



# **Instruction Manual**

## **For Auto Shift Hydraulic Lift Table**

**Model Number: CART-550-AS**



**Note: Owner/Operator must read and understand this Instruction Manual before operating the lift & tilt table.**

# Contents

1	WARNING	2
2	CAUTION	2
3	NAME OF PARTS	3
4	HOW TO ASSEMBLE	4
5	DAILY INSPECTION	6
6	OPERATING LIFTTABLE	6
7	SERVICE INSTRUCTION	7
8	HYDRAULIC CIRCUIT	7
9	SPARE PARTS LIST	8
10	TROUBLES SHOOTING	10

# Operation and Service Manual

READ THIS MANUAL CAREFULLY AND BE SURE TO UNDERSTAND ALL THE INSTRUCTIONS BEFORE OPERATING THE LIFT TABLE. KEEP THIS MANUAL ON FILE FOR FUTURE REFERENCE AND IF LOST, PLEASE CONTACT YOUR LOCAL SUPPLIER FOR A NEW COPY. IF THE WARNING/CAUTION DECAL ON THE UNIT IS WORN, TORN OR LOST, PLEASE CONTACT YOUR LOCAL SUPPLIER FOR A NEW DECAL.

NOTE: For this manual, WARNING means that there may be a condition where danger is present that could lead to death or serious injury. CAUTION means there is a condition present that can lead to injury or property damage.

## 1. WARNING

1. Keep hands and feet clear of the scissors mechanism.
2. DO NOT allow personnel to stand in front of or behind the lift table when it is moving.
3. DO NOT move the lift table when it is in a raised position. The load could become unbalanced and fall.
4. Personnel should never be positioned under the table.
5. DO NOT overload the lift table.
6. Keep your feet clear of the rolling wheels. Injury could result.
7. Ensure that the floor is level and flat when moving the lift table. The load could fall if the floor is not level.
8. DO NOT use the lift table on sloped or inclined surfaces, as the lift table may become erratic and pose danger.
9. DO NOT use the lift table to elevate personnel. This could result in severe injury.

## 2. CAUTION

1. Before operating the lift table, ensure that you read this operation manual carefully and understand its instructions completely. Improper operation could result in injury or property damage.
2. This lift table is a movable lifter designed to elevate or lower a rated load onto a table or flat surface. DO NOT use the lift table for anything other than its intended purpose.
3. DO NOT allow personnel to operate the lift table who are not qualified or familiar with the equipment.
4. DO NOT lower the table too fast. This could unsettle the load and fall, causing injury or property damage.
5. Pay attention to the stability of the load. Do not operate the lift table if load becomes unstable.
6. Ensure that the lift table is braked when sliding a load on or off a table or flat surface.
7. All loads must be distributed evenly on at least 80% of the table area. DO NOT set loads to the side or ends of the lift table surface.
8. DO NOT use the lift table if a load is unstable, unbalanced or loosely stacked.
9. Observe regular maintenance work according to the service manual instructions.
10. It is prohibited to modify the lift table without the manufacturer's written consent. Modifying the lift table without the manufacturer's consent will void the warranty.
11. When servicing the lift table, remove any loads and use the safety stopper to prevent the table from accidentally lowering.
12. Only use the lift table under dry conditions. This lift table is not designed to be water resistant.

### 3. NAME OF PARTS



#### 4.1



#### Steps

The "table" is sufficiently secured before beginning to assemble. Proper care is required when assembling the lift table. Clamping tools, such as clamps, are also used.



Assembly



Correctly assembled

#### 4.1



The assembly is using two bolts as well as the flat washers and spring washer.



## 4.2 Foot pedal assembly



1) Place the foot pedal into the chassis pipe



2) Tighten the bolts

## 4.3 Lift the platform and place two support bars that will secure and hold the chassis steady.



## 4.4. To attach the release handle:

### 4.4.1 Connect the chain to the bottom of the pump.



a) Remove the cotter pins from the axle

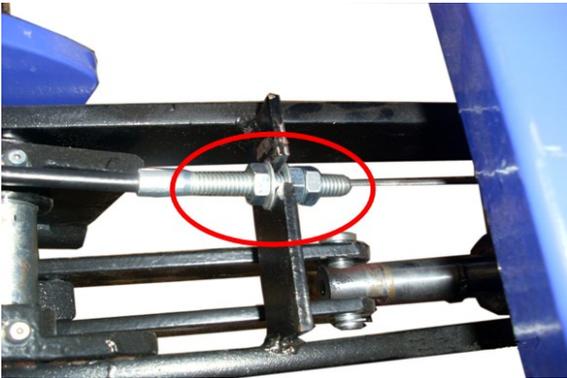


b) Secure the chain into the pump block using cotter pins and the axle.

### 4.4.2 Securing the chain into the chassis groove:



Using two washers, put the bolt into the middle of thread groove and then tighten the nut.



4.4.3 Clip the chain on the handle.



4.4.4. Once assembled, the lift table will activate, lift and lower easily when the lift handle is released. If the table will not lower, please adjust using steps a) or b)

- a) Loosen the up and down nuts, pull the release wire up for a snug fit, and then tighten the nuts until the table lowers smoothly.



- b) Loosen the up and down nuts, Pull the release wire down, and then tighten the nuts until the table lowers

smoothly.



## 5. DAILY INSPECTION

Daily inspection is a good means to find any possible malfunction or fault with the lift table. Check the lift table on the following points before operation.

<b>CAUTION</b>
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DO NOT use the lift table if any malfunction or fault is detected.
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- (1) Check for scratches, bending or cracking on the lift table.
- (2) Check for any cylinder oil leakage.
- (3) Check the vertical creep of the table.
- (4) Check for smooth rotation of the wheel.
- (5) Check for brake function.
- (6) Ensure that all bolts and nuts are tightened securely.

## 6. OPERATING THE LIFT TABLE

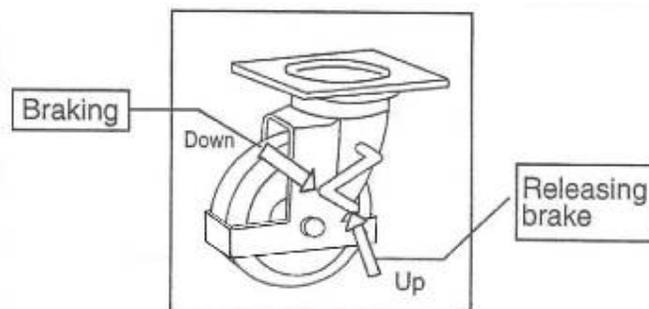
6-1. How to use the brake.

<b>CAUTION</b>
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Ensure that the brake for the lift table is set when it is not in use to prevent sudden movement.
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The brake is located on the right side of the swivel caster.

- (1) To set the brake, press the brake pedal.
- (2) To release the brake, lift the brake pedal.



6-2. Lifting the table

<b>WARNING</b>
<ol style="list-style-type: none"> <li>1. DO NOT overload the lift table; ensure the load is within its rated capacity.</li> <li>2. All loads must be distributed evenly on at least 80% of the table area. DO NOT set loads to the side or ends of the lift table surface.</li> </ol>

Press the lifting pedal several times until the table reaches the desired position.

The table does not elevate once it has reached the highest possible position even if the lifting pedal is continually pressed.

The table lowers slightly after reaching the highest position.

<p><b>NOTE:</b></p> <p>The hydraulic cylinder is designed to hold the table. As is the nature of the hydraulic system, the table lowers very slowly over an extended period of time, Please note the table will not stay at the same position indefinitely.</p>
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6-3. Lowering table

<b>WARNING</b>
<p>Keep your feet and hands clear of the scissors mechanism.</p>

**Pull the lowering lever up and table lowers.**

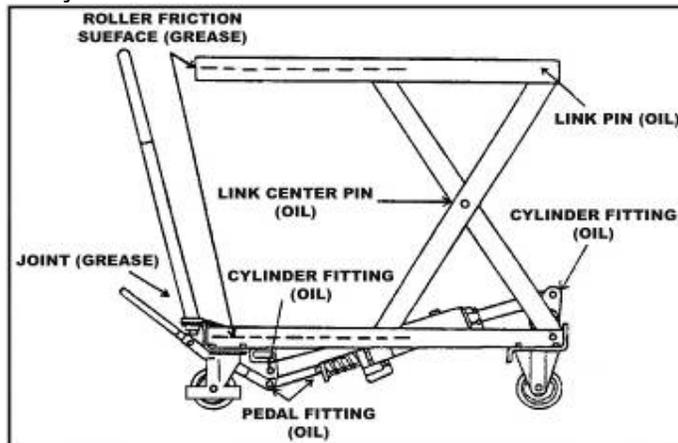
**7. Service instruction**

7-1. Change hydraulic oil every 12 months.

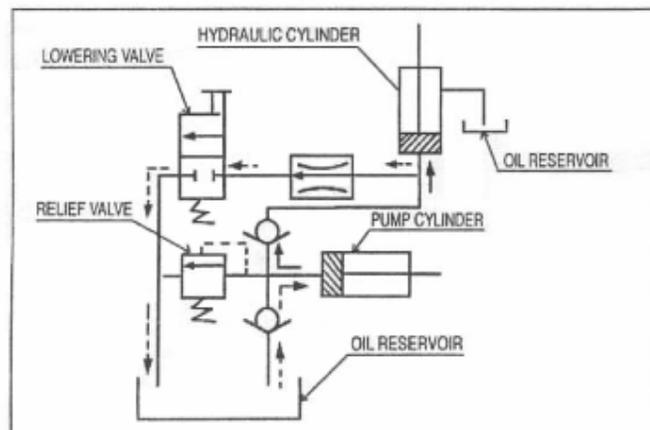
7-2. Lubricate each point described below every month:

Lubricating Points

- (1) Fitting of cylinder.....Oil
- (2) Roller friction surface.....Grease
- (3) Link Pin .....Oil
- (4) Pedal fitting point.....Oil
- (5) Link center pin.....Oil
- (6) Joint.....Grease
- (7) Grease nipple.....Grease
- (8) Hydraulic circuit

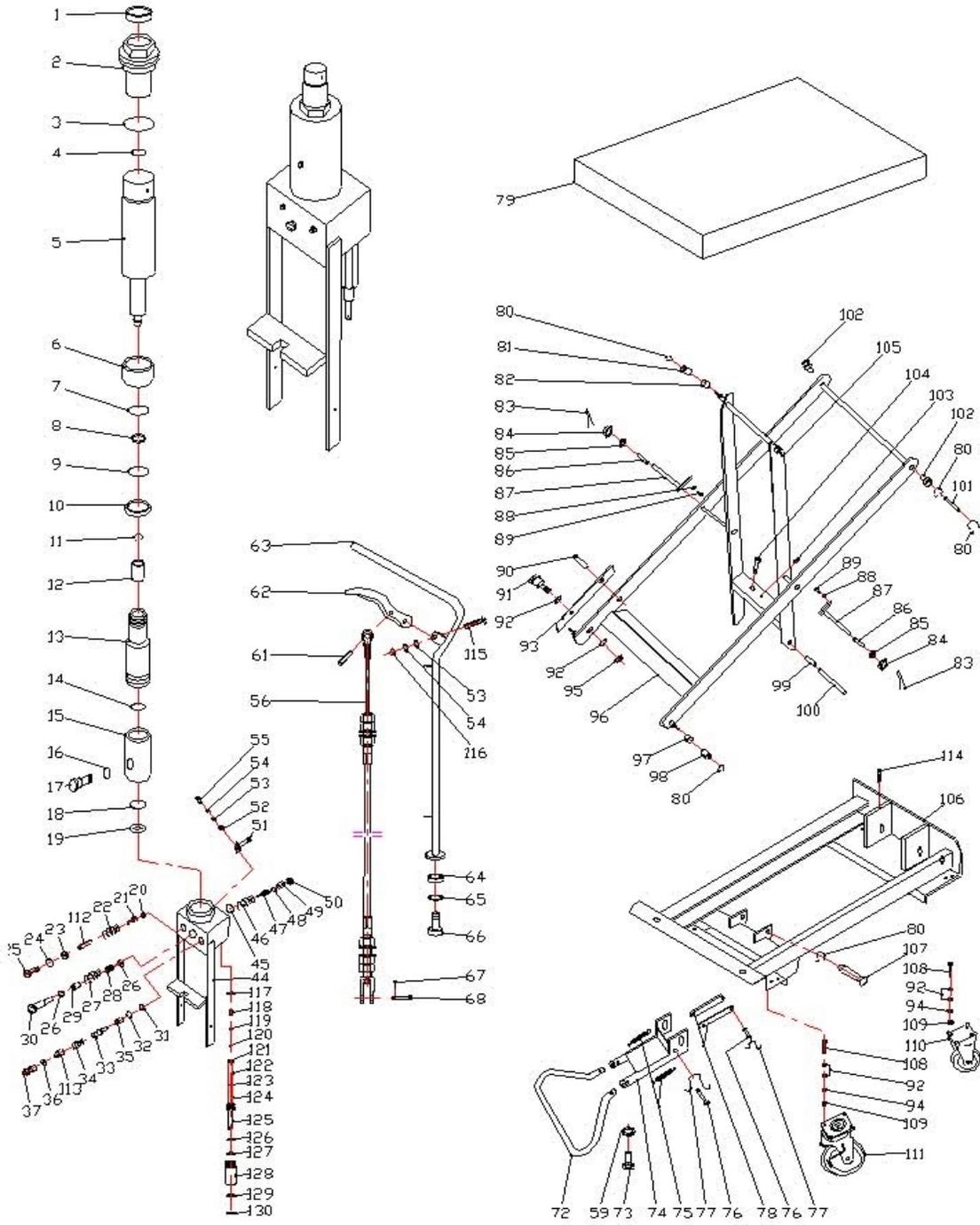


**8. Hydraulic Circuit**



LIFTING →  
 LOWERING →  
 SUCTION →

# 9. LIFT TABLE SPARE PARTS LIST



## LIFT TABLE SPARE PARTS LIST

NO	DESCRIPTION	QTY	NO	DESCRIPTION	QTY	NO	DESCRIPTION	QTY
1.	Seal cover d35×D43.5×5	1	47.	Reflux rod	1	93.	Safety rod	2
2.	Cylinder cover	1	48.	O-ring d4×1.8	1	94.	Spring washer 10	16
3.	O-ring d75×3.55	1	49.	Guide casing	1	95.	Nut M10	2
4.	O-ring d35.5×3.55	1	50.	Protect casing	1	96.	External scissors lever	1
5.	Piston Rod	1	51.	Lever	1	97.	Bushing	2
6.	Spacing casing	1	52.	Lever bushing	1	98.	Roller for chassis	2
7.	Guideing δ2×15	1	53.	Washer 6	2	99.	Bushing	2
8.	O-ring D20×2.4	1	54.	Spring washer 6	2	100.	Pin axle for chassis	1
9.	Seal ring d39×D45×4.5	1	55.	Screw M6×16	1	101.	Pin axle for table	1
10.	Retainer for piston rod	1	56.	Put pressure assembly line	1	102.	Bushing	2
11.	Spacing retainer 18	1	59.	Washer 8	2	103.	Oil cup	1
12.	Piston	1	61.	Spring pin	1	104.	Bolt M8×12	1
13.	Cylinder	1	62.	Control link	1	105.	Internal scissors lever	1
14.	Washer for cylinder	1	63.	Handle	1	106.	Chassis	1
15.	Reservior	1	64.	Spacing casing	2	107.	axle	1
16.	O-ring d10×2.65	1	65.	Spring washer 12	2	108.	Screw M10×25	16
17.	Filler screw	1	66.	Hex screw M12×30	2	109.	Nut M10	16
18.	O-ring d75×2.65	1	67.	Split pin 2×15	1	110.	Wheel	2
19.	Washer for reservior	1	68.	Pin	1	111.	Wheel	2
20.	Steel ball 5	1	72.	Pedal bent pipe	1	112.	Rod	1
21.	Spring base	1	73.	Hex screw M8×20	2	113.	Rod	1
22.	Regulating pressure spring	1	74.	Shake link	1	114.	Bolt M6×8	1
23.	Regulating pressure screw	1	75.	Spring	2	115.	Screw M6×30	1
24.	O-ring d7.1×1.8	1	76.	Pin axle	2	116.	Cover-type nut M6	1
25.	End cover	1	77.	Retainer 10	2	117.	washer	1
26.	O-ring d15×2.65	2	78.	Link	2	118.	Plug	1
27.	Regulating speed spring	1	79.	Table	1	119.	Steel ball φ6	1
28.	Regulating slide-valve	1	80.	Retainer 20	7	120.	Spring	1
29.	Regulating speed spring casing	1	81.	Roller for table	2	121.	Spring seat	1
30.	Regulating speed slide-casing	1	82.	Bushing	2	122.	Spring	2
31.	Steel ball 7	1	83.	Split pin 3.2×26	2	123.	Pin 2.5×8	1
32.	O-ring d6.9×1.8	1	84.	Nut M16	2	124.	Steel ball φ4	2
33.	Conical valve	1	85.	Washing	2	125.	Pump plunger	1
34.	Spring	1	86.	Bushing	2	126.	O-ring φ28×2.4	1
35.	Check valve casing	1	87.	Pin axle for scissors	2	127.	Block ring	1
36.	O-ring d10×1.8	1	88.	Spring washer 8	2	128.	Pump body	1
37.	Check valve screw	1	89.	Hex screw M8×16	2	129.	Seal ring φ20×φ28×5	1
44.	Pump body	1	90.	Spring pin 8×30	2	130.	Seal cover φ20×φ28×4.5	1
45.	O-ring d10.6×2.65	1	91.	Screw bolt M10×40	2			
46.	Spring	1	92.	Washer 10	36			

- A Pump ass'y 1 ~ 50,112,113 , 117 ~ 130
- B Swivel wheel ass'y 111
- C Front wheel ass'y 110
- D Sealkit ass'y 1,3,4,7,8,9,16,18,24,26,32,36,45,48,117,126,129,130
- E Handle ass'y 53,54,56,61,62,63,67,68,115,116

## 10. TROUBLES SHOOTING

NO	TROUBLE	CAUSE	ACTION
1	The table does not lift to maximum height.	-Not enough hydraulic oil.	-Add more oil.
2	The table does not lift up.	-Not enough hydraulic oil. -The oil has impurities. -Discharge valve is out of adjustment.	-Pour in more filtered oil. -Change the oil. -Adjust the setting nut (See item 4.4.4 b). But pressure line adjusting the opposite direction
3	The table does not descend.	-A part has been broken or been deformed resulting from unbalanced load. -The setting screw (58) is not in the correct position.	-Repair or replace component.  -Adjust the setting nut (See item 4.4.4 b)
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 table descends without being lowered.	-Seals worn or damaged. -Discharge valve is out of adjustment.	-Replace with new ones. -Adjust the setting nut (See item 4.4.4 b).