Instruction Manual

ELECTRIC SCISSOR LIFT TABLE

Model: CART-1000D-DC

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ELECTRIC LIFT TABLE

Model **CART-1000D-DC**

Instruction Manual

READ THIS OPERATION MANUAL COMPLETELY BEFORE USING.THOROUGHLY UNDERSTAND AND FOLLOW ALL SAFETY INSTRUCTIONS.IF THIS IS LOST, PLEASE CONTACT YOUR LOCAL SUPPLIER FOR A NEW COPY.IF THE WARNING/CAUTION DECAL ON THE UNIT IS LOST, PLEASE CONTACT YOUR LOCAL SUPPLIER FOR A NEW COPY.

Note: On this manual, WARNING means the danger, which can lead death or serious injury. CAUTION means the danger, which can lead slight injury or property damage.

1. WARNING

1. DO NOT allow another person to stand in front of or behind lifter when it starts to move.
2. ALWAYS travel with table in lowered position. Load could fall down.
3. NEVER sit, stand or ride on platform. SEVERE PERSONAL INJURY could result.
4. NEVER go under platform. SEVERE PERSONAL INJURY or DEATH could result.
5. DO NOT use in area of multilevel floor surface that could create loss control and result in SEVERE INJURY and PROPERTY DAMAGE.
6. DO NOT use lifter on slope, uneven or soft surface. Lifter may become uncontrollable. SEVERE PERSONAL INJURY and PROPERTY DAMAGE could result.
7. KEEP FEET CLEAR of rolling wheels that could result in SEVERE PERSONAL INJURY.
8. DO NOT load one fork more than the other and DO NOT load tips on table. SEVERE PERSONAL INJURY and PROPERTY DAMAGE could result.
9. DO NOT overload lifter. ALWAYS stay within designated capacity and load center rating. SEVERE PERSONAL INJURY and PROPERTY DAMAGE could result.
10. SHEARING HAZARD. NEVER place hands or feet under lowering table. SEVERE PERSONAL INJURY could result.
11. NO FIRE during charging. Read battery operation manual.
12. HIGH VOLTAGE. Disconnect battery socket before opening control panel box.
13. DO NOT remove battery terminal cover. Short-circuit or electric shock could occur.

2. CAUTION

1. Hazard or unsafe practice, which, if not avoided, may result in MINOR or MODERATE PERSONAL INJURY and PROPERTY DAMAGE.
2. READ THE OPERATION MANUAL COMPLETELY BEFORE USING AND THOROUGHLY UNDERSTAND AND FOLLOW ALL SAFETY INSTRUCTIONS.
3. This lifter is designed to use with stable uniform load on a solid lever floor. DO NOT use the lifter for any other purpose than its intended use.
4. TRAINED personnel shall operate lifter only. OPERATOR shall read “Operation Manual” completely and thoroughly understand the controls and operation of this equipment BEFORE operating the lifter.
5. ALWAYS observe lifter and ALWAYS stay at the controls while the lifter is in motion, RELEASE controls and STOP lifter immediately if load on lifter appears to become unstable. NEVER leave the loaded lifter unattended unless the table is in the fully lowered position and the lifter is locked reliably.
6. DO NOT slide the load on or off the table. The lift may move allowing the load to fall. SEVERE PERSONAL INJURY and PROPERTY DAMAGE could result.
7. DO NOT use lifter with unstable, unbalanced or loosely stacked load. Unbalanced loads may become unstable and fall. SEVERE PERSONAL INJURY and PROPERTY DAMAGE could result.
8. Qualified personnel must perform ALL lifter service only.
9. ALWAYS keep feet, hands and fingers away from casters, load wheels and all moving components. SEVERE INJURY could result.
10. ALWAYS perform maintenance and inspections with lifter unloaded.
11. Prolonged continuous working might cause damage of power pack.
12. Stop operation if temperature of hydraulic oil is too high.

The lifter is NOT waterproof and is intended to be used in a dry environment.

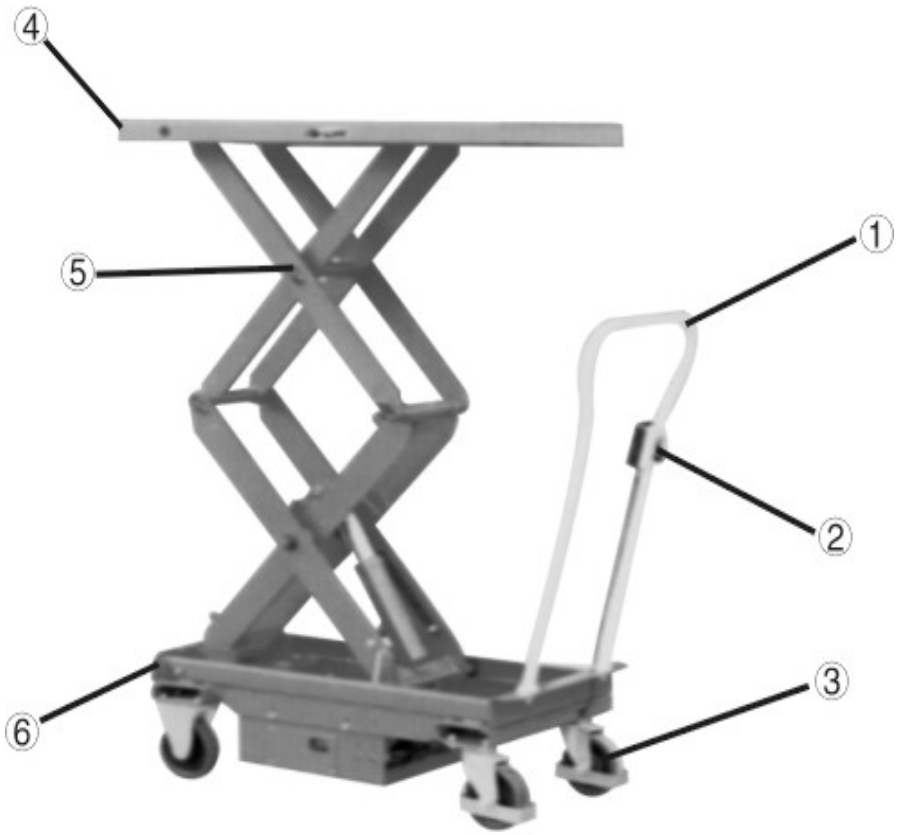
3. DAILY INSPECTION

Daily inspection is effective to find the malfunction or faulty on the lifter. Check the lifter on the following points before the operation.

CAUTION
DO NOT use lifter if any malfunction or faulty is found.

(1) Check scratches, bending or crack on the lifter.
(2) Check smooth movement of the wheels.
(3) Check if there is oil leakage.
(4) Check vertical creep of table.
(5) Check the function of brake.
(6) Check if all the bolts and nuts are tightened firmly.

4. NAME OF PARTS CART-1000D-DC



1.Handle	4.Platform
2.Switch	5. Link
3.Brake Pedal	6.Guide rail

5. OPERATING LIFT TABLE

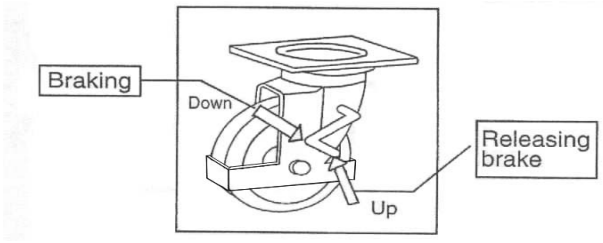
How to use the brake.

CAUTION
Brake lift table when not moving it in order to prevent sudden movement.

The brake is equipped with the swivel caster on the right side.

(1) Brake the wheel, press the brake pedal.

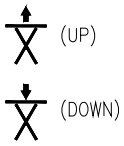
(2) Releasing the brake, lift up the brake pedal.

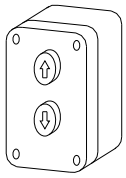


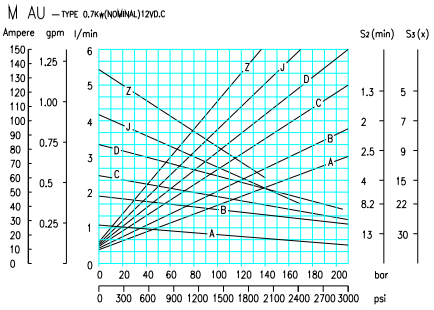
6. LIFTING UP FORKS

CAUTION
1. DO NOT overload lifter. Stay within its rated capacity. 2. Prolonged continuous working might cause damage of hydraulic power pack. 3. Step operation if temperature of hydraulic oil is too high.

Push the button “UP” and the table lifts up.







TYPE OF PUMP

A	GR.0.5 - 0.25	D	GR.0.5 - 0.75
B	GR.0.5 - 0.45	J	GR.0.5 - 0.92
C	GR.0.5 - 0.56	Z	GR.0.5 - 1.26

——Curve S2 defines the maximum running time of the D.C. Motor expressed in a minutes.

——Curve S3 expresses the on-off ratio in % which has value S3 in a total work cycle (100%).

7. LOWERING TABLE

CAUTION
DO NOT lower table with load too fast and stop suddenly. Impact load could be created and lifter could be damaged.

Push the button DOWN and the table lower.

8. MOVING THE LIFTER

WARNING
DO NOT move lifter on slope or inclined surface, otherwise lifter become uncontrollable and create danger.

(1) Make the load stable to prevent it to fall.

(2) Lower the table down.

(3) Release the brake and move the lifter.

CAUTION
KEEP watching the condition of load. Stop operating lifter if load become unstable.

9.CHARGING THE BATTERY

Warning!

- ! Working with or near lead acid batteries is dangerous. Batteries contain sulfuric acid and produce explosive gases. A battery explosion could result in loss of eyesight or serious burns.
- ! Do not smoke or allow a spark or flame near batteries. Charge batteries in locations which are clean, dry, and well-ventilated. Do not lay tools or anything metallic on top of any battery. All repairs to a battery must be made by experienced and qualified personnel.
- ! When working with batteries, remove personal items such as rings, bracelets, necklaces, and watches. Batteries can produce enough energy to weld jewelry to metal, causing a severe burn.
- ! Always have fresh water and soap nearby in case battery acid contacts skin, clothing, or eyes.
- ! Operating the battery with a low battery voltage can cause premature motor contact failure.
- ! Do not expose the lift or charger to rain or adverse conditions.
- ! Replace defective cords or wires immediately.
- ! Check the battery's water level frequently if this applies to your battery type.
- ! Make sure the battery charger is unplugged from 115vac source.

Battery Charger Operating Instructions

Plug the charger into a standard 115V receptacle. If an extension cord must be used, keep it as short and as large as possible. A small cord will decrease the output of the charger due to the voltage drop in the line. This will increase the charging time. It can also cause the 115V cord to overheat.

When properly connected, the charge LED will indicate the status of charge current flowing to the battery, as follows: Power LED is always green when charger is plugged in. The status light is as follows:

Red only – the charger is providing full output to the battery.

Yellow – the charger is "topping off" the battery.

Green – the charger is providing a "float," or maintenance, charge.

Remember to unplug the charger before moving the equipment. Failure to do so could cause damage to cords, receptacles and other equipment.

<u>Troubleshooting:</u>

If the unit does not operate, check all of the wiring connections to make sure they're both mechanically and electrically sound – specifically at the battery, and the motor.

A fully-charged lead acid battery in good condition at room temperature should read 12.65 volts. At 11.9 volts it is considered to be fully discharged and in need of charging. When checking battery voltage, wait at least 1\2 hour after the charger has been turned off before checking the battery's voltage.

If the battery isn't being charged by the charger, check the output charger fuse. Verify fuse is good with an ohmmeter, or close visual (ohm meter best). Fuse is a 10Amp 250 Volt; GBD 10A. If it is good, check the battery's state of charge with a voltmeter. The charger must be connected to the battery in order to read the output voltage of the battery charger. Depending on the state of charge of the batteries, the voltage should be somewhere around 13.5 volts dc.

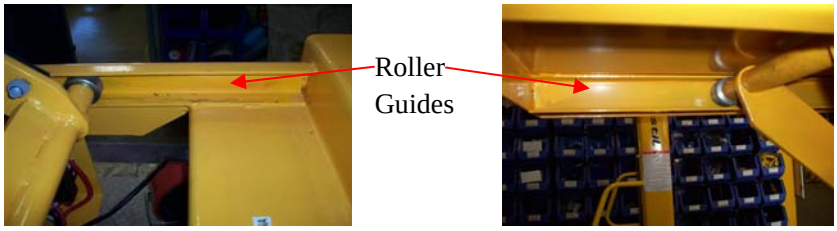
If it is determined the battery is dead, and need replaced, change the battery.

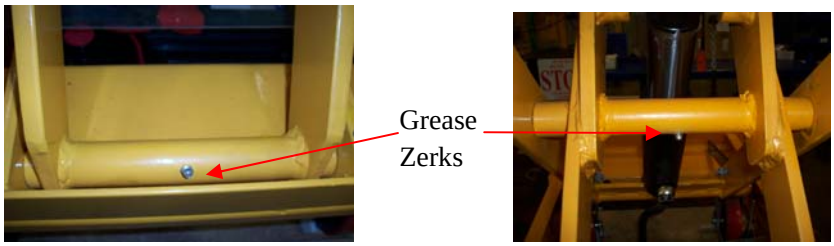
10.REGULAR INSPECTION

Perform the regular inspection for the safety operation

(1) Check the items expressed in daily inspection (daily)

(2) Grease roller guides & grease zerks every month





(3) Lubricate wheel axles every 6 months

(4) Replace the hydraulic oil. (Every 12 months)

Do not use brake fluid or jack oil in the hydraulic system. If oil is needed, use an anti-wear hydraulic oil with a viscosity grade of 150 SUS at 100°F, (ISO 32 @ 40°C), or a non-synthetic transmission fluid.

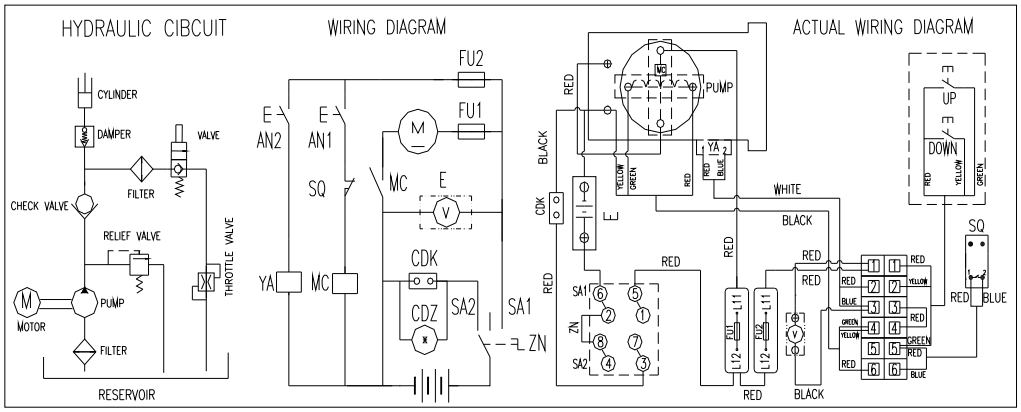
11.TROUBLE SHOOTING

TROUBLE	CAUSE	REPAIR
Platform does not rise while motor does not run.	1.Faulty wiring.	1.Check the wiring referring to the actual wiring diagram.
	2.Battery socket is disconnected	2.Connect the battery socket.
	3.Battery charge is insufficient.	3.Charge the battery.
Platform does not rise while motor runs.	1.Faulty adjustment of relief valve.	1.Adjust relief valve again.
	2.Faulty hydraulic pump.	2.Replace power pack.
	3.Shortage of hydraulic oil.	3.Add oil.
Vertical creep of table.	1.Oil leakage in power pack.	1.Replace lowering valve.
	2.Oil leakage form hydraulic circuit.	2.Check hydraulic circuit and repair.
Oil leakage from cylinder.	Faulty sealing.	Replace sealing.
Oil leakage from piping or joint.	Insufficient tightening or seal in valid.	Tighten joint again or Replace seal.
Oil leakage from air breather.	Excessive oil.	Reduce oil level.

12. SPECIFICATIONS

Model	CART-1000D-DC
Capacity (lbs)	1,000
Table (in)	20 ½ × 39 ¾
Min. table height (in)	19 ½
Max. Table height (in)	63 11/16
Lifting stroke (in)	44 ¼
Motor (KW)	0.7
Work cycle of hydraulic power pack	3 times of table moving up-down per 10 min.
Approx. numbers of lifting at full charge and with full load (times)	40
Approx. time required lifting up table. (Sec)	15
Wheel (in, diameter)	5.9
Handle height (in)	46 ½
Weight (lbs)	437

13. HYDRAULIC CIRCUIT/WIRING DIAGRAM/ACTUAL WIRING DIAGRAM



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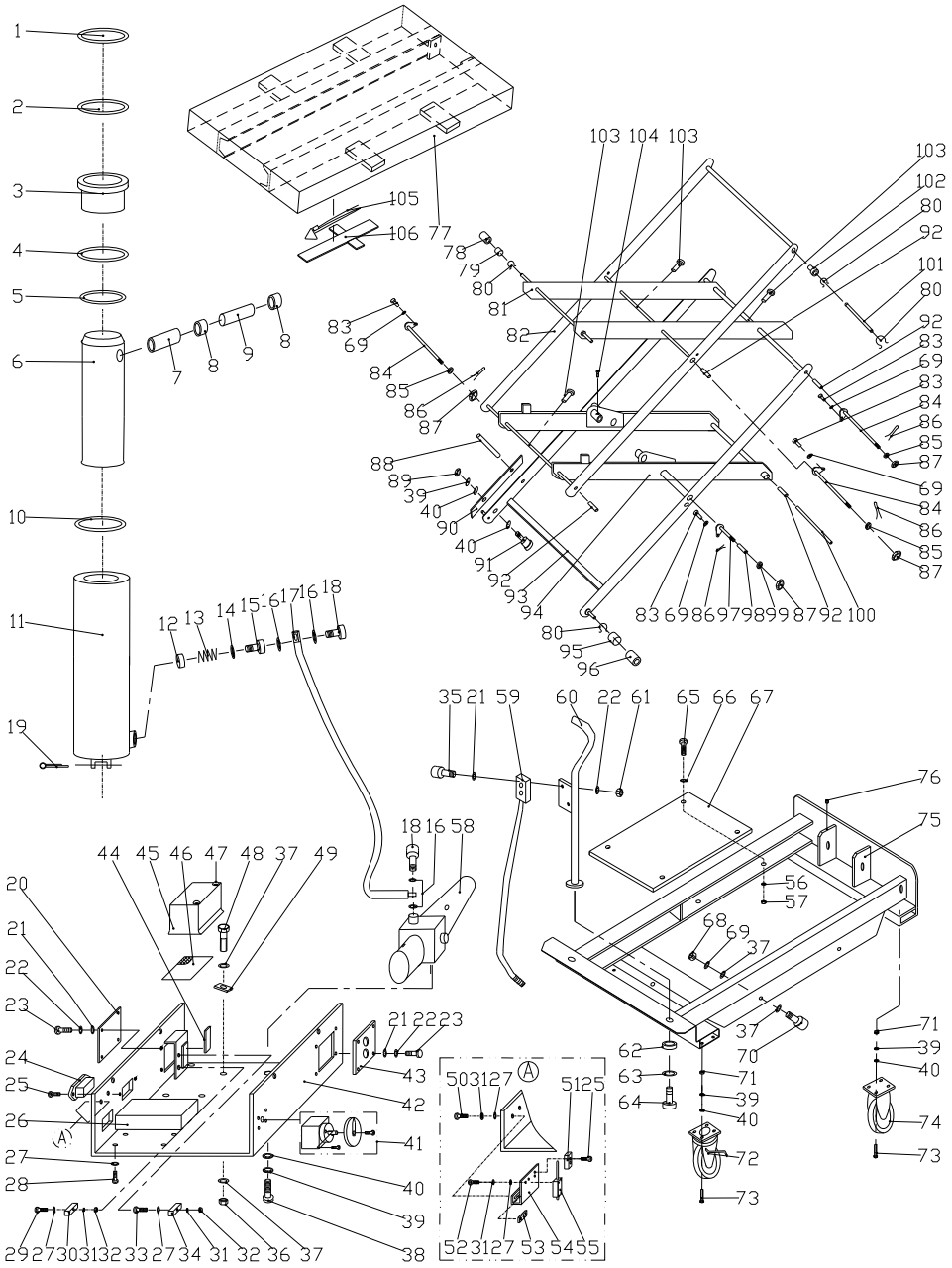

LIFT TABLE SPARE PARTS LIST CART-1**000**-D-DC

NO	DESCRIPTION	QTY	NO	DESCRIPTION	QTY
1	Seal cover φ60×φ68×6.5	1	26	Charger	1
2	Y-ringφ60×φ70×6	1	27	Washer 5	10
3	Cylinder cover	1	28	Screw M5×10	4
4	Retainer ring	1	29	Screw M5×20	1
5	O-ring φ65×2.65	1	30	Fuse	1
6	Piston rod	1	31	Spring washer 5	6
7	Bushing	1	32	Nut M5	2
8	Bushing	2	33	Screw M5×16	1

9	Pin axle	1	34	Fuse	1
10	Snap ring 60	1	35	Screw M4×16	2
11	Cylinder	1	36	Nut M8	4
12	Prevent burst valve	1	37	Washer 8	16
13	Spring	1	38	Screw M10×16	2
14	Seal ring 18	1	39	Spring washer 10	20
15	Prevent burst joint	1	40	Washer 10	22
16	Seal ring 14	4	41	Switch	1
17	High pressure hose	1	42	Battery case weldment	1
18	Joint	2	43	Covering plate	1
19	Split Pin	1	44	Pad	1
20	Covering plate	1	45	Battery	1
21	Washer 4	10	46	Insulator pad	1
22	Spring washer 4	10	47	Insulation case	2
23	Screw M4x10	8	48	Screw M8×40	4
24	Battery indicator	1	49	Battery securing tag	4
25	Screw M3×10	4	50	Screw M5×16	2
51	Connector block	1	79	Bushing	2
52	Screw M5×10	2	80	Retaining ring for axle 20	6
53	Fixing plate	1	81	Internal scissors for table	1
54	Joint board	1	82	External scissors for table	1
55	Lifting limit switch	1	83	Screw M8×16	5
56	Spring washer 6	4	84	Pin axle for scissors	3
57	Nut M6	4	85	Washer	3
58	Hydraulic power pack	1	86	Split pin 3.2×26	5
59	Terminals	1	87	Nut M16×1.5	5
60	Handle	1	88	Spring pin 8×30	2
61	Nut M4	2	89	Nut M10	2
62	Washer	2	90	Safety rod	2
63	Spring washer 12	2	91	Screw M10×40	2
64	Hex screw M12×30	2	92	Bushing	8
65	Hex screw M6×20	4	93	External scissors for chassis	1
66	Washer 6	4	94	Internal scissors for chassis	1
67	Covering plate	1	95	Bushing	2
68	Nut M8	4	96	Roller for chassis	2
69	Spring washer 8	9	97	Pin axle	2
70	Screw M8×20	4	98	Bushing	2
71	Nut M10	16	99	Washing	2
72	Rear wheel	2	100	Pin axle for chassis	1

73	Screw M10×25	16	101	Pin axle for table	1
74	Front wheel	2	102	Bushing	2
75	Chassis	1	103	Oil cup	4
76	Screw M6x8	1	104	Screw M6×16	2
77	Table	1	105	Cable	1
78	Roller for table	2	106	Cable velcro strap	1