

INSTRUCTION MANUAL

WARNING

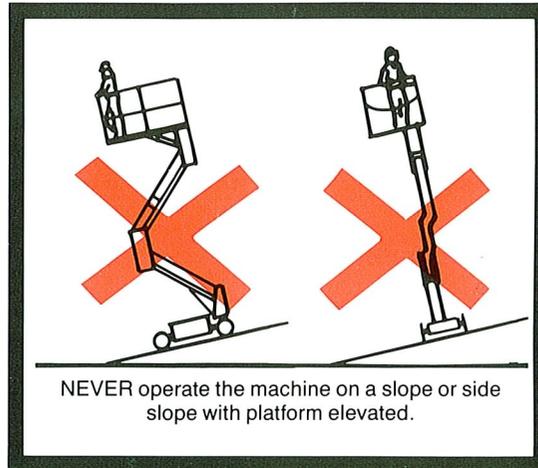
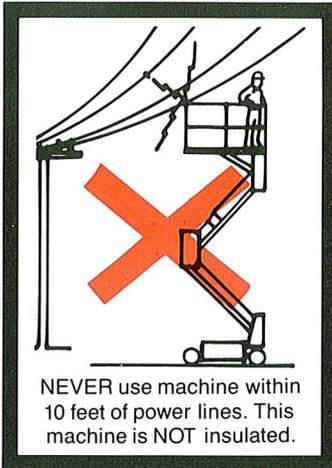
IMPORTANT SAFETY RULES

Please! Carefully study these Safety Rules and Operating Instructions. Make sure all personnel read and understand them completely before using the Up-Right SL-20.

UR UP-RIGHT SL-20

SERIAL NO. 3045 TO CURRENT

SAFETY RULES & OPERATING INSTRUCTIONS



SAFETY RULES

BEFORE USING THE Up-Right SL-20:

- Thoroughly **INSPECT** the work platform for cracked welds, loose hardware, hydraulic leaks, damaged control cable, loose wire connections and tire damage.
- **CHECK** that all guardrails are properly in place and secured with all fasteners in place.
- **DISTRIBUTE** all loads evenly on the platform. See back cover for maximum platform load.
- **SURVEY** the work area for surface hazards such as holes, drop-offs, bumps and debris before operating machine.
- **LOOK** up, down and around for overhead obstructions and electrical conductors.
- **LATCH** gate at entrance after mounting platform.
- **NEVER** use damaged equipment. (Contact UP-RIGHT for instructions. See toll free number on back cover.)
- **NEVER** change operating or safety systems.
- **NEVER** operate the work platform within ten feet of power lines. **THIS MACHINE IS NOT INSULATED.**
- **NEVER** elevate the platform or drive the work platform while elevated unless the work platform is on firm level surface.
- **NEVER** attach overhanging loads or increase platform size.
- **NEVER** use ladders or scaffolding on the platform.
- **NEVER** sit, stand or climb on-guardrail or midrail.
- **NEVER** climb down elevating assembly with the platform elevated.
- **NEVER** recharge batteries near sparks or open flame; batteries that are being charged emit highly explosive hydrogen gas.
- **NEVER** perform service on work platform while platform is elevated without blocking the elevating assembly.
- **AFTER USE** secure the work platform against unauthorized use by turning key switch off and removing key from key switch.
- **CHECK** that parking brake release valve is open for normal operation.

PRE-OPERATIONAL & SAFETY INSPECTION INSTRUCTIONS

*Read and fully understand all safety rules
and then follow these steps each day before use.*

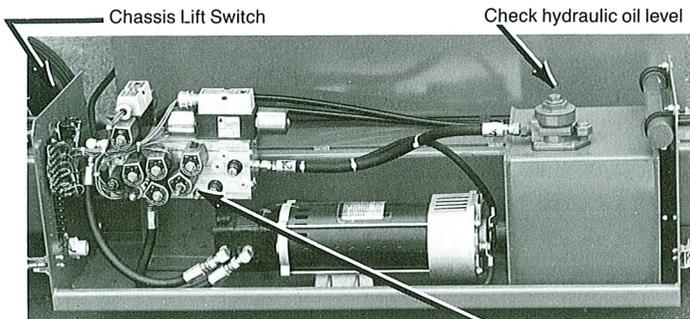


Figure 1. Power Module

Emergency Lowering valve
(See Emergency Lowering Instructions)

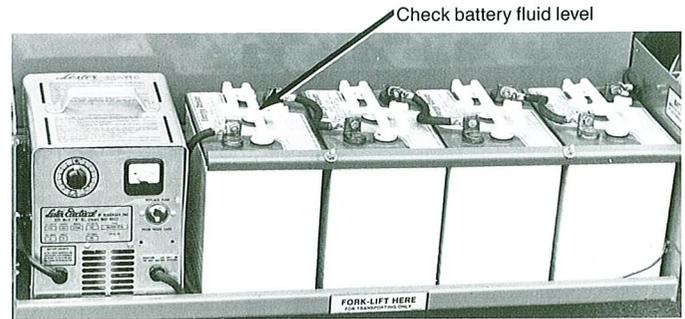


Figure 2. Energy Module

1. Visually inspect for any damage or missing parts.
2. Remove module covers.
3. Check hydraulic oil level with platform fully lowered. Unscrew LARGE hex portion of cap. Oil should be visible in filter (Figure 1). Use Mobile DTE 25 or equivalent.
4. Check battery fluid level (Figure 2).
5. Check state of battery charge (see Maintenance).
6. Check that AC extension cord has been disconnected from charger.

— WARNING —
PERFORM FOLLOWING CHECKS FROM THE GROUND

7. Check that emergency stop switch on control console is in "ON" position. When switch guard is closed, emergency stop switch will automatically go to "OFF" position.
8. Turn key switch to "DRIVE" position.
9. Depress foot switch (located on platform floor).
10. Push drive switch to "FORWARD" position then "REVERSE" position to check for speed and directional control.
11. Move steering switch right and then left to check steering control.
12. Move machine, if necessary, to unobstructed area to allow for full elevation.
13. Turn key switch to "LIFT" position.
14. Push chassis lift switch to "UP" position and fully elevate platform (Figure 1).
15. While platform is elevated, visually inspect from outside of elevating assembly area, gears, lift cylinder, cables and hoses for any damage or erratic operation.

NOTE: Step 10 should be done with drive range selector in "LOW" and "HIGH".

— WARNING —
DO NOT ENTER ELEVATING ASSEMBLY AREA WHILE ELEVATED

16. Check for missing or loose parts and fasteners.
17. Lower platform part way by pushing chassis lift switch to "DOWN" (Figure 1).
18. Check for audible down alarm function while lowering.
19. Finish lowering platform by opening emergency lowering valve to check for proper valve operation (see "Emergency Lowering").
20. Close emergency lowering valve (Figure 1).
21. After all the preceding checks have been completed, replace module covers.

PREPARATION FOR USE

Ensure that pre-operation and safety inspection has been completed and any deficiencies have been corrected.



Figure 3.

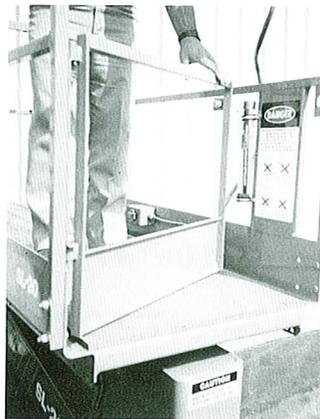


Figure 4.

1. Hang control console on guardrail (Figure 3).
2. After mounting platform, insure gate is closed and latched. (Figure 4).

OPERATING INSTRUCTIONS

Understand all functions of all controls before operating machine.

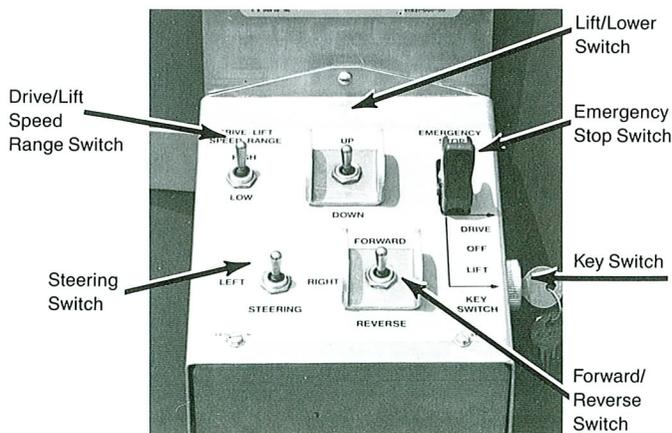


Figure 5. Control Console

— WARNING —

Before operating always check that route is clear of persons, obstructions, holes and dropoffs, above, below and to the sides of platform.

— WARNING —

Before traveling in reverse, double check that route is clear.

TRAVEL WITH PLATFORM LOWERED

NOTE: Always check that route is clear of obstructions, holes and drop-offs, and is capable of supporting the wheel loads.

1. Turn key switch to "DRIVE" position.
2. Set drive range selector to "HIGH" for travel on level surfaces, to "LOW" for climbing grades or traveling in confined areas.
3. Set the drive/lift speed range to "LOW".
4. Depress foot switch.
5. Push drive switch "FORWARD" or "BACKWARD" to travel desired direction.
6. While moving, push drive/lift speed range switch to "HIGH" if faster speed is desired.

STEERING

1. Turn key switch to "DRIVE" position.
2. Depress foot switch.
3. Push steering switch right or left to turn wheels.

NOTE: Steering is not self-centering. Wheels must be returned to straight ahead position by operating switch.

ELEVATING PLATFORM

1. Turn key switch to "LIFT" position.
2. Set drive/lift speed range switch to "HIGH".
3. Depress foot switch.
4. Push lift/lower switch to "UP" position to elevate platform.

NOTE: Setting drive/lift speed range switch to "LOW" will allow slow elevation speed.

TRAVEL WITH PLATFORM ELEVATED

NOTE: Machine will travel at a reduced speed when platform is elevated.

1. Travel with platform elevated only on a hard level surface.
2. Turn key switch to "DRIVE" position.
3. Depress foot switch.
4. Push drive switch FORWARD or BACKWARD to change direction.

LOWERING PLATFORM

1. Turn key switch to "LIFT" position.
2. Depress foot switch.
3. Push lift/lower switch to "DOWN".

EMERGENCY LOWERING

— WARNING —

If platform should fail to lower, never climb down elevating assembly. This could result in serious bodily injury.

1. Ask person on ground to open emergency lowering valve to lower platform. This valve is located on the left hand side of chassis through cut out in power module cover.
2. Open valve by turning knob counterclockwise (Figure 1).
3. Once platform is fully lowered, be certain that emergency lowering valve is closed again. The platform will not elevate if the emergency lowering valve has not been closed.

AFTER USE EACH DAY

1. Ensure that platform is fully lowered.
2. Park work platform on level ground, preferably under cover.

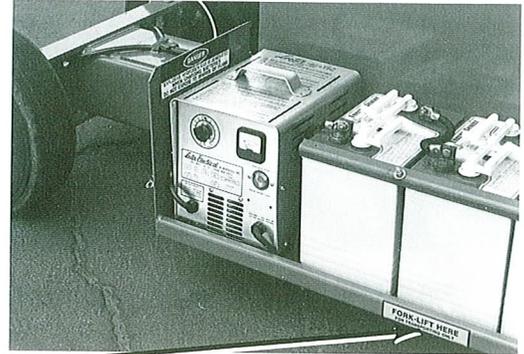
3. Secure against vandals, children or unauthorized operation.
4. Turn key switch to "OFF" position and remove key to prevent unauthorized operation.

FORKLIFTING OF WORK PLATFORM

NOTE: Forklifting is for transporting only.

1. Forklift from side by lifting under modules (Figure 6).

NOTE: See specifications for weight of work platform and be certain that forklift is of adequate capacity to lift work platform.



Forklift from side

Figure 6. Forklifting

PARKING BRAKE RELEASE INFORMATION

1. Turn valve clockwise to close.
2. Activate push-pull thumb pump until brake is released.
3. Turn valve counterclockwise to fully open for normal brake function.

— WARNING —
Parking brake release valve to be closed for releasing parking brake only.

SECURING TO TRUCK FOR TRANSPORT

1. Always block under work platform to keep weight off front wheels while being transported.

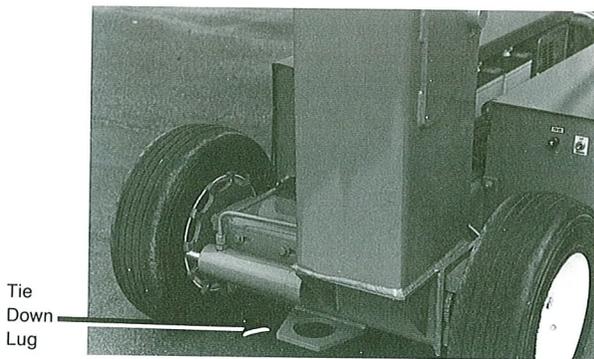


Figure 7. Tie Down Lugs

2. Use tie down lugs (located center front and center rear of chassis) to secure the work platform for transport (Figure 7).

— CAUTION —
Tie down lugs are not to be used for lifting work platform.

3. Use chains or straps of adequate load capacity.

— CAUTION —
Over-tightening may result in damage to work platform.

4. Always chock wheels on truck bed.

GUARDRAIL LOWERING INSTRUCTIONS

This procedure is solely for the purpose of passing through doorways. Guardrails must be returned to proper position before using the SL-20.

FOLD DOWN PROCEDURE

1. Remove control console from front guardrail and lay it on the deck.
2. Lift up on top front guardrail until slots disengage from pins and then fold guardrail back.
3. Remove retaining pin at the right side of top rear guardrail, rotate it to position along left top guardrail and pin in place.

GUARDRAIL ERECTION PROCEDURE

1. Raise the right top guardrail and then push down to engage pins with slots.
2. Raise the left top guardrail and then push down to engage pins with slots.
3. Remove retaining pin from rear top guardrail (attached to left top guardrail), swing it into place across rear of machine and pin to right top guardrail.
4. Raise front top guardrail and push down to engage pins with the slots.
5. Hook control console over front guardrail.

BATTERY CHARGING

1. Check battery fluid level.
2. Check battery charge indicator in power module to see state of charge in batteries.
3. The plug for the battery charger is located at the rear of the power module. Connect plug to properly grounded 115 volt, 60 HZ outlet.
4. Operation of the charger is automatic. The green light on the side cover of charger is on when batteries are charging. The light will blink when batteries are fully charged.

4. Lift up on on left top guardrail until slots disengage with pins and fold guardrail in.
5. Lift up on right top guardrail until slots disengage with pins and fold guardrail in.

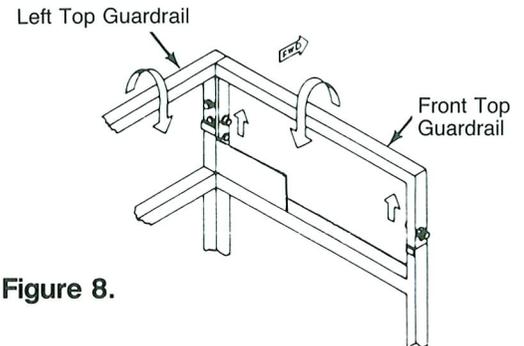
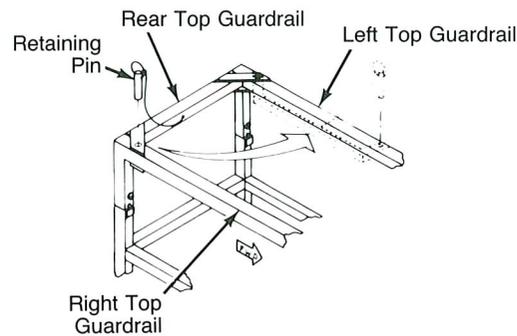
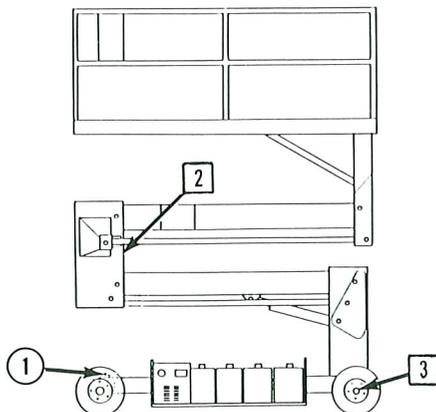


Figure 8.



— CAUTION —
Use charger only on battery systems specified on battery nameplate. Connect only to properly grounded outlets. Disconnect only when supply cord is disconnected as arcing and burning may result. Surface of charger is very hot while charging and can cause burns. Avoid contact while charging. Keep charger dry.

MAINTENANCE AND ROUTINE SERVICE



LUBRICATION POINTS

1. King Pins (Weekly)
2. Gears (Weekly)
3. Wheel Bearings (Yearly)
 - Grease
 - Oil

— CAUTION —
Never perform service work on work platform while platform is elevated.

Figure 9. Lubrication Points

SPECIFICATIONS

ITEM	AMERICAN STANDARD	METRIC
PLATFORM SIZE	30 in. x 96 in.	0.76 m x 2.44 m
MAXIMUM PLATFORM CAPACITY Standard With Fold-Down Extension Deck With Optional Cage	750 lbs. 650 lbs. 550 lbs. total capacity/250 lbs. in cage	340 kg. 295 kg. 250 kg. total capacity/110 kg. in cage
WORKING HEIGHT	26 ft.	7.92 m
MAXIMUM PLATFORM HEIGHT	20 ft.	6.10 m
MINIMUM PLATFORM HEIGHT	47 in.	1.19 m
ENERGY SOURCE	24 volt battery pack 4 HP/DC electric motor Four 220 ampre-hour batteries	24 volt battery 3 kW DC Motor Four 220 ampres-hour batteries
BATTERY CHARGER	25 AMP Battery Charger	
BATTERY DUTY CYCLE	25% for 8 hours	
LIFT SYSTEM	Single Lifting Cylinder	
DRIVEABLE HEIGHT	20 ft.	6.10 m
SURFACE SPEED Platform Lowered Platform Raised	0 to 2.0 MPH 0 to .6 MPH	0.89 m/s 0.27 m/s
HYDRAULIC TANK CAPACITY	4 gallons	15
DIMENSIONS Weight Overall Width Overall Height Overall Height, Guardrails Lowered* Overall Length	2830 lbs. 32.5 in. 89 in. 79.5 in. 96 in.	1284 kg. 0.83 m 2.26 m 2.02 m 2.44 m
CONTROL SYSTEM	2 speeds — forward and reverse	
DRIVE CONTROL	Toggle switches for all functions	
HORIZONTAL DRIVE	Dual wheel; hydraulic motors	
WHEELS	16 in. diameter solid rubber	0.41 m diameter solid rubber
BRAKING	Spring applied, hydraulic release parking brake	
TOEBOARD	6 in. high	0.15 m high
GUARDRAILS	43.5 in. high	1.10 m high
TURNING RADIUS	114 in. outside, 88 in. inside	2.90 m outside, 2.24 m inside
GRADEABILITY	20%	20%
WHEEL BASE	73 in.	1.85 m

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

Required Maintenance Service

SERVICE OPERATION	SERVICE INTERVAL					
	Daily	Weekly	Monthly or 50 Hrs.	6 Mos. or 250 Hrs.	1 Yr. or 500 Hrs.	2 Yrs. or 1000 Hrs.
Check battery fluid level	X					
Charge batteries	X					
Check hydraulic fluid level	X					
Check lug nuts	X					
Lubricate king pins		X				
Grease gears		X				
Grease wheel bearings					X	
Change hydraulic filter				X		
Change hydraulic fluid						X
Check electric motor brushes			X			

Meets or exceeds all applicable requirements of OSHA and ANSI A92.6-1979

NOTE: FOR PROPER SERVICE PROCEDURES REFER TO UP-RIGHT SL-20 SERVICE MANUAL.

SALES • RENTAL • SERVICE



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