

Instruction Manual

Low Profile Lift Table



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

RevB: 05/2007

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 small structure distortion.
- ◇ Do not use in an explosive or flammable place.

2.



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 movable 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 manufacturer'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 safely.
- ◇ Keep the hydraulic system under clean and safe condition.
- ◇ The hydraulic power pack features an electric lowering control. The coils must be fed with the required voltage as described on those coils. The power supply voltage should not exceed $\pm 10\%$ of the

rated required voltage.

- ◇ 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.

3.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.

4.OPERATING THE LIFT TABLE

■ LOADING

The maximum capacity of the lift table is 1000kg. 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 ringbolts.
- ◇ Pay attention to the maximum capacity of lifting equipment to be used.
 - ◇ Keep the ringbolts with reasonableness.

5.SPECIFICATIONS

Model		HU600	HU1000	HU1500
Capacity	(kg)	600	1000	1500
Collapsed Height	(mm)	85	85	105
Max. Height	(mm)	860	860	880
Platform Length	(mm)	1450	1450	1600
Platform Width	(mm)	985	1140	1180
Approx. Lifting Time while Loaded Rated Capacity		≤25	≤25	≤30
Motor	Output (w)	1100	1100	1500
	Voltage (V)	400		
	Revolution (r/min)	1400		
	Protection Class	IP.54		
	Insulation Class	F.		
Net Weight	(kg)	207	280	380

6.HYDRAULIC CIRCUIT & ELECTRIC PRINCIPLE DIAGRAM

See Figure 1 & Figure 2.

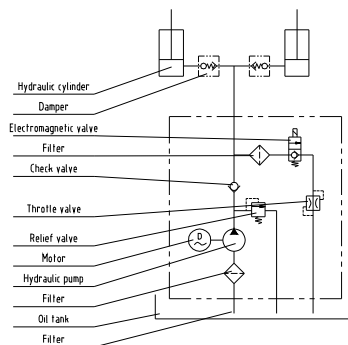
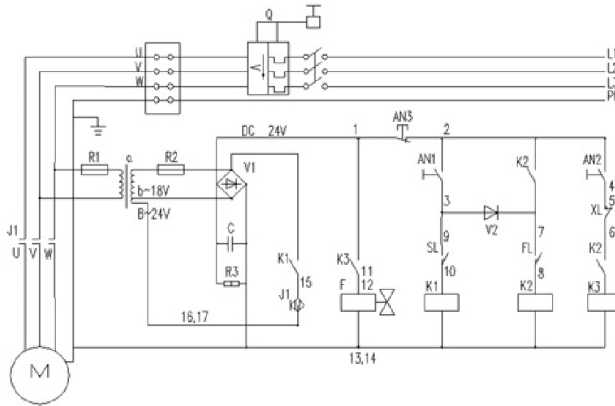


Fig. 1 Hydraulic circuit



19	B	TRANSFORMER	35W 0-18-24V/200, 240,380,400	1	
18	Q	SUBVOLTAGE OVERCURRENT GUARD LIMIT		1	USER PROVIDE FOR ONESELF
17	M	HYDRAULIC POWER PACK		1	
16	FL	MALFUNCTION LIMIT SWITCH	ME-8104	7	
15	XL	LOWERING LIMIT SWITCH		1	USER PROVIDE FOR ONESELF
14	SL	LIFTING LIMIT SWITCH	ME-8104	1	
13	AN3	EMERGENCY STOP		1	
12	AN2	DOWN BUTTON		1	
11	AN1	UP BUTTON		1	
10	K3	RELAY	943-1C-24DS	1	7A
9	K2	RELAY	HRS2H-S-DE24V	1	
8	K1	RELAY	943-1C-24DS	1	7A
7	J1	CONTACTOR	K6, AC24V	1	
6	C	ELECTROLYTIC CAPACITOR	470U50V	1	HORIZONTAL
5	V2	SILICON DIODE	1A	1	
4	V1	SILICON RECTIFYING BRIDGE	5A	1	
3	R3	RESISTOR	1.8K Ω /1W	1	
2	R2	FAST ACTING FUSE	3A	1	
1	R1	FAST ACTING FUSE	0.25A	1	
NUMBER	SYMBOL	NAME	MODEL&STANDARD	QUANTITY	REMARK

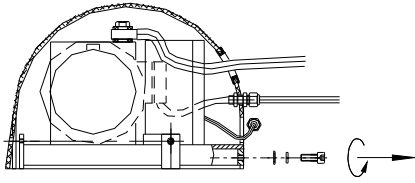
Fig. 2 Electric Principle Diagram

7.Service INSTRUCTIONS

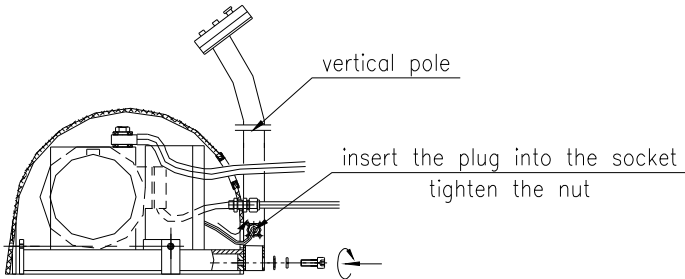
- Do routine check of fasteners, packing and oil leaking.
 - Do routine check of the function of the lift table.
 - Before service the lift table, make sure to turn off the AC power supply.
 - After service it is necessary to check the function of the lift table again.
 - ONLY a qualified personnel can 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 hours' 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.		

Instruction for Power Pack Installment

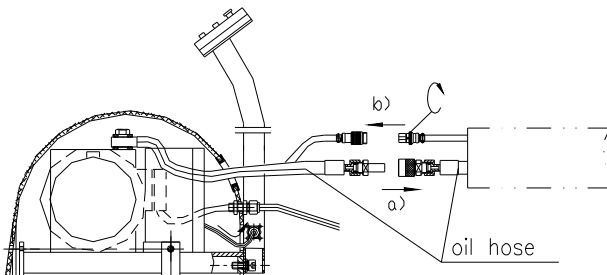


1. Loosen the bolt



2. a) Install the vertical pole and the cocer by tightening the crew as being showed in the figure;

b) Insert the plug connecting with the electeic box into the socket on the pole,then tighten the screw.



2. a) Insert the plug into the socket ,then tighten the screw. showed in the figure;

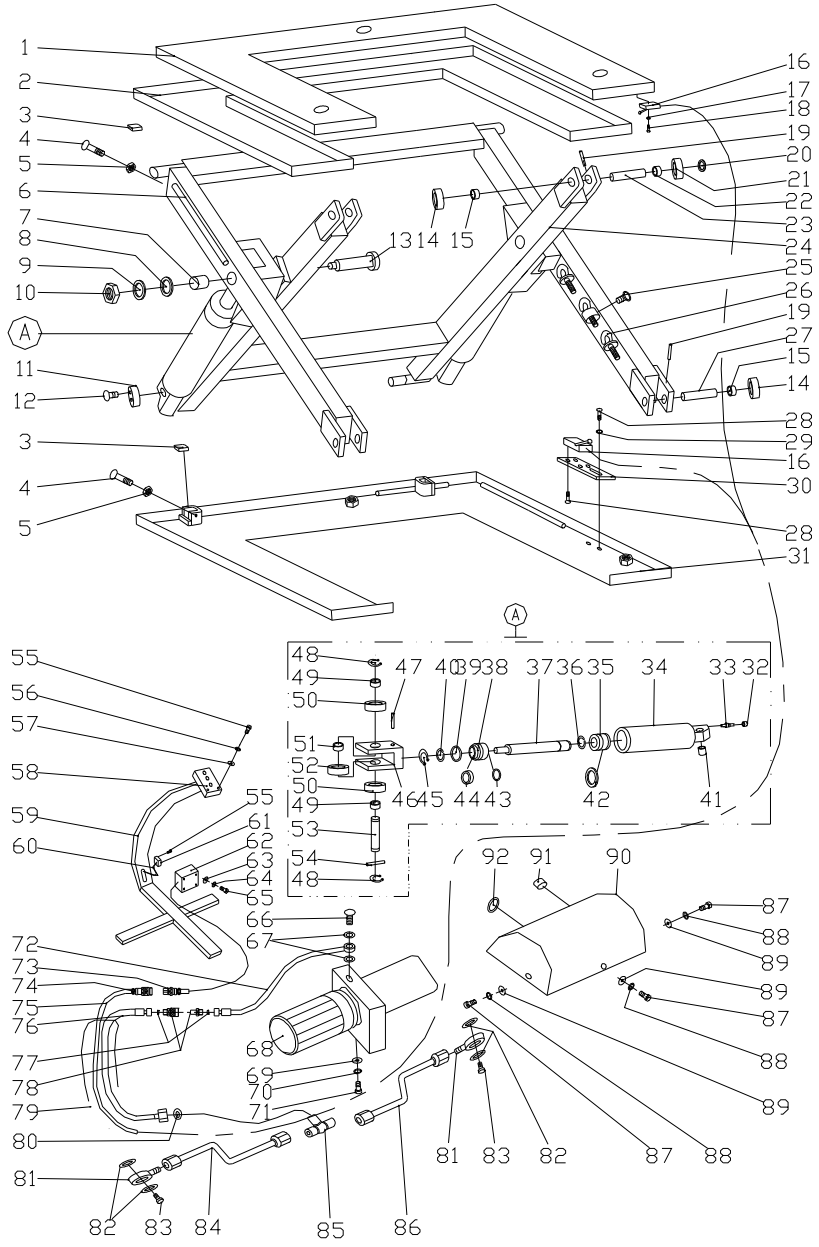
b) Insert the plug into the socket ,then tighten the screw.

8.TROUBLE SHOOTING

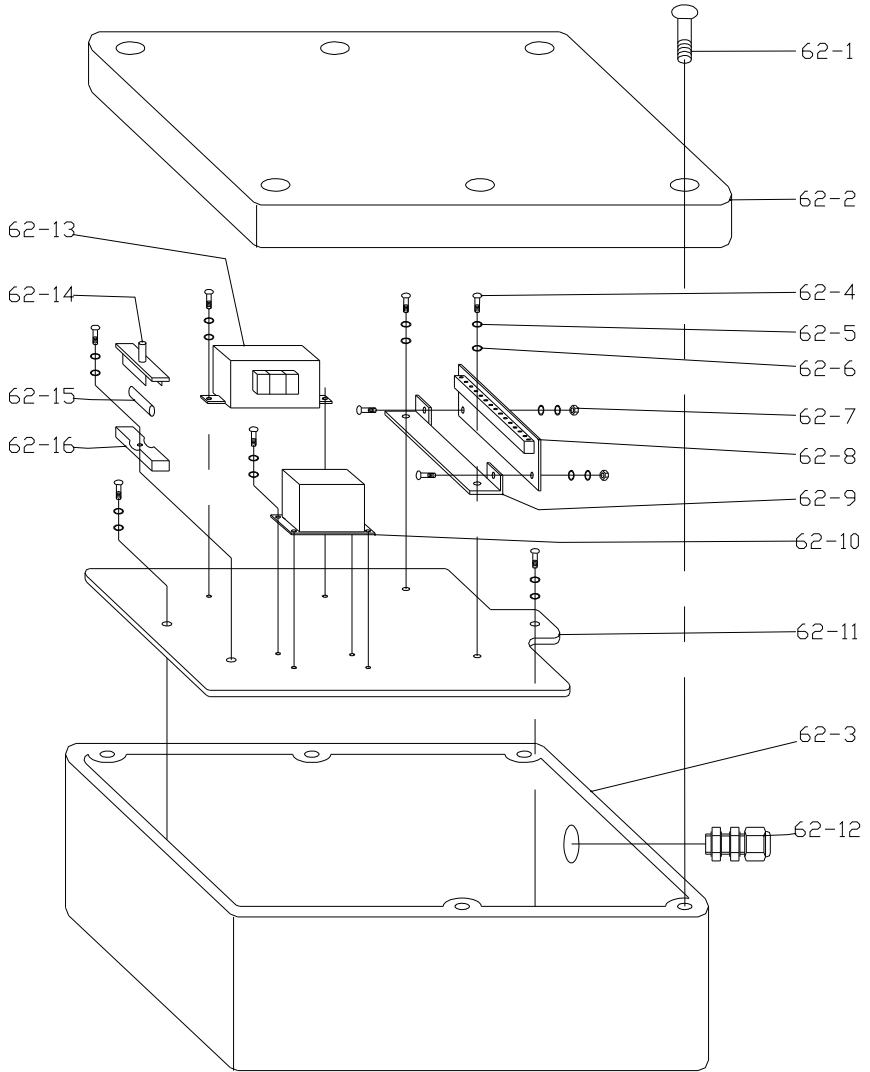
Note: Before service it is necessary to screw two eyebolts into relevant screw-holes on the basis lest the table lowers accidentally.

Trouble	Cause	Remedy
Table cannot lift while motor works 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 ◇ Check the function of 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 existed) 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

LIFT TABLE HU1000



ELECTRICAL BOX (62)

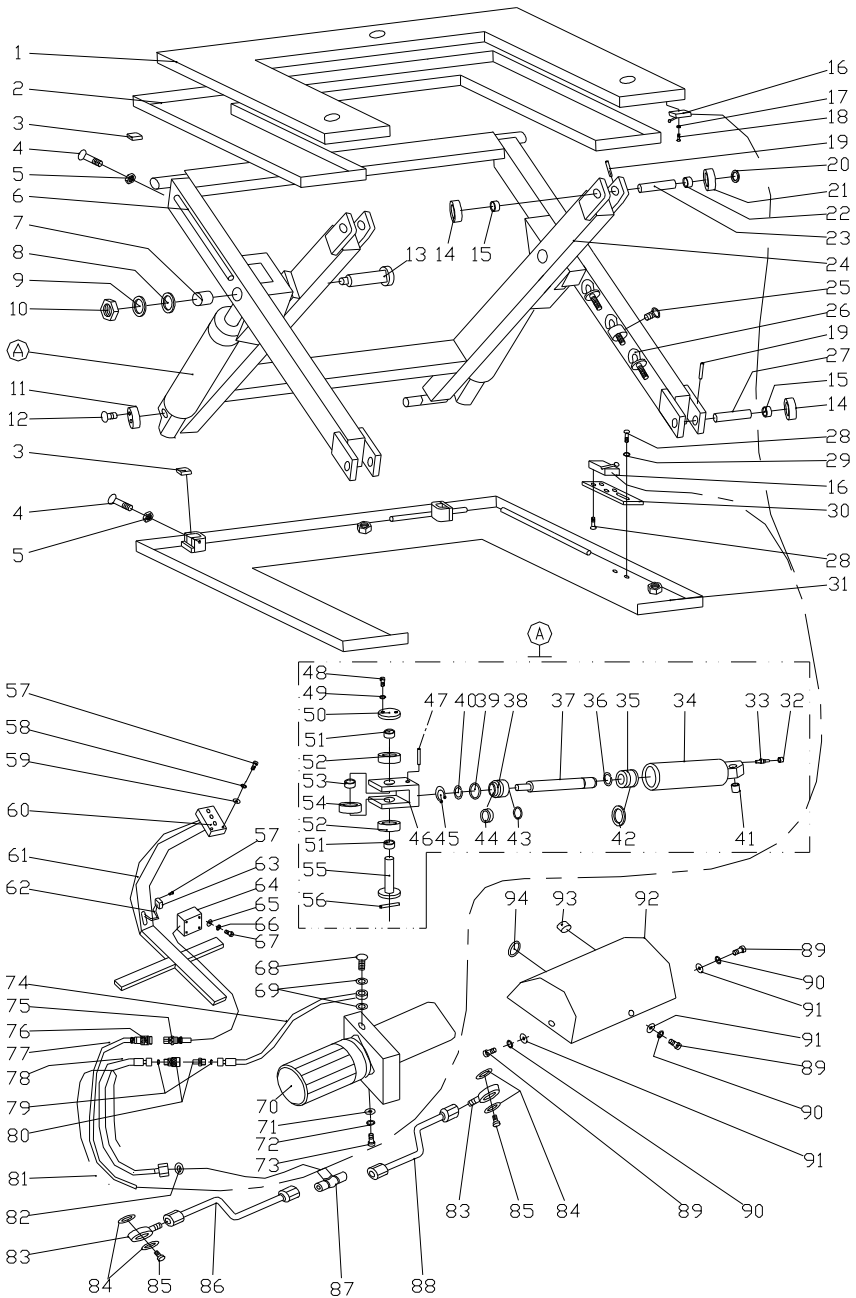


PART LIST HU1000

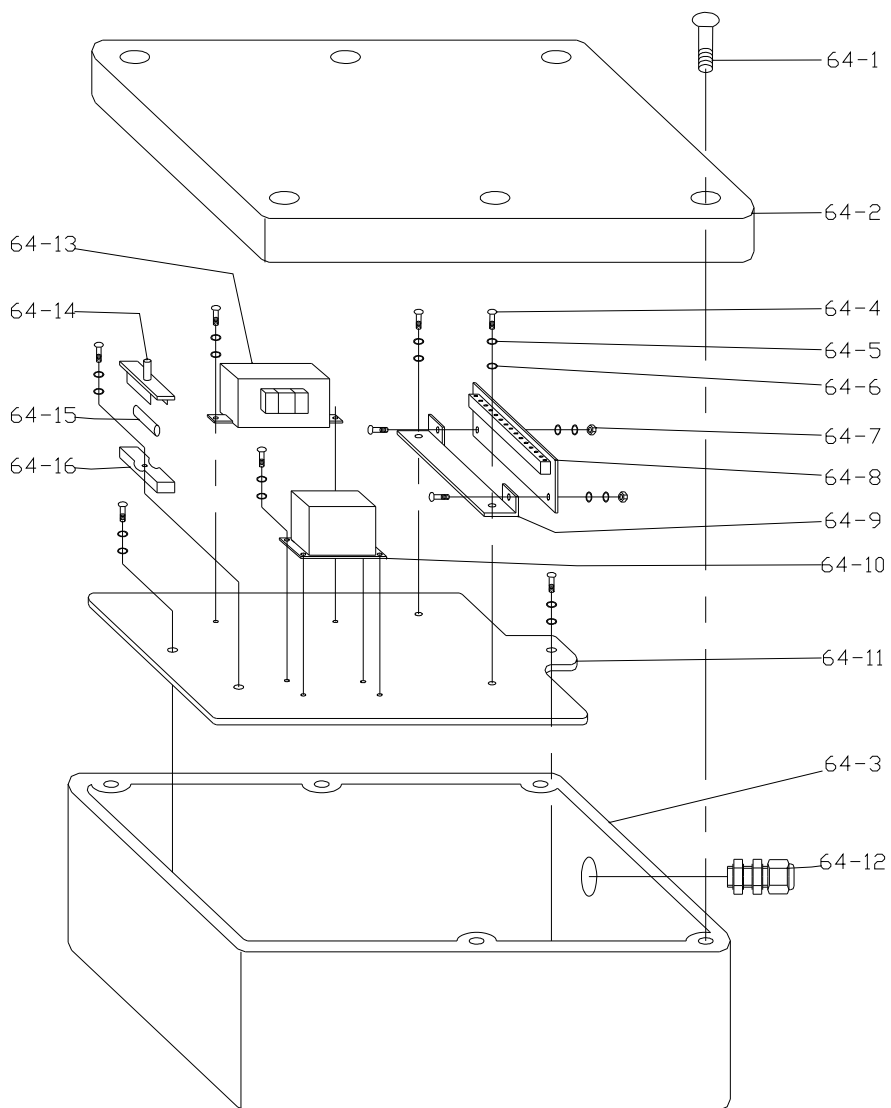
No	Description	Qty	No	Description	Qty
1	Table	1	28	Screw M5×12	6
2	Safety guard	1 set	29	Washer 5	2
3	Nylon washer	4	30	Mounted plate	1
4	Bolt M6x50	4	31	Chassis	1
5	Locknut M6	4	32	Bush	2
6	External scissor	1	33	Anti-explosive valve	2
7	Bush	2	34	Cylinder tube	2
8	Nylon washer	2	35	Piston	2
9	Washer	2	36	Snap Ring 25	2
10	Locknut M24	2	37	Piston rod	2
11	Axial cover	2	38	Cylinder cover	2
12	Screw M5x16	4	39	O-ring ϕ 55x2.65	2
13	Middle axle	2	40	Snap Ring 60	2
14	Short wheel	4	41	Lager axial bush	2
15	Short bush	4	42	Packing Assembly	2 set
16	Switch	8	43	O-ring ϕ 25x2.65	2
17	Washer 3	28	44	Packing UHS25	2
18	Screw M3×25	14	45	Retaining ring 55	2
19	Spring straight pin 5x50	4	46	Roller base	2
20	Retaining ring for axle 20	2	47	Spring straight pin ϕ 6x35	2
21	Long wheel	2	48	Retaining ring 22	4
22	Long bush	2	49	Small axial bush	4
23	Nylon wheel axle I	2	50	Roller	4
24	Internal scissor	1	51	Axial bush	2
25	Screw M6x10	3	52	Middle roller	2
26	Eyebolt	3	53	Roller axle	2
27	Nylon wheel axle II	2	54	Spring straight pin ϕ 4×40	2

55	Screw M3x10	8	66	Pipe-joint	1
56	Spring washer 3	4	67	Seal ring 14	2
57	Washer 3	4	68	Hydraulic power pack	1
58	Control switch	1	69	Washer 10	2
59	Hydraulic-pump unit base	1	70	Spring washer 10	2
60	Control wire	1 set	71	Screw M10x20	2
61	Plug	1 set	72	High pressure hose I	1
62	Electrical box	1	73	Plug	1
62-1	Screw	6	74	Socket	1
62-2	Cover	1	75	Switch wire	1 set
62-3	Box	1	76	High pressure hose II	1
62-4	Screw M4x10	13	77	Nylon seal	2
62-5	Spring washer 4	13	78	Ball valve	1 set
62-6	Washer 4	13	79	High pressure hose set	1
62-7	Nut M4	2	80	O-ring ϕ 10x1.8	1
62-8	Connection block plate	1	81	Joint pin	2
62-9	Support	1	82	Seal ring 12	4
62-10	Switch	1	83	Joint bolt	2
62-11	Board	1	84	Long tube assembly	1
62-12	Plastic joint	5 set	85	T joint	1
62-13	Transformer	1	86	Short tube assembly	1
62-14	Plug for fuse	1	87	Screw M6x12	3
62-15	Fuse	1	88	Spring washer 6	3
62-16	Socket for fuse	1	89	Washer 6	3
63	Washer 4	2	90	Power-unit cover	1
64	Spring washer 4	2	91	Plastic joint	1 set
65	Screw	2	92	Rubber bush	1

LIFT TABLE HU1500



ELECTRICAL BOX (64)

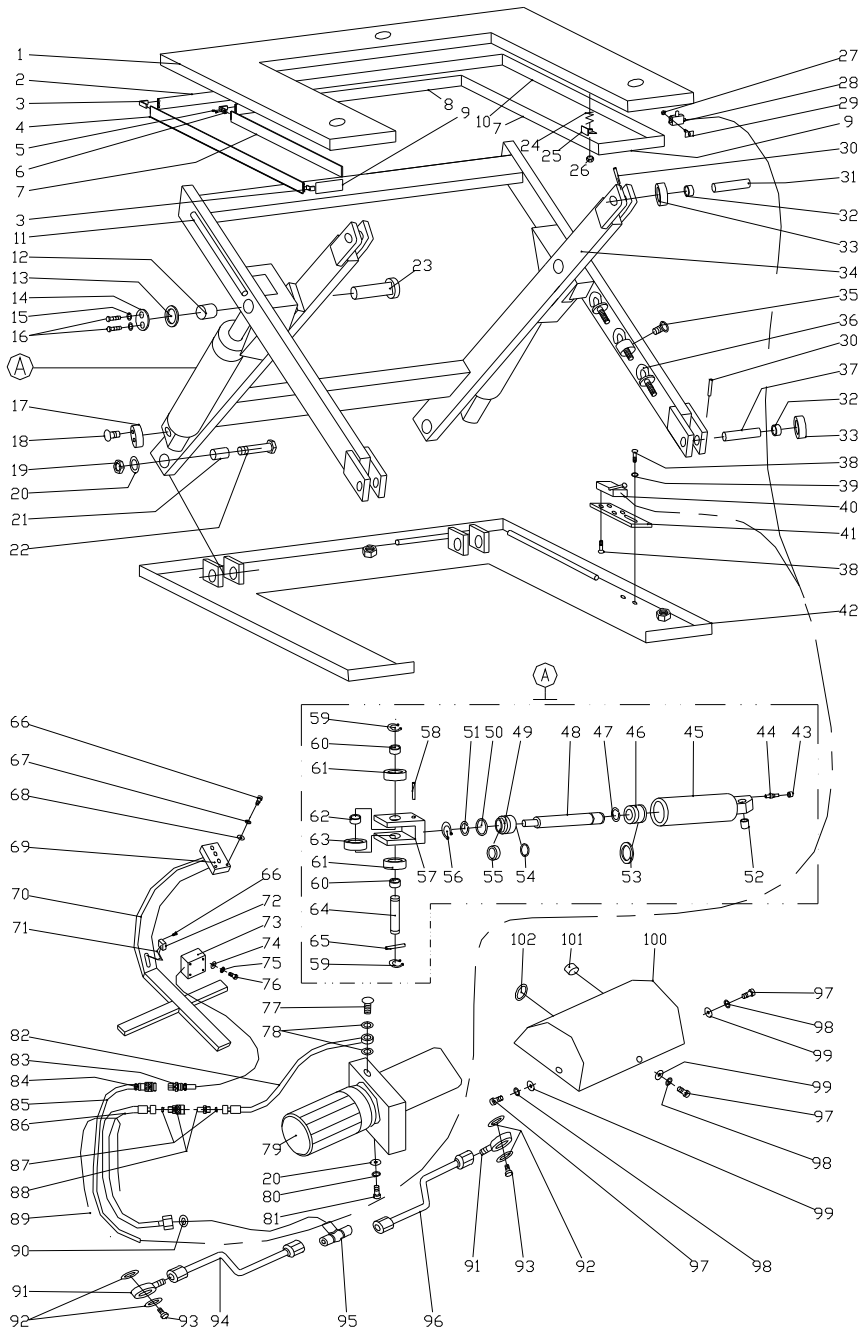


PART LIST HU1500

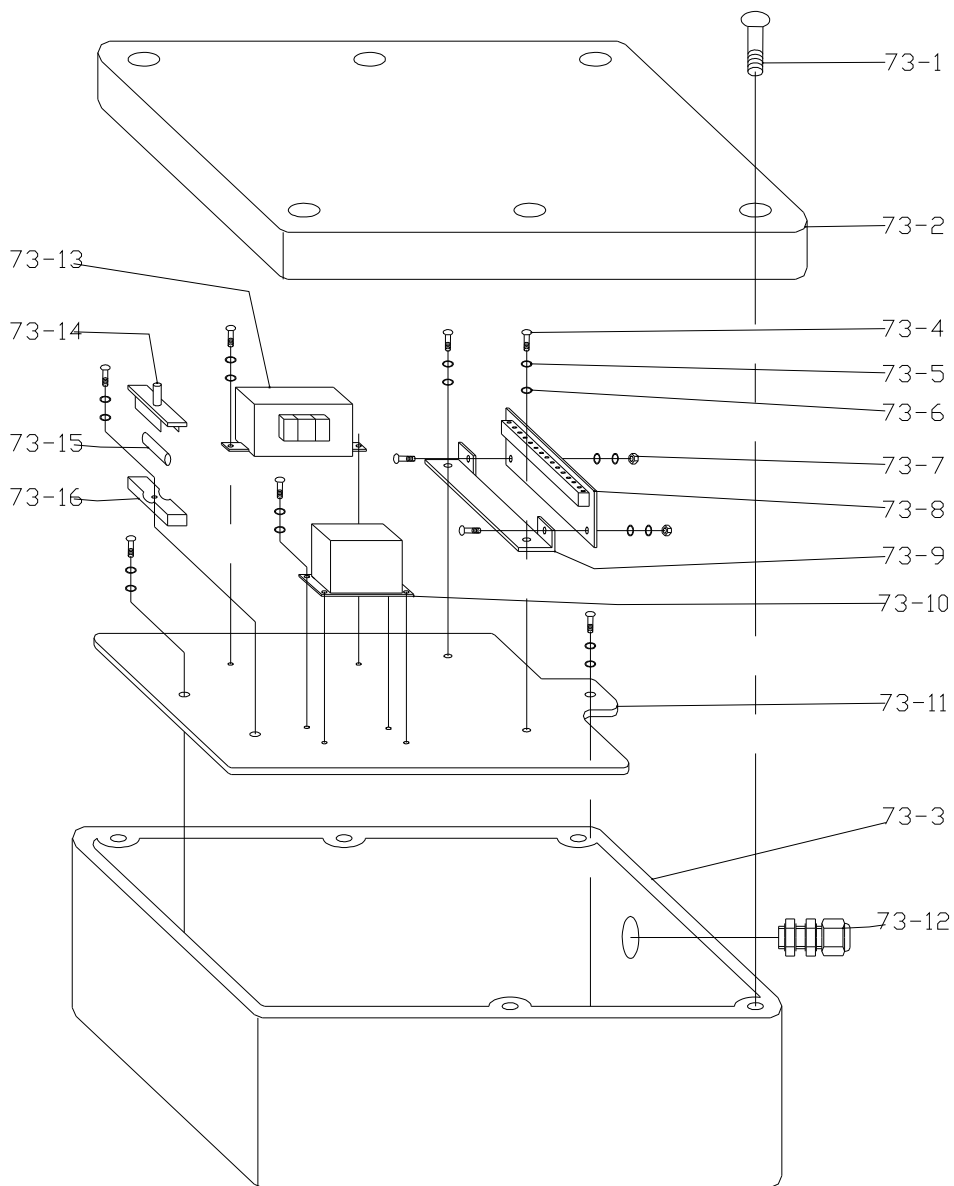
No	Description	Qty	No	Description	Qty
1	Table	1	28	Screw M5×12	6
2	Safety guard	1 set	29	Washer 5	2
3	Nylon washer	4	30	Mounted plate	1
4	Bolt M6x50	4	31	Chassis	1
5	Locknut M6	4	32	Bush	2
6	External scissor	1	33	Anti-explosive valve	2
7	Bush	2	34	Cylinder tube	2
8	Nylon washer	2	35	Piston	2
9	Washer	2	36	Snap Ring 40	2
10	Locknut M24	2	37	Piston rod	2
11	Axial cover	2	38	Cylinder cover	2
12	Screw M5x16	4	39	O-ring ϕ 75x2.65	2
13	Middle axle	2	40	Snap Ring ϕ 80	2
14	Short wheel	4	41	Lager axial bush	2
15	Short bush	4	42	Packing Assembly	2 set
16	Switch	8	43	O-ring ϕ 40x2.65	2
17	Washer 3	28	44	Packing UHS52×40×7	2
18	Screw M3×25	14	45	Retaining ring ϕ 75	2
19	Spring straight pin 5x60	4	46	Roller base	2
20	Retaining ring for axle 25	2	47	Spring straight pin ϕ 6x40	2
21	Long wheel	2	48	Screw M5×14	4
22	Long bush	2	49	Spring washer 5	4
23	Nylon wheel axle I	2	50	Washer	2
24	Internal scissor	1	51	Small axial bush	4
25	Screw M6x10	3	52	Roller	4
26	Eyebolt	3	53	Axial bush	2
27	Nylon wheel axle II	2	54	Middle roller	2

55	Roller axle	2	67	Screw	2
56	Spring straight pin $\phi 4 \times 40$	2	68	Pipe-joint	1
57	Screw M3x10	8	69	Seal ring 14	2
58	Spring washer 3	4	70	Hydraulic power pack	1
59	Washer 3	4	71	Washer 10	2
60	Control switch	1	72	Spring washer 10	2
61	Hydraulic-pump unit base	1	73	Screw M10x20	2
62	Control wire	1 set	74	High pressure hose I	1
63	Plug	1 set	75	Plug	1
64	Electrical box	1	76	Socket	1
64-1	Screw	6	77	Switch wire	1 set
64-2	Cover	1	78	High pressure hose II	1
64-3	Box	1	79	Nylon seal	2
64-4	Screw M4x10	13	80	Ball valve	1 set
64-5	Spring washer 4	13	81	High pressure hose set	1
64-6	Washer 4	13	82	O-ring $\phi 10 \times 1.8$	1
64-7	Nut M4	2	83	Joint pin	2
64-8	Connection block plate	1	84	Seal ring 12	4
64-9	Support	1	85	Joint bolt	2
64-10	Switch	1	86	Long tube assembly	1
64-11	Board	1	87	T joint	1
64-12	Plastic joint	5 set	88	Short tube assembly	1
64-13	Transformer	1	89	Screw M6x12	3
64-14	Plug for fuse	1	90	Washer 6	3
64-15	Fuse	1	91	Washer 6	3
64-16	Socket for fuse	1	92	Power-unit cover	1
65	Washer 4	2	93	Plastic joint	1
66	Spring washer 4	2	94	Rubber bush	1

LIFT TABLE HU600



ELECTRICAL BOX (73)



PART LIST HU600

No	Description	Qty	No	Description	Qty
1	Table	1	30	Spring straight pin 4x50	4
2	Width safety guard I	1	31	Axle for wheel I	2
3	Connected-board I	6	32	Bushing	4
4	Long safety guard I	1	33	Wheel	4
5	Screw M4×5	8	34	Internal scissor	1
6	Connected-board II	2	35	Screw M6x10	3
7	Long safety guard II	2	36	Eyebolt	3
8	Width safety guard II	1	37	Axle for wheel II	2
9	Width safety guard III	2	38	Screw M5×12	6
10	Long safety guard III	1	39	Washer5	2
11	External scissor	1	40	Switch	1
12	Bushing	2	41	Mounted plate	1
13	Nylon washer	2	42	Chassis	1
14	Washer	2	43	Bush	2
15	Spring washer 8	4	44	Anti-explosive valve	2
16	Hex bolt M8×20	4	45	Cylinder tube	2
17	Axial cover	2	46	Piston	2
18	Screw M5x16	4	47	Snap Ring 25	2
19	Locknut M10	4	48	Piston rod	2
20	Washer10	6	49	Cylinder cover	2
21	Bushing	4	50	O-ring φ 55x2.65	2
22	Hex bolt M10×55	4	51	Snap Ring 60	2
23	Middle axle	2	52	Lager axial bush	2
24	Spring	8	53	Packing Assembly	2 set
25	Buffer-board	8	54	O-ring φ 25x2.65	2
26	Locknut M8	8	55	Packing UHS25	2
27	Nut M4	14	56	Retaining ring for axle 55	2
28	Safety switch	6	57	Roller base	2
29	Fixed-board	12	58	Spring straight pin φ 6x35	2

59	Retaining ring for axle	4	73-16	Socket for fuse	1
60	Small axial bush	4	74	Washer 4	2
61	Roller	4	75	Spring washer 4	2
62	Axial bush	2	76	Screw	2
63	Middle roller	2	77	Pipe-joint	1
64	Roller axle	2	78	Seal ring 14	2
65	Spring straight pin	2	79	Hydraulic power pack	1
66	Screw M3x10	8	80	Spring washer 10	2
67	Spring washer 3	4	81	Screw M10x20	2
68	Washer 3	4	82	High pressure hose I	1
69	Control switch	1	83	Plug	1
70	Hydraulic-pump unit	1	84	Socket	1
71	Control wire	1 set	85	Switch wire	1 set
72	Plug	1 set	86	High pressure hose II	1
73	Electrical box	1	87	Nylon seal	2
73-1	Screw	6	88	Ball valve	1 set
73-2	Cover	1	89	High pressure hose set	1
73-3	Box	1	90	O-ring ϕ 10x1.8	1
73-4	Screw M4x10	13	91	Joint pin	2
73-5	Spring washer 4	13	92	Seal ring 12	4
73-6	Washer 4	13	93	Joint bolt	2
73-7	Nut M4	2	94	Long tube assembly	1
73-8	Connection block plate	1	95	T joint	1
73-9	Support	1	96	Short tube assembly	1
73-10	Switch	1	97	Screw M6x12	3
73-11	Board	1	98	Spring washer 6	3
73-12	Plastic joint	5 set	99	Washer 6	3
73-13	Transformer	1	100	Power-unit cover	1
73-14	Plug for fuse	1	101	Plastic joint	1 set
73-15	Fuse	1	102	Rubber bush	1