Part No. 33547 Genie Superlift Contractor 1 First Edition • Seventh Printing Operator's 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. You read, understand and obey the manufacturer's instructions and safety rules and operator's manuals and machine decals. You read, understand and obey employer's safety rules and worksite regulations. You read, understand and obey all applicable governmental regulations. You are properly trained to safely operate the machine. Know and understand the safety rules before going on to the next section.

- 1 Avoid hazardous situations.
- 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.

Fall Hazards

Do not use 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.

SAFETY RULES

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 guywired.

Do not exceed the rated load capacity. See Load Capacity Charts section. Avoid debris and uneven surfaces while rolling a machine with the legs folded up.

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

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

SAFETY RULES

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.

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 place ladders or scaffolding against any part of the machine.

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

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.

Lifting Hazards

Use proper lifting techniques to load or tip the machine.

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

Voltage Minimum Safe Approach Distance

Phase to Phase Feet Meters

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

SAFETY RULES

Crushing Hazards

Keep hands and fingers away from folding legs and other potential pinch points. 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 lower the load unless the area below is clear of personnel and obstructions.

Do not stand under the load. The safety brake system (if equipped) will allow the load to drop 1 to 3 feet $\!\!/$ 30 to 91 cm before locking the columns.

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.

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 four 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.

Be sure 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 Contractor Parts and Service Manual for details. Do not allow oil or grease on braking surfaces. Do not use any type of lubrication on the column surfaces.

Bodily Injury Hazard Do not grasp the cable.

Improper Use Hazard

Never leave a machine 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.

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

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

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

Green - used to indicate operation or maintenance information.

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.

Refer to the list on the next page and check each of the items.

If damage or any unauthorized 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, improperly installed or missing parts and unauthorized modifications:
- _ Winch and related components
- _ Base components
- _ Legs
- _ Stabilizers and latch plates (if equipped)
- _ Mast columns
- _ Carriage hold-down bar
- _ Cable anchor
- _ Cable and pulleys
- _ Wheels and casters
- _ Load handling attachments
- _ Nuts, bolts and other fasteners
- _ Cable (kinks, frays, abrasions)

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.

Load Handling Attachments

Standard Forks and Standard Fork Options

- 1 Place the forks inside the carriage.
- 2 Insert the retaining pin.

Fork Extension

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

Function Tests

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

Setup

Machines With Stabilizers

- 1 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.
- 2 Remove the leg retainer pin and lower the leg to the down position. Insert the pin through the leg and base.

FUNCTION TESTS

Fork Extension

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

Test One-Speed Winch Operation

- 1 Install a load handling attachment.
- 2 Raise the carriage by firmly grasping the winch handles and rotating them towards the mast.

Result: The winch should operate smoothly, free of hesitation or binding.

3 Lower the carriage by firmly grasping the winch handles and rotating them away from the mast.

After lowering to the desired position, turn the winch handles toward the mast (raise the load) 1/4 turn to set the brake.

Result: The winch should operate smoothly, free of hesitation or binding.

Test Mast Sequencing

- 1 Install a load handling attachment.
- 2 Raise the carriage to full height by firmly grasping the winch handles and rotating them towards the mast.

Result: The carriage should raise to the top of the front mast section, followed in consecutive order by each mast section.

3 Fully lower the carriage. After lowering to the desired position, turn the winch handles toward the mast (raise the load) 1/4 turn to set the brake.

Workplace Inspection Fundamentals

The workplace inspection helps the operator determine if the workplace is suitable for safe machine operation. It should be performed by the operator prior to moving the machine to the workplace.

It is the operator's responsibility to read and remember the workplace hazards, then watch for and avoid them while moving, setting up and operating the machine.

Be aware of and avoid the following hazardous situations:

- drop-offs or holes
- · bumps and floor obstructions
- · debris
- · overhead obstructions and high voltage conductors
- · hazardous locations
- · sloped surfaces
- unstable or slippery surfaces
- · inadequate surface support to withstand all load forces imposed by the machine
- wind and weather conditions
- $\boldsymbol{\cdot}$ all other possible unsafe conditions

Fundamentals

The Operating Instructions section provides instructions for each aspect of machine operation.

It is the operator's responsibility to follow all the safety rules and instructions in the operator's manual.

Using the machine for anything other than lifting material is unsafe.

If more than one operator is expected to use a machine at different times in the same work shift, each operator is expected to follow all safety rules and instructions in the operator's manual. That means every new operator should perform a pre-operation inspection, function tests and a workplace inspection before using the machine.

OPERATING INSTRUCTIONS

Moving Machine with a Load

It is best to move the machine on the worksite with no load. Moving a raised load should be restricted to positioning for loading and unloading. If it is necessary to move the machine with a raised load, understand and obey the following safety rules:

- · Make sure the area is level and clear of obstructions.
- · Make sure the load is centered on the load handling attachment.
- · Make sure the load is secured to the load handling attachment.
- · Avoid sudden starts and stops.
- · Travel with the load in the lowest possible position.
- · Keep personnel away from the machine and load.

After Each Use

To prepare the machine for storage, follow the Setup procedure in reverse order. Select a safe storage location - firm level surface, weather protected, clear of obstruction and traffic.

Setup

Select an area that is firm, level and free of obstructions. Follow the Setup procedures in the Function Tests section.

Raising and Lowering Load

- ${\bf 1}$ Center the load on the load handling attachment. See Load Capacity Charts section.
- 2 Make sure the load is properly secured to the load handling attachment.
- 3 Raise the load by firmly grasping the winch handles and rotating them toward the mast. Do not allow the cable to wind unevenly onto the drum.
- 4 Lower the load by firmly grasping the winch handles and rotating them away from the mast. After lowering to the desired position, turn the winch handles toward the mast (raise the load) 1/4 turn to set the brake.

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 Load Capacity Chart section.

Tip-over hazard. Raising a load that exceeds the machine's capacity may result in death or serious injury.

A load center is defined as the balancing point (center of gravity) of a load and must be positioned within the load center zone. Tip-over hazard. Failure to position the load center within the load center zone may result in death or serious injury.

Forks

Load Positioning Instructions

- 1 Determine the weight of the load and the location of its load center.
- $2\ \mbox{Measure}$ to the load center from the side of the load that will be closest to the carriage.
- 3 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.

- 4 Place the load so that it rests on the forks, as close to the carriage as possible.
- 5 Position the load so that the load center is within the load center zone. 6 Secure the load to the forks.
- measure to the load center See the chart on the next page for maximum load centers for standard forks.

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Load Center Zone
LOAD CAPACITY CHARTS
Model SLC-18
Load Capacity Chart
Load Center
   16 18
           20 22 24 INCHES
650 610 565 515 470 425 LBS
Maximum Load Centers (measure from the front of the carriage)
Standard Forks 24 in
Decals
Inspection for Decals with Words
Determine whether the decals on your machine have words or symbols. Use the
appropriate inspection to verify that all decals are legible and in place.
Part No. Description Quantity
31072 Label - Operator's Manual Container 1
32687 Warning - Standard Forks Safety/Setup 1
32714 Warning - Adjustable Forks Safety/Setup 1
32716 Notice - Boom Setup 1
32717 Warning - Boom Safety 1
32770 Notice - Two-Speed Shift Instructions 1
32775 Warning - Fall Hazard, Load Platform 1
32885 Warning - Silent Winch 1
32938 Label - Use This Winch 1
32939 Warning - Brake Lock 1
33468 Warning - No Riders 1
33545 Warning - Machine Safety & Setup
(before serial number 9596-5288) 1
Part No. Description Quantity
40513 Warning - Machine Safety & Setup
(after serial number 9596-5287) 1
52675 Caution - Damaged Machine Hazard 1
52984 Cosmetic - Superlift Contractor Logo 2
52994 Cosmetic - SLC-18 2
97529 Caution - Bodily Injury Hazard 1
97547 Danger - Electrocution Hazard 2
Inspection for Decals with Symbols
Determine whether the decals on your machine have words or symbols. Use the
appropriate inspection to verify that all decals are legible and in place.
Part No. Description Quantity
52984 Cosmetic - Superlift Contractor Logo 2
52994 Cosmetic - SLC-18 2
82487 Label - Read The Manual 1
82964 Warning - No Riders 1
Part No. Description Quantity
97532 Caution - Bodily Injury Hazard 1
97539 Danger - Electrocution 2
97541 Label - Use This Winch 1
97543 Warning - Load Center Chart 1
97545 Warning - Lock Brake 1
97546 Notice - Two-Speed Shift 1
DECALS
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Transport Instructions

Observe and Obey:

- 1. The transport vehicle must be parked on a level surface.
- 2. The transport vehicle must be secured to prevent rolling while the machine is being loaded.
- 3. Be sure the vehicle capacity, loading surfaces and chains or straps are sufficient to withstand the machine weight. See the serial plate for the machine weight. The machine must be secured to the transport vehicle with chains or straps of ample load capacity.
- 4. Adjust the loading wheels to the desired height. Be sure the pull pin is properly inserted.
- 5. Place the machine against the vehicle. Use proper lifting techniques to load the machine into the transport vehicle. Be sure to check that the carriage is locked in the lowered position with the hold down bar.
- 6. To unload, follow the loading instructions in reverse order. Loading the Machine

Be sure to remove the load handling attachment from the machine and place the stabilizers in the stored position.

- 1 Fully lower the carriage, to lock for transport.
- 2 Rotate the carriage hold down bar over the carriage.
- 3 Raise the carriage until it contacts the carriage hold down bar.

Loading the Machine with a Crane

Be sure to place the legs and stabilizers in the stored position.

Be sure to inspect the machine and remove any loose or unsecured items.

Use the lifting bracket on the top of the rear mast column.

Always place the lifting hook through the lifting bracket so that it points away from the machine.