# **Operating Instructions**

**Parts List** 

# ETF

### **BATTERY POWERED LIFT TABLE**

Note:

Owner and operator MUST read and understand this operating instructions before use this lift table. BEFORE OPERATING THE LIFTER, READ THIS MANUAL CAREFULLY AND UNDERSTAND COMPLETELY, KEEP THIS MANUAL ON FILE FOR FUTURE REFERENCE, IF THIS IS LOST, PLEASE CONTACT YOUR LOCAL SUPPLIER FOR A NEW COPY, IF THE WARNING/CAUTION LABEL ON THE UNIT IS LOST, PLEASE CONTACT YOUR LOCAL SUPPLIER FOR A NEW COPY.

danger which can lead to death or serious injury.

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CAUTION means the danger which can lead to slight injury or property damage.

### 1. WARNING

- (1.) Do Not put foot or hand in scissors mechanism.
- (2.) Do Not allow other person to stand in front of or behind lifter when it is moving.
- (3.) Do Not move lifter when table is in raised position. Load could fall down.
- (4.) Do Not enter under table.
- (5.) Do Not overload lifter.
- (6.) Do Not put foot in front of rolling wheel, Injury could result.
- (7.) Watch difference of floor level when moving lifter. Load could fall down.
- (8.) Do Not use lifter on slope or inclined surface, lifter may become uncontrollable and create danger.
- (9.) Do Not lift people. People could fall down and suffer severe injury.

(10.) Do Read "Caution" on the case of power pack of the lifter, before daily operation.

# 2. CAUTION

- (1.) Read this manual carefully and understand completely before operating lifter. Improper operation could create danger.
- (2.) This lifter is a movable lifter designed to lift or lower rated load on table.

  Do Not use lifter for other purpose than its intended use.
- (3.) All lifter service must be performed by qualified personnel only.
- (4.) Do Not lower table too fast. Load could fall down and create danger.

  Lower speed controller is available for safety purpose.
- (5.) Keep watching the condition of load. Stop operating lifter if load becomes unstable.
- (6.) Brake lifter and switch the breaker off when sliding load on or off table.
- (7.) Do Not side or end load. Load must be distributed on at least 80% of table area.
- (8.) Do Not use lifter with unstable, unbalanced loosely stacked load.
- (9.) Practice maintenance work according to Regular Inspection.
- (10.) Do Not modify lifter without manufacturer's written consent expecially the electric device.
- (11.) Remove load from table and when servicing lifter, please use safety stopper to prevent table from lowering.
- (12.) This lifter is not designed to be water resistant. Use lifter under dry condition.
- (13.) Prolonged continuous operation might cause damage of power pack.
- (14.) Stop operation if temperature of hydraulic oil is too high.
- (15.) Do Not supply built-in charger with AC voltage other than 110V or 220V.

## 3.DAILY INSPECTION

Daily inspection is effective to find the malfunction or fault on lifter. Check lifter on the following points before operation.



DO not use lifter if any malfunction or fault is found

- (1.) Check for scratch, bending or cracking on the lifter.
- (2.) Check if there is any oil leakage from the cylinder.
- (3.) Check the vertical creep of Table.
- (4.) Check the smooth movement of the wheels.
- (5.) Check the function of brake.
- (6.) Check if all the bolts and nuts are tightened firmly.
- (7.) Check the storage level by turning the circuit breaker on.
- (8.) Check the lifting and lowering conditions by switching buttons on.
- (9.) Check if there are broken hoses or broken electric wires by eyes.

#### 4. OPERATING LIFTER

#### 4-1 How to use the brake



#### CAUTION

Brake lifter when not moving it in order to prevent sudden movement.

The brake is equipped with the swivel caster on the right.

- (1.) Braking the wheel, press the brake pedal.
- (2.) Release the brake, lift up the brake pedal.

#### 4-2 Lifting the table



#### CAUTION

- 1. Do Not overload lifter. Stay within it's rated capacity.
- 2. Do Not side or end load. Load must be distributed on at least 80% of table area.
- 3. Prolonged continuous working might cause damage of hydraulic power pack.
- 4. Stop operation if temperature of hydraulic oil is too high.
- 5. Do Not lift people. People could fall down and suffer severe injury.
- (1.) Press the switch "UP" and the table lifts up to the desired position ranging vertical travel.

(2.)

	- Maximum Capa	acity Of Table	
ETF -30	ETF-50	ETF-75	ETF-35/D
300Kg	500Kg	750Kg	350Kg

Do not over load lifter.

#### 4-3 Lowering table



#### CAUTION

- 1. Do Not put foot or hand in scissors mechanism.
- Do Not lower table with load too fast and stop suddenly. Impact load could be created and lifter could be damaged.

#### 5. MOVING LIFTER



#### CAUTION

- DO NOT move lifter on slope or inclined surface. Lifter may become uncontrollable and create danger.
- DO NOT allow other person stand in front of or behind lifter when it is moving.
- DO NOT move lifter when table is in raised position. Load could fall down.
- DO NOT put foot in front of rolling wheels. Injury could result.
- Watch difference of floor level when moving lifter. Load could fall down.
- (1.) Make the load stable to prevent it from falling down.
- (2.) Lower the table down before moving.
- (3.) Release the brake and move the lifter.
- (4.) Keep watching the condition of load. Stop operating lifter if load becomes unstable.

#### 6. CHARGING THE BATTERY

- (1.) The lifter is equipped with "Free Maintenance" seal type battery. Need not attend but replace when worn out.
- (2.) Turn the circuit breaker off when charging the battery.
- (3.) The attached automatic charger is only available for the optional voltage of 110V or 220V as refered.
- (4.) Check the storage level indicator on the power pack for the battery condition.
- (5.) The switch of charger turns off automatically when the battery reaches 80% capacity or exceeds 12 hours in charging condition.
  - (6.) Check the wiring or confirm AC voltage when AC power Indicator of Automatic Charger shows Abnormal by Red Flashlight.

# 7. REGULAR INSPECTION

- (1.) Check the items emphasized in daily inspection (daily).
- (2.) Lubricate with grease the rails where roller moves. Also lubricate the grease nipples (monthly).
- (3.) Lubricate all the pivoting points and axles (every 6 months).
- (4.) Replace the hydranlic oil (every 12 months).

# 8. TROUBLE SHOOTING

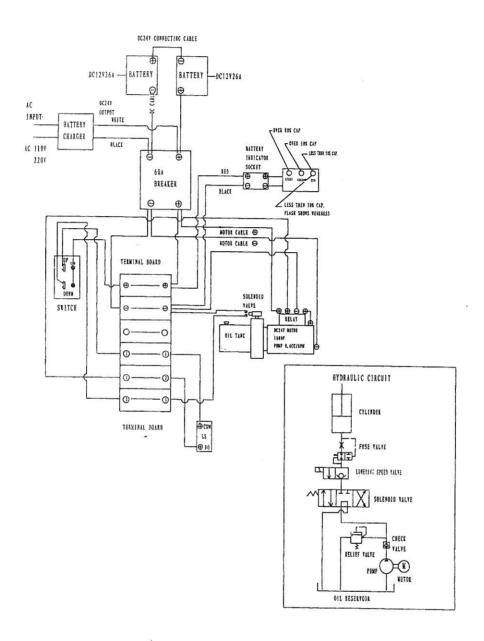
TROUBLE	CAUSE	REPAIR
Table does not rise	1. Faulty wiring.	1.Check the wiring refering to the
while motor does not		actual wiring diagram.
run.	2.Battery cord is disconnected.	2.Connent the battery cord .
	3.Battery charge is insufficient.	3. Charge the battery.
Table does not rise	1.Faulty adjustment of relief valve	1.Adjust relief valve again.
while motor runs.	2.Faulty hydraulic pump.	2.Replace power pack.
	3.shortage of hydraulic oil.	3.Add oil.
Vertical creep of table	1.Oil leakagein lowering valve .	1.Replace lowering valve.
	2.Oil leakage from hydraulic circuit	2.Check hydraulic circuit and repair.
Oil leakage from	Faulty sealing.	Replace sealing.
cylinder		-
Oil leakage from	Insufficient tightening.	Tighten joint again.
piping or joint.		
Oil leakage from air	Excessive quantity of oil	Reduce oil quantity.
breathing		
Battery fail to be	Battery is worn out	Replace battery
charged		
Charger shows	1.charger is not connected to	Connect cord to breaker.
abnormal by red flash	breaker.	
	2.Poles are reverse	Interchange the connection of
	inconnection.	poles

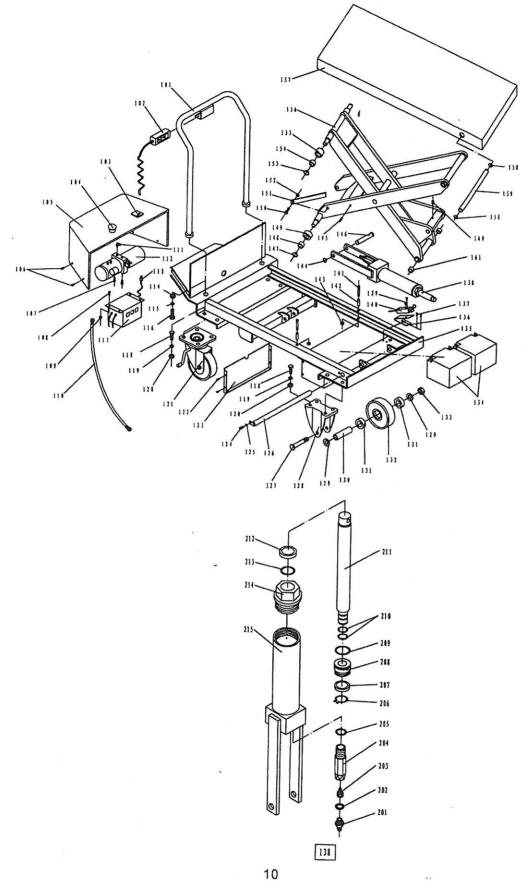
# 9. SPECIFICATIONS

Model	ETF-30	ETF-50	ETF-75	ETF-35/D
Capacity (kg)	300	500	750	350
Table Size (mm)	850x500	1010x520	1000x510	910x500
Max Table Height (mm)	880	1025	975	1300
Min Table Height (mm)	290	438	420	370
Dimensions (mm) LxWxH	1145x485x920	1305x520x970	1345x600x936	1205x485x920
Vertical Travel (mm)	590	560	560	930
Lifting Motor (DC24V KW)	0.8	0.8	0.8	0.8
Battery X2	12Vx21AH	12Vx26AH	12Vx26AH	12Vx26AH
Charger (built-in) 24V3A	8.5Hr	8.5Hr	8.5Hr	8.5Hr
Approx Lifting Speed	10	10	12	12
Wheel Dia	ф 128	ф 150	ф 150	ф 128
Weight (kgs)	116	157	160	136
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# 10. WIRING DIAGRAM/

## HYDRAULC CIRCUIT





Part List Of fork

No	Description	Quantity	No	Description	Quantity
101	Handle Grip	1	132	Wheel	2
102	Control switch	1	133	Nut	2
103	Voltage indicator	1	134	Battery	2
104	Switch	1	135	Frame	1
105	Hood	1	136	Switch seat	1
106	Bolt	4	137	Bolt	2
107	Bolt	2	138	Cylinder	1
108	Bolt	4	139	Bolt	2
109	Nut	4	140	Switch	1
110	Oil pipe	1	141	Bolt	2 2
111	90° curve	1	142	Pipe	
112	Pump Unit	1	143	Nut	2
113	Plug	1	144	Retaining Ring	1 1
114	Washer	2	145	Elastic Pin	2
115	Elastic Washer	2	146	Shaft	1
116	Bolt	2	147	Retaining Ring	2 2
117	Charger	1	148	Bushing	2
118	Bolt	16	149	Roller	2 2
119	Elastic Washer	16	150	Bolt	2
120	Nut	16	151	Support Plank	2
121	Universal Wheel	2	152	Nut	2 2
122	Bolt	4	153	Retaining Ring	2
123	Cover	1	154	Bushing	2 2
124	Bolt	1	155	Roller	
125	Washer	1	156	Fork Arm	1
126	Long Shaft	1	157	Table	1 1
127	Wheel Axle	2	158	Retaining Ring	2
128	Wheel support	. 2	159	Long Shaft	1
129	Washer	4	160	Screw	1
130	Reduction pipe	2	161	Bushing	2
131	Bearing	4			

NO	Description	Quantity	NO	Description	Quantity
201	Nipples	1	209	O - Ring	1
202	Seal Washer	1	210	O - Ring	2
203	Safety Valve	1	211	Piston Rod	1
204	Joint	1	212	Dust Ring	1
205	O - Ring	1	213	O - Ring	11
206	Retaining Ring	1	214	Cylinder Cap	11
207	Y - Seal	1	215	Cylinder	1
208	Piston	1			