

2G & 3G Light Duty Lift Tables Service Manual



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Model: 2G2848, 2G3849, 3G3049, 3G3849

S/N _____

Customer _____

LIFT PRODUCTS, INC.

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 THE APPROPRIATE PLACE. IF THE MANUAL OR WARNING DECAL IS MISSING, PLEASE CONTACT THE 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.



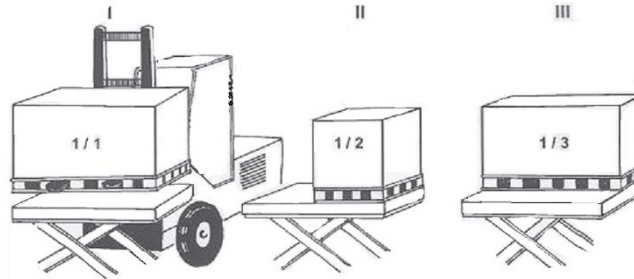
WARNING!

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

- Read & thoroughly understand the instruction manual completely before using. Following 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 a 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:

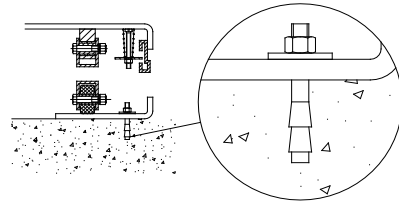
- 100% of the rated load (maximum load) uniformly distributed over the entire platform area.
- or 50% of the rated load (maximum load) uniformly distributed over half the length of the platform area.
- or 33% of the rated load (maximum load) uniformly distributed over half the width of the platform area.



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



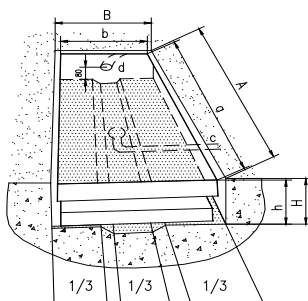
Double or triple vertical scissor tables must be fixed to the floor/ground by means of expander bolts or similar. We also recommend that all other lift table types, with the exception of mobile units, are securely affixed on the floor to prevent unintentional movement.



Mechanical/Electrical Installation

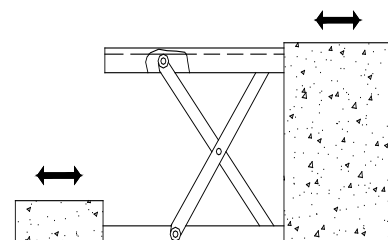
1. The base frame of the lift table is not as standard self-supporting. It is important that the flooring is flat and stable and that the installation area or pit, when necessary, is well drained.
2. Utilize a lifting sling through the scissor package. Tie the base frame to the platform or the scissor mechanism. Locate the table into the desired 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

LOADING/UNLOADING AT THE FIXED ARM END



Pit Drawing

- A. Pit length= a+30mm
- B. Pit width=b+30mm
- H. Pit depth=closed height of table + 5mm
- a. platform length
- b. platform width
- c. drainage hole (when required)
- d. tube for external cables and hoses 60mm
- e. lowest height



3.



CAUTION!

If operating the lift table improperly, a person may be injured. Therefore, operate properly according to the following instructions:

- 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 manufacture.
- 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 +/- 10% of the rated required voltage.
- Always do maintenance and routine check with 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 1,000kg. Load should be distributed on the lift table equally.

- **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 start to work to the lift 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 ring bolts.

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

- **MOTOR WORKING TIME**

- Motor hours of work in one hour less than nine minutes.

No	Type	Name	Description	Qty
1	LB01	Control	DF30-110V-460V/0-24V 50VA	1
2	F1 F2	Fast Melter	5A	2
3	VD1	Rectifier	RS-2510	1
4	VDR1	Voltage Dependent Resistor	10K/471 10K/821	1
5	R1	Resistor	1.8K/1W	1
6	C1	Electrolytic Condenser	470uF/50V	1
7	KM01	AC Contractor	BC-30-10	1
8	KA1 KA2	Middle Relay	SRC-24VDC-SH	2
9	D1 D2 D3 D4 D5 D6 D7	Silicon Rectifying Diode	IN4007	7
10	DF01	Electromagnetic Valve	DC24V	1
11	SB3	Emergency Stop Button	XB2-ES542C+ZB-BY9101	1
12	SB2	Down Button	XB2-BA21C	1
13	SB1	Up Button	XB2-BA21C	1
14	SQ1	Up Limit Switch	D4V-8108Z	1
15	SQ2	Safety Switch		2
16	SQ9	Down Limit Switch	D4V-8108Z (Prepared by customer)	1
17	M101	Pump Motor		1
18	QF101	Circuit Breaker	C45N3P 25A (Prepared by customer)	1
19	R6	Resistor	100/0.5w	1
20	R4	Resistor	10K/0805	1
21	R5	Resistor	1K/0805	1
22	RW01	Rheostat	50K	1
23	WD01	Stabilovolt Tube	3.3V	1
24	C3 C4 C8	Electrolytic Condense	10uf/50V	3
25	IC01	Integrated Circuit	LM358	1
26	U04	Integrated Circuit	KA7812	1
27	U02	Electric Dipole	P521	1
28	TA01	Current Transformer	20A	1
29	R9	Resistor	24K/0805	1
30	R8	Resistor	5.1K/0805	1

Fig. 2 Electric Principle Diagram

7 SERVICE INSTRUCTIONS

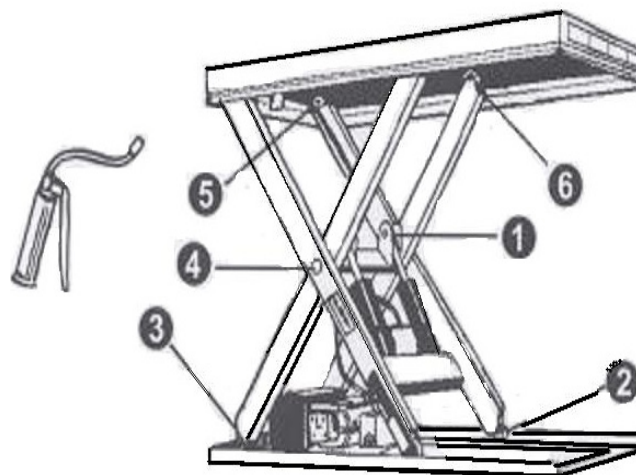
- Do routine check of fasteners, packing and oil leaking.
- Do routine check of the function of the lift table.
- Before service the lift table, make sure to turn off the AC power supply.
- After service it is necessary to check the function of the lift table again.
- ONLY a qualified personnel can do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

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 bearings 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 put down the prop lest the table lowers accidentally.

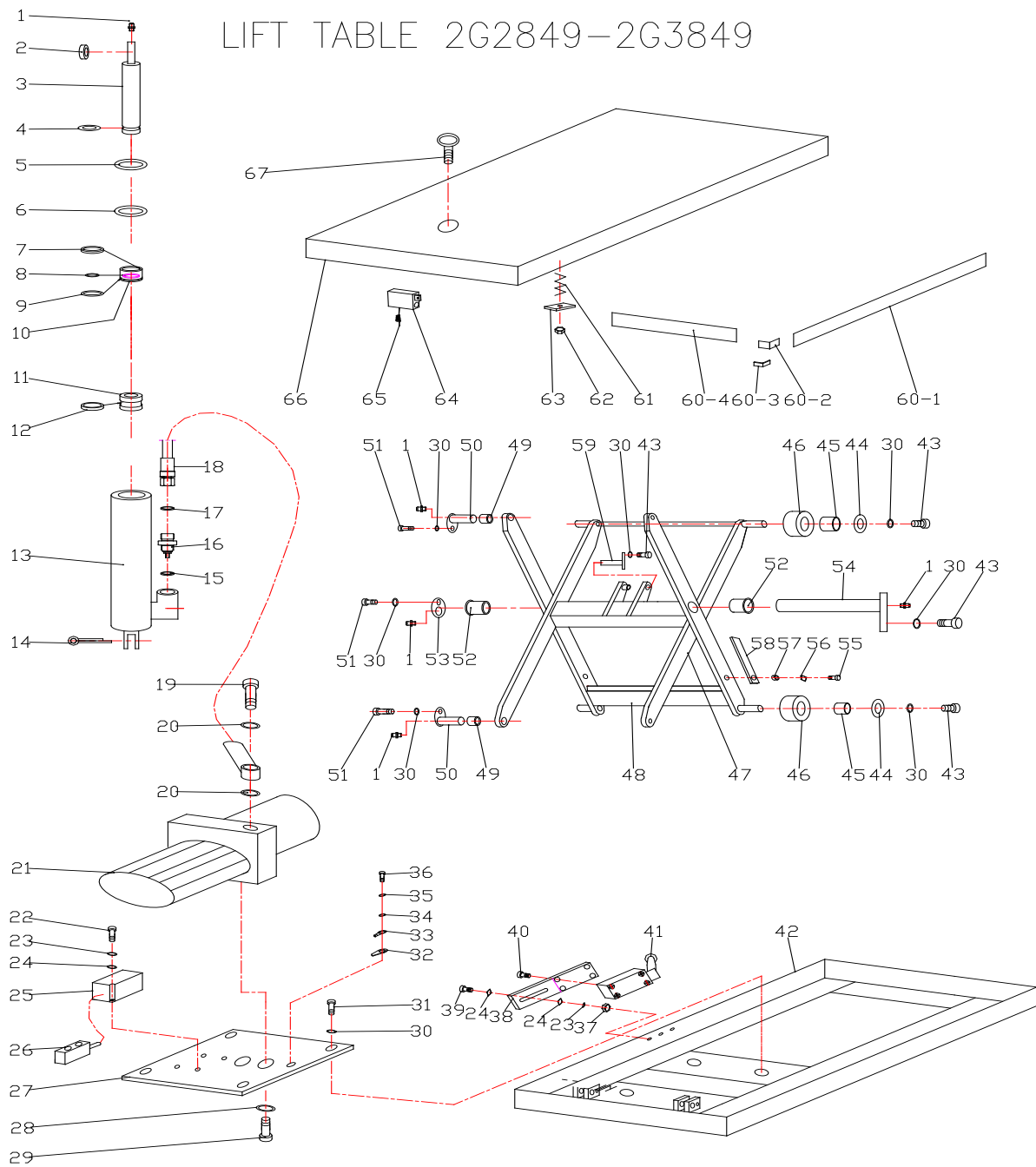
Trouble	Cause	Remedy
Table cannot lift while motor works normally.	<ul style="list-style-type: none"> • Eyebolt has not been removed. • AC voltage phases mistake. • Electromagnetic dysfunctions. 	<ul style="list-style-type: none"> • Remove eyebolt. • Correct AC voltage phase. • Check the function of electromagnetic valve and repair it.
	<ul style="list-style-type: none"> • The table is overloaded. 	<ul style="list-style-type: none"> • 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 electrical 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.

The brand of oil is ISO HL32 (such as Rando oil R & 032. D.T.E. Oil light. Turbo 32)

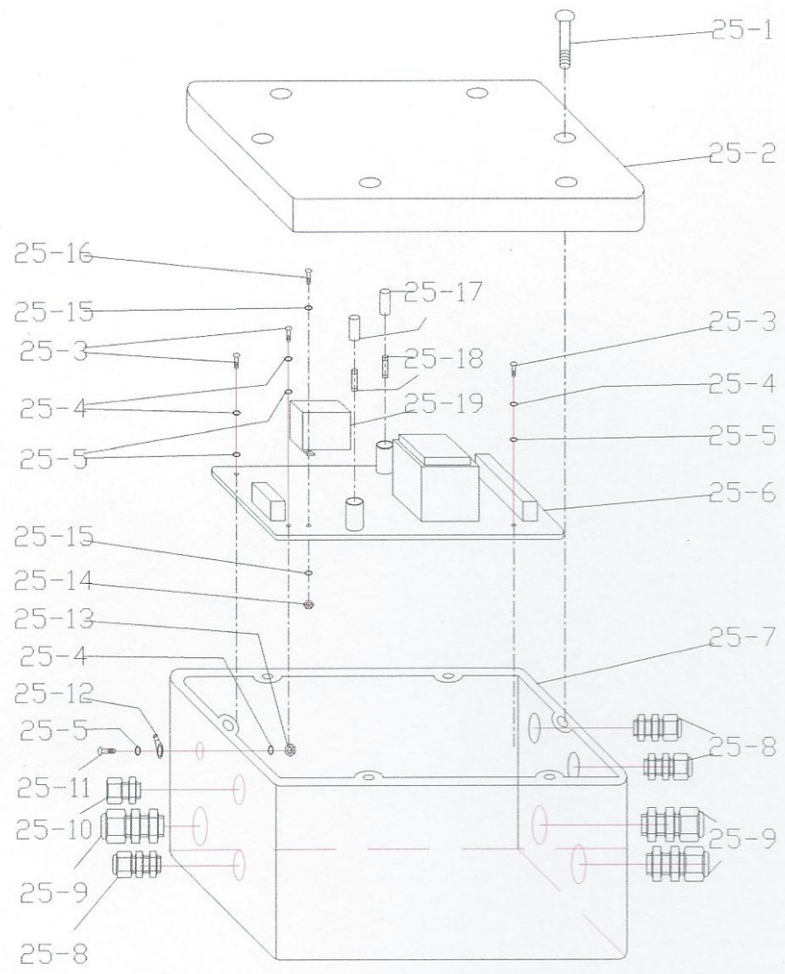
10 SPECIFICATIONS

Model		2G2849	2G3849	3G3049	3G3849
Capacity (Lbs)		2000	2000	3000	3000
Collapsed Height (mm)		200	200	200	200
Max. Bearing Height (mm)		1000	1000	1000	1000
Platform Length (mm)		1245	1245	1245	1245
Platform Width (mm)		710	965	762	965
Approx. Lifting Time while loaded. Rated Capacity (sec)		12~15	12~15	30~40	30~40
Motor	Output (w)	750	750	1200	1200
	Voltage (V)	110			
	Revolution (r/min)	1720			
	Protection Class	IP.54			
	Insulation Class	F.			
Net Weight (kg)		172	185	225	237

LIFT TABLE 2G2849-2G3849



ELECTRICAL BOX (25)

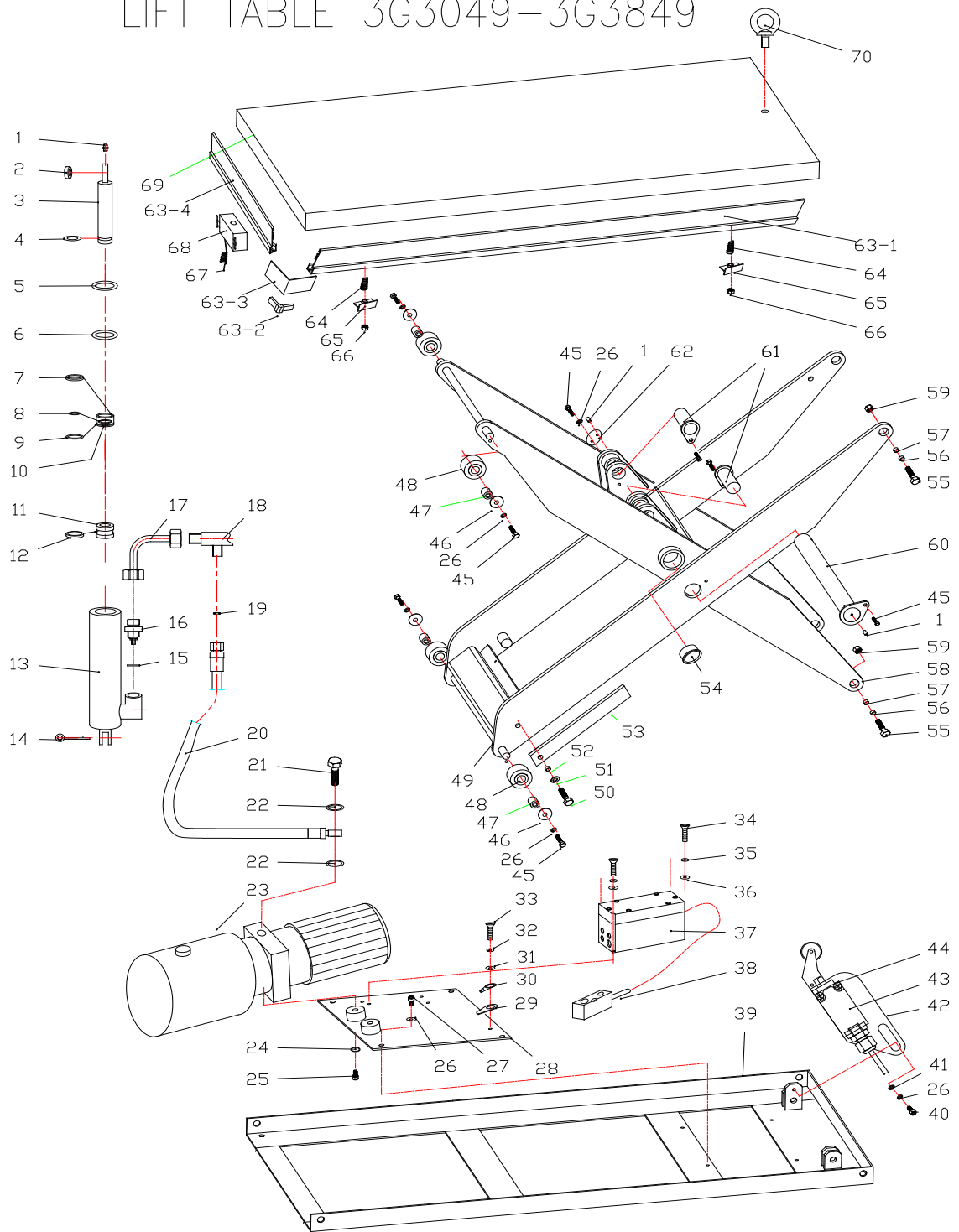


LIFT TABLE SPARE PARTS LIST 2G2849 2G3849

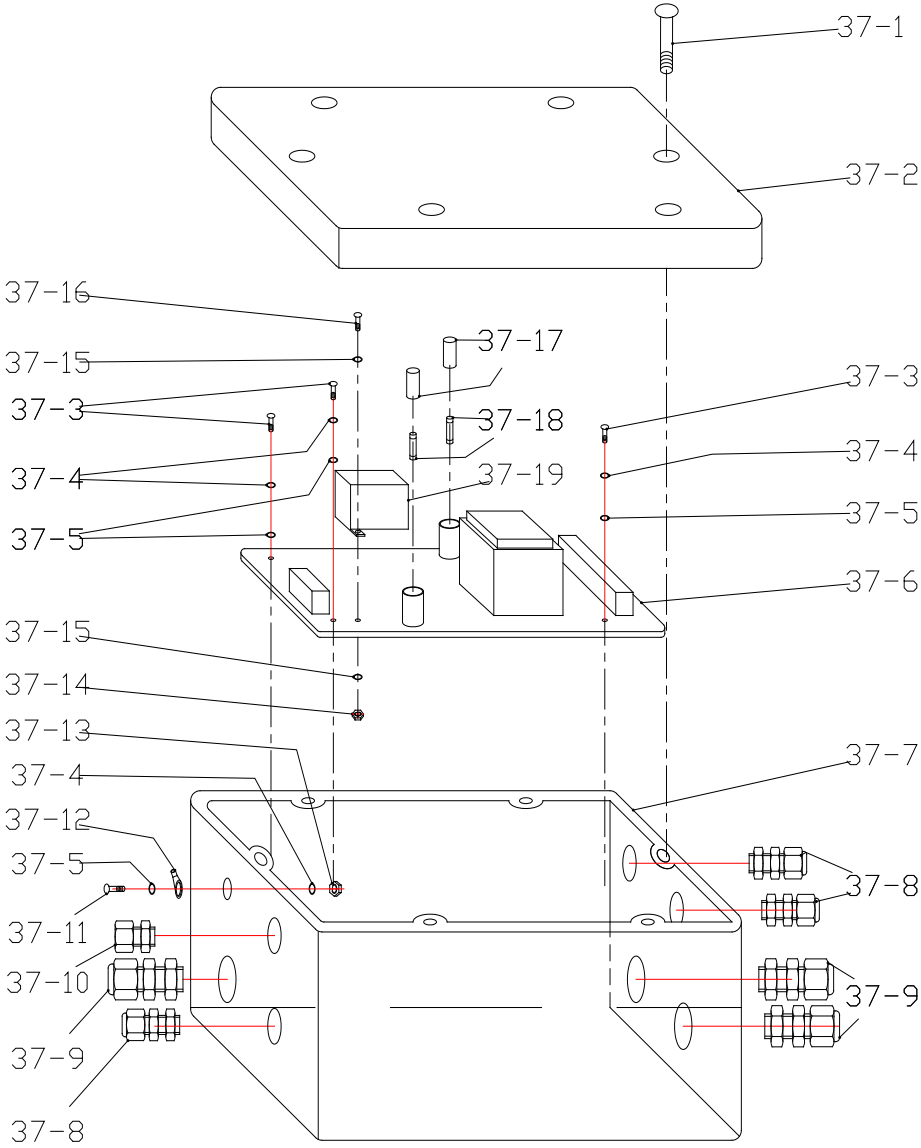
NO.	DESCRIPTION	QTY	NO.	DESCRIPTION	QTY
1.	Grease Cup M6	7	23.	Spring Washer 5	6
2.	Bearings GE30ES	1	24.	Washer 5	8
3.	Piston Rod	1	25.	Electric Box	1
4.	Snap Ring 40	1	25-1	Scre M5x20	6
5.	Retaining Ring 70	1	25-2	Cover	1
6.	Snap Ring 80	1	25-3	Screw M5x10	3
7.	Seal Cover 52x40x7	1	25-4	Spring Washer 5	4
8.	O-ring 40x2.65	1	25-5	Washer 5	4
9.	O-ring 75x2.65	1	25-6	Integrated Circuit Board	1
10.	Cylinder Cover	1	25-7	Box	1
11.	Piston	1	25-8	Plastic Joint	3
12.	Seal Ring	1	25-9	Plastic Joint	3
13.	Cylinder	1	25-10	Plastic Cover	1
14.	Split Pin 5x35	1	25-11	Screw M5x16	1
15.	Seal Ring 16	1	25-12	Earthing	1
16.	Hose Break Valve	1	25-13	Nut M5	1
17.	O-ring 9.5x1.8	1	25-14	Nut M4	2
18.	High Pressure Hose	1	25-15	Washer 4	4
19.	Joint	1	25-16	Screw M4x10	2
20.	Seal Ring 14	2	25-17	Plug for fuse	2
21.	Hydraulic Power Pack	1	25-18	Fuse 5A	2
22.	Bolt M5x10	4	25-19	Contactora	1

NO.	DESCRIPTION	QTY	NO.	DESCRIPTION	QTY
26.	Control Switch	1	49.	Bushing 20x18x15	4
27.	Pump Pack Base	1	50.	Pin	4
28.	Spring Washer 10	2	51.	Bolt M8x12	5
29.	Screw Bolt M10x20	2	52.	Bushing 34x30x45	2
30.	Spring Washer 8	15	53.	Washer	1
31.	Bolt M8x10	4	54.	Pin	1
32.	Indicator 6	1	55.	Bolt M16x36	2
33.	Connector Lug 6-4	1	56.	Washer 16	2
34.	Bolt M6x12	1	57.	Bushing	2
35.	Spring Washer 6	1	58.	Prop	2
36.	Washer 6	1	59.	Pin	1
37.	Nut M5	2	60.	Safety Frame	1
38.	Fixed Board	1	60-1	Safety Frame I	2
39.	Screw M5x20	2	60-2	Connected-board	4
40.	Screw M5x12	4	60-3	Fixed-board	4
41.	Travel Switch	1	60-4	Safety Frame II	2
42.	Chassis	1	61.	Spring	4
43.	Bolt M8x16	6	62.	Locking Nut M8	4
44.	Washer 8	4	63.	Buffer-Board	4
45.	Bushing 18x20x30	4	64.	Safety Switch	2
46.	Roller	4	65.	Coil Spring Line	1
47.	Internal Scissors	1	66.	Table	1
48.	External Scissors	1	67.	Lifting Bolt M16	2

LIFT TABLE 3G3049-3G3849



ELECTRICAL BOX (37)



LIFT TABLE SPARE PARTS LIST 3G3049 3G3849

NO.	DESCRIPTION	QTY	NO.	DESCRIPTION	QTY
1.	Grease Cup M6	4	24.	Spring Washer 10	2
2.	Bearings GE30ES	2	25.	Screw Bolt M10x20	2
3.	Piston Rod	2	26.	Spring Washer 8	10
4.	Snap Ring 40	2	27.	Screw Bolt M8x10	4
5.	Retaining Ring 75	2	28.	Pump Pack Base	1
6.	Snap Ring 80	2	29.	Indicator 6	1
7.	Seal Cover 52x40x7	2	30.	Connector Lug 6-4	1
8.	O-ring 40x2.65	2	31.	Washer 6	1
9.	O-ring 75x2.65	2	32.	Spring Washer 6	1
10.	Cylinder Cover	2	33.	Bolt M6x12	1
11.	Piston	2	34.	Bolt M5x10	4
12.	Seal Ring 80x60x22.3	2	35.	Spring Washer 5	4
13.	Cylinder	2	36.	Washer 5	4
14	Split Pin 5x35	2	37.	Electric Box	1
15.	Seal Ring 16	2	37-1	Screw M5x20	6
16.	Hose Break Valve	2	37-2	Cover	1
17.	Steel Tube	2	37-3	Screw M5x10	3
18.	T Joint	1	37-4	Spring Washer 5	4
19.	O-ring 6x1.8	1	37-5	Washer 5	4
20.	High Pressure Hose	1	37-6	Integrated Circuit Board	1
21.	Joint	1	37-7	Box	1
22.	Seal Ring 14	2	37-8	Plastic Joint	3
23.	Hydraulic Power Pack	1	37-9	Plastic Joint	3

NO.	DESCRIPTION	QTY	NO.	DESCRIPTION	QTY
37-10	Plastic Cover	1	52	Bushing	2
37-11	Screw M5x16	1	53	Prop	2
37-12	Earthing	1	54	Bushing	2
37-13	Nut M5	1	55	Screw Bolt M14x15	4
37-14	Nut M4	2	56	Bushing 22x25x15	4
37-15	Washer 4	4	57	Bushing	4
37-16	Screw M4x10	2	58	Internal Scissors	1
37-17	Plug for fuse	2	59	Nut M14	4
37-18	Fuse 5A	2	60	Pin	1
37-19	Contactor	1	61	Pin	3
38	Control Switch	1	62	Washer	1
39	Chassis	1	63	Safety Frame	
40	Screw Bolt M8x14	1	63-1	Safety Frame II	2
41	Washer 8	1	63-2	Fixed-board	4
42	Frame of Travel Switch	1	63-3	Connected-board	4
43	Travel Switch	1	63-4	Safety Frame I	2
44	Bolt M4x25	2	64	Spring	4
45	Screw Bolt M8x20	8	65	Buffer-Board	4
46	Washer	4	66	Nut M8	4
47	Bushing	4	67	Coil Spring Line	1
48	Roller	4	68	Safety Switch	2
49	External Scissors	1	69	Table	1
50	Screw Bolt M16x36	2	70	Lifting Bolt M16	1
51	Washer 16	2			