

# OPERATION And PARTS AND

# MAINTENANCE

LT650 Series



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

| Serial No. |  |  |
|------------|--|--|
|            |  |  |
|            |  |  |

LOAD RATING: 650 LBS.

#### PLACARDS





Above end effector socket

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

### **SAFETY GUIDELINES**

Inspect your Lift Trac® regularly, according to the maintenance schedule.

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

Never lift any load that exceeds the load capacity of the lift or end effector as indicated by the placards located on the lift and end effector.

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

Raise or lower the Lift Trac® only when it is standing still and stationary.

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

Never stand under a load that is being supported or lifted by the end effector.

Keep hands and feet clear of pinch points between the Lift Trac®, the end effector and the load.

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

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

Charge batteries or replace depleted batteries with fully charged batteries as soon as the indicator lite comes on.

Stand directly behind the Lift Trac® when moving it.

#### Operation Guide for the Lift Trac® Mechanical Lift



Your Lift Trac® comes complete with a remote pendant, a battery charger and if outfitted with the removable battery system, two spare batteries.

Operation of the Lift Trac® is very simple and easy.

- If your Lift Trac® has on-board batteries simply turn the emergency stop switch, located on the battery box, counterclockwise, it should then pop out slightly.
- If your Lift Trac® is outfitted with the removable battery system place two batteries in the power box on the right side of the lift. It does not matter which way you insert the batteries.

Once power has been supplied to the Lift Trac®, its smart relay performs a self check and within fifteen seconds the indicator above the batteries should turn green indicating the unit is ready for operation. If the indicator does not light, wiggle the removable batteries to allow the pop up contacts to make a good connection.

Note: If the lift is not going to be used for an extended period, in order to conserve battery charge, push in the emergency stop switch or remove a battery. These batteries cannot be overcharged, however, permanent damage **can** occur to batteries that are allowed to become too discharged, shortening their life span.



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



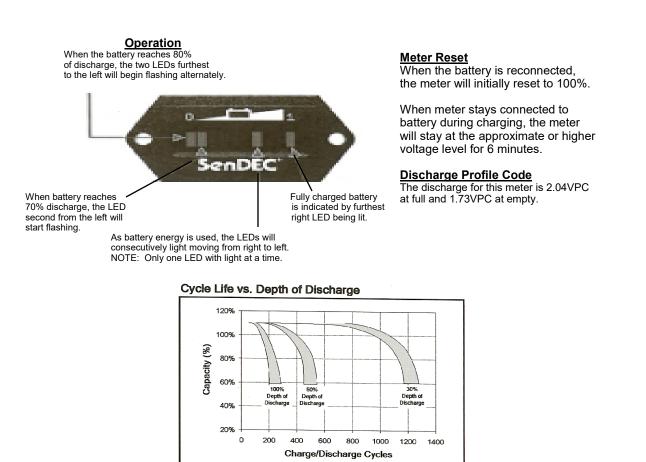
#### The handlebar **UP** switch is located in the **RIGHT** handle.

The **DOWN** switch is located in the **LEFT** handle.



Plug the remote pendant into the receptacle located on the left side of the Lift Trac®. The upper button on the pendant, located nearest the hook, is for UP. The lower button is for DOWN. Note that if both buttons are pushed at the one time the Lift Trac® will not respond. Push one button at a time.

#### **Charging Battery**



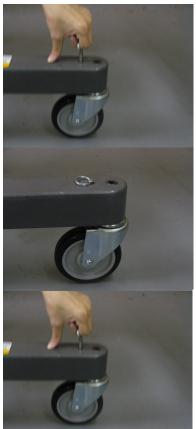
A battery meter is located on the motor cover below the handle bars. A fully charged battery will indicate by the farthest right LED being lit. As battery energy is used, the LED's will consecutively light moving from right to left. Note only one LED will light at a time. The battery should be charged 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.



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.



Wheels 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.



Interchange end effectors by resting the end effector on a stand, table or shelf. Remove the two attaching pins by pulling them out. Move the Lift Trac® to the desired end effector, align the holes, and reinsert the pins.

## **TROUBLE SHOOTING**

| <ul> <li>A) Dead Battery</li> <li>B) Loose Wire</li> <li>C) Tripped Breaker</li> <li>A) Worn Brushes</li> <li>B) Loose Wire</li> <li>C) Dead Battery</li> <li>D) Faulty Switch</li> <li>E) Tripped Breaker</li> </ul> | Replace w/Fully Charged<br>BatteryRepair or ReplaceResetReplace BrushesRepair or ReplaceReplace w/ Fully Charged<br>BatteryCheck—Replace if NecessaryReset |
|---|--|
| <ul> <li>C) Tripped Breaker</li> <li>A) Worn Brushes</li> <li>B) Loose Wire</li> <li>C) Dead Battery</li> <li>D) Faulty Switch</li> <li>E) Tripped Breaker</li> </ul>   | Reset<br>Replace Brushes<br>Repair or Replace<br>Replace w/ Fully Charged<br>Battery<br>Check—Replace if Necessary   |
| <ul> <li>A) Worn Brushes</li> <li>B) Loose Wire</li> <li>C) Dead Battery</li> <li>D) Faulty Switch</li> <li>E) Tripped Breaker</li> </ul>   | Replace Brushes<br>Repair or Replace<br>Replace w/ Fully Charged<br>Battery<br>Check—Replace if Necessary  |
| <ul> <li>B) Loose Wire</li> <li>C) Dead Battery</li> <li>D) Faulty Switch</li> <li>E) Tripped Breaker</li> </ul>  | Repair or Replace<br>Replace w/ Fully Charged<br>Battery<br>Check—Replace if Necessary   |
| C) Dead Battery<br>D) Faulty Switch<br>E) Tripped Breaker   | Replace w/ Fully Charged<br>Battery<br>Check—Replace if Necessary  |
| D) Faulty Switch<br>E) Tripped Breaker  | Battery<br>Check—Replace if Necessary  |
| E) Tripped Breaker  |  |
|   | Reset  |
|   |  |
| A) Faulty UP/Down Switch  | Replace Switch   |
| <b>B)</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  |
| A) Inspect Ball & Screw Drive   | Repair or Replace  |
| B) Worn Rollers   | Repair or Replace  |
|   | See Lube Schedule  |
|   | F) Tripped Breaker<br>A) Inspect Ball & Screw Drive<br>B) Worn Rollers<br>C) Lack of Lube  |

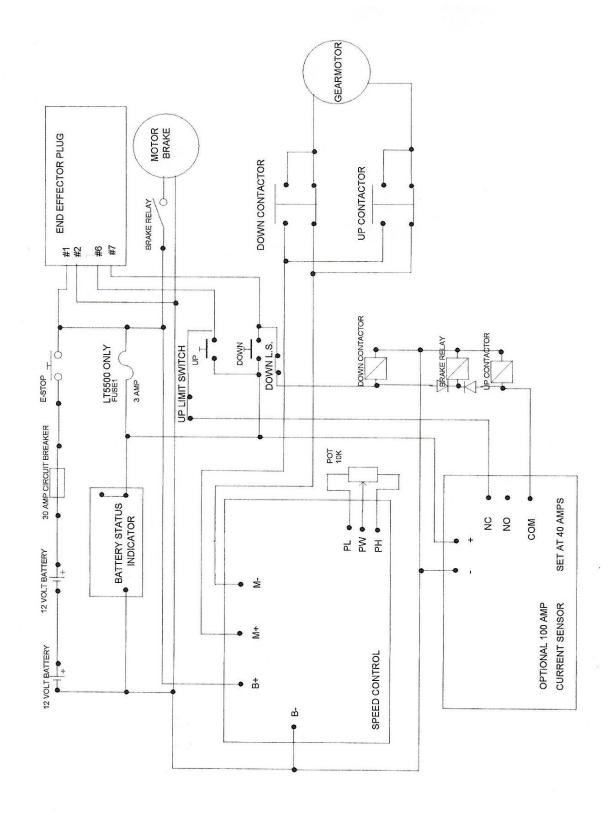
# **MAINTENANCE SCHEDULE**

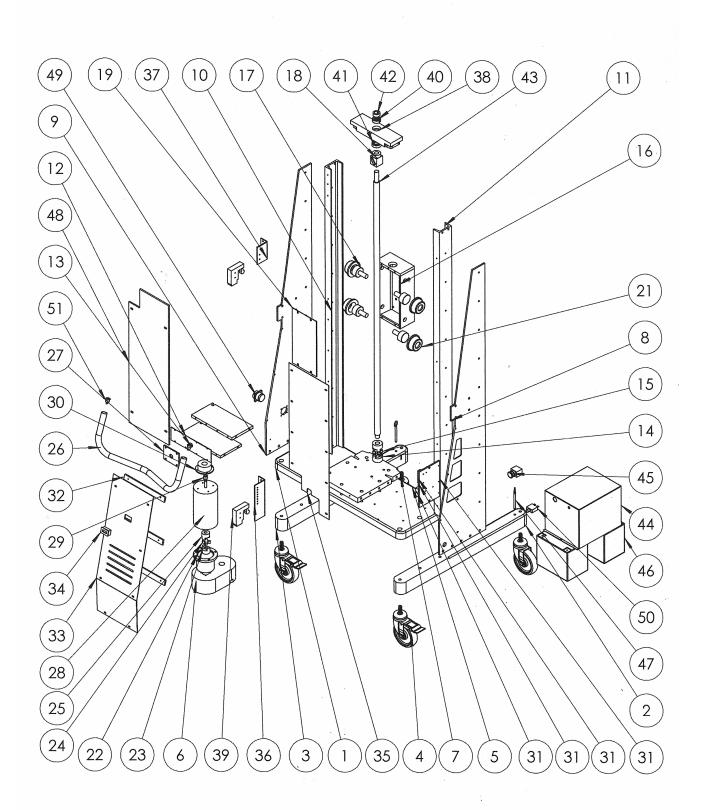
| PART                   | <b>Every 3 Months</b>                                   | EVERY 6 Months  |
|------------------------|---|---|
| Ball Screw             | Lubricate   |   |
| Thrust Bearing         |   | Lubricate Grease Fitting  |
| Battery and<br>Charger | Check for damage<br>and make sure<br>contacts are clean | Note: When battery is NOT in use, store in your<br>charger. These batteries cannot be over<br>charged. However, permanent damage can<br>occur to batteries that are allowed to become too<br>discharged, shortening their life span |
| 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.

LIFTTRAC Isbell Lifts, LLC 602-243-1001 LT650 HD Contactor Electrical with Speed Control





| f  | PART NUMBER                                   | QTY. |
|----|---|------|
| 1  | LT5001 MAIN BASE 32 INCH                      | 1    |
| 2  | LT5002 LEG 32 INCH RIGHT                      | 1    |
| 3  | LT5002 LEG 32 INCH LEFT                       | 1    |
| 4  | LT4002 REAR WHEEL 5 INCH<br>SWIVEL WITH BRAKE | 2    |
| 5  | LT4001 FRONT WHEEL 5 INCH<br>SWIVEL           | 2    |
| 6  | LT5060 GEARBOX                                | 1    |
| 7  | LT5003 MAST BASE PLATE                        | 1    |
| 8  | LT5015 RIGHT SIDE FRAME                       | 1    |
| 9  | LT5016 LEFT SIDE FRAME                        | 1    |
| 10 | LT5004 MAST RAIL 62 INCH LEFT                 | 1    |
| 11 | LT5004 MAST RAIL 62 INCH RIGHT                | 1    |
| 12 | LT5019 HANDLE BAR MOUNT                       | 2    |
| 13 | LT5008 HANDLE BAR MOUNT<br>COVER              | 1    |
| 14 | LT4021 BALL SCREW COUPLER                     | 2    |
| 15 | LT4022 BALL SCREW COUPLER<br>SPIDER           | 1    |
| 16 | LT5006 CARRIAGE ASSEMBLY                      | 1    |
| 17 | LT4019 CAM FOLLOWER 1.875                     | 4    |
| 18 | LT4020 BALL NUT                               | 1    |
| 19 | LT5006.4 CARRIAGE COVER                       | 1    |
| 20 | LT5007 END EFFECTOR MOUNT<br>ASSEMBLY         | 1    |
| 21 | LT5026.NYLATRON ROLLER<br>COVER               | 4    |
| 22 | LT5061 COUPLER COVER                          | 1    |
| 23 | LT4024 MOTOR COUPLER<br>GEARBOX SIDE          | 1.   |
| 24 | LT4026 MOTOR COUPLER SPIDER                   | 1    |
| 25 | LT4025 MOTOR COUPLER MOTOR<br>SIDE            | 1    |
| 26 | LT3032-1.0 HANDLE BAR                         | 1    |
|    |   |      |

| f  | PART NUMBER                           | QTY. |
|----|---------------------------------------|------|
| 27 | LT3027-2.0 HANDLE BAR<br>MOUNT PLATE  | 1    |
| 28 | LT4027 MOTOR                          | 1    |
| 29 | LT4030 MOTOR BRAKE HUB                | 1    |
| 30 | LT4029 MOTOR BRAKE                    | 1    |
| 31 | LT5051 CONTACTOR BOARD<br>ASSEMBLY    | 1    |
| 32 | LT5021 BACK COVER MOUNT               | 3    |
| 33 | LT5022 BACK COVER                     | 1    |
| 34 | LT4006 BATTERY INDICATOR              | 1    |
| 35 | LT5010 FRONT ACTUATOR COVER           | 1    |
| 36 | LT5024 BOTTOM LIMIT SWITCH<br>BRACKET | 1    |
| 37 | LT5025 UPPER LIMIT SWITCH<br>BRACKET  | 1    |
| 38 | LT5005 TOP BEARING MOUNT              | 1    |
| 39 | LT5050.LIMIT SWITCH                   | 2    |
| 40 | LT4017 THRUST BEARING                 | 1    |
| 41 | LT4018 RADIAL BEARING                 | 1    |
| 42 | LT4014 COLLAR                         | 1    |
| 43 | LT4015 BALL SCREW                     | 1    |
| 44 | LT5040 BATTERY COVER                  | 1.   |
| 45 | LT4007 E-STOP SWITCH                  | 1    |
| 46 | LT4013 BATTERY                        | 2    |
| 47 | LT4003 WHEEL LOCK PIN                 | 2    |
| 48 | LT5041 POLYCARBONATE.62 INCH<br>MAST  | 1    |
| 49 | LT4004 CannonPlug                     | 1    |
| 50 | LT4008 Circuit Breaker                | 1    |
| 51 | LT4009 Red pushbutton switch          | 2    |