

Instruction Manual

Low Profile Lift Table



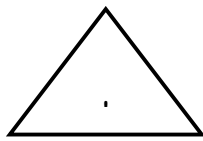
Model: ET -series

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 provides instructions for using the product correctly and parts list. This Manual cannot replace the professional skills and expertise of the user.

1.



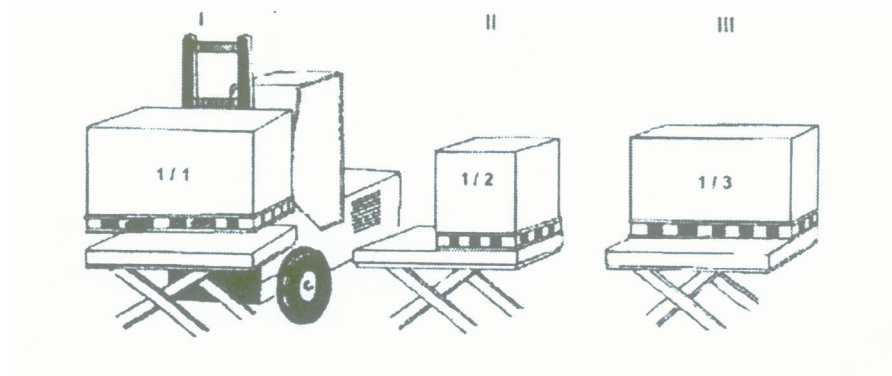
WARNING! If operating the lift table improperly, a person may be seriously !injured. Therefore, operate properly according to the following instruction

- ◇ 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.

Note! Maximum load refers to the load being uniformly distributed over the entire platform area.

In accordance with **EN1570**, Safety Requirements for Lifting Tables, the basic requirements are:

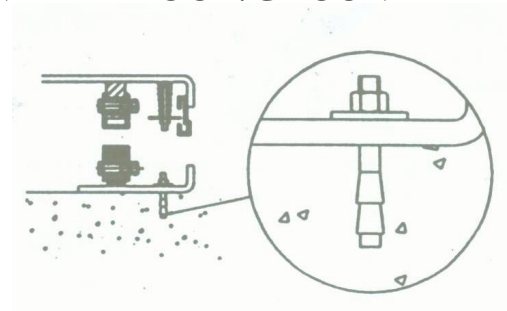
- I 100% of the rated load (maximum load) uniformly distributed over the entire platform area.
- II or 50% of the rated load (maximum load) uniformly distributed over half the length of the platform.
- III or 33% of the rated load (maximum load) uniformly distributed over half the width of the platform.



2. INSTALLATION OF LIFT TABLE ON THE FLOOR/GROUND OR IN A PIT



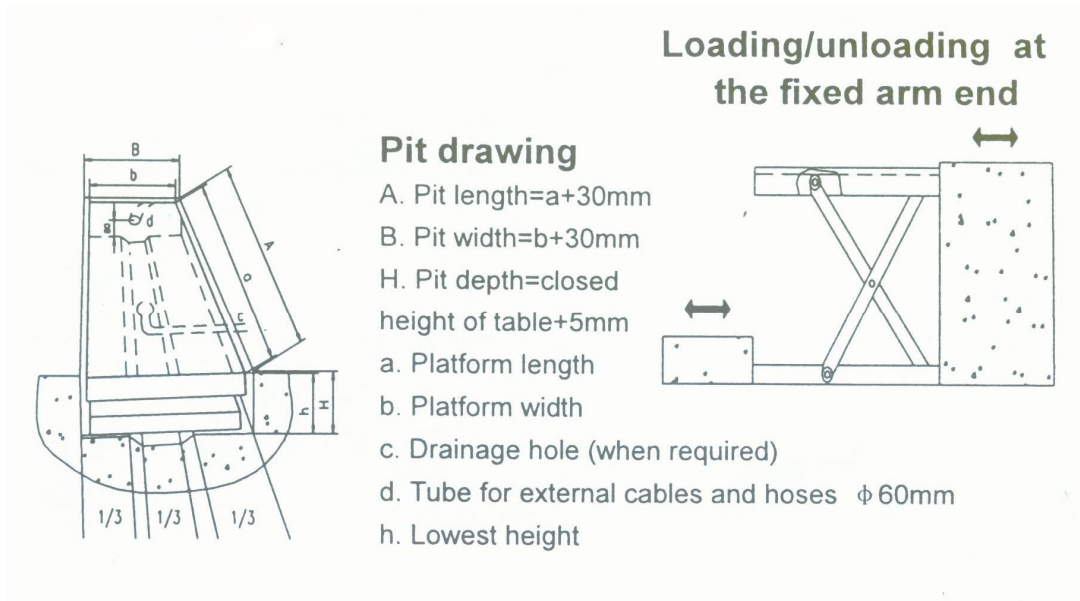
Double or triple vertical
Scissors tables must be
Fixed to the floor/ground



By means of expander bolts or silimar, We also remommend that all other lift table types, with the exception of mobile units, are securely affixed on the floor to Pr event unintentional movement

Mechanical/electrical installation

1. The base frame of the lift table is not as standard self-supporting. It is important that the flooring is flat and stable and that the installation area or pit, when necessary, is well drained.
2. Utilize a lifting sling through the scissor package. Tie the base frame to the platform or the scissor mechanism. Locate the table into the desire position. Turn the fixed arm end to the side where the load will be moved on or off at upper level. See picture below.
3. Check the operation of the safety frame on all sides.
4. The control device should be positioned so that the operator has a clear view over the lift table and the load at all times when the lift is operated.



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

- ◇ 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.
- ◇ 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! Do not use the lift table if any 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 hydraulic 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! *Do not overload the lift table. Ensure the balance of loading. Do not load 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! *Do not put foot or hand in scissors mechanism.*

- ◇ Push the DOWN button and the table will lower.
- ◇ 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

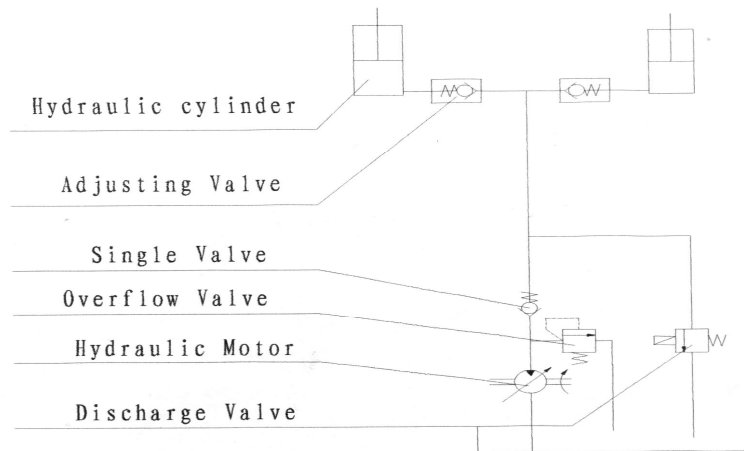
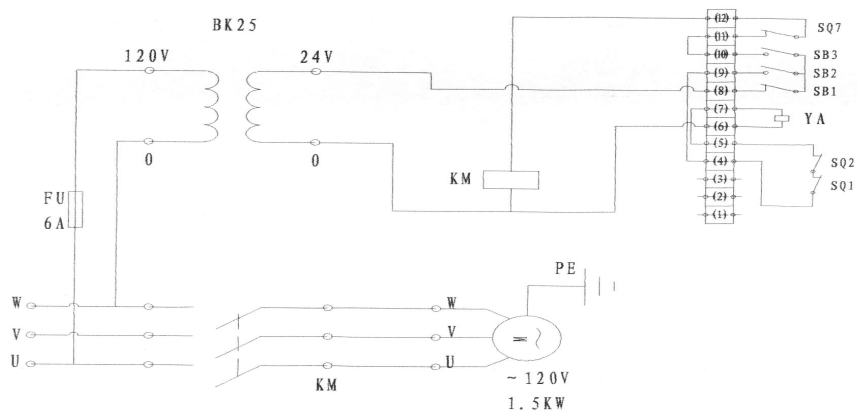


Fig. 1 Hydraulic circuit

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	
YA	Fuse-down	AC24V	1	
SB1	Emergency Button		1	
SB2	Button - up		1	
SB3	Button -down		1	

Fig. 2 Electric Principle Diagram

7. SERVICE INSTRUCTIONS

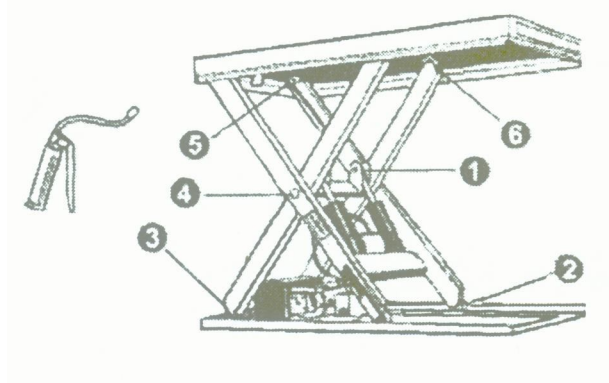
- Do routine check of fasteners, packing and oil leaking.
- Do routine check of the function of the lift table.
- Before service the lift table, make sure to turn off the AC power supply.
- After service it is necessary to check the function of the lift table again.
- ONLY a qualified person can do service 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 life.
- 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' working or every year
Check oil level of oil tank	☆	
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 pivot points	☆	
Check wear and tear of all axial bushes		☆
Replace hydraulic oil for the first time	Accumulated working ten hours'	
Replace hydraulic oil		☆
Check oil leaking		☆

Remark: ☆ stands for proceeding the item.

8. GREASING POINTS

- ① Piston rod bearing
- ② Lower running wheel
- ③ Lower arm fixing
- ④ Arm center
- ⑤ Upper arm fixing
- ⑥ Upper running wheel



When greasing the bearing the lift table must not be loaded! When determining oil levels, bear in mind that the tank contains the greatest amount when the lift table is in its lowest position. Hydraulic oil must be treated as dangerous waste!

9. TROUBLE SHOOTING

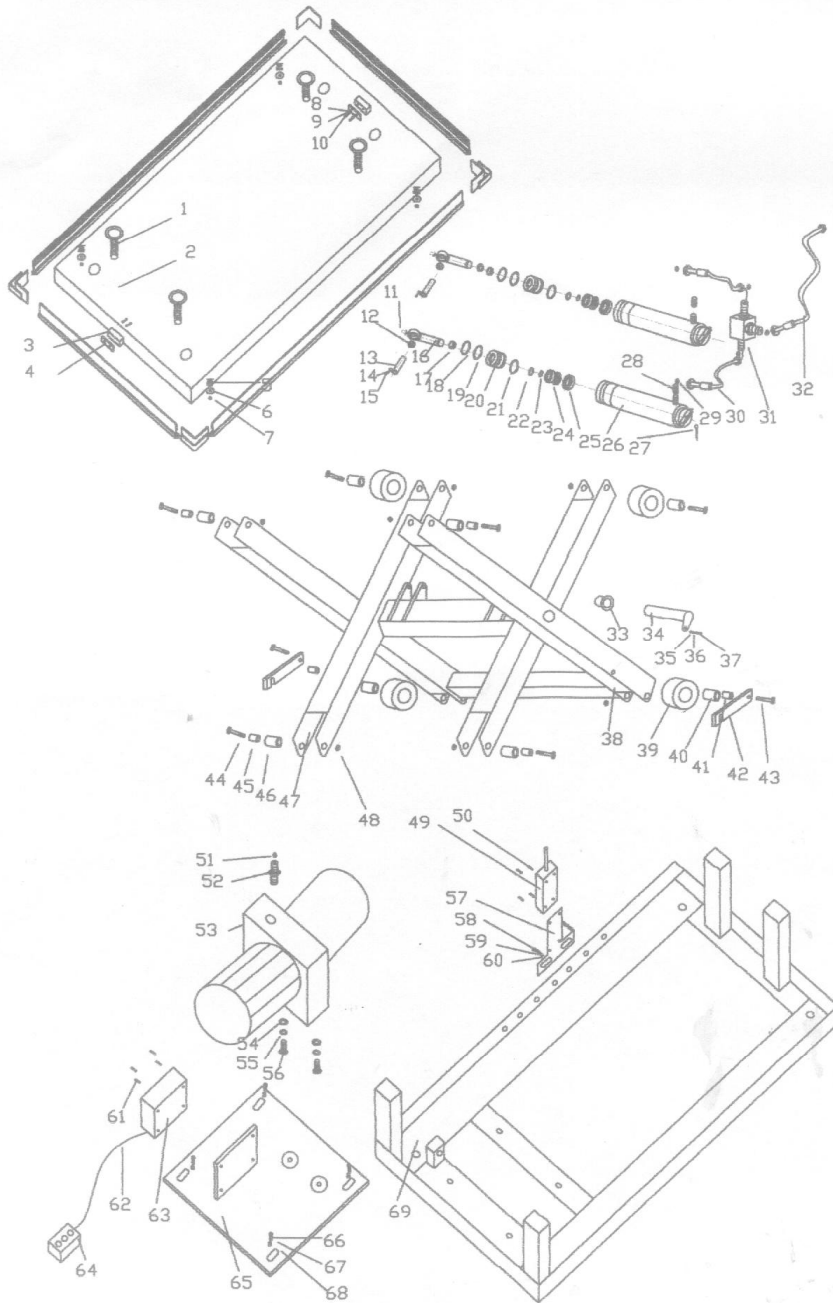
Note: Before service it is necessary to screw two eyebolts into relevant screw-holes on the basis lest the table lowers accidentally.

Trouble	Cause	Remedy
Table cannot lift while motor works normally	<ul style="list-style-type: none"> ◇ Eyebolt has not been removed ◇ AC Voltage phrases mistake ◇ Electromagnetic dysfunctions ◇ The table is overloaded 	<ul style="list-style-type: none"> ◇ Remove eyebolt ◇ Correct AC voltage phrase electromagnetic valve and repair it ◇ Remove excessive load
Table cannot lift and motor does not work	<ul style="list-style-type: none"> ◇ Lowering limit switch (if switched) damaged 	<ul style="list-style-type: none"> ◇ Replace limit switch
Table cannot lower	<ul style="list-style-type: none"> ◇ Lowering limit switch or micro-switch on safety guard damaged ◇ Electromagnetic valve dysfunctions ◇ Safety guard works ◇ Something wrong with electric circuit board 	<ul style="list-style-type: none"> ◇ Replace lowering limit 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	<ul style="list-style-type: none"> ◇ Internal leaking in electromagnetic valve ◇ Packing damaged in hydraulic cylinder 	<ul style="list-style-type: none"> ◇ Repair electromagnetic valve and if necessary replace it ◇ Check and replace packing
Table cannot reach the highest position	<ul style="list-style-type: none"> ◇ Oil not enough ◇ Limit switch damaged 	<ul style="list-style-type: none"> ◇ Fill enough oil ◇ Check and repair limit switch. If necessary, replace it

10. SPECIFICATIONS

Model	ET1001	ET1002	ET2001	ET2002	ET4001	ET4002	
Capacity (kg)	1000kg/2200lb	1000kg/2200lb	2000kg/4400lb	2000kg/4400lb	4000kg/8800lb	4000kg/8800lb	
Lowest Height (mm)	205	205	230	230	240	240	
Max. Lift Height (mm)	1000	1000	1050	1050	1100	1100	
Table Dimensions (mm)	820x1300	1000x1600	850x1300	1000x1600	1200x1700	1200x2000	
Approx. Lifting Time while Loaded Rate Capacity(sec)	20 ~ 25	20 ~ 25	16 ~ 22	16 ~ 22	30 ~ 40	30 ~ 40	
Net Weight (kg)	160	186	235	268	375	405	
Packing Dimensions	1310x820x210	1610x1010x210	1310x860x240	1610x1010x240	1710x1210x250	2010x1210x250	

ET²⁰⁰¹₄₀₀₁ Electric Lift Table



ET2001/4001 Electric Lift Table Parts List

No.	Description	Q'ty	No.	Description	Q'ty
1	Lifting Bolt	4	37	Hex Cap Bolt M8x20	2
2	Table	1	38	Outer Scissor	1
3	Switch	2	39	Roller Guide	4
4	Fixed Board	2	40	Roller Bushing	4
5	Taper Spring	4	41	Separate Cover	2
6	Aluminum Alloy Angle Iron	4	42	Set Position Rod	2
7	Set Nut M8	4	43	Hex Cap Bolt	2
8	Flat Washer $\Phi 4$	2	44	Hex Cap Bolt	6
9	Spring Washer $\Phi 4$	2	45	No Oil Bearing	4
10	Semicircle Screw M4x30	2	46	Scissor Cover	4
11	Oil Mouth	2	47	Inner Scissors	1
12	Bearing	2	48	Set Nut M16	8
13	Cylinder Pin	2	49	Semicircle Screw M4x25	4
14	Spring Washer $\Phi 8$	2	50	Switch	1
15	Hex Cap Bolt M8x20	2	51	O-ring $\Phi 10 \times 1.9$	1
16	Lift Piston	2	52	Oil Pipe Joint	1
17	Oil Seal TC50x62x7	2	53	Power Pack	1
18	C-ring $\Phi 95$	2	54	Flat Washer $\Phi 10$	2
19	Steel C-ring	2	55	Spring Washer $\Phi 10$	2
20	Top Nut	2	56	Hex Cap Bolt M10x45	2
21	O-ring $\Phi 80 \times 3.1$	2	57	Fixed Board	1
22	O-ring $\Phi 80 \times 3.1$	2	58	Hex Cap Screw M6x12	2
23	Steel C-ring $\Phi 40 \times 3.2$	2	59	Flat Washer $\Phi 6$	2
24	Piston	2	60	Spring Washer $\Phi 6$	2
25	Oil Seal DAS80-62	2	61	Semicircle Screw M4x12	4
26	Cylinder	2	62	Wire	1
27	Lock Pin $\Phi 3.5 \times 30$	2	63	Batter Switch Cover	1
28	Safe Valve Assembly	2	64	Button Switch	1
29	O-ring $\Phi 10 \times 1.9$	5	65	Install Board	1
30	High Pressure Oil Pipe	2	66	Hex Cap Screw M8x20	4
31	T-joint	1	67	Spring Washer	4
32	Long High Pressure Oil Pipe	1	68	Flat Washer	4
33	No Oil Bearing	2	69	Frame Seat	1
34	Upper Scissor Pin	2			
35	Flat Washer $\Phi 8$	2			
36	Spring Washer $\Phi 8$	2			