

LIFTO™



USER MANUAL

Safety Rules



WARNING

Failure to obey the instructions and safety rules in this manual may result in death or serious injury.

Do Not Operate Unless:

You learn and practice the principles of safe machine operation contained in this operator's manual.

1. Avoid hazardous situations.

Know and understand the safety rules before going on to the next section.

2. Always perform a pre-operation inspection.

3. Always perform the function tests prior to use.

4. Inspect the workplace.

5. Only use the machine as it was intended.

You read, understand and obey:

- manufacturer's instructions and safety rules—operator's manual and machine decals
- Employer's safety rules and worksite regulations
- Applicable governmental regulations

Safety Rules

Fall Hazards

- Do not use the machine as a personnel lifting platform or step.
- Do not stand on the load handling attachments.
- Do not climb on the mast.

Tip-over Hazards

- Do not raise the load unless the stabilizers (if equipped) and legs have been fully lowered and locked and the casters are in full contact with the ground.
- Do not raise the load unless the leg retainer pins are properly inserted through the leg and the base.
- Do not remove the leg retainer pins while the machine is loaded and/or raised.
- Do not raise the load unless the machine is on a firm, level surface.

- Prior to use, check the work area for drop-offs, holes, bumps, debris, unstable or slippery surfaces or other possible hazardous conditions.



- Do not raise the load unless the load handling attachment is properly secured to the machine.
- Do not use blocks to level the machine.
- Do not move the machine with a raised load, except for minor positioning.
- Do not operate the machine in strong or gusty winds. Increasing the load surface area will decrease machine stability in windy conditions.



- Do not leave a load raised when windy conditions may occur unless the machine(s) are properly guy wired.



- Do not cause a horizontal force or side load to the machine by raising or lowering a fixed or overhanging load.

Safety Rules

Do not place ladders or scaffolding against any part of the machine.

- Do not use the machine on a moving or mobile surface or vehicle.



- Do not exceed the rated load capacity. See Load Capacity Charts section.

- Avoid debris and uneven surfaces while rolling a Genie Superlift with the legs folded up.

- Do not replace machine parts critical to stability or structure with items of different weight or specification.

- Do not use a straddle base, the flat forks, the vertical barrel stacker or the rotating barrel handler on an SLA-20 or an SLA-25.

Lifting Hazards

- Use proper lifting techniques to load or tip the machine.

- Use proper lifting techniques when installing or removing the load handling attachments.

Electrocution Hazards

- This machine is not electrically insulated and will not provide protection from contact with or proximity to electrical current.



Keep away from the machine if it contacts energized power lines. Personnel must not touch or operate the machine until power lines are shut off.

Maintain safe distances away from electrical power lines and apparatus in accordance with applicable governmental regulations and the following chart.

Voltage	Minimum Safe Approach Distance	
	Feet	Meters
Phase to Phase		
0 to 300V	Avoid Contact	
300V to 50KV	10	3.1
50KV to 200KV	15	4.6
200KV to 350KV	20	6.1
350KV to 500KV	25	7.6
500KV to 750KV	35	10.7
750KV to 1000KV	45	13.7

Allow for mast movement and electrical line sway or sag, and be aware of strong or gusty winds.

Do not use the machine as a ground for welding.

DO NOT GRASP THE CABLE.

Do not grasp the cable.

Safety Rules

Crushing Hazards

Do not raise if the load is not properly centered on the load handling attachment

Do not raise unless the load is properly secured to the load handling attachment.

Do not stand under or allow personnel under the machine when the load is raised.

Do not stand under the load. The safety brake system (if equipped) will allow the load to drop 1 to 3 feet before locking the columns.



Do not lower the load unless the area below is clear of personnel and obstructions.

Keep hands and fingers away from folding legs and other potential pinch points.

Maintain a firm grasp on the stabilizer when the lock plates are released. The stabilizer will drop.

Maintain a firm grasp on the leg when the retaining pin is removed. The leg will drop.

Maintain a firm grasp on the winch handles until the brake is locked. The brake is locked when the load will not cause the winch handles to turn.

Adjustable Flat Forks

Do not raise the load unless the snap pins are properly inserted in the forks.



Vertical Barrel Stacker

Do not raise the load unless the lifting arms are in the correct position for the barrel size.

Do not raise the load unless the lifting arms are correctly positioned between the ribs on the barrel.

Rotating Barrel Handler

Keep hands clear of the rotating gears.

Use proper lifting techniques to lift the barrel handler.

Fork Extensions

Do not raise the load unless the fork extensions are properly secured to the forks.

Collision Hazards

Check the work area for overhead obstructions or other possible hazards.

Do not tilt the machine back unless the area is clear of personnel and obstructions.



Use common sense and planning when transporting the machine on an incline or slope.

Do not load for transport unless the machine and vehicle are on a level surface. Use proper lifting techniques to load the machine.

Safety Rules

Damaged Machine Hazards



Do not use a damaged or malfunctioning machine.

Do not use a machine with a worn, frayed, kinked or damaged cable.

Do not use a machine with less than 4 wraps of cable on the winch drum when the carriage is fully lowered.



Conduct a thorough pre-operation inspection prior to each use.

Be sure all decals are in place and legible. See Decals section.

Be sure that the operator's manual is complete, legible and in the storage container located on the machine.

Maintain proper lubrication on the winch. See Genie Superlift Parts and Service Manual for details. Do not allow oil or grease on raking surfaces.

Do not use any type of lubrication on the column surfaces.

Improper Use Hazard

Never leave a Genie Superlift unattended with a load. Unauthorized personnel may attempt to operate the machine without proper instruction, creating an unsafe condition.

Decal Legend

Genie product decals use symbols, color coding and signal words to identify the following:



Safety alert symbol—used to alert personnel to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

▲ DANGER

Red—used to indicate the presence of an imminently hazardous situation which, if not avoided, will result in death or serious injury.

▲ WARNING

Orange—used to indicate the presence of a potentially hazardous situation which, if not avoided, could result in death or serious injury.

▲ CAUTION

Yellow with safety alert symbol—used to indicate the presence of a potentially hazardous situation which, if not avoided, may cause minor or moderate injury.

CAUTION

Yellow without safety alert symbol—used to indicate the presence of a potentially hazardous situation which, if not avoided, may result in property damage.

NOTICE

Green—used to indicate operation or maintenance information.

Part Description

1. LIFTO15

- 4.98 m (16 ft 4 in) maximum lifting height
- Up to 300 kg load capacity

2. LIFTO20

- 6.46 m (21 ft 2.5 in) maximum lifting height
- Up to 250 Kg load capacity

3. LIFTO25

- 7.94 m (26 ft 0.5 in) maximum lifting height
- Up to 200kg load capacity



Productivity

- Heavy-duty design
- Patented telescoping mast system with mast brake
- Captive stabilizer set (standard on Model-2, 3, not available on straddle base)
- Rolls easily through single door in upright position
- Quick set up requires no tools
- Interchangeable load handling attachments
- Maneuverable casters
- Compact design, legs fold up for easy storage
- Roller wheels allow easy transport in stowed position
- Easy to load and unload on or off a vehicle for transport
- Hold-down bar secures mast assembly during transport

Power

- One speed manual winch

Productivity & Fork Options

- Standard forks
- Lifter Jack

Casters

- Front swivel casters, 10 cm (4 in), non-marking (standard)
- Rear swivel casters, 13 cm (5 in), non-marking (standard)
- 4-way swivel locks and side brakes (standard)



Inspection & Testing

Pre-Operation Inspection

- Always perform a pre-operation inspection.
- Know and understand the pre-operation inspection before going on to the next section.
- Always perform function tests prior to use.
- Inspect the workplace.
- Only use the machine as it was intended.

Fundamentals

The Pre-operation Inspection is a visual inspection performed by the operator prior to each work shift. This inspection is designed to discover if anything is apparently wrong with a machine before the operator tests it.

Inspect the machine for modifications, damage and loose or missing parts.

A damaged or modified machine must never be used. If damage or any variation from factory delivered condition is discovered, the machine must be tagged and removed from service.

Repairs to the machine may only be made by a qualified service technician, according to the manufacturer's specifications. After repairs are completed, the operator must perform a pre-operation inspection again before going on to the function tests.

Pre-operation Inspection

- Be sure that the operator's manual is complete, legible and in the storage container located on the machine.
- Be sure that all decals are legible and in place. See Decals section.
- Check the following components or areas for damage, modifications and improperly installed or missing parts :
 - ☑ Winch and related components
 - ☑ Base components
 - ☑ Stabilizers and latch plates (if equipped)
 - ☑ Exterior plastic shim for safety brake (if equipped)
 - ☑ Carriage hold-down bar
 - ☑ Cable and pulleys
 - ☑ Load handling attachments (if equipped)
 - ☑ Nuts, bolts and other fasteners
 - ☑ Cable (kinks, frays, abrasions)
 - ☑ Legs
 - ☑ Mast columns
 - ☑ Cable anchor
 - ☑ Wheels and casters
- **Check the entire machine for :**
 - ☑ Dents or damage
 - ☑ Corrosion or oxidation
 - ☑ Cracks in welds or structural components
 - ☑ Be sure that all structural and other critical components are present and all associated fasteners and pins are in place and properly tightened.
 - ☑ Be sure there is a minimum of 4 wraps of cable around the winch drum when the carriage is fully lowered.

Test Regime

Function Tests -

Select a test area that is firm, level and free of obstructions

Setup

• Machines Without Stabilizers

- ☑ Remove the leg retainer pin and lower the leg to the down position. Insert the pin through the leg and base.



• Machines With Stabilizers

- ☑ Push down to release the stabilizer lock plates and lower the stabilizers until the casters are in full contact with the ground. Be sure the stabilizers are locked in the down position. (Fig.-1)
- ☑ Remove the leg retainer pin and lower the leg to the down position. Insert the pin through the leg and base. (Fig.2)



Fig. 1

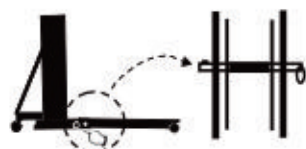


Fig. 2

• Straddle Base

- ☑ Place a 2 inch / 5.1 cm block under one leg swivel caster.
- ☑ Loosen the arm lock knob on the opposite adjustable arm. Push down on the lock knob.
- ☑ Position the adjustable arm to the desired width.
- ☑ Tighten the arm lock knob while supporting the leg assembly.
- ☑ Repeat steps 1-4 for the other arm.

• Load Handling Attachments

Standard Forks and Standard Forks Options

- ☑ Place the forks inside the carriage
- ☑ Insert the retaining pin.



- **Load Platform with Standard Forks**

- ☑ Place the load platform on the standard forks.

- **Pipe Cradle**

- ☑ Attach the pipe cradles to the forks. Be sure the fasteners are tightened.

- **Fork Extensions**

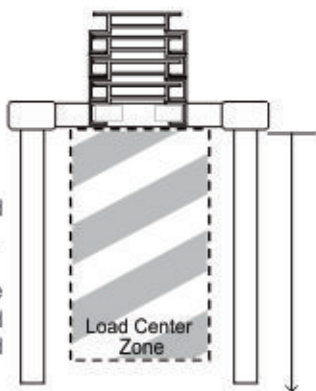
- ☑ Slide each extension tube onto the fork.
- ☑ Adjust to the desired position and insert the retaining pins.

Load Capacity Charts



Observe and Obey:

- ☑ Failure to properly position the load may result in death or serious injury.
- ☑ Verify that the load you wish to raise does not exceed the maximum load for your load center. See the Load Capacity Chart on the next page.
- ☑ A load center is defined as the balancing point (center of gravity) of a load and must be positioned within the load center zone.



Fork :

Load Positioning Instructions

- Determine the weight of the load and the location of its load center.
- Measure to the load center from the side of the load that will be closest to the carriage.
- Refer to the chart on the next page to determine if the machine is capable of lifting the weight at the location on the forks
- Place the load so that it rests on the forks, as close to the carriage as possible
- Position the load so that the load center is within the load center zone.
- Secure the load to the forks.

Boom :

Load Positioning Instructions

- Determine the weight of the load and the location of its load center
- Refer to the chart below to determine if the machine is capable of lifting the weight.
- At the location on the boom.
- Secure the load to the lifting shackle on the boom.



Load Capacity Chart (Load Center)					
Load Center					
Dimensions		40 cm	60 cm	80 cm	100 cm
Load	LIFTO15	300kg	300kg	250kg	150kg
	LIFTO20	250kg	200kg	150kg	100kg
	LIFTO25	200kg	150kg	100kg	75kg

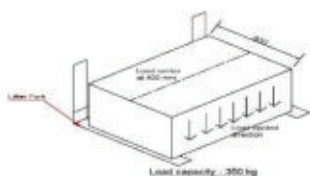
Test Procedure :

First, we should select model and apply load case as given below :

LIFTO20 (6.46 Meter)

Load Case 1

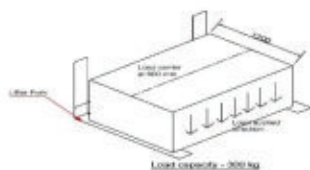
Load center 400 mm



Load Center - 400 mm
Load Capacity - 250 kg

Load Case 2

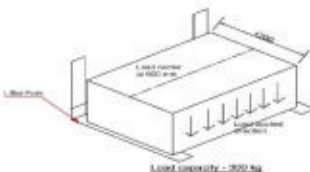
Load center 600 mm



Load Center - 600 mm
Load Capacity - 200 kg

Load Case 3

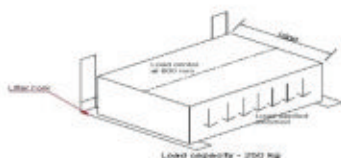
Load center 800 mm



Load Center - 800 mm
Load Capacity - 150 kg

Load Case 4

Load center 1000 mm



Load Center - 1000 mm
Load Capacity - 100 kg

Load Combinations

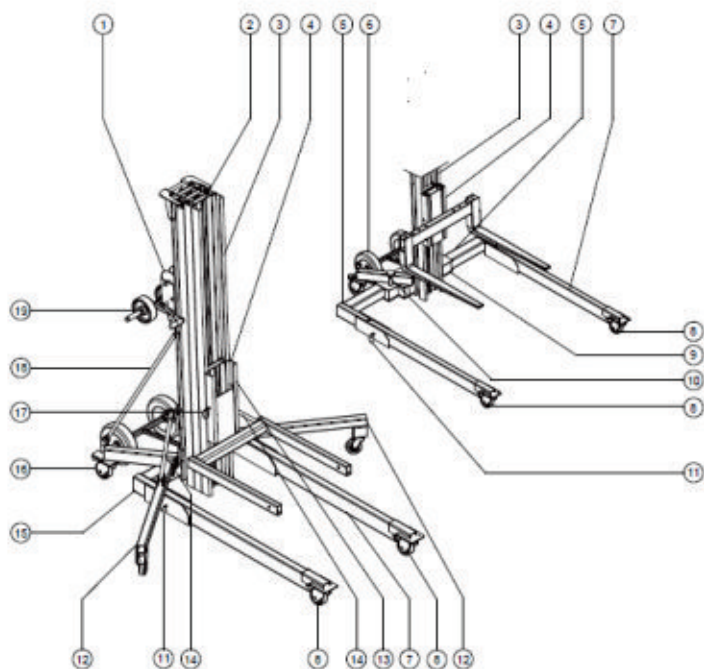
Combination No.	Combination Description	Load Cases
1	1+5	Load Case - 1
2	3+6	Load Case - 2
3	4+5	Load Case - 3
4	2+5	Load Case - 4

Note - Above allowable loads included 1.11 of load applied for wind loading also.

LIFTO20

6.46 m (21 ft 2.5 in) maximum lifting height

Up to 250 Kg load capacity

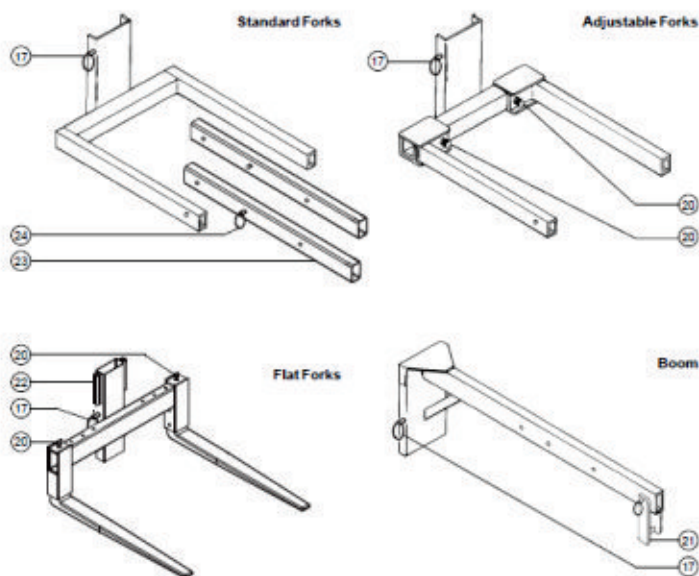


1. Winch
2. Cable
3. Mast
4. Carriage
5. Adjustable Arm
6. Traveling Wheels (Optional)
7. Leg
8. Leg Swivel Caster
9. Straddle Base
10. Arm Lock Knob
11. Leg Retaining Pin
12. Stabilizer (If Equipped)
13. Hold Down-Bar (on opposite side of Machine)
14. Stabilizer Brace
15. Standard Base
16. Base Swivel/Lock Caster with Brake
17. Load handling attachment retaining pin

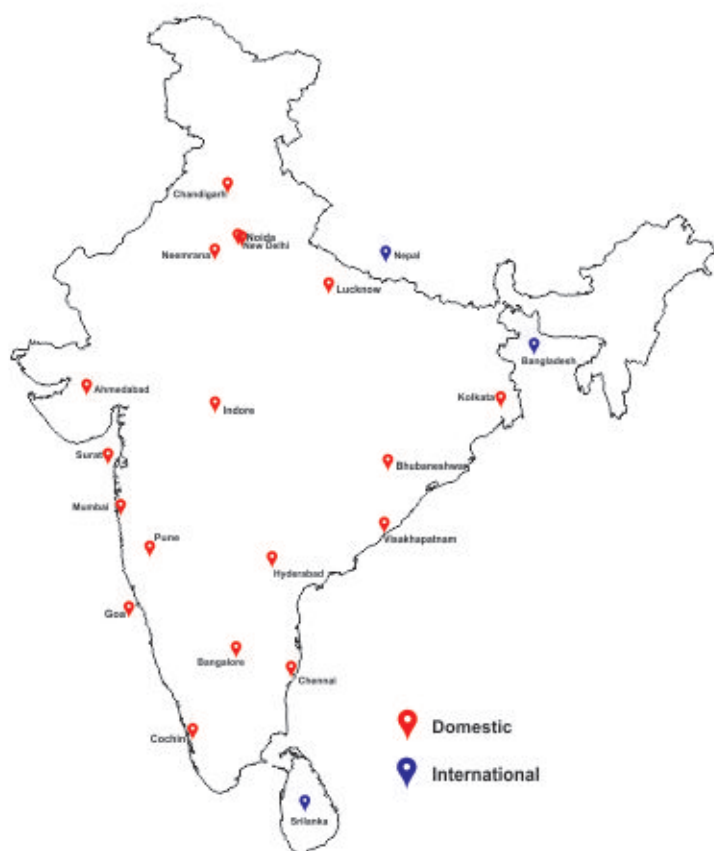
LIFTO20

6.46 m (21 ft 2.5 in) maximum lifting height

Up to 250 Kg load capacity



18. Mast Brace
19. Loading wheels/steer handles
20. Snap Pin
21. Lifting Shackle
22. Fork Mounting Bracket
23. Fork Extension
24. Fork Extension Retaining Pin



DELHI NCR • MUMBAI • CHENNAI • BANGALORE • KOLKATA
AHMEDABAD • LUCKNOW • INDORE • GOA • SURAT • BHUBANESHWAR
HYDERABAD • COCHIN • VIZAG • CHANDIGARH • PUNE • NEEMRANA.

LIFTO™

Manufactured by :

Youngman Manufacturing India Pvt Ltd

Plot No.14, Ecotech-1 Extension, Greater Noida, 201310

E-mail : sales@youngman.co.in | Contact : +91-9205586056, 9015964626

Store : Store.youngman.co.in | www.youngman.co.in