

# INSTRUCTION MANUAL

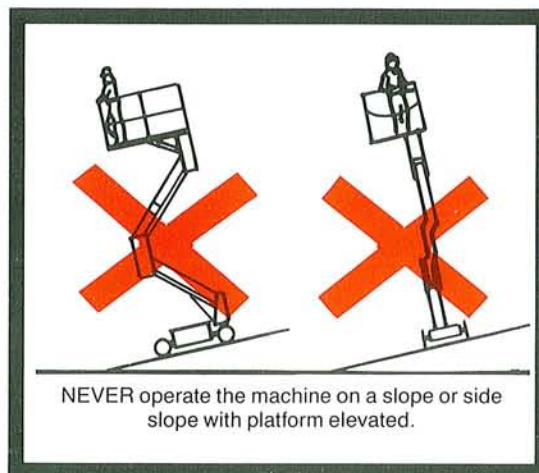
## WARNING

### IMPORTANT SAFETY RULES

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

# UP-RIGHT SL-20

## SAFETY RULES & OPERATING INSTRUCTIONS



## SAFETY RULES

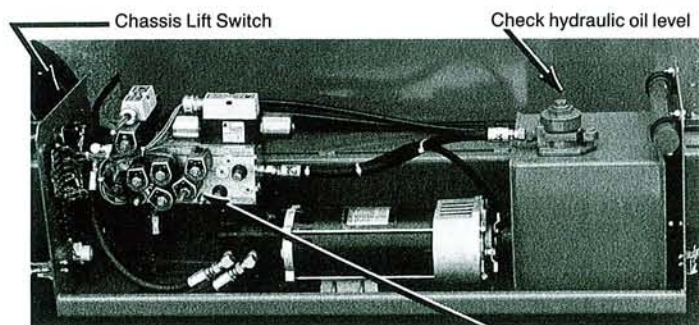
### BEFORE USING THE Up-Right SL-20:

- 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.
- **HOOK** chains across 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.



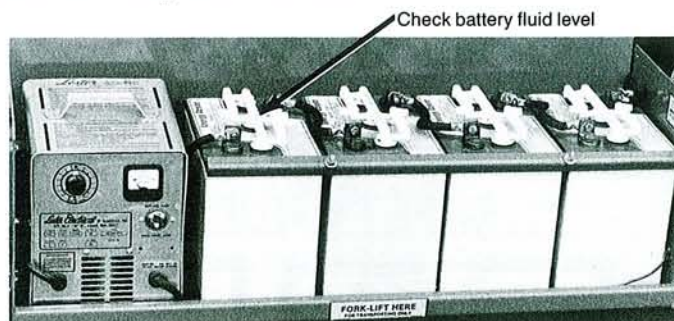
# PRE-OPERATIONAL & SAFETY INSPECTION INSTRUCTIONS

*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. Unhook control console from front guardrail and hold it while performing these steps.
  8. 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.
  9. **WARNING:** Stand clear of machine and protect control console cable from possible damage while performing these checks.
  10. Turn key switch to "DRIVE" position.
  11. Push drive switch to "FORWARD" position then "REVERSE" position to check for speed and directional control.
  12. Move steering switch right and then left to check steering control.
  13. Rehook control console to front guardrail.
  14. Move machine, if necessary, to unobstructed area to allow for full elevation.
  15. Turn key switch to "LIFT" position.
  16. Push chassis lift switch to "UP" position and fully elevate platform (Figure 1).
- NOTE:** Step 11 should be done with drive range selector in "LOW" and "HIGH".

## — WARNING —

**DO NOT ENTER ELEVATING ASSEMBLY AREA WHILE ELEVATED**

17. While platform is elevated, visually inspect from outside of elevating assembly area, gears, lift cylinder, cables and hoses for any damage or erratic operation.
18. Check for missing or loose parts and fasteners.
19. Lower platform part way by pushing chassis lift switch to "DOWN" (Figure 1).
20. Check for audible down alarm function while lowering.
21. Finish lowering platform by opening emergency lowering valve to check for proper valve operation (see "Emergency Lowering").
22. Close emergency lowering valve (Figure 1).
23. After all the preceeding 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.

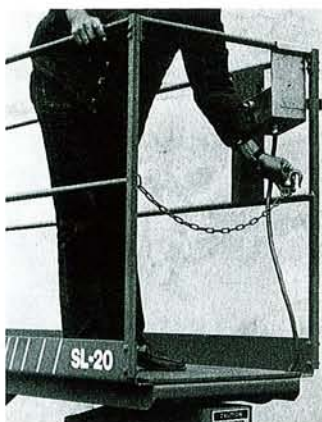


Figure 4.

1. Hang control console on guardrail (Figure 3).
2. After mounting platform, hook chain across entrance. Also, check that chain at middle rear guardrail is hooked into position (Figure 4).

## OPERATING INSTRUCTIONS

*Understand all functions of all controls before operating machine.*

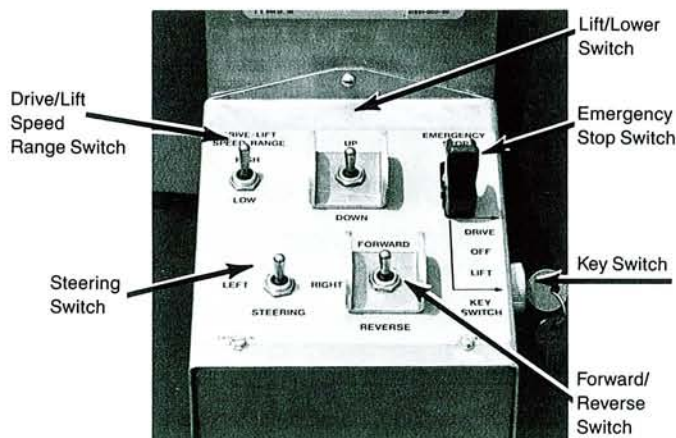


Figure 5. Control Console

### — 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. Push drive switch "FORWARD" or "BACKWARD" to travel desired direction.
5. While moving, push drive/lift speed range switch to "HIGH" if faster speed is desired.

## STEERING

1. Turn key switch to "DRIVE" position.
2. 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. 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. Push drive switch FORWARD or BACKWARD to change direction.

## LOWERING PLATFORM

1. Turn key switch to "LIFT" position.
2. 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) approximately  $\frac{1}{4}$  turn and pull out to disengage detent.
3. Once platform is fully lowered, be certain that emergency lowering valve is closed again. To close push knob in and turn approximately  $\frac{1}{4}$  turn clockwise until detent engages. 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.

## 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.*

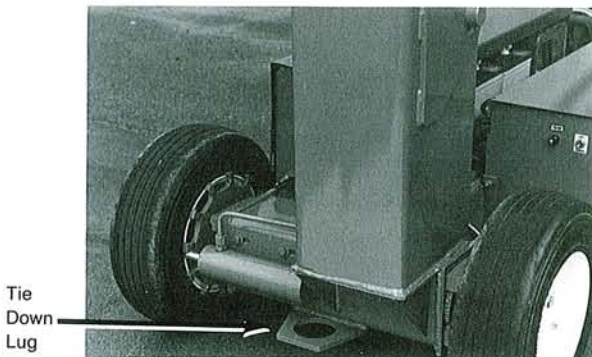


Forklift from side

**Figure 6. Forklifting**

## 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

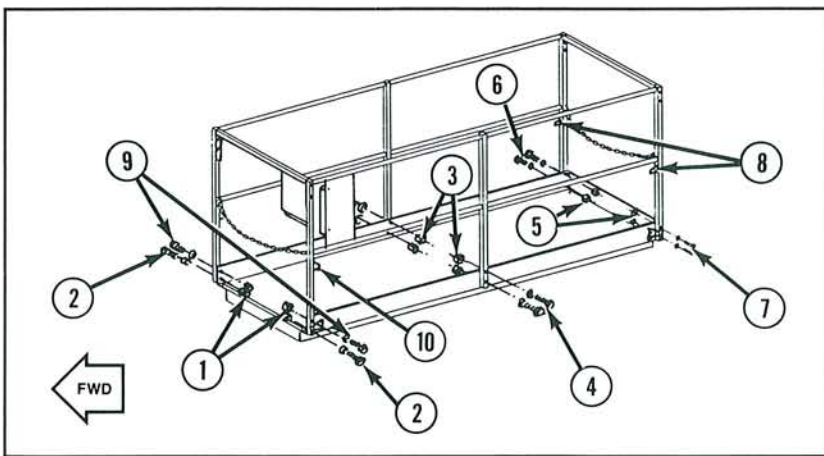
*This procedure is solely for the purpose of passing through doorways. Guardrails must be returned to proper position before using the SL-20.*

### LOWERING THE GUARDRAILS: (Figure 8)

*NOTE: When performing the following procedures retain all fasteners.*

1. Start at front end of work platform.
2. Remove all four nuts (1) and two bottom bolts (2).
3. Remove all four nuts (3) and bolts (4) from center posts.
4. Remove all four nuts (5) from rear guardrail posts. Then remove the two bolts (6) from one side.





**Figure 8. Lowering the Guardrails**

5. While supporting the guardrail remove two remaining bolts (7) and lower end of guardrails onto stops (8).
6. Return to the front of the guardrails. While supporting the guardrail remove remaining two bolts (9) and lower the end of guardrails onto stops (10).

**— DANGER —**

Before entering platform guardrails must be securely fastened in their proper position.

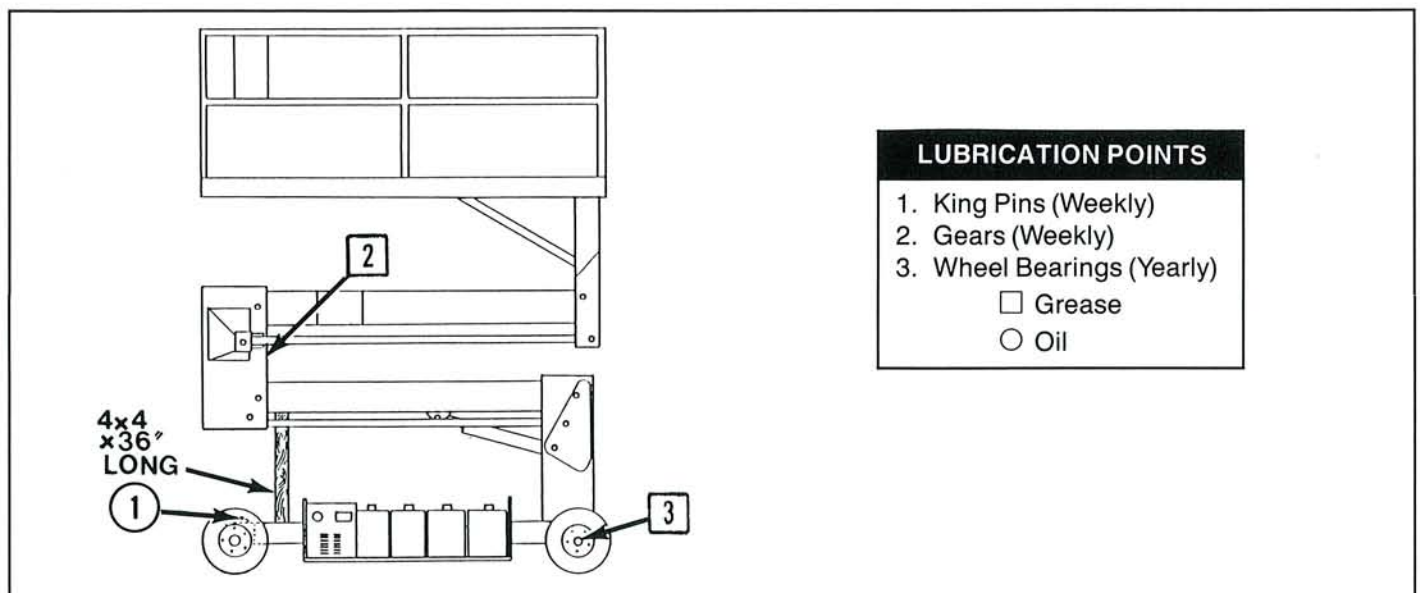
## RAISING THE GUARDRAILS: (Figure 8)

1. Raise front end of guardrails, aligning holes and insert two top bolts (9) and nuts (1). Tighten securely.
2. Raise rear end of guardrails, aligning holes and insert bolts (7) of one side. Attach nuts (5) and tighten securely.
3. Install all remaining bolts (2,4,6). Ensure that all fasteners are tightened securely.
4. Before operating work platform check that all bolts are in place and all nuts are tightened securely.

## MAINTENANCE AND ROUTINE SERVICE

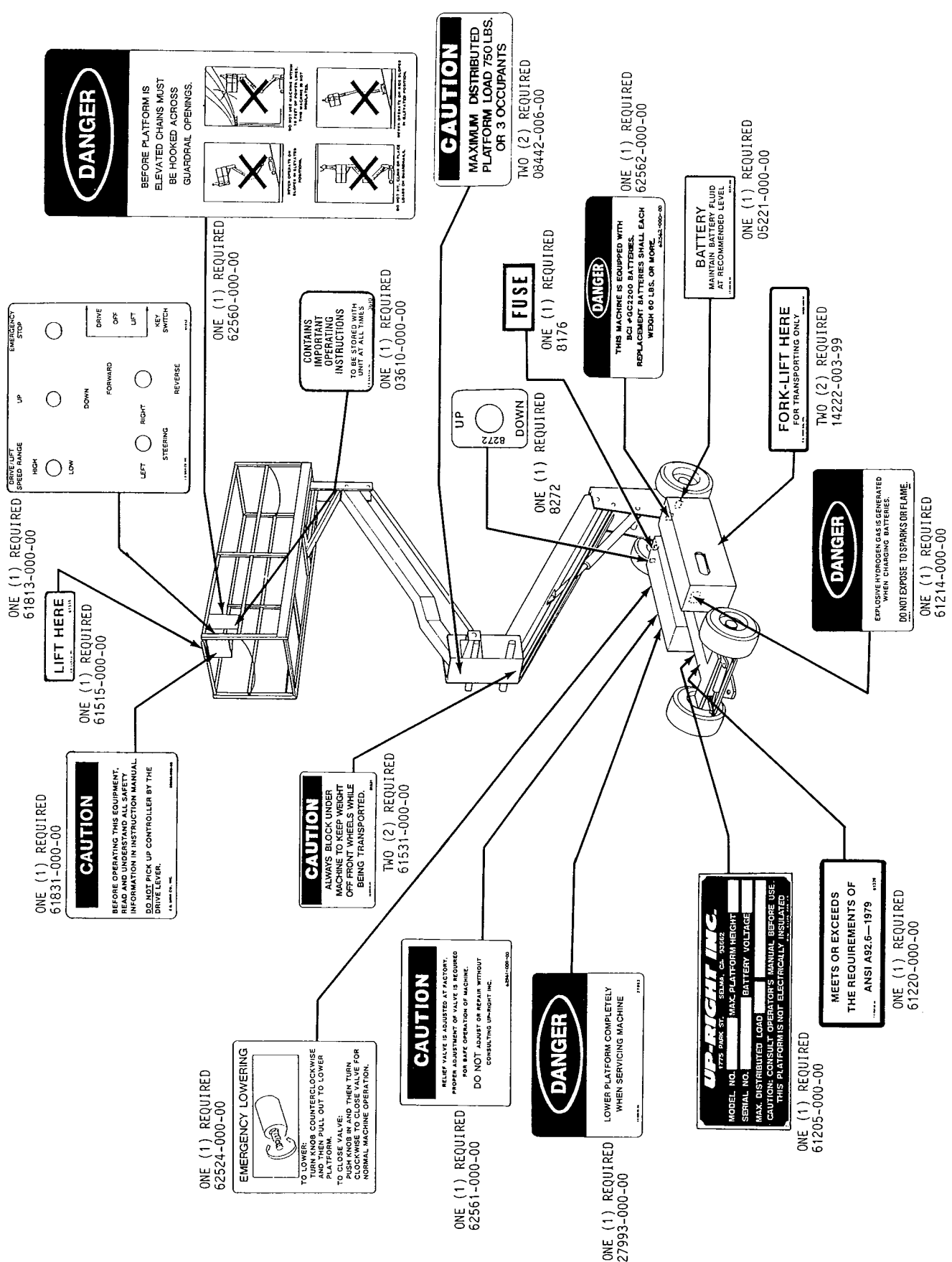
**— DANGER —**

Never perform service on work platform while platform is elevated without blocking elevating assembly (see Figure 9).

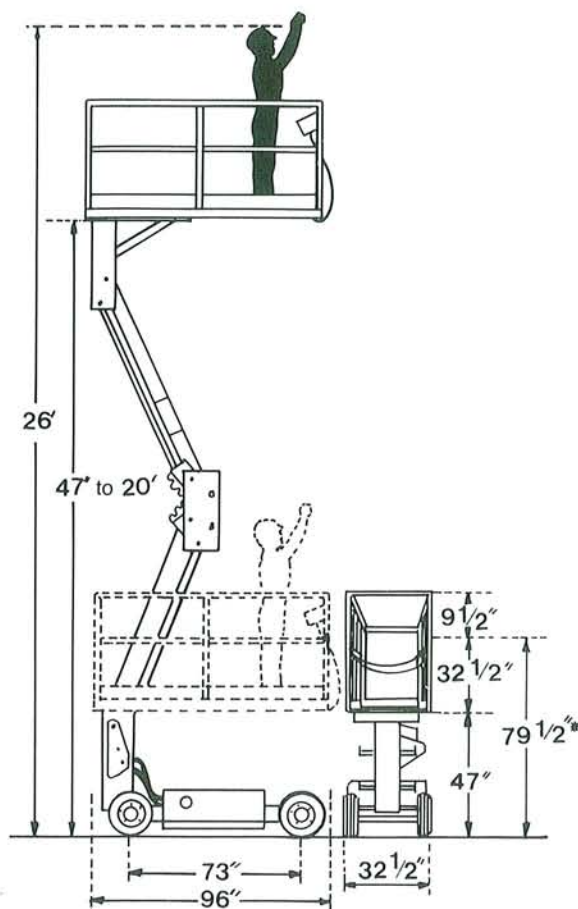


**Figure 9. Blocking the Elevating Assembly and Lubrication Points**

**DECAL INSTALLATION: READ AND UNDERSTAND  
THESE DECALS BEFORE OPERATING UP-RIGHT LIFT**



**NOTE: Decals can be ordered by using part number located by each decal.**



SPECIFICATIONS	
Item	SL-20
Platform Size	30 in. x 96 in.
Maximum Platform Capacity	
Standard	750 lbs.
With Fold-down Extension Deck	650 lbs.
With Optional Cage	550 lbs. total capacity/250 lbs. in cage
Working Height	26 ft.
Maximum Platform Height	20 ft.
Minimum Platform Height	47 in.
Energy Source	24 volt battery pack 4 HP/DC electric motor Four 220 ampere-hour batteries
Battery Charger	25 AMP Battery Charter
Battery Duty Cycle	25% for 8 hours
Lift System	Single lifting cylinder
Driveable Height	20 ft.
Surface Speed	
Platform Lowered	0 to 2.0 MPH
Platform Raised	0 to .6 MPH
Hydraulic Tank Capacity	4 gallons
Dimensions	
Weight	2830 lbs.
Overall Width	32.5 in.
Overall Height	89 in.
Overall Height, Guardrails Lowered*	79.5 in.
Overall Length	96 in.
Control System	2 speeds — forward & reverse
Drive Control	Toggle switches for all functions
Horizontal Drive	Dual wheel; hydraulic motors
Wheels	16 in. diameter solid rubber
Braking	Spring applied, hydraulic release parking brake
Toeboard	4 in. high
Guardrails	42 in. high
Turning Radius	114 in. outside, 88 in. inside
Gradeability	20%
Wheel Base	73 in.
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

**UP-RIGHT**  
AERIAL PLATFORMS

CALL TOLL FREE:

CALIFORNIA: [800] 852-LIFT

P.O. Box 560, 1775 Park St., Selma, CA 93662

TLX: 355 5400, FAX: [209] 896-9012

CANADA: [416] 668-7701

108 Industrial Dr., Whitby, Ontario, Can. L1N5Z8