddal limit	1	211	Valve spring	1
103	Bolt	1	212	Ball	1
104	Paddal	1	213	Valve spring	1
105	Nut	1	214	Pad ring	1
106	Cylinder pin	3	215	Bolt	1
107	Slip bearing	2	216	Pump	1
108	Roller wheel	1	217	Screw ring	1
109	Roller wheel axle	1	218	"o" ring	1
110	Fixture axle	1	219	"o" ring	1
111	Slip bearing	2	220	Dust ring	1
			221	Cylinder cap	1
201	Cylinder pin	1	222	Spring retaining ring	2
202	Pump piston rod	1	223	Bearing	2
203	Washer	1	224	Chain wheel	2
204	Pump piston rod spring	1	225	Orifice spring ring	2
205	Dust ring	1	226	Chain wheel frame	1
206	Screw ring	1	227	Poston rod	1
207	Handle 1	1			
208	"o" ring	2			
209	Ball	1			



## 3. OPERATION GUIDANCE:

- 3.1 Operator must be understand the instruction and all the warning indicate before using the stacker.
- 3.2 Don't use the stacker before training & Anthorization.
- 3.3 It must be checked the stacker before using the stacker. In particular such as attention the stacker wheel. Handle. Roller wheel. Stacker frame.
- 3.4 Don't use the stacker on the descent ground.
- 3.5 Don't loading-person under the forks.
- 3.6 The operator had better wear the glove and pull on re-glide shoes before used the stacker.
- 3.7 Others must be distance the stacker more than 600 millimetre.



## 1. APPLICATION:

Welcome you using CTY series hand stacker! CTY series Hand stacker is a equipment for high-lifting and short distance carrying goods. It made up of the stackers frame, lifting frame, Oil pump system. It features as stable lifting and Lowering, easy operation. Safety and reliability, etc. and it suitable for the used on hard flat ground. In order to keep you safety. Please see and read the instruction carefully and grasp the features of the stacker before operation!

## 2. Main parameters:

parameters	CTY 0.5	CTY 1.0	CTY 1.5	CTY 2.0	CTY 3.0
Rated lifting capacity(kg)	500	1000	1500	2000	3000
Max lifting height(H) (mm)	1600	1600	1600	1600	1600
Height of forks lower(h) (mm)	100	80/90/100	80/90/100	80/80/100	100
Fork Length(L) (mm)	770	880/900/770	880/900/770	880/900/770	900
Adjustable width of the fork(E) (mm)	790-900	790-900	790-900	790-900	850-1000
Lifting speed(mm/stroke)	50	20	14	14	10
Lowering speed	Controllable	Controllable	Controllable	Controllable	Controllable
Operations power of the hand crank (kg)	16	24	24	32	40
Outer width of front leg(B) (mm)	690	710	740	740	780
Minimum refuel volume for fuel tank(L)	2.6	1.5	2.0	2.0	2.0
Front wheel size(mm)	100×50	80×68/100×50	80×94/100×50	80×94/100×50	100×50
Rear wheel size(mm)	120×50	180×50	180×50	180×50	180×50
Overall size(mm)	2030×690×1140	2050×710×1300	2050×710×1300	2050×710×1300	2060×740×1500
Self weight(kg)	105	155	160	250	280

Special colour and special specification can be made according to the customer's demands.

No.	Description	Quantity	No.	Description	Quantity
301	Bolt	2	321	Bearing	4
302	Nut	2	322	Front wheel	2
303	Nut	8	323	Front wheel shaft	2
304	Chain bolt	4	324	Bolt	2
305	Pin	4	325	u" scroll ring	1
306	Chain	2	326	Stacker frame	1
307	Bolt	1	401	Bolt	2
308	Scroll ring	1	402	Net	2
309	Nut	1	403	Lifting frame	1
310	Spring retaining ring for axle	2	404	Spring for axle	4
311	Bearing	2	405	Ball	2
312	Bearing	2	406	Entry and exit wheel	4
313	Rear wheel frame	2	407	Nut	4
314	Spring retaining ring for axle	4	408	Bolt	4
315	Bearing ring	4	409	Spring retaining ring for axle	4
316	Bearing	4	410	Spring retaining ring	4
317	Rear wheel	2	411	Bearing	4
318	Rear wheel shaft	2	412	Roller wheel	2
319	Spring retaining ring for axle	4	413	Roller wheel axle	2
320	Front wheel bearing ring	4	414	Fork	2

