



INSTRUCTION MANUAL  
FOR HIGH LIFT HAND TRUCK (TOTE LIFTER)  
**MODELS COVERED: L-270-DC-HD-SS**



**Note:** The Owner / Operator must read and understand this operating manual before using this electric high lift truck

Thank you for choosing our electric high lift truck. For your safety and correct operation, please carefully read this manual before use.

**Note:** All of the information reported herein is based on data available at the time of printing. The factory reserves the right to modify its own products at any time without notice or incurring in any sanction. Please verify with the factory for possible updates.

## 1. General Specification:

Model	Capacity	Max. Fork Height	Fork Length	Overall Fork Width	Net Weight
	kg (lbs)	mm (inch)	mm (inch)	mm (inch)	kg (lbs)
L-270-DC-HD-SS	1000 (2200)	800 (31.5)	1165 (45.9)	680 (26.8)	161 (354)

Battery	Battery Max. Overall Dimension		
V-Ah	mm (inch)		
12-75	278(11)	175 (6.8)	190 (7.5)

### Power Pack Technical Specification

Rated Voltage	Rated Power	Rotation Speed of Motor	Max. Pressure
12V	1200W	4000RPM	25MPa

Materials and specification are subject to change without notice.

## 2. Installation Instructions:

To save freight, the truck is separated into two parts. Two parts are separately packed.

Please install them according to following instructions:

- 2.1 Undo two screws (S164H), take down the battery cover (E717).
- 2.2 Use hexagon head bolts (SE708) and spring washers (SE709) to connect the battery base (SE718) and rhombus plate assembly (SE729), then tighten the bolts.
- 2.3 Remove the plugs on high pressure tube (E705) and pump joint (SE706). Feed the high pressure tube through the hole on front wall of battery base (SE718). Connect the pump joint (SE706) with high pressure tube (E705), then tighten them. If your electric high lift truck contains battery, skip item 2.4 and 2.5, continue from item 2.6. Otherwise, continue from item 2.4.
- 2.4 Install one traction battery (E732) on the battery base (SE718). (The specification of battery please refer to item 1).
- 2.5 Connect two joints of the cable with two fasteners of the battery (E732). Note to let the red one connect the anode, the black one connect the cathode. Then tighten them.
- 2.6 Set the handle assembly on the external cylinder (SM624). Use bolts (SH708) and spring washers (SH709) to connect the handle base (SH710) and link plates (SH711). The handle base (SH710) should be about 50mm above the upper surface of battery cover (E717). Then tighten the bolts.
- 2.7 Connect the two control connector (H705 and E710).
- 2.8 Install the battery cover (E717) on the battery base (SE718). Fix it with screws (S164H). Then tighten them.
- 2.9 Charge the battery (See item 3.1).
- 2.10 Expel the air: Lift and lower the truck with load (200kg to 800kg) until no stick-slip phenomena occur.

### 3. Battery

The inspection, charging and maintenance of the battery must be carried out by authorized personnel following the manufacturer's instructions.

It's forbidden to smoke or keep inflammable or spark-producing material near the truck or charger. It is forbidden to raise or lower the forks during recharging operations.

#### 3.1 Charging:

When only three pilot lamps of the battery Volta metric indicator shine, charge the battery immediately.

3.1.1 Preparation: Lower the forks. Connect the charging connector on charger to the charging connector (E723). Turn the current adjusting knob to minimum position. Connect the power plug of charger to AC socket.

3.1.2 Charging: Turn on the power switch, then adjust the charging current to 7~8A. The charger will automatically charge the battery. The charging indicators shine. When the charging indicator and charged indicator shine by turns, the battery has been fully charged.

3.1.3 End: Turn off the power switch. Disconnect the charging connector (E723) and charging connector on charger.

#### 3.2 Maintenance:

3.2.1 Notice to keep the battery clean.

3.2.2 Keep the contact of two cable joints and battery fasteners in good condition. To prevent corrosion you can smear Vaseline on the fasteners, joints and connecting parts.

3.2.3 If you don't use the battery for a long time, you must charge the battery every one month in order to keep the service life.

3.2.4 Check the electrolyte level in battery cells once monthly. Adjust the electrolyte level with distilled water. Don't add sulphuric acid or other liquids. This must be done by professional.

3.2.5 Never un-charge the battery completely and avoid partial recharging.

### 4. Periodic maintenance

Item	Checks	Period		
		3 months	6 months	12 months
Frame	Check load bearing elements		●	
Wheels	Check wear and tear	●		
	Ball bearings and anchorage	●		
Steering	Check play	●		
Hydraulic Installation	Check working of tubes and joints	●		
	Oil level		●	
	Change oil (about 1lt)			●
	Check max. pressure valve			●
Electrical Installation	Check working	●		
	Connections and cables	●		
	Control button	●		
Electrical Motor	Check wear and tear of brushes		●	
Greasing	Lubricate joints	●		

Note: Use hydraulic oil according to the table below.

Temperature	Oil
-4°F~+104°F	L-HV46 Hydraulic oil

## 5. Guide to Safety Operation

The truck has been designed for transport and lifting of loads on perfectly even floors. Electrically driven lifting quickens and facilitates repetitive changes of work heights. For safe operation of Electric High Lift Truck, please read all warning signs and instructions here and on the truck prior to use.

- 5.1 Do not operate the truck unless you are familiar with it and have been trained or authorized to do so.
- 5.2 Do not operate the truck until you are convinced that it is in perfect condition. Give special attention to the condition of the wheels, the handle, the frame and the battery.
- 5.3 Never use the truck on sloping ground.
- 5.4 Never place any part of your body in the lifting mechanism or under the forks or load. Do not carry passengers.
- 5.5 We advise that operators should wear gloves and security shoes.
- 5.6 Do not handle unstable or loosely stacked loads.
- 5.7 Do not overload the truck.
- 5.8 Always place loads centrally across the forks and not at the end of forks (See Fig.2).
- 5.9 The capacity of the truck assumes an evenly distributed load with the centre of the load being at the halfway point of the length of the forks.
- 5.10 Make sure that length of the forks matches the length of the pallet.
- 5.11 Lower the forks to lowest height when the truck is not being used.
- 5.12 Do not tow the truck when the forks are over 300mm from the ground.
- 5.13 Do not use the raising/lowering button when battery is being recharged.
- 5.14 Steer slowly as sudden movements can provoke dangerous situations.
- 5.15 The time between first lift and the next should be about three minutes to ensure the useful life of the motor.

## 6. Trouble Shooting

NO	TROUBLE	CAUSE	ACTION
1	The forks do not lift to max. height.	-Not enough hydraulic oil.	-Pour in enough filtered oil.
2	The forks do not lift up.	-Too little oil. -The voltage of battery isn't high enough. -Seals on small nut (SM611) or big nut (SM620) worn out. -The fuse (E712 or E715) broken. -Motor relay broken. - Motor brushes worn out. -Faulty solenoid valve. -Electric circuit broken.	-Pour in enough filtered oil. -Recharge the battery (item 3.2). -Replace seals with new ones. -Replace it with new one. -Replace it with new one. -Replace it with new one. -Check and substitute. -Check and repair electrical connections and control button (H712).
3	The forks do not descend.	-The fuse (E712 or E715) broken. -Faulty solenoid valve. - Electric circuit broken.	-Replace it with new one. -Check and substitute. -Check and repair electrical connections and control button (H712).
4	Leaks	-Seals worn out or damaged. -Some parts may be cracked or worn out.	-Replace seals with new ones. -Check and replace with new ones.
5	Stick-slip phenomena occur.	-Air in the hydraulic oil.	-Expel the air (See item 2.10).

**\*Note:** Do not attempt to repair the truck unless you are trained and authorized to do so.

FIG. 1

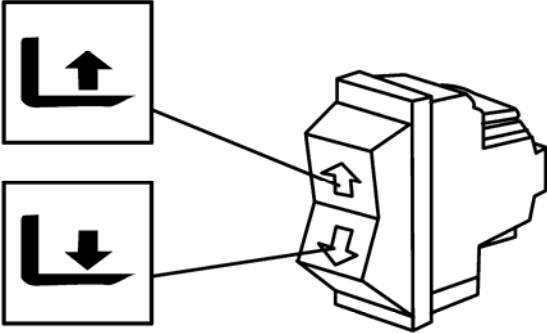
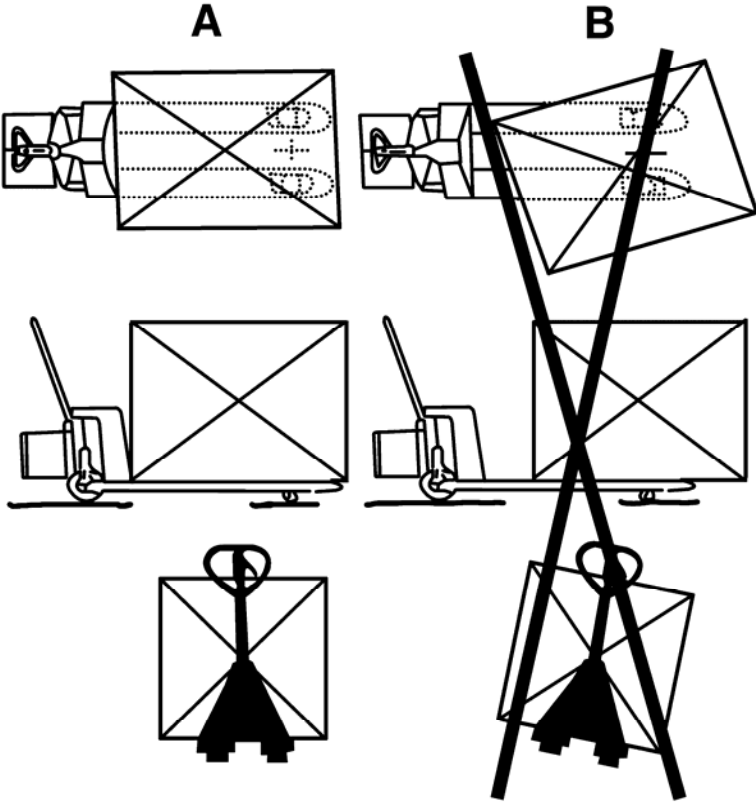
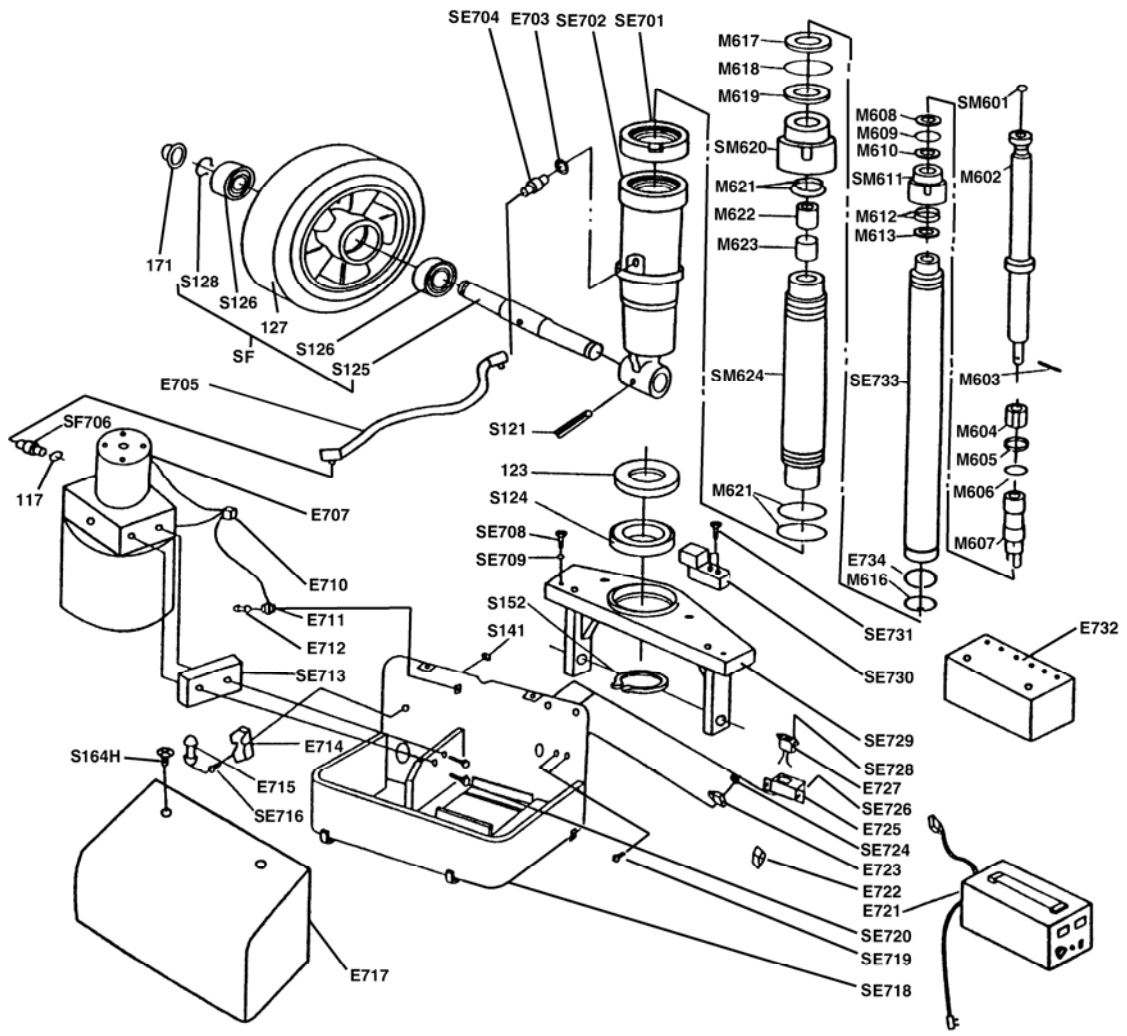


FIG. 2

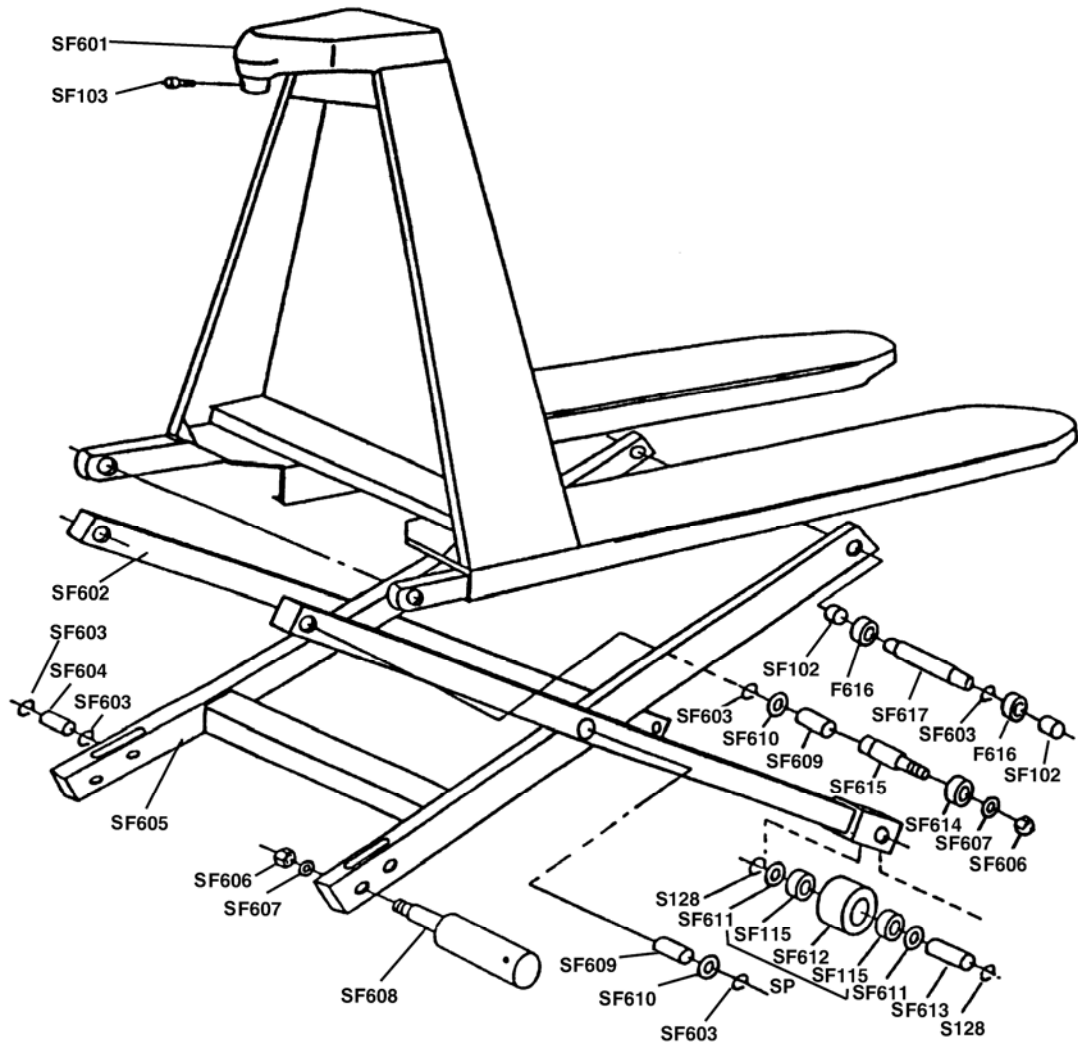




## L-270-DC-HD-SS Parts List of Hydraulic System

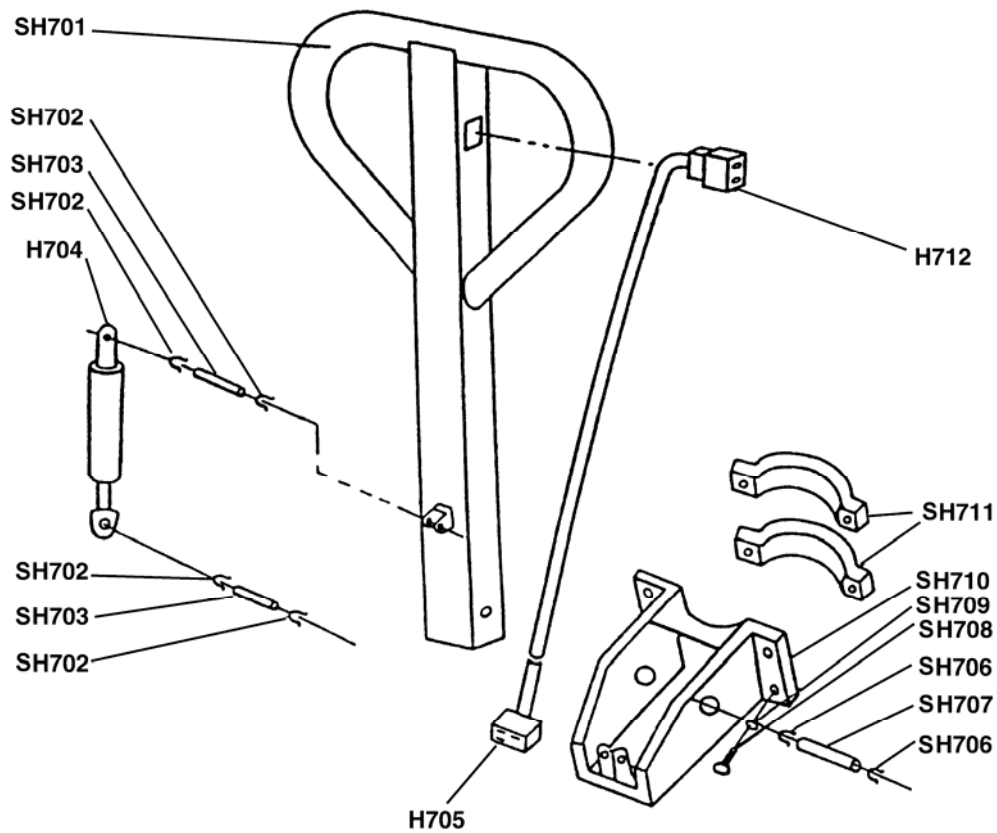
PARTS NO.	DESCRIPTION	Q'TY	PARTS NO.	DESCRIPTION	Q'TY
<input type="checkbox"/> SE701	Nut	1	<input type="checkbox"/> SM601	Steel ball	1
<input type="checkbox"/> SE702	Housing	1	<input type="checkbox"/> M602	Rod	1
E703	Red copper washer	1	M603	Pin	1
<input type="checkbox"/> SE704	Cylinder joint	1	M604	Guide casing	1
E705	High pressure tube	1	M605	Washer	1
<input type="checkbox"/> SE706	Pump joint	1	M606	Spring washer	1
E707	Power pack	1	M607	Supportive rod	1
<input type="checkbox"/> SE708	Hexagon head bolt	4	M608	Dust proof ring	1
<input type="checkbox"/> SE709	Spring washer	4	M609	O-ring	1
E710	Control connector	1	M610	Seal ring	1
E711	Fuse base	1	<input type="checkbox"/> SM611	Small nut	1
E712	Fuse	1	M612	O-ring	2
SE713	Plate	1	M613	Washer	1
E714	Fuse base	1	M616	Retaining ring	1
E715	Fuse	1	M617	Dust proof ring	1
<input type="checkbox"/> SE716	Bolt	1	M618	O-ring	2
E717	Battery cover	1	M619	Seal ring	1
<input type="checkbox"/> SE718	Battery base	1	<input type="checkbox"/> SM620	Big nut	1
<input type="checkbox"/> SE719	Screw	2	M621	O-ring	4
<input type="checkbox"/> SE720	Bolt	2	M622	Spacing pipe	1
E721	Charger	1	M623	Big bushing	1
E722	Switch	1	<input type="checkbox"/> SM624	External cylinder	1
E723	Charging connector	1	117	O-ring	1
<input type="checkbox"/> SE724	Nut	2	<input type="checkbox"/> S121	Spring pin	1
E725	Voltametric indicator casing	1	123	Dust cover	1
<input type="checkbox"/> SE726	Screw	2	<input type="checkbox"/> S124	Bearing	1
E727	Voltametric indicator	1	<input type="checkbox"/> S125	Steering wheel axle	1
<input type="checkbox"/> SE728	Screw	2	<input type="checkbox"/> S126	Bearing	4
<input type="checkbox"/> SE729S	Rhombus plate assembly (540mm)	1	127A	Steering wheel, Nylon	2
<input type="checkbox"/> SE729L	Rhombus plate assembly (680mm)	1	<input type="checkbox"/> S128	Retaining ring	2
<input type="checkbox"/> SE730	Spacing block	2	<input type="checkbox"/> S141	Nut	1
<input type="checkbox"/> SE731	Bolt	4	<input type="checkbox"/> S152	Retaining ring	1
E732	Battery	1	<input type="checkbox"/> S164H	Screw	2
<input type="checkbox"/> SE733	Internal cylinder	1	171	Dust cover	2
E734	Steel wire retaining ring	1			





### L-270-DC-HD-SS Parts List of Frame

PARTS NO.	DESCRIPTION	Q'TY	PARTS NO.	DESCRIPTION	Q'TY
□SF601S	Frame (540mm)	1	□SF611	Washer	4
□SF601L	Frame (680mm)	1	SF612A	Load roller, nylon	2
□SF602	External supportive pole	2	□SF613	Load roller axle	2
□SF603	Retaining ring	10	□SF614	Spacer	2
□SF604	Shaft	2	□SF615	Screw bolt	2
□SF605S	Internal supportive pole (540mm)	1	F616	Guide roller	4
□SF605L	Internal supportive pole (680mm)	1	□SF617	Guide roller axle	2
□SF606	Nut	4	□SF102	Guide roller bushing	4
□SF607	Spring washer	4	□SF103	Hexagon socket screw	1
□SF608	Eccentric pin	2	□SF115	Bearing	4
□SF609	Bushing	4	□S128	Retaining ring	4
□SF610	Washer	4			



### L-270-DC-HD-SS Parts List of Handle

PARTS NO.	DESCRIPTION	Q'TY	PARTS NO.	DESCRIPTION	Q'TY
□SH701	Handle	1	□SH707	Pin	1
□SH702	Retaining ring	4	□SH708	Bolt	4
□SH703	Pin	2	□SH709	Spring washer	4
H704	Gas spring	1	□SH710	Handle base	1
H705	Control connector	1	□SH711	Link plate	2
□SH706	Retaining ring	2	H712	Control button	1

The part marked with “□” is stainless steel part.

## L-270-DC-HD-SS Assembly list

Assembly	Description
SF1	Nylon steering wheel ass'y
SP1	Nylon load roller ass'y
SP	*Seal kit

\*Note: Seal kit include following parts: 117, M608, M609, M610, M612, M617, M618, M619, M621, E703.