

# OPERATION AND PARTS & MAINTENANCE MANUAL

# LT300 Series



**TECH SUPPORT:** 1-602-243-1001

LOAD RATING: 300 lbs.

Serial No.

## **SAFETY GUIDELINES**

Inspect your LiftTrac® regularly, according to the schedule supplied with this manual.

Never use the LiftTrac® on uneven or slanted surfaces while carrying a load.

Never lift any load that exceeds the load capacity noted on the capacity plaquard on the machine.

Never move the LiftTrac® from one area to another with the load more than 2 feet off the floor.

Raise and lower the LiftTrac® only when it is standing still and stationary.

Never stand, sit or ride on any part of the LiftTrac® or its end-effector.

Keep hands and feet clear of pinch points by never pushing aside a shield.

Keep both hands occupied and gripping the handle bars when raising or lowering the end effector with the handlebar switches.

Stand away from the machine and do not lean on it with any part of your body when using the remote control wand.

Stand directly behind LiftTrac® when moving it.

**Units with Onboard Battery System:** 

When the low battery indicator light goes on, complete your current task then bring the LiftTrac® unit to the charger for charging.

Units with Removable Battery Pak System:

Never place a damaged or dropped battery into the battery charger or into the battery receptacle of the LiftTrac®.

Replace a depleted battery with a fully charged battery as soon as the low battery indicator light comes on.

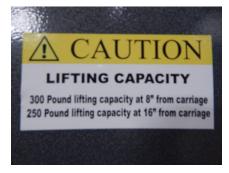
## **PLACARDS**



Left side on base of unit



Left side on base of unit



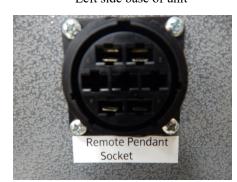
Left side base of unit



At pinch point locations



On back lower panel



Left side panel



On battery box (with on-board battery system)



Left handle bar grip



Right handlebar grip



On back lower panel



On right and left side frames



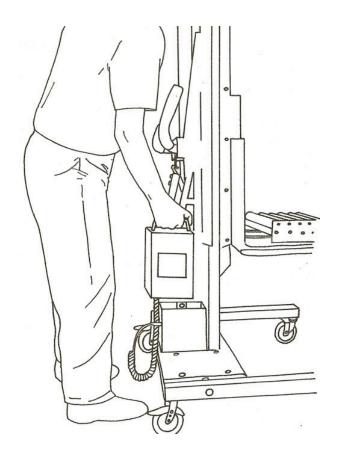
On left side frame



On right side panel if equipped with speed control

If any placards are missing, take lift out of service and acquire replacement placards.

## Operation Guide for the LIFTTRAC® Mechanical Lift

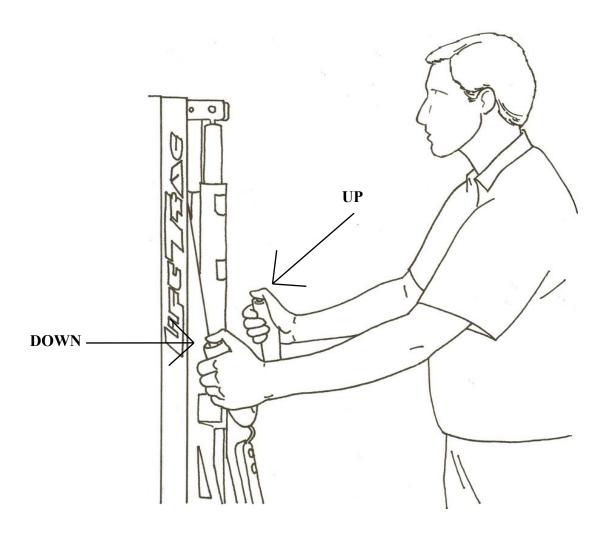


Your LIFTTRAC® comes complete with a remote pendant, a battery charger and if outfitted with the removable battery pak system, one spare battery.

Operation of the LIFTTRAC® is very simple and easy.

If your LIFTTRAC® has an on-board battery, simply turn the emergency stop switch (located on the battery box) clockwise. It should then pop out slightly.

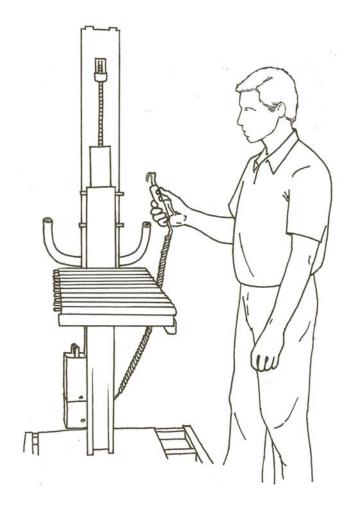
If your LIFTTRAC® is outfitted with the removable battery pak system, place one battery in the power box on the right side of the lift. It does not matter which way you insert the battery.



Move the LIFTTRAC® by grasping the handles as shown. The handles are ergonomically designed to fit your hand comfortably. Note that your thumbs will easily access the up/down buttons.

The handlebar UP button is located in the RIGHT handle.

The DOWN button is located in the LEFT handle.



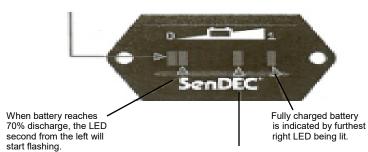
Plug the Remote Control Pendant into the receptacle located near the bottom left side of the LIFTTRAC®. The upper button on the Pendant is UP- the lower button is DOWN.

Note: if both UP & DOWN buttons are pushed at one time, the LiftTrac\$ will not respond. Push one button at a time.

### **Charging Battery**

#### Operation

When the battery reaches 80% of discharge, the two LEDs furthest to the left will begin flashing alternately.



As battery energy is used, the LEDs will consecutively light moving from right to left. NOTE: Only one LED with light at a time.

#### **Meter Reset**

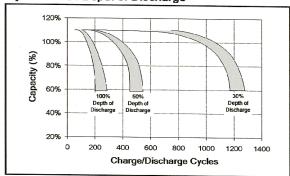
When the battery is reconnected, the meter will initially reset to 100%.

When meter stays connected to battery during charging, the meter will stay at the approximate or higher voltage level for 6 minutes.

#### **Discharge Profile Code**

The discharge for this meter is 2.04VPC at full and 1.73VPC at empty.

#### Cycle Life vs. Depth of Discharge



A battery meter is located on the motor cover below the handle bars. A fully charged battery will indicate by the farthest right LED being lit. As battery energy is used, the LED's will consecutively light moving from right to left. Note only one LED will light at a time. The battery should be charged when the LED on the left begins to blink. The lift will continue to operate until the battery is totally discharged, however doing so will shorten the battery life and possibly damage the battery. The graph above shows the cycle life vs. depth of discharge. A battery that is 100% discharged may only charge 200 times vs. a battery that is 30% discharged may charge 1200 times.

Lifts equipped with On Board Batteries: Push in the E stop. Attach the battery charger plug to the socket on the left side of the lift and plug battery charger into a wall outlet.

Lifts equipped with Removable Battery Pak System: Simply exchange the discharged battery from the Lift with the fully charged battery from the storage charger. The battery will charge automatically then go to a trickle charge for storage.

Battery charger: Red light indicates the charger has power.

An amber light indicates the battery is connected and charging.

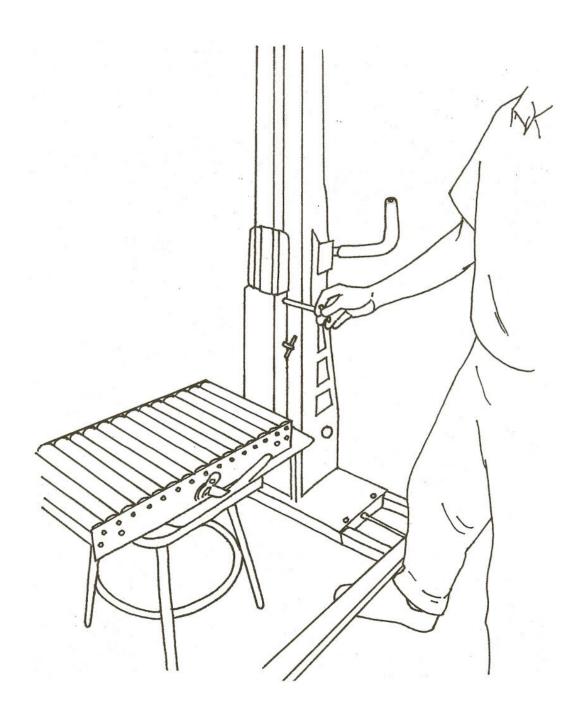
A green light indicates the battery is fully charged.

NOTE: Batteries cannot be overcharged, however, permanent damage CAN occur to batteries that are allowed to become too discharged, shortening their life span.



If your LiftTrac® unit is equipped with adjustable legs:

To widen the LiftTrac® legs, insert a socket onto the nut on either side of the machine legs. Turning the nut counter-clockwise will open the leg. Clockwise turning will retract the leg. Note: each leg will move independently for field modification of leg width.



To change end effectors on the LiftTrac® unit, set the end effector on a stable platform, pull pins, then back away. Move the LiftTrac® unit to the desired end effector, align the holes, insert pins and begin using.



The front wheels can be made to pivot or can be set to track straight ahead by using the pin located above the wheel.

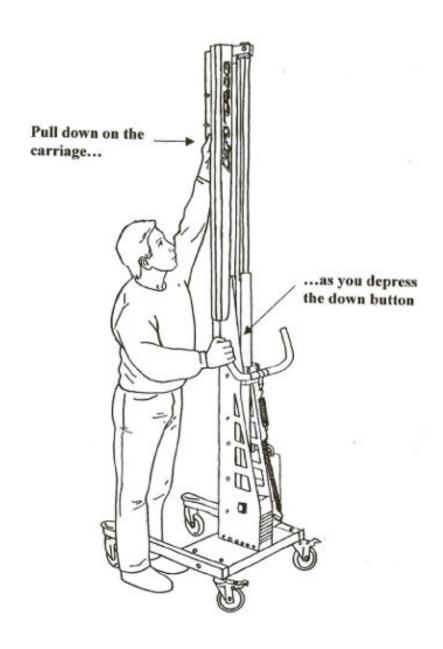
To track straight, align the wheel by pushing the LiftTrac® forward, then push the pin down into the wheel.

To allow the wheel to pivot, pull the pin up until it stops.





Wheel brakes are located on each rear wheel housing. Push down to brake the wheel and lock it from rotating. Use your toe to push the lever upward to release the brake



# DO <u>NOT</u> EXTEND THE MAST TO FULL EXTENSION WITHOUT AN END-EFFECTOR ATTACHED.

If the mast goes to full height without an End Effector attached to the carriage, the carriage may not move down when the mast is retracted. This is not a serious problem and can be rectified easily (as seen above). It occurs because the weight of the chain is greater than the carriage without an End Effector attached. The fix is to simply pull the carriage down by hand as the mast is lowered, until the weight of the chain is overcome and the carriage moves down on its own.

# MAINTENANCE SCHEDULE

PART	DAILY	<b>EVERY 6 Months</b>
Battery and Charger	Check for damage and make sure contacts are clean	Note: When battery is NOT in use, store in your charger. These batteries cannot be overcharged. However, permanent damage <u>can</u> occur to batteries that are allowed to become too discharged, shortening their life span
Chain		Check for wear
Mast Rollers		Check for wear
Mast Channels		Check for wear
End Effector		Check all bearings and movable joints for wear

# **WARRANTY**

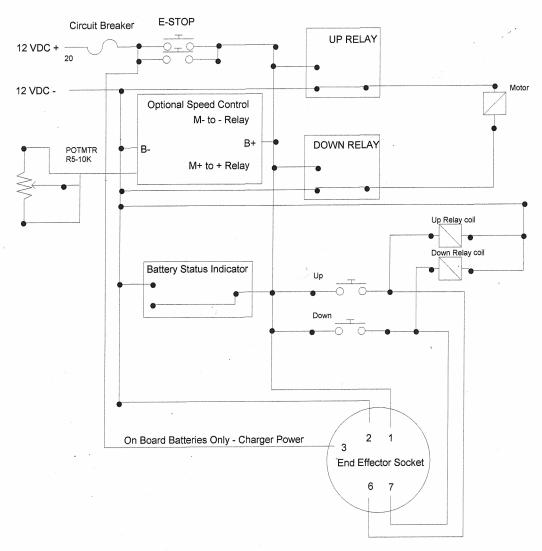
1 year limited warranty on all parts only under conditions of normal and intended use. Misuses, damage or alteration of lift or any of its parts, voids the warranty. No other warranties written, verbal, implied or other than listed here will be honored.

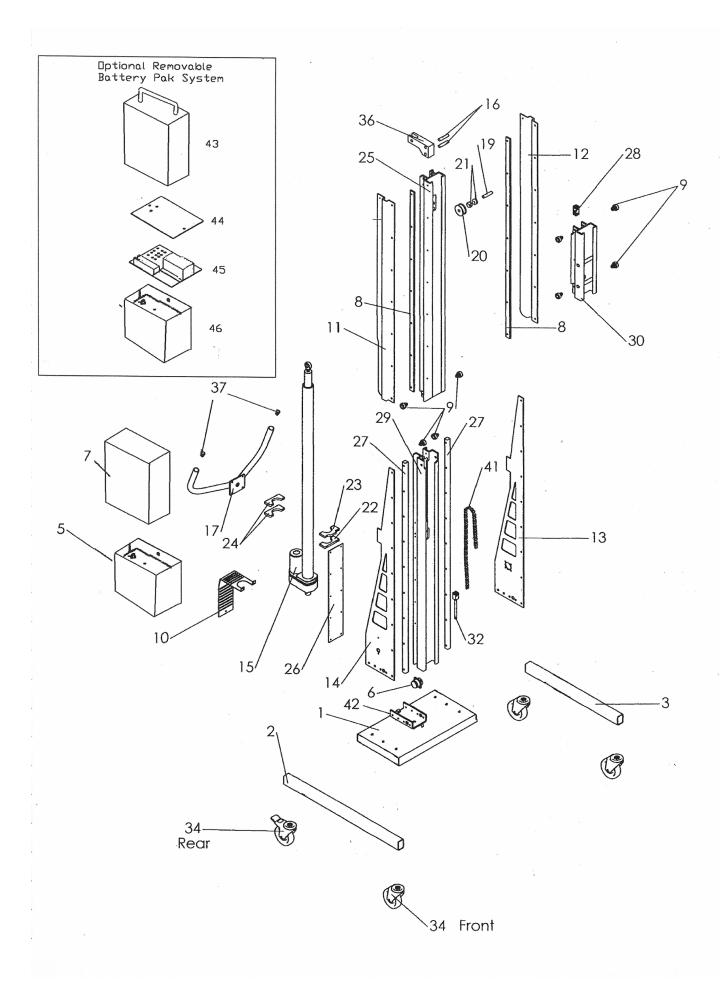
Isbell Lifts, LLC— dba LIFTTRAC 602-243-1001

# TROUBLE SHOOTING

TROUBLE SHOUTH VG				
MALFUNCTION	PROBABLE CAUSE	CORRECTIVE ACTION		
No Power	A) Dead Battery	Replace w/Fully Charged		
	B) Loose Wire	Battery Repair or Replace		
	C) Tripped Breaker	Reset		
Motor Will Not Run	A) Worn Brushes	Replace Brushes		
	B) Loose Wire	Repair or Replace		
	C) Dead Battery	Replace w/Fully Charged Battery		
	D) Faulty Switch	Check. Replace if Necessary		
	E) Tripped Breaker	Reset		
No Lift or Lowering	A) Faulty UP/Down Switch	Replace Switch		
of the Carriage	B) Faulty Limit Switch	Replace Switch		
	C) Faulty Circuit Board	Repair or Replace		
	D) Dead Battery	See Above		
	E) Debris in Power Box	Remove		
	F) Tripped Breaker	Reset		
<b>Excessive Operating</b>	A) Inspect Ball & Screw Drive	Repair or Replace		
Noise	B) Worn Rollers	Repair or Replace		
	C) Lack of Lube	See Lube Schedule		

LT300 Relay Electrical





## LT300 Parts List

ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	1	LT3000-A1.0	Base Frame Assembly
2	1	LT3000-A2.0	Left Leg Assembly
3	1	LT3000-A3.0	Right Leg Assembly
4	2	LT3017-1.0	Frame Cover
5	1	10054-1	Power Box
6	1	2558	Cannon Plug
7	1	LT2058	Battery
8	2	LT3033	Sliding Mast Shield Cover
9	8	LT3000-A7.1	Cam Follower Roller Bearing
10	1	LT3036	Actuator Shield
11	1	LT3014-1.2	Left Sliding Mast Side Plate
12	1	LT3014-1.1	Right Sliding Mast Side Plate
13	1	LT3016.1.1	Right Main Mast Mounting Plate
14	1	LT3015.1.1	Left Main Mast Mounting Plate
15	1	LT3000-A10.0	Actuator
16	2	LT3063-1.0	Cantilever Drift Pin
17	1	LT3000-A14.0	Handle Bar Assembly
18	1	35025-1	Front Bumper /Metal Support
19	2	LT3022-1.0	Main Pulley Shaft
20	1	LT3024-1.0	Main Sheave
21	1	LT3023-1.0	½" Shaft Collar
22	2	LT3020-1.0	Lower Actuator Mount
23	1	LT3019-1.0	Upper Actuator Mount
24	1	LT3021-1.1	Outer Actuator Mount
25	2	LT3006-1.0	Sliding Mast
26	1	LT3035	Back Cover Plate
27	1	LT3039-1.0	Mast Brace Spacer
28	1	LT3047-1.0	Chain Link Adaptor
29	2	LT3000-A15.0	Main Mast Assembly
30	1	LT3000-A20.0	Carriage Assembly
31	2	LT3000-A17.0	Front Caster Lock (Opt)
32	1	LT3000-A16.0	Chain Mount
33	2	LT3000-A13.0	Adjuster Nut
34	4	LT2045FC & LT2046RC	Front & Rear Casters
35	2	LT3069-1.0	Counter Weight Mount Plate (Opt)
36	1	LT3075-1.0	Cantilever
37	2	2008	Red Push Button
39	2	BBP1001	Bumper Support
40	4	LT2043	Leg End Cap
41	1	LT3077-1.0	Chain
43	1	LT2058R	Battery
44	1	LT3080	Top Plate
45	1	LT3085-A25	Controller Assembly
46	1	10054-1R	Power Box