Instruction Manual

Low Profile Lift Table



ETW1000 ETW2000

Note: Owner/Operator must read and understand this instruction manual before using the low profile lift table

THANK YOU VERY MUCH FOR SELECTING OUR PRODUCT. THIS INSTRUCTION MANUAL DESCRIBES CORRECT OPERATING METHOD TO ENSURE PROLONGED SERVICE LIFE. PLEASE READ AND COMPLETELY UNDERSTAND THIS MANUAL BEFORE OPERATING THE LOW PROFILE LIFT TABLE. ALWAYS KEEP THIS MANUAL AT AN APPROPRIATE PLACE. IF THE MANUAL OR WARNING DECAL IS MISSING, PLEASE CONTACT WITH DEALER.

Note: This manual has been prepared for skilled and competent personal. It provises instructions for using the product correctly and parts list. This Manual cannot replace the professional skills and expertise of the user.

1.

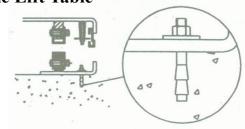
WARNING! If operating the lift table improperly, a person may be seriously !injured. Therefore, operate properly according to the following instruction

- ♦ Read & thoroughly understand the instruction manual completely before using. Follow all safety instructions strictly.
- ♦ It is necessary to check all safety devices before operation.
- ♦ Make sure that there are no obstacles in the working area.
- ♦ Do not put foot or hand in scissors mechanism or through frame.
- ♦ Screw the lifting eyes on the base frame before working on the lift table.
- ♦ Do not overload the lift table. Load should be distributed on the table according to relevant load distribution chart.
- ♦ Pay attention if local voltage and frequency is as same as the input specification of the lift table.
- ♦ Use the lift table on flat and solid ground.
- ♦ All the electrical connection and disconnection operations must be carried out by skilled and competent personal.
- ♦ While operation, it is forbidden to contact the moving parts of the lift table.
- ♦ While the lift table moving, it is forbidden to adjust or to move the load
- ♦ It is forbidden to lift the load, which perhaps does harm to a person or other object.
- ♦ It is forbidden to operate the lift table while a person is under the table.
- ♦ Do not adjust the safety valve of hydraulic power pack.
- ♦ It is forbidden to operate the lift table even if there is underf the table.
- ♦ Do not adjust the safety valve of hydraulic power pack.
- ♦ It is forbidden to operate the lift table even if there is small structure distortion.
- ♦ Do not use in an explosive or flammable place.

2.

WARING! Bolting down the Lift Table

Static vertical lift table must be fixed to the floor/ground by means of expander bolts or similar, are securely



affixed on the floor to prevent unintentional movement





CAUTION! <u>If operationg the lift table improperly. A person may be injured. Therefore, operate properly according to the following instruction.</u>

- ♦ The lift table is a moveable lifter designed to lift or lower rated load. Do not use it for other purpose.
- ♦ Do not allow a person to operate the lift table, who does not understand its operation.
- ♦ It is forbidden to change the lift table without manufacture's written admission.
- ♦ It is necessary to use the spare parts designated by manufacturer.
- ♦ Make sure to keep a distance between the table and ambient objects enough to operate the lift table safety.
- ♦ Keep the hydraulic system under clean and safe condition.
- \diamond The hydraulic power pack features an electric lowering control those coils. The coils must be fed with the power supply voltage should not exceed \pm 10% of the rated required votage.
- ♦ Always do maintenance and routine check while the lift table is unloaded.
- ♦ The lift table is not waterproof and should be used in a dry environment.

4. DAILY INSPECTION

Daily inspection is effective to find the malfunction or fault on the lift table. Before operation, check the lift table according to the following points.



CAUTION! <u>Do not use the lift table if any</u> malfunction or fault is found.

- ♦ Check all the terms of WARNING and CAUTION.
- ♦ Check scratches, bending or crack on the lift table.
- ♦ Check smooth movement of the table.
- ♦ Check if there is any dydraulic oil leakage.
- ♦ Check the vertical creep of the table.
- ♦ Check if all the bolts and nuts are firmly tightened.

5. Operating the lift table

LOADING

The maximum capacity of the lift table is 1000kg/2000kg. Load should be distributed on the lift table equably.

■ Lifting the Table



CAUTION! <u>Do not overload the lift table.</u>

<u>Ensure the balance of loading. Do not load</u>

partially or concentrically

♦ Screw and loose emergency stop switch.

- ♦ Push the UP button and power pack starts to work to lift the load.
- ♦ Loose the UP button and power pack stops working.

■ LOWERING THE TABLE



WARNING! <u>Do not put foot or hand in scissors mechanism.</u>

- ♦ Push the DOWN button and the table will lower.
- \Diamond Loose the DOWN button and the table will stop.

NOTE

- ♦ The table is equipped with an aluminum guard to avoid accidental danger.
- ♦ If aluminum guard strikes an object while the table lowers, stop operation and check the lift table. After making sure no any abnormality, strike the UP button slightly and then the electric system will function as before.

■ EMERGENCY STOP

There are two methods of emergency stop as follows:

- ♦ Push down the emergency stop switch and the movement of table stops.
- ♦ Strike aluminum guard upward and the movement of table also stops.

■ TRANSPORTATION

If necessary, the lift table can be transported with attached righbolts.

- ♦ Pay attention to the maximum capacity of lifting equipment to be used.
- ♦ Keep the righbolts with reasonableness.

6. HYDRAULIC CIRCUIT & ELECTRIC PRINCIPLE DIAGRAM

See Figure 1 & Figure 2

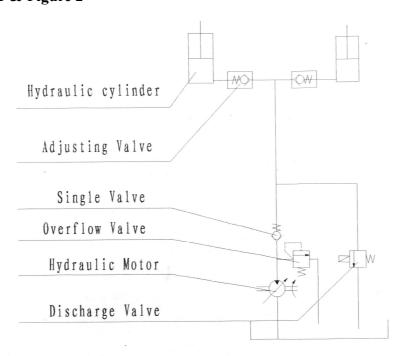
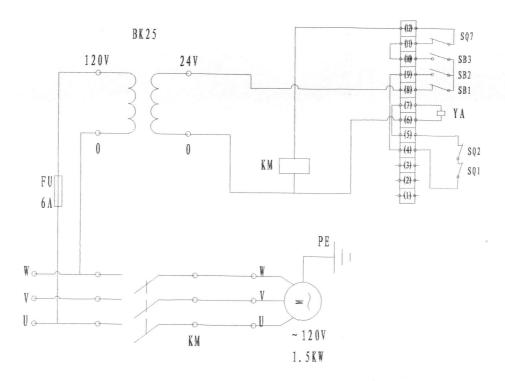


Fig. 1 Hydraulic circuit

ELECTRIC PRINCIPLE DIAGRAM



No.	Description	Specification	Q'ty	Marks
BK	Power Transformer	25W (120V-24V)	1	
FU	Fuse	RT14-20 (6A)	1	
KM	Connect	CJX2-1201/24V	1	
M	Hydraulic Power Pack	120V/1.5kw	1	
PE	Ground Wire		1	
SQ1-2	Control Switch-down	TZ-8104	2	
SQ7	Control Switch-up		1	
Y A	Fuse-down	AC24V	1	
SB1	Emergency Button		1-	
SB2	Button - up		1	, e ²
SB3	Button -down		1	×

Fig. 2 Electric Principle Diagram

7. SERVICE INSTRUCTIONS

- Do routine check of fasteners, packing and oil leaking.
- Do routine check of the function of the lift table.
- Before service the lift table, make sure to turn off the AC power supply.
- After service it is necessary to check the function of the lift table again.
- ONLY a qualified personel can do service work.
- Do routine check of the micro-switches on the safety guard.
- Do routine check of the hydraulic system by listening its noise, touch motor's surface.
- Caution: It is necessary to turn off the AC power supply before touch motor's surface.
- Pay attention to clear or even replace the oil filter after operating for a long time.
- Appropriate lubrication is necessary to make the lift table work easily and have a prolonged service lift.
- Following table is recommended to service the lift table periodically.

Content	After every 500 hour' working or every 3 months later	After every 2000 hours'wording or every year		
Check oil level of oil tank	\Rightarrow			
Check the cleanliness of oil filter	☆			
Fasten all the connecting parts again	☆			
Check wear and tear of pressure oil pipes	☆			
Check hydraulic cylinder	☆			
Fix main parts tightly again	☆			
Check the function of micro-switches	☆			
Check whole working state of the lift table	☆			
Lubricate all the joints and privot points	☆			
Check wear and tear of all axial bushes		☆		
Replace hydraulic oil for the first time	Accumulated working	d working ten hours'		
Replace hydraulic oil		☆		
Check oil leaking		☆		
Remark: \$\sigma\$ stands for proceeding the item.				

8. TROUBLE SHOOTING

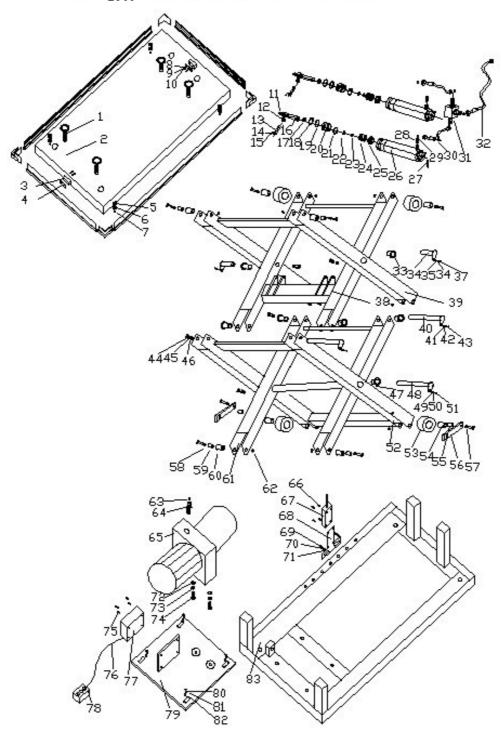
Note: Before service it is necessary to screw two eyebolts into relevant screw-holes on the basis lest the table lowers accidentally.

Trouble	Cause	Remedy
Table cannot lift while motor works mormally	 ♦ Eyebolt has not been removed ♦ AC Voltage phrases mistake ♦ Electromagnetic dysfunctions ♦ The table is overloaded 	 ◇ Remove eyebolt ◇ Correct AC voltage phrase electromagnetic valve and repair it ◇ Remove excessive load
Table cannot lift and motor does not work	 ◇ Lowering limit switch (if switched) damaged 	◇ Replace limit switch
Table cannot lower	 ◇ Lowering limit switch or micro-switch on safety guard damaged ◇ Electromagnetic valve dysfunctions ◇ Safety guard works ◇ Something wrong with electric circuit board 	 ◇ Replace lowering limit switch switch or micro-switch. ◇ Check the function of electromagnetic valve and repair it ◇ Strike the UP button slightly ◇ Replace electric circuit board
Table's legs go over limit position (if existed) while table lowers	 ♦ Internal leaking in electromagnetic valve ♦ Packing damaged in hydraulic cylinder 	 ◇ Repair electromagnetic valve and if necessary replace it ◇ Check and replace packing
Table cannot reach the hightest position	◇ Oil not enough◇ Limit switch damaged	♦ Fill enough oil♦ Check and repair limit switch.If necessary, replace it

9. SPECIFICATIONS

Model		ETW1000 ETW2000			
Capacity (kg)		1000kg 2200lb	2000kg 4400lb		
Lowest H	leight (mm)	305	360		
Max. Lift Height (mm)		1780	1780		
Table Dir	mensions (mm)	820x1300	850x1300		
Approx. Li	fting Time while loading	≤50s	€80s		
Motor	Output (w)	1500	2200		
	Voltage (V)		400		
	Revolution (r/min)	14	400		
Protection Class		IP.54			
	Insulation Class				
Net Wei	ght (kg)	210	295		

ETW₂₀₀₀ Electic Lift Table



ETW 1000/2000 ELECTRIC LIFT TABLE PARTS LIST

No.	Description	Q'ty	No.	Description	Q'ty
1	Lifting Bolt M10	4	43	Hex Cap Bolt M8x20	2
2	Table	1	44	Hex Cap Bolt M8x25	10
3	Switch	2	45	Spring Washer Φ8	10
4	Fixed Board	2	46	Big Washer	5
5	Taper Spring	4	47	No Oil Bearing Φ44x Φ40x80	2
6	Aluminum Alloy Angle Iron	4	48	Shaft Pin	ī
7	Set Nut M8	4	49	Flat Washer	1
8	Flat Washer Φ4	2	50	Spring Washer	1
9	Spring Washer Φ4	2	51	Hex Cap Bolt M8x20	1
10	Semicicle Screw M4x30	2	52	Outside Scissor (Down)	1
11	Oil Mouth	2	53	Roller Guide	4
12	Bearing Φ47x Φ30x20	2	54	Shaft Bushing	4
13	Cylinder Pin	2	55	Separate Cover	2
14	Spring Washer ⊕8	2	56	Position Rod	2
15	Hex Cap Bolt M8x20	2	57	Hex Cap Bolt M16x85	2
16	Lift Piston	2	58	Hexp Cap Bolt M16x75	6
17	Oil Seal TC50x62x7	2	59	No Oil Bearing	4
18	C-ring Φ95	2	60	Link Cover	4
19	Steel Wire C-ring Φ95	2	61	Inside Scissor (Down)	1
20	Top Nut	2	62	Set Nut M16	8
21	O-ring Φ80x3.1	2	63	O-ring Φ10x1.9	1
22	O-ring Φ80x3.1	2	64	Oil Pipe Joint	1
23	C-ring Φ40x3.2	2	65	Power Pack	1
24	Piston	2	66	Semicicle Screw M4x25	4
25	Oil Seal DAS80-62	2	67	Switch	1
26	Cylinder	2	68	Fixed Board	1
27	Lock Pin Φ40x3.2	2	69	Hex Cap Screw M4x12	2
28	Valve Assembly	2	70	Flat Washer Φ6	2
29	O-ring Φ10x1.9	5	71	Spring Washer Φ6	2
30	High Pressure Oil Pipe	2	72	Flat Washer Φ10	2
31	T Joint	1	73	Spring Washer Φ10	2
32	Long High Pressure Oil Pipe	1	74	Hex Cap Bolt M10x45	2
33	No Oil Bearing Φ39x Φ35x80	6	75	Semicicle Screw M4x12	4
34	Shaft	2	76	Wire	1
35	Flat Washer Φ8	2	77	Wire Switch Cover	1
36	Spring Washer Φ8	2	78	Switch	1
37	Hex Cap Bolt M8x20	2	79	Install Board	1
38	Inside Scissor (upper)	1	80	Hex Cap Bolt M8x20	4
39	Outside Scissor (upper)	1	81	Spring Washer	4
40	Pin	2	82	Flat Washer	4
41	Flat Washer Φ8	2	83	Frame Seat	1
42	Spring Washer Φ8	2			-