Genie®
A TEREX BRAND

Operator's Manual

Serial Number Range

from GS69F-18000

GS™-2669
GS™-3369
GS™-4069

Bi-Energy Power

ANSI/CSA
North America
South America
Asia

with
Maintenance
Information

Original Instructions
Second Edition
First Printing
Part No. 1298221GT

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These machines comply with
ANSI/SAIA A92.20
CAN/CSA B354.6

Introduction

About this manual

Genie appreciates your choice of our machine for your application. Our number one priority is user safety, which is best achieved by our joint efforts. This book is an operation and daily maintenance manual for the user or operator of a Genie machine.

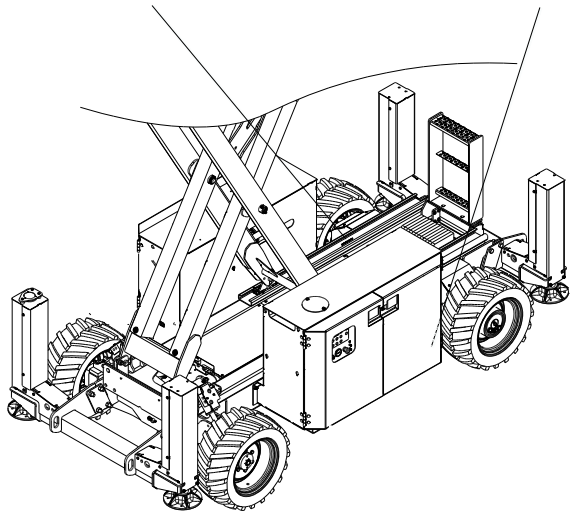
This manual should be considered a permanent part of your machine and should remain with the machine at all times. If you have any questions, contact Genie.

Product Identification

The machine serial number is located on the serial label.

Serial number stamped on chassis

Serial label (located under cover)



Intended Use and Familiarization Guide

The intended use of this machine is to lift personnel, including tools, and materials to an aerial work site. Before operating the machine, it's the operator's responsibility to read and understand this familiarization guide.

- ☑ Each person must be trained to operate a Mobile Elevating Work Platform (MEWP).
- ☑ Familiarization with the MEWP must be given to each person who is authorized, competent and trained.
- ☑ Only trained and authorized personnel should be permitted to operate the machine.
- ☑ The operator is responsible to read, understand, and obey the manufacturer's instructions and safety rules provided in the Operator's Manual.
- ☑ The Operator's Manual is located in the manual storage container, at the platform.
- ☑ For specific product applications, see **Contacting The Manufacturer**.

Introduction

Platform contols symbology and releated machine movement:


Lift function enable button


Drive function enable button


Outrigger function button


Platform up/down (when lift function selected)


Drive forward/reverse (when drive function selected)


Steer right/left (when drive function selected)

Ground controls symbology and related machine movement:


Lift function enable button


Platform up/down button

Sequential functions and movement:

- Drive and steer.

Interlocked functions:

- Elevated drive speed.
- Elevated drive in an off-level condition.
- All platform and ground controls.

Limitations of use:

- The intended use of this machine is to lift personnel, including tools, and materials to an aerial work site.
- Do not elevate the platform unless the machine is on firm level ground.

Introduction

Bulletin Distribution and Compliance

Safety of product users is of paramount importance to Genie. Various bulletins are used by Genie to communicate important safety and product information to dealers and machine owners.

The information contained in the bulletins is tied to specific machines using the machine model and serial number.

Distribution of bulletins is based on the most current owner on record along with their associated dealer, so it is important to register your machine and keep your contact information up to date.

To ensure safety of personnel and the reliable continued operation of your machine, be sure to comply with the action indicated in a respective bulletin.

To view any open bulletins for your machine, visit us on the web at www.genielift.com.

Contacting the Manufacturer

At times it may be necessary to contact Genie. When you do, be ready to supply the model number and serial number of your machine, along with your name and contact information. At minimum, Genie should be contacted for:

Accident reporting

Questions regarding product applications and safety

Standards and regulatory compliance information

Current owner updates, such as changes in machine ownership or changes in your contact information. See Transfer of Ownership, below.

Transfer of Machine Ownership

Taking a few minutes to update owner information will ensure that you receive important safety, maintenance and operating information that applies to your machine.

Please register your machine by visiting us on the web at www.genielift.com or by calling us toll free at 1-800-536-1800.

Introduction



Danger

Failure to obey the instructions and safety rules in this manual will 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 function tests prior to use.

4 Inspect the workplace.

5 Only use the machine as it was intended.

☑ You read, understand and obey the manufacturer's instructions and safety rules—safety 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.

Safety Sign Maintenance

Replace any missing or damaged safety signs. Keep operator safety in mind at all times. Use mild soap and water to clean safety signs. Do not use solvent-based cleaners because they may damage the safety sign material.

Hazard Classification

Decals on this machine use symbols, color coding, and signal words to identify the following:



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

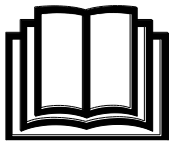
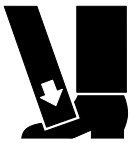
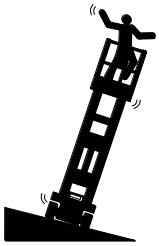
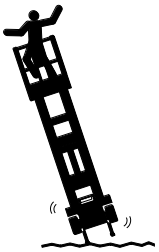
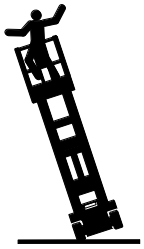
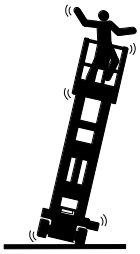
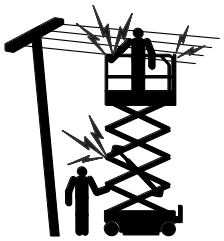
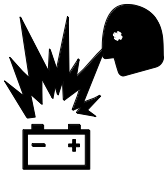
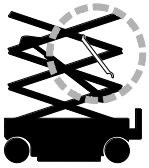
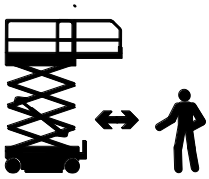
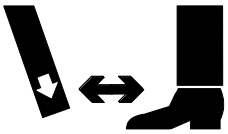
⚠ DANGER Indicates a hazardous situation which, if not avoided, will result in death or serious injury.

⚠ WARNING Indicates a hazardous situation which, if not avoided, could result in death or serious injury.

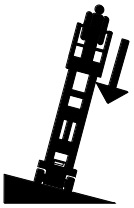
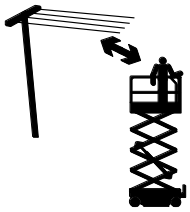
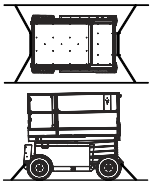
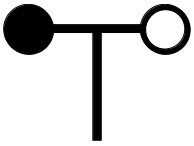
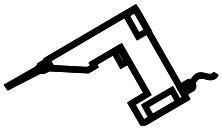
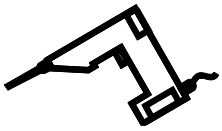
⚠ CAUTION Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

NOTICE Indicates a property damage message.

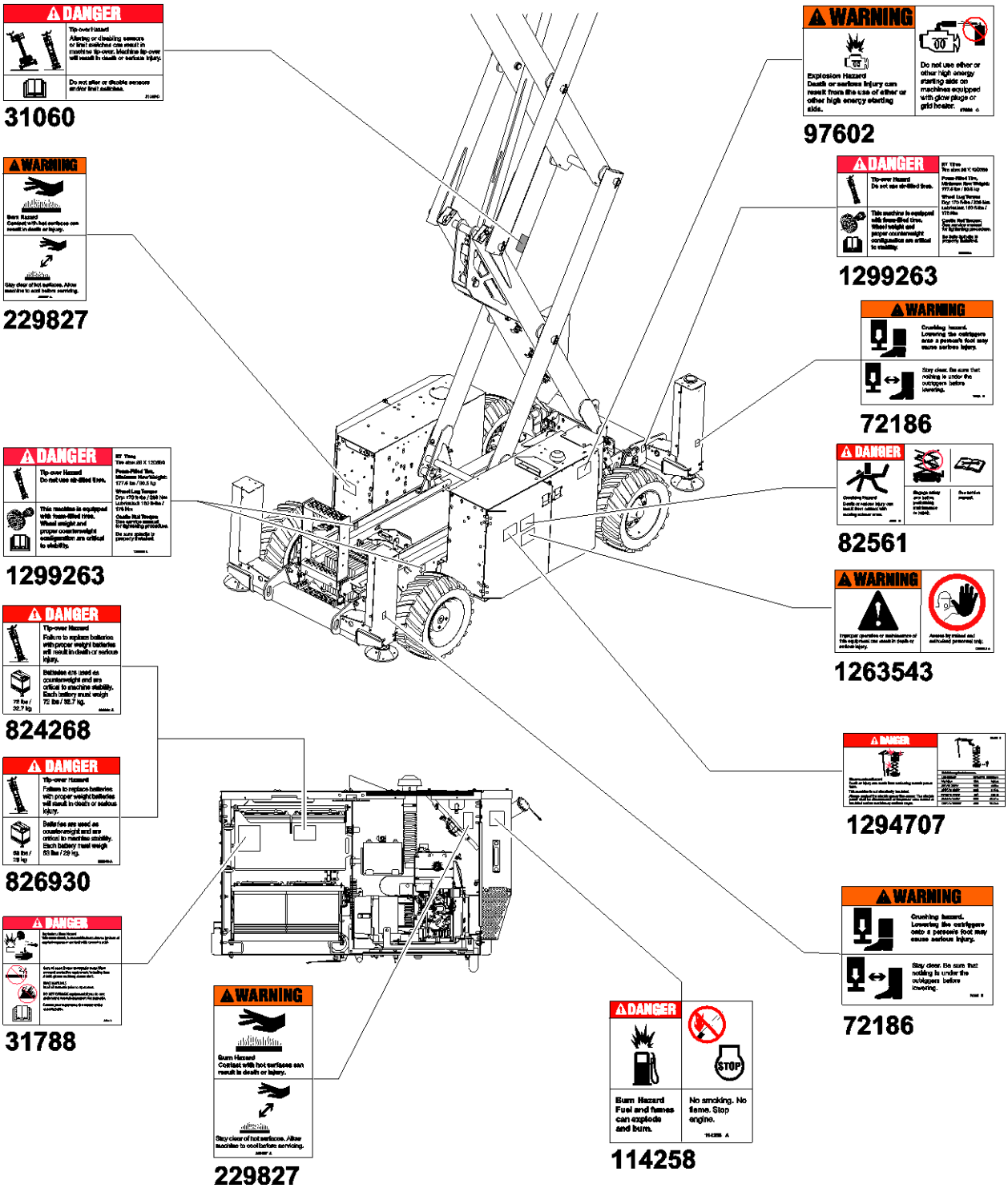
Symbol and Hazard Pictorials Definitions

 Read the operator's manual	 Read the service manual	 Crush hazard	 Crush hazard	 Collision hazard
 Tip-over hazard	 Tip-over hazard	 Tip-over hazard	 Tip-over hazard	 Electrocution hazard
 Electrocution hazard	 Explosion hazard	 Fire hazard	 Burn hazard	 Skin injection hazard
 Engage safety arm	 Keep away from moving parts	 Keep clear of outriggers and tires	 Move machine to level ground	 Close chassis tray

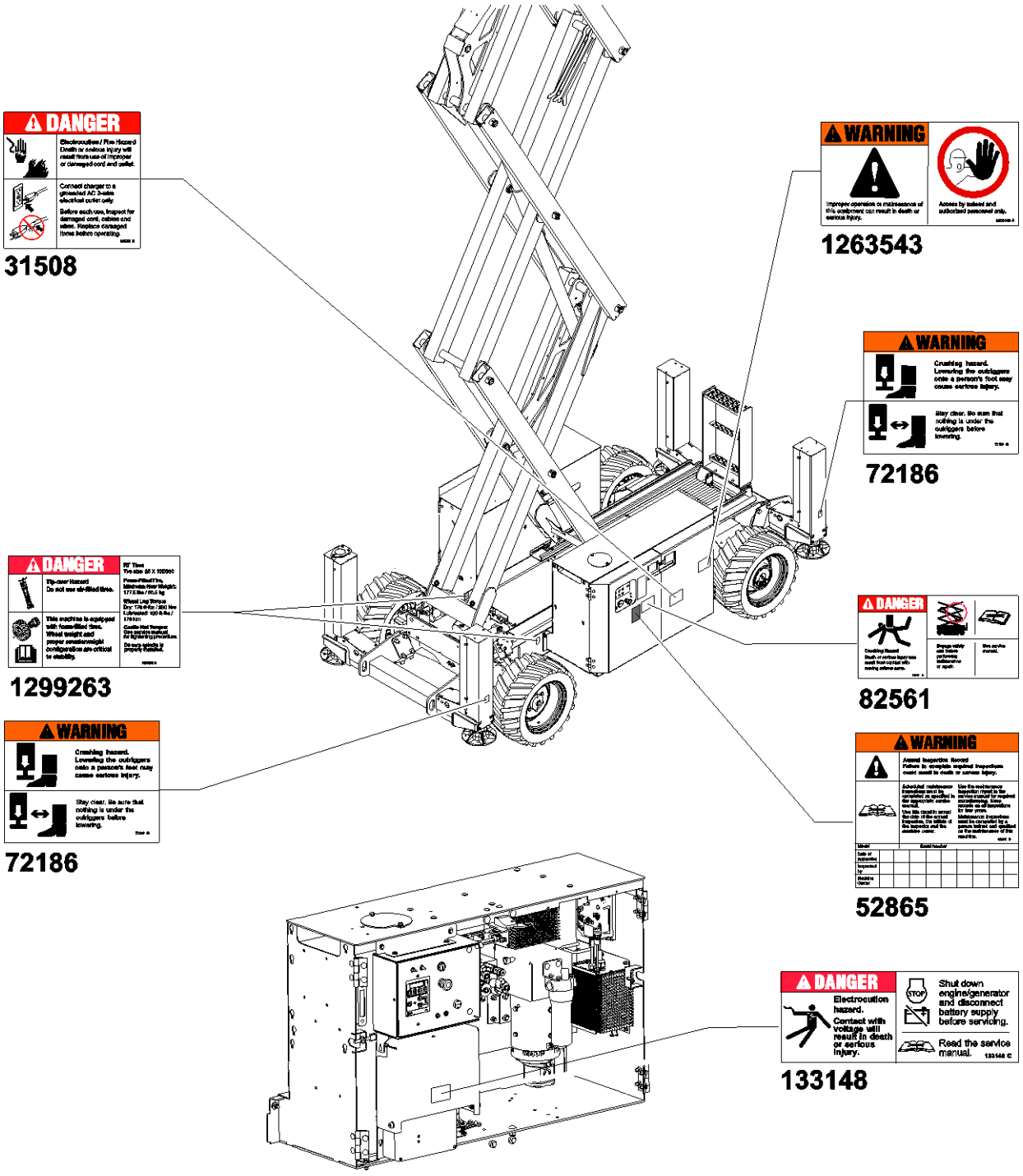
Symbol and Hazard Pictorials Definitions

 Lower the platform.	 Do not set up where it cannot be leveled with outriggers	 Maintain required clearance	 Access by trained and authorized personnel only	 Use a piece of cardboard or paper to search for leaks
 Chock the wheels	 Release brakes	 Tiedown	 Lanyard anchorage points	 No smoking
 Wheel load	 Transport diagram	 Side force	 Wind speed	 Outrigger load
 Voltage rating for power to platform	 Pressure rating for air line to platform	 Maximum capacity	 Fall hazard	 100% Restraint
 Platform overloaded	 Hold rail while lowering	 Crushing hazard		

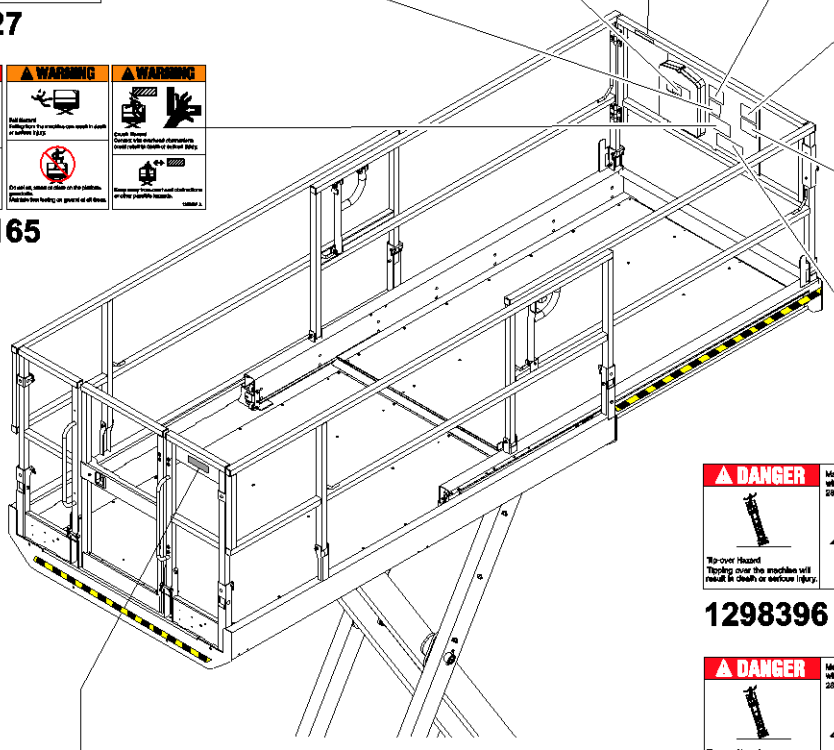
General Safety



General Safety



General Safety



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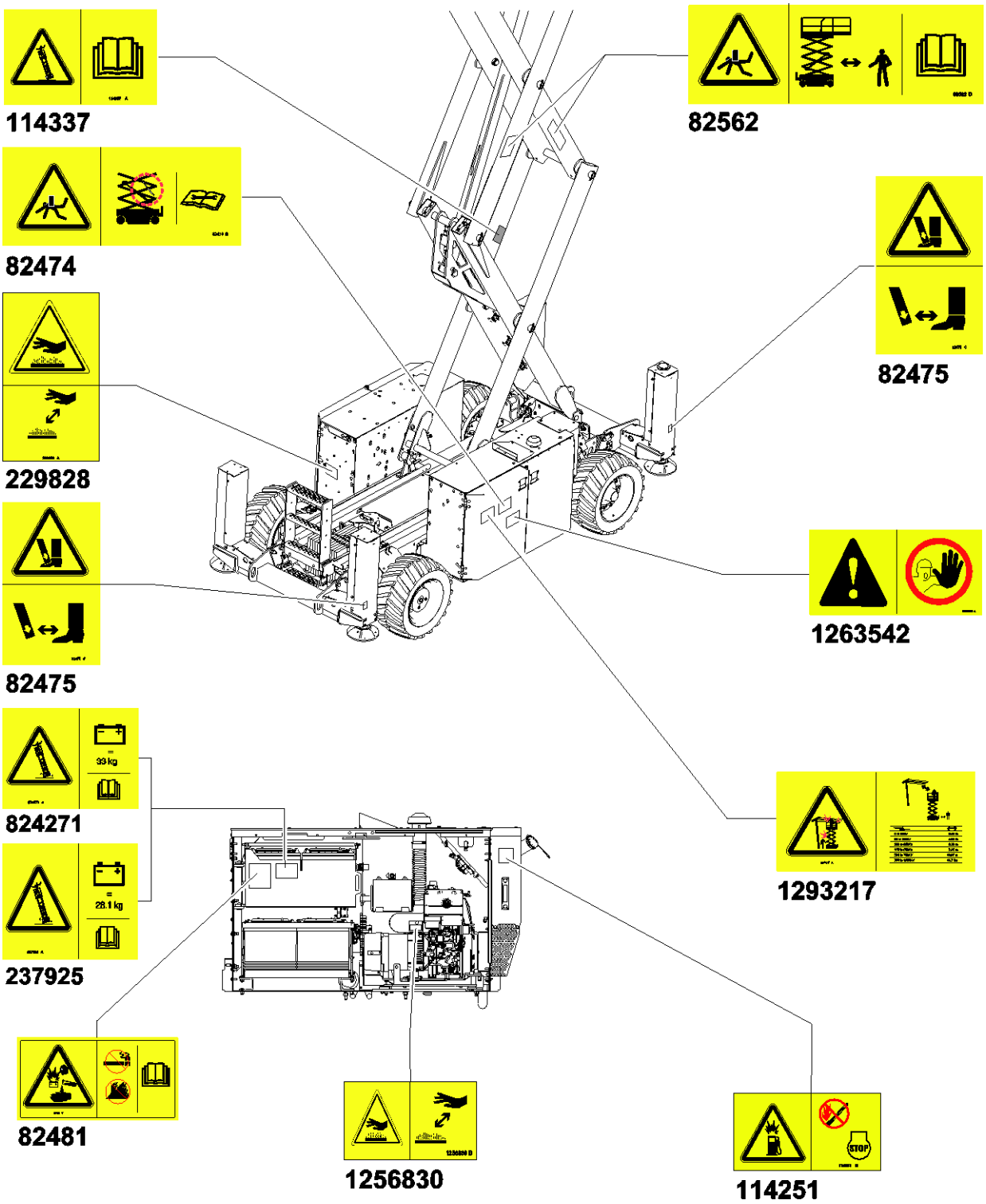
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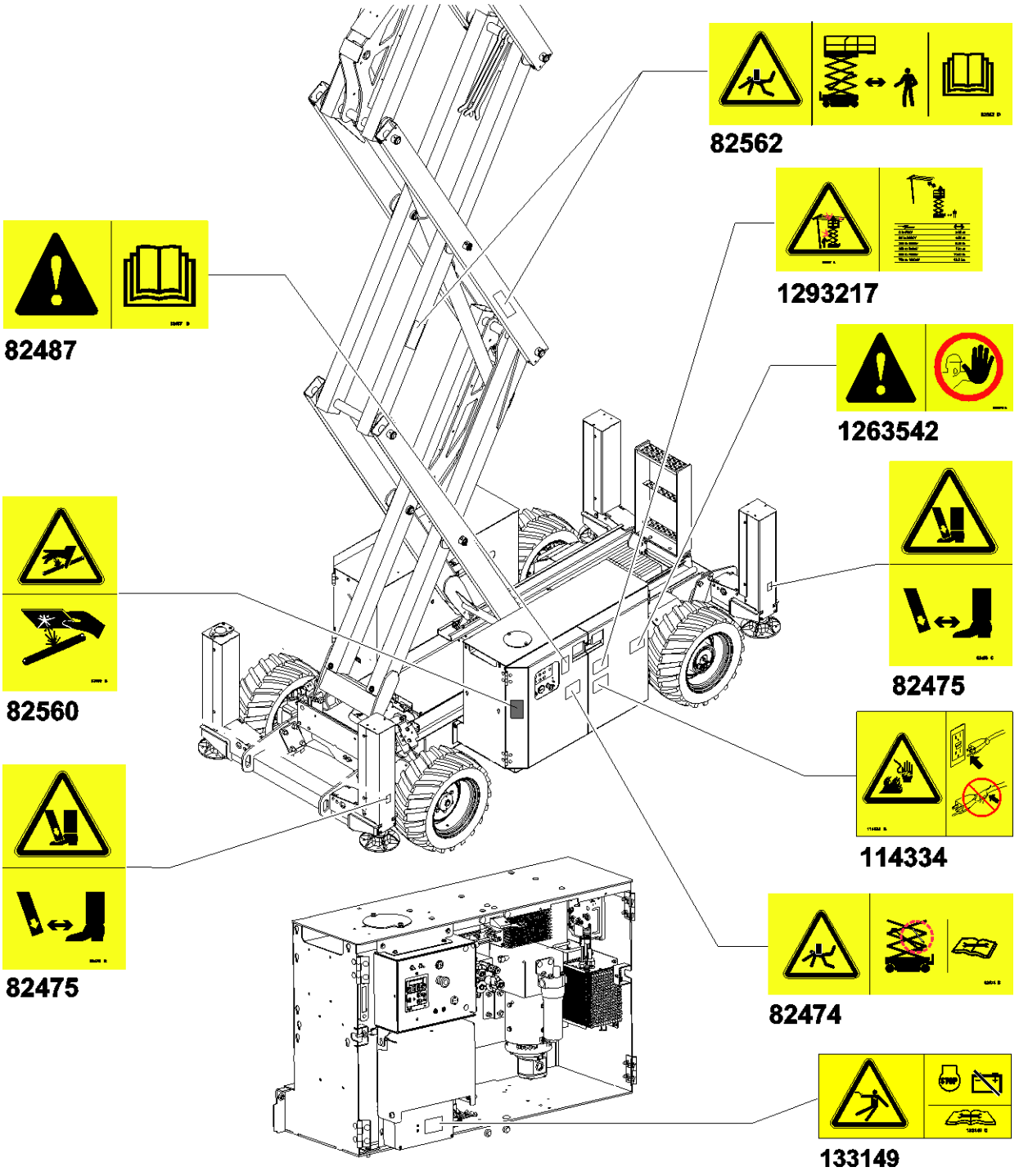
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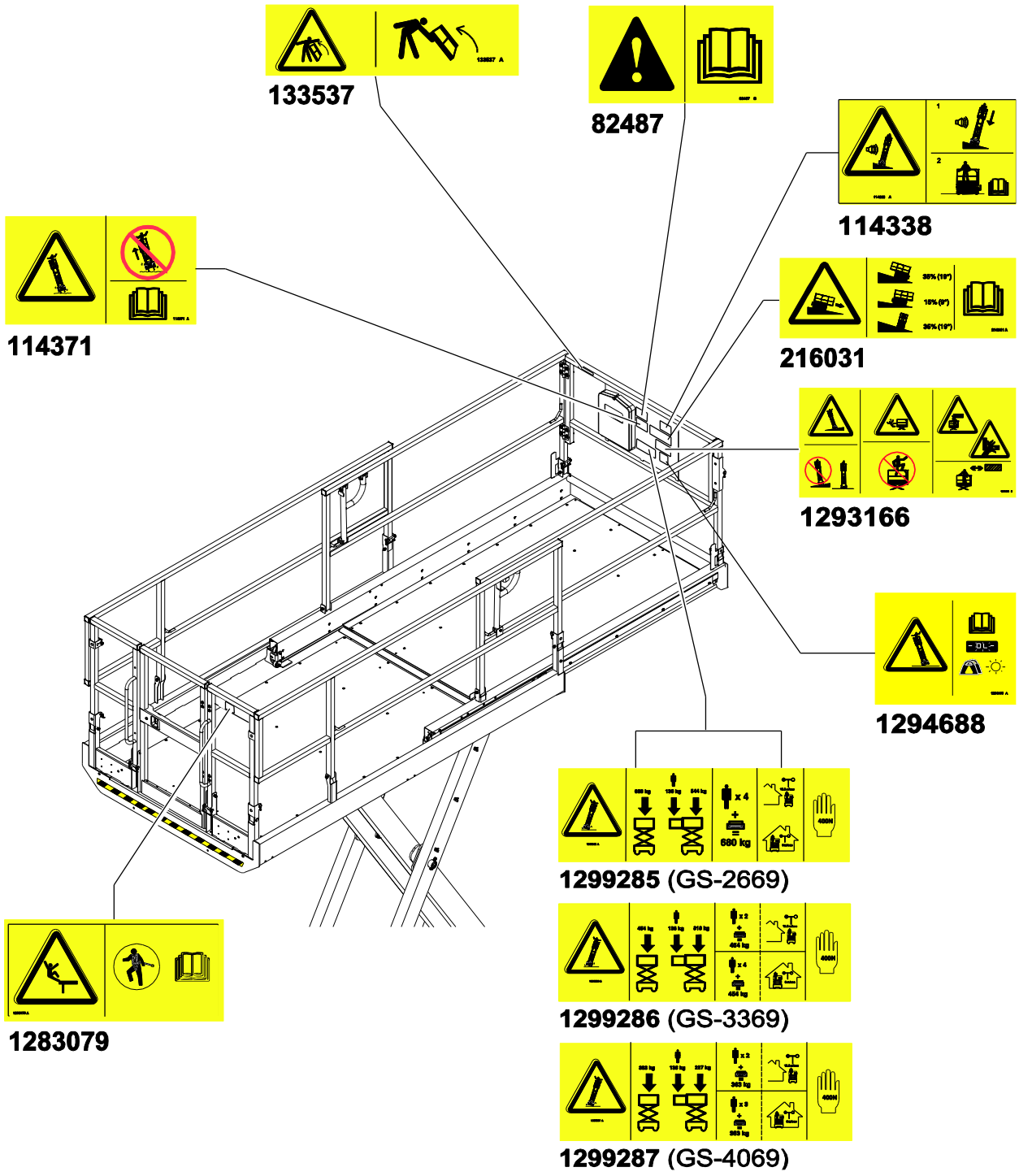
General Safety



General Safety



General Safety



Personal Fall Protection

Personal fall protection equipment (PFPE) is not required when operating this machine provided the operator remains inside the perimeter of the platform guardrail system. If PFPE is required by job site or employer rules, the following shall apply:

All PFPE must comply with applicable governmental regulations and must be inspected and used in accordance with the manufacturer's instructions.

Requirements for Exiting an Elevated Work Platform

Operators must use personal fall protection equipment when exiting and entering an elevated platform through the side gate. When exiting or entering an elevated platform, the platform must be positioned as close as possible to the surface of the exit or entry point, but not more than 12 inches / 30 cm away from the surface of the exit or entry point.

Operators are required to wear approved PFPE at all times when exiting and entering an elevated platform through the side gate, and must use a lanyard designed to allow 100% tie-off when exiting and entering an elevated platform through the side gate.

Do not exit or enter an elevated platform through the rear gate.

Exiting an Elevated Platform Through the Side Gate

1 Attach primary lanyard to a platform anchor point.

2 Attach secondary lanyard to an approved adjacent anchor point.

3 Detach the primary lanyard from the platform anchor point.

The primary lanyard can not remain attached to the platform anchor point after attaching the secondary lanyard to the adjacent anchor point.

Do not operate the machine while the secondary lanyard is attached to the adjacent anchor point.

Entering an Elevated Platform Through the Side Gate

1 Attach primary lanyard to a platform anchor point.

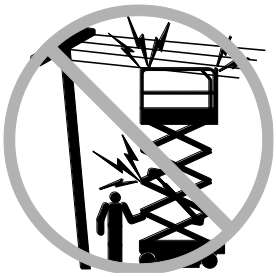
2 Detach secondary lanyard from the adjacent anchor point.

3 Detach the primary lanyard from the platform anchor point.

Work Area Safety

⚠ Electrocution Hazards

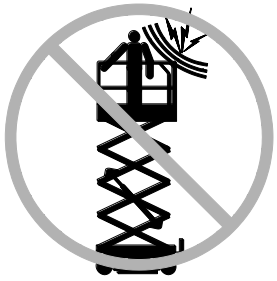
This machine is not electrically insulated and will not provide protection from contact with or proximity to electrical current.



Obey all local and governmental regulations regarding required clearance from electrical power lines. At a minimum, the required clearance contained in the chart below must be followed.

Line Voltage	Required Clearance	
0 to 50KV	10 ft	3.05 m
50 to 200KV	15 ft	4.60 m
200 to 350KV	20 ft	6.10 m
350 to 500KV	25 ft	7.62 m
500 to 750KV	35 ft	10.67 m
750 to 1000KV	45 ft	13.72 m

Allow for platform movement, electrical line sway or sag, and beware of strong or gusty winds.



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

Do not operate the machine during lightning or storms.

Do not use the machine as a ground for welding.

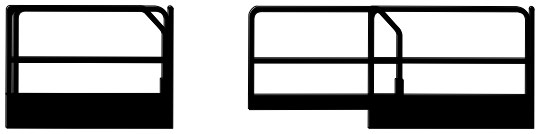
⚠ Tip-over Hazards

Occupants, equipment and materials shall not exceed the maximum platform capacity or the maximum platform capacity of the platform extension.

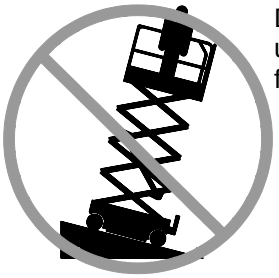
Maximum capacity

		Platform extended		
Model	**Platform retracted**	**Platform only**	**Extension only**	**Maximum occupants**
GS-2669BE	1500 lbs/ 680 kg	1200 lbs/ 544 kg	300 lbs/ 136 kg	4
GS-3369BE	1000 lbs/ 454 kg	700 lbs/ 318 kg	300 lbs/ 136 kg	Indoor – 4 Outdoor – 2
GS-4069BE	800 lbs/ 363 kg	500 lbs/ 227 kg	300 lbs/ 136 kg	Indoor – 3 Outdoor – 2

Platform retracted Platform extended



Extension only Platform only



Do not raise the platform unless the machine is on a firm, level surface.



Work Area Safety

Do not depend on the tilt alarm as a level indicator. The tilt alarm sounds on the chassis only when the machine is on a severe slope.

If the tilt alarm sounds:
Lower the platform. Move the machine to a firm, level surface. If the tilt alarm sounds when the platform is raised, use extreme caution to lower the platform.

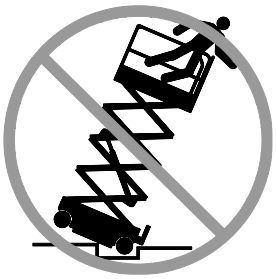
Do not alter or disable the limit switches or angle sensor.

Do not drive over 0.3 mph / 0.48 km/h with the platform raised.

Do not raise the platform when wind speeds may exceed 28 mph / 12.5 m/s. If wind speeds exceed 28 mph / 12.5 m/s when the platform is raised, lower the platform and do not continue to operate the machine.



Do not operate the machine in strong or gusty winds. Do not increase the surface area of the platform or the load. Increasing the area exposed to the wind will decrease machine stability.



Use extreme care and slow speeds while driving the machine in the stowed position across uneven terrain, debris, unstable or slippery surfaces and near holes and drop-offs.

Do not use the platform controls to free a platform that is caught, snagged, or otherwise prevented from normal motion by an adjacent structure. All personnel must be removed from the platform before attempting to free the platform using the ground controls.

Do not drive the machine on or near uneven terrain, unstable surfaces or other hazardous conditions with the platform raised.

Do not use the machine as a crane.

Do not push the machine or other objects with the platform.

Do not contact adjacent structures with the platform.

Do not tie the platform to adjacent structures.

Do not place loads outside the platform perimeter.



Do not push off or pull toward any object outside of the platform.

Maximum manual force – ANSI and CSA	
GS-2669BE – 4 person	90 lbs / 400 N
GS-3369BE – 4 person, indoor	90 lbs / 400 N
GS-3369BE – 2 person, outdoor	90 lbs / 400 N
GS-4069BE – 3 person, indoor	90 lbs / 400 N
GS-4069BE – 2 person, outdoor	90 lbs / 400 N

Work Area Safety

Do not alter or disable machine components that in any way affect safety and stability.

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

Do not modify or alter a mobile elevating work platform without prior written permission from the manufacturer. Mounting attachments for holding tools or other materials onto the platform, toeboards, or guard rail system can increase the weight in the platform and the surface area of the platform or the load.



Do not place or attach fixed or overhanging loads to any part of this machine.



Do not place ladders or scaffolds in the platform or against any part of this machine.

Do not transport tools and materials unless they are evenly distributed and can be safely handled by person(s) in the platform.

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

Be sure all tires are in good condition, castle nuts are properly tightened and cotter pins are properly installed.

Do not use batteries that weigh less than the original equipment. Batteries are used as counterweight and are critical to machine stability. For GS-2669 and GS-3369 machines with standard battery option, each battery must weigh 63 lbs / 29 kg. For GS-4069 machines and machines with high capacity battery option, each battery must weigh 72 lbs / 32.7 kg.

⚠ Crushing Hazard

Keep hands and limbs out of scissors.

Keep hands clear when folding rails.

Do not work under the platform or in the scissor links without the safety arm in place.

Use common sense and planning when operating the machine with the controller from the ground. Maintain safe distances between the operator, the machine and fixed objects.

Work Area Safety

⚠ Operation on Slopes Hazards

Do not drive the machine on a slope that exceeds the maximum uphill, downhill or side slope rating of the machine. Slope rating applies only to machines in the stowed position.

Maximum slope rating, stowed position		
	Extension deck uphill	35% (19°)
	Extension deck downhill	15% (9°)
	Side slope	35% (19°)

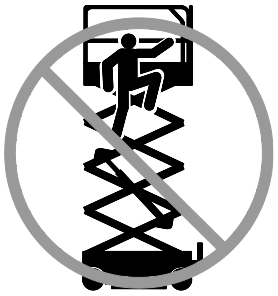
Note: Slope rating is subject to ground conditions with one person in the platform and adequate traction. Additional platform weight may reduce slope rating. See Driving on a Slope in the Operating Instructions section.

⚠ Fall Hazards

The guard rail system provides fall protection. If occupant(s) of the platform are required to wear personal fall protection equipment (PFPE) due to job site or employer rules, PFPE and its use shall be in accordance with the PFPE manufacturer's instructions and applicable governmental requirements. Use approved lanyard attachment point provided.



Do not sit, stand, or climb on the platform guard rails. Maintain a firm footing on the platform floor at all times.



Do not climb down from the platform when raised.

Keep the platform floor clear of debris.

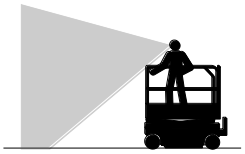
Do not enter or exit the platform unless the machine is in the stowed position.

Attach the platform entry chain or close the entry gate before operating.

Do not operate the machine unless the guard rails are properly installed and the entry is secured for operation.

Work Area Safety

⚠ Collision Hazards



Be aware of limited sight distance and blind spots when driving or operating.

Be aware of extended platform position when moving the machine.

The machine must be on a level surface or secured before releasing the brakes.

Operators must comply with employer, job site, and governmental rules regarding use of personal protective equipment.



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



Be aware of crushing hazards when grasping the platform guard rail.

Observe and use color-coded direction arrows on the platform controls and the platform decal plate for drive and steer functions.



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



Limit travel speed according to the condition of the ground surface, congestion, slope, location of personnel, and any other factors which may cause collision.

Do not operate a machine in the path of any crane or moving overhead machinery unless the controls of the crane have been locked out and/or precautions have been taken to prevent any potential collision.

No stunt driving or horseplay while operating a machine.

Work Area Safety

⚠ Bodily Injury Hazard

Do not operate the machine with a hydraulic oil or air leak. An air leak or hydraulic leak can penetrate and/or burn skin.

Improper contact with components under any cover will cause serious injury. Only trained maintenance personnel should access compartments. Access by the operator is only advised when performing a pre-operation inspection. All compartments must remain closed and secured during operation.

When the engine is running, operate the machine in a well-ventilated area to avoid carbon monoxide poisoning.

⚠ Explosion and Fire Hazards

Do not start the engine if you smell or detect diesel fuel or other explosive substances.

Do not refuel the machine with the engine running.

Refuel the machine and charge the battery only in an open, well-ventilated area away from sparks, flames and lighted tobacco.

Do not operate the machine or charge the battery in hazardous locations or locations where potentially flammable or explosive gases or particles may be present.

Do not spray ether into engine.

⚠ Damaged Machine Hazards

Do not use a damaged or malfunctioning machine.

Conduct a thorough pre-operation inspection of the machine and test all functions before each work shift. Immediately tag and remove from service a damaged or malfunctioning machine.

Be sure all maintenance has been performed as specified in this manual and the appropriate Genie service manual.

Be sure all decals are in place and legible.

Be sure the operator's, safety, and responsibilities manuals are complete, legible, and in the storage container located on the machine.

⚠ Component Damage Hazards

Do not use the machine as a ground for welding.

Do not use any battery or charger greater than 12V to jump-start the engine.

Do not operate the machine in locations where extremely high magnetic fields may be present.

Lockout After Each Use

1 Select a safe parking location—firm level surface, clear of obstruction and traffic.

2 Lower the platform.

3 Turn the key switch to the off position and remove the key to secure from unauthorized use.

4 Charge the batteries.

Work Area Safety

⚠ Battery Safety

Burn Hazards

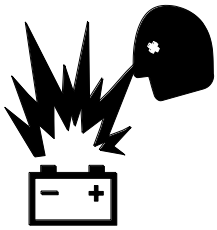


Batteries contain acid. Always wear protective clothing and eye wear when working with batteries.

Avoid spilling or contacting battery acid. Neutralize battery acid spills with baking soda and water.

Do not expose the batteries or the charger to water or rain during charging.

Explosion Hazards



Keep sparks, flames, and lighted tobacco away from batteries. Batteries emit explosive gas.

The battery tray should remain open during the entire charging cycle.



Do not contact the battery terminals or the cable clamps with tools that may cause sparks.



Component Damage Hazard

Do not use any battery charger greater than 48V to charge the batteries.

Electrocution/Burn Hazards



Connect the battery charger to a grounded, AC 3-wire electrical outlet only.

Inspect daily for damaged cords, cables and wires. Replace damaged items before operating.

Avoid electrical shock from contact with battery terminals. Remove all rings, watches and other jewelry.

Do not operate when generator is submerged in water.

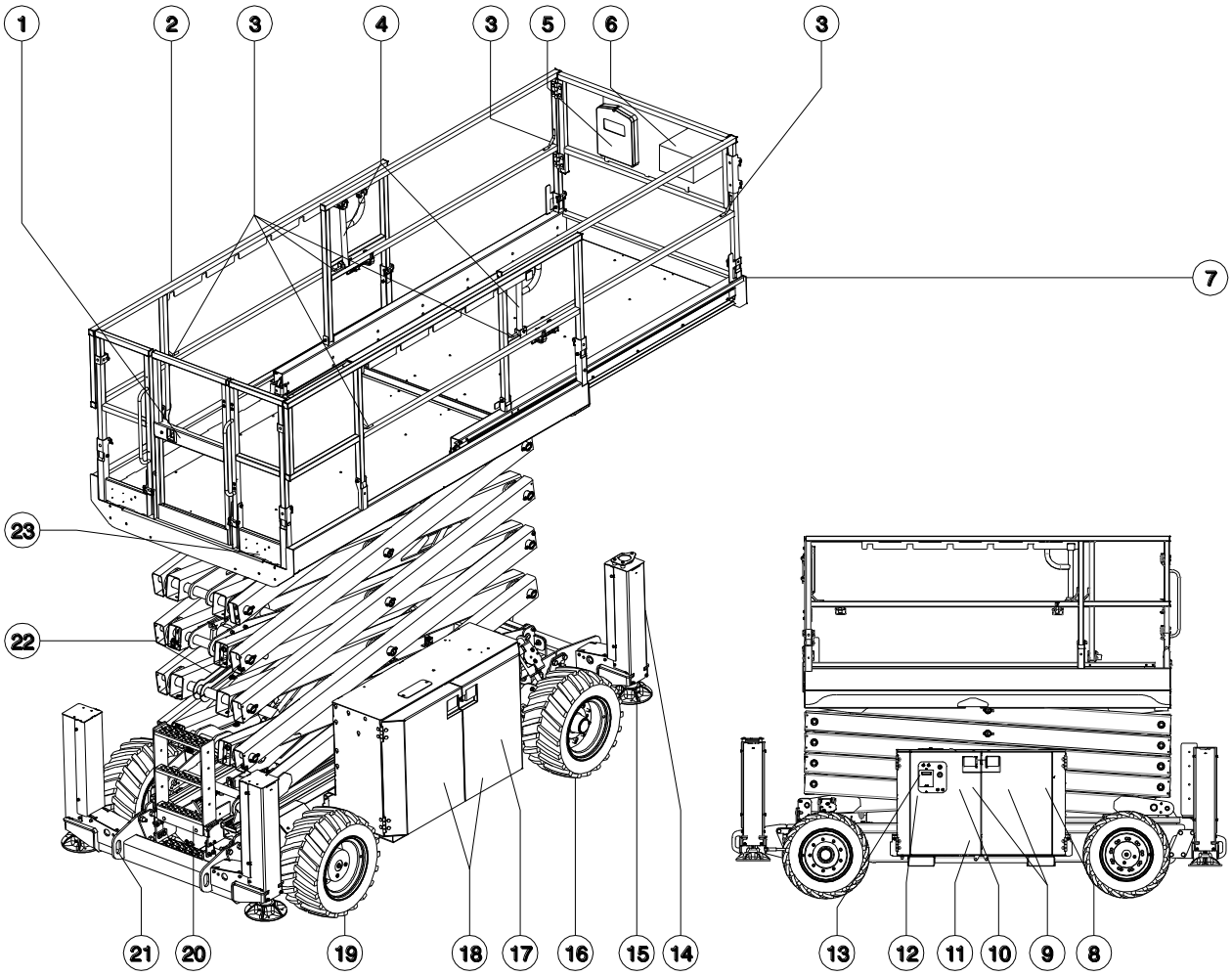
Tip-over Hazard

Do not use batteries that weigh less than the original equipment. Batteries are used as counterweight and are critical to machine stability. For GS-2669 and GS-3369 machines with standard battery option, each battery must weigh 63 lbs / 29 kg. For GS-4069 machines and machines with high capacity battery option, each battery must weigh 72 lbs / 32.7 kg.

Lifting Hazard

Use the appropriate number of people and proper lifting techniques when lifting batteries.

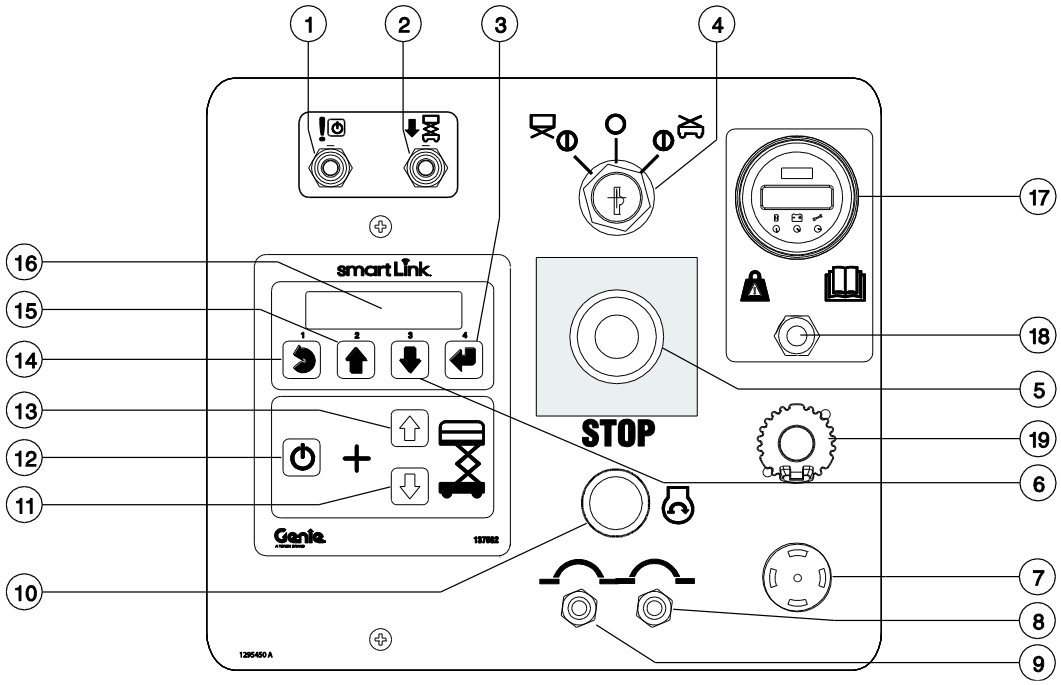
Legend



1 Platform entry gate
2 Platform guard rails
3 Lanyard anchorage points
4 Platform extension lock handle
5 Manual storage container
6 Platform controls
7 Platform extension
8 Battery charger (behind cover at the ground controls side)
9 Ground controls side cover
10 Hydraulic tank (behind cover)
11 Tilt alarm (behind cover)
12 Hydraulic oil level indicator (behind cover)
13 Ground controls with LCD readout screen
14 Outrigger housing (if equipped with outriggers)
15 Outrigger footpad (if equipped with outriggers)
16 Steer tire
17 Engine (under cover)
18 Battery compartment covers
19 Non-steer tire
20 Entry ladder
21 Transport tie-down
22 Safety arm
23 GFCI outlet

Controls

The ground control station is to be used as a means to raise the platform for function tests and for storage purposes. The ground control station can be used in the event of an emergency to rescue an incapacitated person in the platform.



Ground Control Panel

1 Function enable toggle switch for auxiliary lowering

2 Auxiliary lowering toggle switch

3 Menu enter button

4 Key switch for platform/off/ground selection

Turn the key switch to the platform position and the platform controls will operate. Turn the key switch to the off position and the machine will be off. Turn the key switch to the ground position and the ground controls will operate.

5 Red Emergency Stop button

Push in the red Emergency Stop button to the off position to stop all functions. Pull out the red Emergency Stop button to the on position to operate the machine.

6 Menu down button

7 Alarm

8 7A breaker for controls circuit

9 15A breaker for controls circuit

10 Engine start button

11 Platform down button

12 Lift function enable button

Press and hold this button to activate the lift function.

13 Platform up button

14 Menu escape button

15 Menu up button

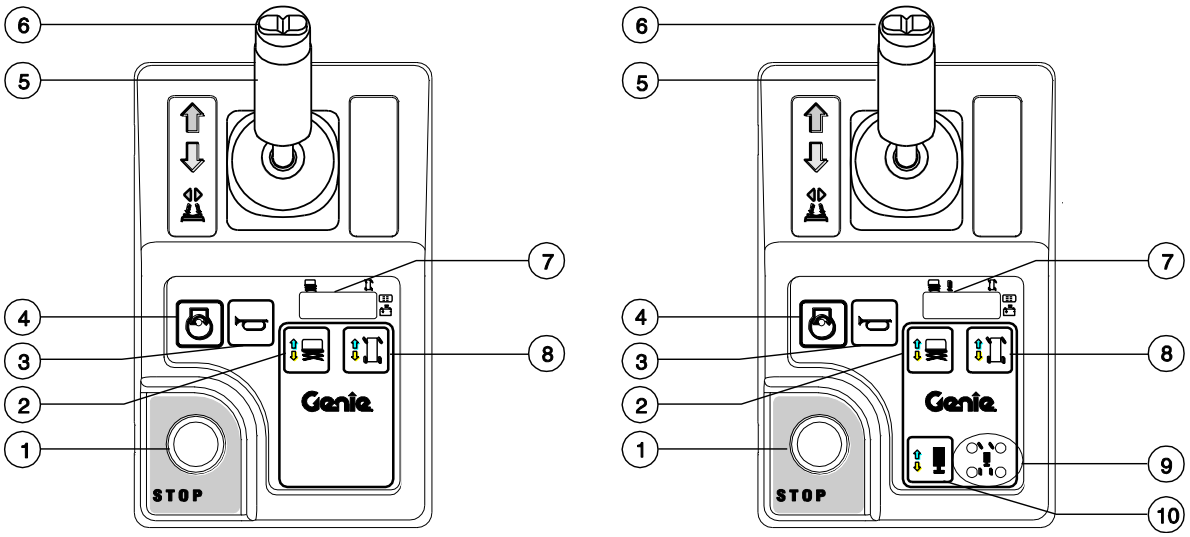
16 LCD diagnostic readout

17 Load Sense LED display

18 Load Sense Calibration switch (see service manual for details)

19 Load Sense Calibration display (see service manual for details)

Controls



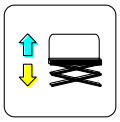
Platform Control Panel

1 Red Emergency Stop button

Push in the red Emergency Stop button to the off position to stop all functions. Pull out the red Emergency Stop button to the on position to operate the machine.

2 Lift function button

Push this button to activate the lift function.



3 Horn button

Press the horn button and the horn will sound. Release the horn button and the horn will not sound.



4 Engine start/stop button with indicator light

Press the engine start button to start the engine. The engine start button indicator light will be on when the button is being pressed. Light on indicates engine restart system is on.



Press the engine start button to stop the engine.

Controls

5 Proportional control handle and function enable switch for drive, steer, lift and outrigger functions

Lift function: Press and hold the function enable switch to enable the lift function on the platform control handle. Move the control handle in the direction indicated by the blue arrow and the platform will raise. Move the control handle in the direction indicated by the yellow arrow and the platform will lower. The descent alarm should sound while the platform is lowering.

Drive function: Press and hold the function enable switch to enable the drive function on the platform control handle. Move the control handle in the direction indicated by the blue arrow on the control panel and the machine will move in the direction that the blue arrow points. Move the control handle in the direction indicated by the yellow arrow on the control panel and the machine will move in the direction that the yellow arrow points.

Outrigger function: Press and hold the function enable switch to enable the outrigger function on the platform control handle. Move the control handle in the direction indicated by the blue arrow and the outriggers will retract. Move the control handle in the direction indicated by the yellow arrow and the outriggers will extend.

6 Thumb rocker switch for steer function

Press the left side of the thumb rocker and the machine will turn in the direction the blue triangle points on the platform control panel.



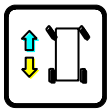
Press the right side of the thumb rocker and the machine will turn in the direction the yellow triangle points on the platform control panel.



7 LED diagnostic readout / battery charge indicator

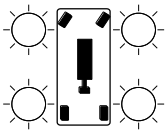
8 Drive function button

Push this button to activate the drive function.



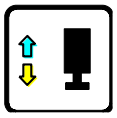
Controls

9 Outrigger indicator lights



During outrigger extension, lights flash green. As each outrigger contacts the ground, lights turn solid green. Any time the outrigger extension procedure is interrupted, the lights will flash green indicating the outriggers are not contacting the ground or the outriggers are not fully deployed. During outrigger retraction lights turn solid green. As each outrigger fully retracts, lights turn off. Lights will turn solid red, indicating the corresponding outrigger is at end of stroke.

10 Outrigger function button



Press this button to activate the outrigger function.

Inspections



Do Not Operate Unless:

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

1 Avoid hazardous situations.

2 Always perform a pre-operation inspection.

Know and understand the pre-operation inspection before going on to the next section.

3 Always perform function tests prior to use.

4 Inspect the workplace.

5 Only use the machine as it was intended.

Pre-operation Inspection Fundamentals

It is the responsibility of the operator to perform a pre-operation inspection and routine maintenance.

The pre-operation inspection is a visual inspection performed by the operator prior to each work shift. The inspection is designed to discover if anything is apparently wrong with a machine before the operator performs the function tests.

The pre-operation inspection also serves to determine if routine maintenance procedures are required. Only routine maintenance items specified in this manual may be performed by the operator.

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.

Scheduled maintenance inspections shall be performed by qualified service technicians, according to the manufacturer's specifications and the requirements listed in the responsibilities manual.

Inspections

Pre-operation Inspection

- ❑ Be sure that the operator's, safety and responsibilities manuals are complete, legible and in the storage container located in the platform.
- ❑ Be sure that all decals are legible and in place. See Inspections section.
- ❑ Check for engine oil leaks and proper fluid level. Add oil if needed. See Maintenance section.
- ❑ Check for hydraulic oil leaks and proper oil level. Add oil if needed. See Maintenance section.
- ❑ Check for battery fluid leaks and proper fluid level. Add distilled water if needed. See Maintenance section.

Check the following components or areas for damage, improperly installed, or missing parts and unauthorized modifications:

- ❑ Electrical components, wiring, and electrical cables
- ❑ Hydraulic power unit, reservoir, hoses, fittings, cylinders and manifolds
- ❑ Generator and related components
- ❑ Fuel and hydraulic tanks
- ❑ Drive motors
- ❑ Wear pads
- ❑ Tires and wheels
- ❑ Engine and related components
- ❑ Limit switches, angle sensor, alarms and horn
- ❑ Lanyard anchorage points
- ❑ Alarms and beacons (if equipped)
- ❑ Nuts, bolts and other fasteners
- ❑ Brake release components
- ❑ Safety arm
- ❑ Platform extension
- ❑ Scissor pins and retaining fasteners
- ❑ Platform control joystick
- ❑ Outrigger housing and footpads (if equipped)
- ❑ Battery pack and connections
- ❑ Ground strap
- ❑ Platform entry gate

Check entire machine for:

- ❑ Cracks in welds or structural components
- ❑ Dents or damage to machine
- ❑ Excessive rust, corrosion or oxidation

- ❑ Verify that all structural and other critical components are present and all associated fasteners and pins are in place and properly tightened.
- ❑ Be sure side rails are installed and bolts are fastened.

Note: If the platform must be raised to inspect the machine, make sure the safety arm is in place. See Operating Instructions section.

Inspections



Do Not Operate Unless:

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

1 Avoid hazardous situations.

2 Always perform a pre-operation inspection.

3 Always perform function tests prior to use.

Know and understand the function tests before going on to the next section.

4 Inspect the workplace.

5 Only use the machine as it was intended.

Function Test Fundamentals

The function tests are designed to discover any malfunctions before the machine is put into service. The operator must follow the step-by-step instructions to test all machine functions.

A malfunctioning machine must never be used. If malfunctions are 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 and function tests again before putting the machine into service.

At the Ground Controls

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

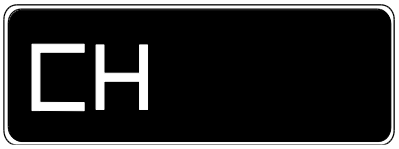
2 Be sure the batteries are connected.

3 Pull out the platform and ground red Emergency Stop button to the on position.

4 Turn the key switch to ground control.

5 Observe the diagnostic LED readout on the platform controls.

⊙ Result: The LED should look like the picture below.



6 Observe the diagnostic LCD readout on the ground controls.

⊙ Result: The LCD should display the model and hour meter.



Test Emergency Stop

7 Start the engine.

8 Push in the red Emergency Stop button to the off position.

⊙ Result: The engine should shut off and no functions should operate.

9 Pull out the red Emergency Stop button to the on position and restart the engine.

Test the Up/Down Functions

The audible warnings on this machine and the standard horn all come from the same central alarm. The horn is a constant tone. The descent alarm sounds at 60 beeps per minute. The alarm sounds at 180 beeps per minute when the machine is not level.

10 Do not press the lift function enable button.

11 Press the platform up or platform down button.

⊙ Result: The lift function should not operate.

12 Do not press the platform up or platform down buttons.

13 Press the lift function enable button.

⊙ Result: The lift function should not operate.

14 Press and hold the lift function enable button, and press the platform up button.

⊙ Result: The platform should raise.

15 Press and hold the lift function enable button, and press the platform down button.

⊙ Result: The platform should lower. The descent alarm should sound while the platform is lowering.

Inspections

Test Auxiliary Lowering

16 Activate the up function by pressing the lift enable button and platform up button, and raise the platform approximately 2 ft. / 60 cm.

17 Push in the ground red Emergency Stop button to the off position.

18 Pull out the red Emergency Stop button to the on position.

19 Move and hold the auxiliary lowering function enable toggle switch.

20 Move and hold the auxiliary lowering toggle switch.

⊙ Result: The platform should lower. The descent alarm will not sound.

21 Turn the key switch to platform control.

At the Platform Controls

Test Emergency Stop

22 Start the engine.

23 Push in the platform red Emergency Stop button to the off position.

⊙ Result: The engine should shut off and no functions should operate.

24 Pull out the red Emergency Stop button to the on position and restart the engine.

Test the Horn

25 Pull out the red Emergency Stop button to the on position.

26 Press the horn button.

⊙ Result: The horn should sound.

Test the Function Enable Switch and the Up/Down Functions

27 Do not hold the function enable switch on the control handle.

28 Slowly move the control handle in the direction indicated by the blue arrow, then in the direction indicated by the yellow arrow.

⊙ Result: No functions should operate.

29 Press the lift function button.

30 Wait seven seconds for the lift function to time out.

31 Slowly move the control handle in the direction indicated by the blue arrow, then in the direction indicated by the yellow arrow.

⊙ Result: The lift function should not operate.

32 Press the lift function button.

33 Press and hold the function enable switch on the control handle. Slowly move the control handle in the direction indicated by the blue arrow.

⊙ Result: The platform should raise.

34 Release the control handle.

⊙ Result: The platform should stop raising.

35 Press and hold the function enable switch on the control handle. Slowly move the control handle in the direction indicated by the yellow arrow.

⊙ Result: The platform should lower. The descent alarm should sound while the platform is lowering.

Inspections

Test the Drive Function Button

36 Press the drive function button. 

37 Wait seven seconds for the drive function to time out. Slowly move the control handle in the direction indicated by the blue arrow, then in the direction indicated by the yellow arrow.

⊙ Result: No functions should operate.

Test the Steering

Note: When performing the steer and drive function tests, stand in the platform facing the steer end of the machine.

38 Press the drive function button. 

39 Press and hold the function enable switch on the control handle.

40 Press the thumb rocker switch on top of the control handle in the direction indicated by the blue triangle on the control panel.

⊙ Result: The steer wheels should turn in the direction indicated by the blue triangle.

41 Press the thumb rocker switch on top of the control handle in the direction indicated by the yellow triangle, on the control panel.

⊙ Result: The steer wheels should turn in the direction indicated by the yellow triangle.

Test Drive and Braking

42 Press the drive function button. 

43 Press and hold the function enable switch on the control handle.

44 Slowly move the control handle in the direction indicated by the blue arrow on the control panel until the machine begins to move, then return the control handle to the center position.

⊙ Result: The machine should move in the direction that the blue arrow points on the control panel, then come to an abrupt stop when the control handle is returned to the center position.

45 Slowly move the control handle in the direction indicated by the yellow arrow on the control panel until the machine begins to move, then return the control handle to the center position.

⊙ Result: The machine should move in the direction that the yellow arrow points on the control panel, then come to an abrupt stop when the control handle is returned to the center position.

Note: The brakes must be able to hold the machine on any slope it is able to climb.

Inspections

Test the Tilt Sensor Operation

Note: Perform this test from the ground with the platform controller. Do not stand in the platform.

46 Fully lower the platform.

47 Place a 2x4 or similar piece of wood under both wheels on one side and drive the machine up onto them.

48 Raise the platform approximately 7 ft / 2.13 m.

⊙ Result: The platform should stop and the tilt alarm will sound at 180 beeps per minute. The platform controls LED readout should display LL and the ground controls LCD should display LL: Machine Tilted.

49 Press the drive function button. 

50 Press and hold the function enable switch on the control handle.

51 Move the control handle in the direction indicated by the blue arrow, then move the control handle in the direction indicated by the yellow arrow.

⊙ Result: The drive function should not work in either direction.

52 Lower the platform and remove both pieces of wood.

Test Elevated Drive Speed

53 Raise the platform approximately 8 ft / 2.4 m from the ground.

54 Press the drive function button. 

55 Press and hold the function enable switch on the control handle. Slowly move the control handle to full drive position.

⊙ Result: The maximum achievable drive speed with the platform raised should not exceed 0.44 ft / 13 cm per second.

If the drive speed with the platform raised exceeds 0.44 ft / 13 cm per second, immediately tag and remove the machine from service.

Inspections

Test Stowed Drive Speed

56 Press and hold the lift function button, and press the platform down button.

⊙ Result: The platform should lower.

57 Press and hold the function enable switch on the control handle. Slowly move the control handle to full drive position in the direction indicated by the blue arrow.

⊙ Result: The maximum achievable drive speed with the platform stowed should not exceed 6.6 ft / 2 m per second.

If the drive speed with the platform stowed exceeds 6.6 ft / 2 m per second, immediately tag and remove the machine from service.

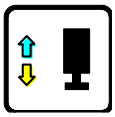
58 Press and hold the drive/steer function enable switch on the control handle. Slowly move the control handle to full drive position in the direction indicated by the yellow arrow.

⊙ Result: The maximum achievable drive speed with the platform stowed should not exceed 4.4 ft / 1.34 m per second.

If the drive speed in reverse with the platform stowed exceeds 4.4 ft / 1.34 m per second, immediately tag and remove the machine from service.

Test the Outrigger System (if equipped)

59 Press the outrigger function button. On the LCD screen, a circle below the outrigger function symbol will turn on.



If the control handle is not moved within seven seconds of pushing the outrigger function button, the circle below the outrigger function symbol will turn off and outrigger function will not operate. Press the outrigger function button again.

60 Press and hold the function enable switch on the control handle.

61 Move the control handle in the direction indicated by the yellow arrow.

⊙ Result: The outriggers should extend. The individual outrigger indicator lights will flash green as the corresponding outrigger extends.

Inspections

62 Continue holding the control handle in the direction indicated by the yellow arrow until all outrigger indicator lights turn solid green and a long beep is heard from the platform controls alarm. The machine is now level. At this point, the drive and steer functions are disabled.

Note: If the control handle is released too soon during extension, the outrigger indicator lights will continue to flash green, indicating the outriggers are not contacting the ground.

Note: If the control handle is released too soon after the outriggers have contacted the ground, a long beep will not be heard at the platform controls and the outrigger indicator lights will be solid green. If a long beep is not heard and the outrigger indicator lights are solid green, this condition may indicate the outriggers are not fully deployed or the machine is not level.

63 Press the drive function button.

64 Press and hold the function enable switch on the control handle.

65 Slowly move the control handle in the direction indicated by the blue arrow, then in the direction indicated by the yellow arrow.

⊙ Result: The machine should not move in the directions indicated by the blue and yellow arrows.

66 Press the drive function button.

67 Press and hold the function enable switch on the control handle.

68 Press the thumb rocker switch on top of the control handle in the direction indicated by the blue and yellow triangles on the control panel.

⊙ Result: The steer wheels should not turn in the directions indicated by the blue and yellow triangles.

69 Raise the platform.

⊙ Result: The platform should raise. Raise the platform to approximately 8 ft / 2.4 m and stop.

70 Fully lower the platform.

71 Press the outrigger function button.

72 Wait seven seconds for the outrigger function enable to time out.

73 Slowly move the control handle in the direction indicated by the blue arrow, then in the direction indicated by the yellow arrow.

⊙ Result: The outriggers should not retract.

74 Press the outrigger function button.

75 Move the control handle in the direction indicated by the blue arrow.

⊙ Result: The outriggers should retract. The individual outrigger indicator lights will turn solid green as the corresponding outrigger retracts.

76 Continue holding the control handle until the outriggers are completely retracted. Release the control handle when all outrigger indicator lights turn off. All functions are now restored.

Note: If the control handle is released too soon during retraction, the outrigger indicator lights will flash green, indicating the outriggers are not fully retracted.

Inspections



Do Not Operate Unless:

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

1 Avoid hazardous situations.

2 Always perform a pre-operation inspection.

3 Always perform function tests prior to use.

4 Inspect the workplace.

Know and understand the workplace inspection before going on to the next section.

5 Only use the machine as it was intended.

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.

Workplace Inspection Checklist

Be aware of and avoid the following hazardous situations:

- ❑ drop-offs or holes
- ❑ bumps, floor obstructions or debris
- ❑ sloped surfaces
- ❑ unstable or slippery surfaces
- ❑ overhead obstructions and high voltage conductors
- ❑ hazardous locations
- ❑ inadequate surface support to withstand all load forces imposed by the machine
- ❑ wind and weather conditions
- ❑ the presence of unauthorized personnel
- ❑ other possible unsafe conditions
- ❑ deep water

Inspections

Decals Inspection 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.

Below is a numerical list with quantities and descriptions.

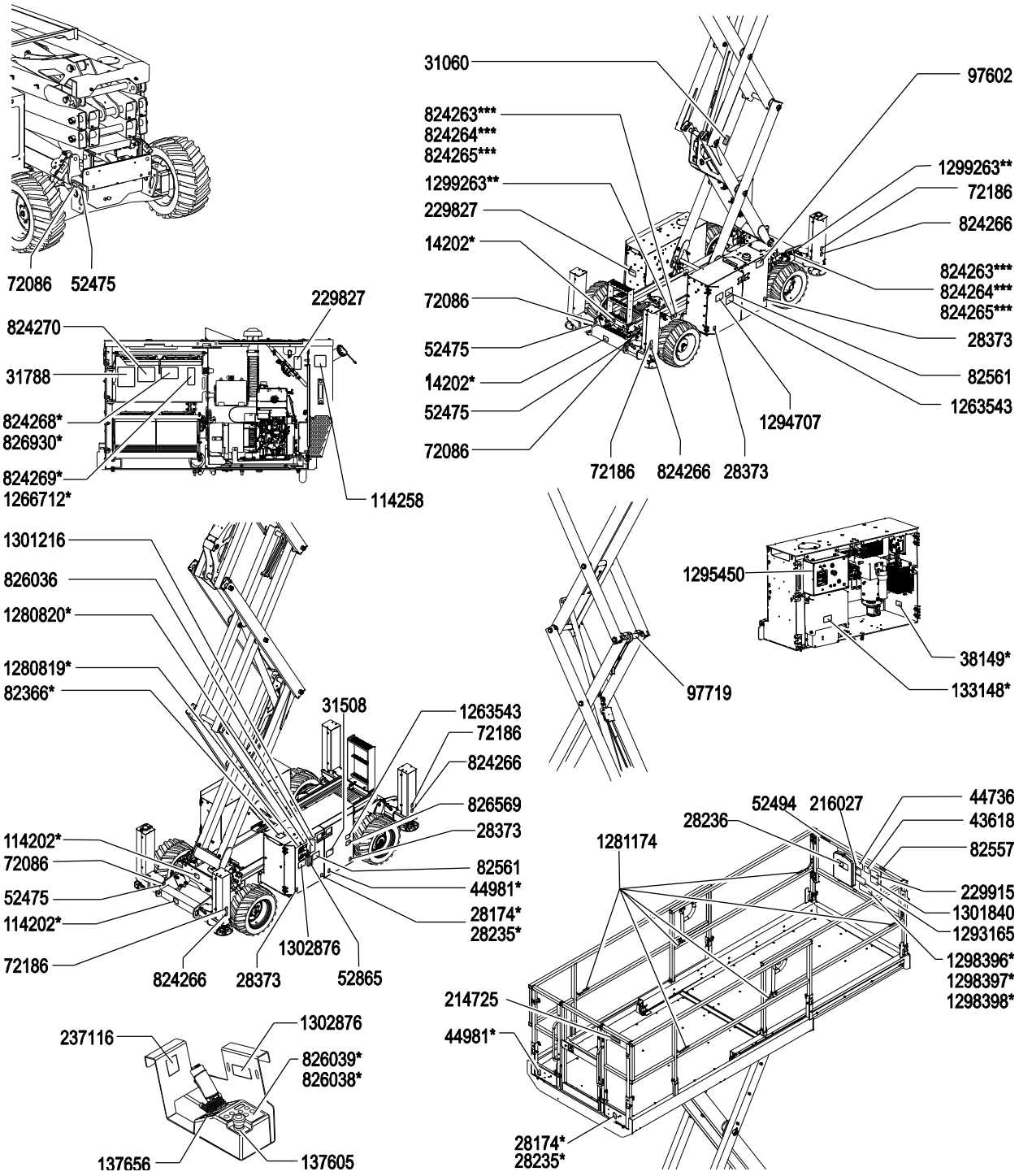
Part No.	Decal Description	Qty
28174	Label – Power to Platform, 230V*	2
28176	Label – Missing Manuals	1
28235	Label – Power to Platform, 115V*	2
28236	Warning – Improper Operation	1
28373	Label – Forklift Pocket	4
31060	Danger – Tip-over Hazard, Limit Switch	2
31508	Danger – Electrocution Hazard	1
31788	Danger – Explosion/Burn Hazard	1
38149	Label – Patents*	1
43618	Label – Directional Arrows	1
44736	Danger – Tip-over Hazard, Tilt Alarm	1
44981	Label – Air Line to Platform*	2
52475	Label – Transport Tie-down	4
52494	Caution – Crushing Hazard, Rails	1
52865	Warning – Annual Inspection Record	1
72086	Label – Lifting Point	4
72186	Warning – Crushing Hazard, Outriggers	4
82366	Label – Chevron Rando*	1
82557	Label – Platform Controls Location	1
82561	Danger – Crushing Hazard	2
97602	Warning – Explosion Hazard	1
97719	Label – Safety Arm	1
114202	Label – Transport Diagram	2
114258	Danger – Explosion Hazard	1
114385	Danger – Electrocution Hazard	2
133148	Danger – Electrocution hazard	1
137605	Label – Emergency Stop, Platform Control	1
137656	Label – Drive/Steer Direction, Platform Control	1
214725	Warning – Fall Hazard	1
216027	Danger – Runaway Hazard, Slope	1
229827	Warning – Hot Surface	2
229915	Danger – Outrigger Safety and Instructions	1
237116	Label – Operational Indicator Codes	1
824263	Label – Wheel Load, GS-2669BE***	4
824264	Label – Wheel Load, GS-3369BE***	4
824265	Label – Wheel Load, GS-4069BE***	4
824266	Label – Outrigger Load	1
824268	Danger – Tip-over Hazard, Batteries, T145*	1
824269	Instructions – Kholer Engine Specifications (KD-350)*	1
824270	Instructions – Battery Connection Diagram, T105 & T145*	1
826036	Instructions – Operation, Ground Control	1
826038	Overlay – Platform Control Panel (with outriggers)*	1
826039	Overlay – Platform Control Panel (without outriggers)*	1
826569	Instructions – Battery Charger Operation	1
826930	Danger – Tip-over Hazard, Batteries, T105*	1
1263543	Warning – Compartment Access	2
1266712	Instructions – Kholer Engine Specifications 3000 rpm (KD-350)*	1
1280819	Label – Warning, Prop 65*	1
1280820	Label – Fuel, Diesel Exhaust, Prop 65*	1
1281174	Label – Lanyard Anchorage Point, Fall Arrest/Fall Restrained	6
1295450	Overlay – Ground Control Panel	1
1298396	Danger – Tip-over, Capacity, GS-2669*	1
1298397	Danger – Tip-over, Capacity, GS-3369*	1
1298398	Danger – Tip-over, Capacity, GS-4069*	1
1299263	Danger – Tip-over, Foam Filled Tires*	4
1301216	Label – Emergency Lowering	1

Shading indicates decal is hidden from view, i.e. under covers

* These decals are model, option or configuration specific.

*** These decals are installed on both sides of chassis and are model, option, or configuration specific.

Inspections



Inspections

Decals Inspection 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.

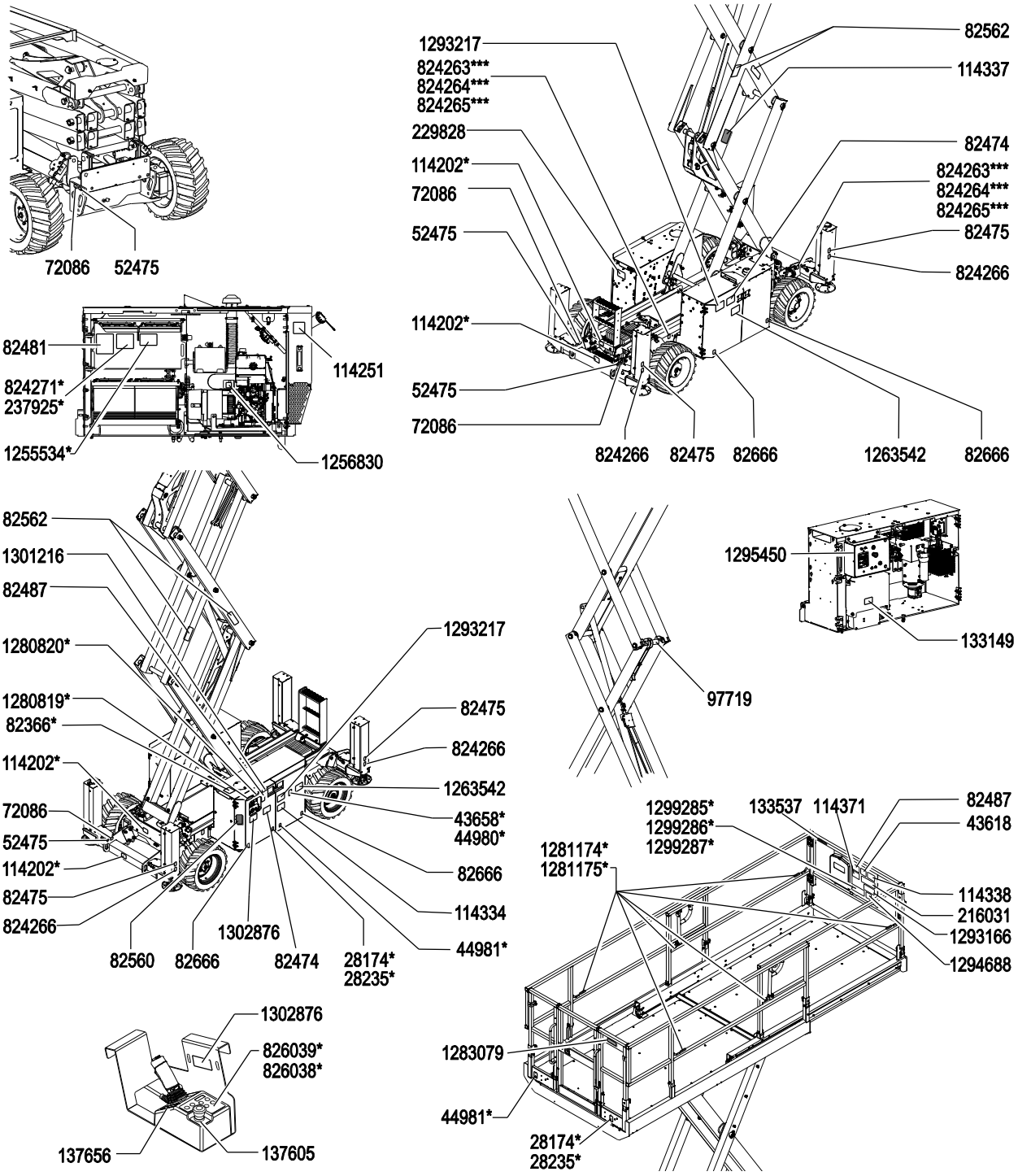
Below is a numerical list with quantities and descriptions.

Part No.	Decal Description	Qty
28174	Label – Power to Platform, 230V	2
28235	Label – Power to Platform, 115V	2
43618	Label – Directional Arrows	1
43658	Label – Power to Charger, 230V	1
44980	Label – Power to Charger, 115V	1
44981	Label – Air Line to Platform	2
52475	Label – Transport Tie-down	4
72086	Label – Lifting Point	4
82366	Label – Chevron Rando	1
82474	Label – Use Safety Chock	2
82475	Label – Crushing Hazard, Outriggers	4
82481	Label – Battery/Charger Safety	1
82487	Label – Read the Manual	2
82560	Label – Skin Injection Hazard	1
82562	Label – Crushing Hazard	4
82666	Label – Forklift Pocket	4
97719	Label – Safety Arm	1
114202	Label – Transport Diagram	2
114251	Label – Explosion Hazard	1
114334	Label – Electrocution Hazard, Plug	1
114371	Label – Outrigger Safety	1
114337	Label – Tip-over Hazard, Limit Switch	2
114338	Label – Tip-over Hazard, Tilt Alarm	1
114371	Label – Outrigger Safety	1
133149	Label – Electrocution Hazard	1
133537	Label – Crushing Hazard	1
137605	Label – Emergency Stop, Platform Control	1
137656	Label – Drive/Steer Direction, Platform Control	1
216031	Label – Runaway Hazard, Slope	1
229828	Warning – Hot Surface	1
237925	Label – Tip-over Hazard, Batteries, T105	1
824263	Label – Wheel Load, GS-2669BE	4
824264	Label – Wheel Load, GS-3369BE	4
824265	Label – Wheel Load, GS-4069BE	4
824266	Label – Outrigger Load	4
824271	Label – Tip-over Hazard, Batteries, T145	1
826038	Overlay – Platform Control Panel (with outriggers)	1
826039	Overlay – Platform Control Panel (without outriggers)	1
1255534	Label – 103 dB	1
1256830	Warning – Hot Surface	1
1263542	Label – Compartment Access	2
1280819	Label – Warning, Prop 65	1
1280820	Label – Fuel, Diesel Exhaust, Prop 65	1
1281174	Label – Lanyard Anchorage Point, Fall Arrest/Fall Restrained	6
1281175	Label – Lanyard Anchorage Point, Fall Restrained	6
1283079	Label – Fall Hazard	1
1293166	Danger, Warning – Tip-over, Crush Hazard	1
1293217	Label – Danger, Electrocution Hazard	2
1294688	Label – Platform Overload LED Indicator Light	1
1295450	Overlay – Ground Control Panel	1
1299285	Danger – Tip-over, Capacity, GS-2669	1
1299286	Danger – Tip-over, Capacity, GS-3369	1
1299287	Danger – Tip-over, Capacity, GS-4069	1
1301216	Label – Emergency Lowering	1
1302876	Label – SmartLink Update, GS-69	2

■ Shading indicates decal is hidden from view, i.e. under covers

* These decals are model, option or configuration specific.

Inspections



Operating Instructions



Do Not Operate Unless:

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

1 Avoid hazardous situations.

2 Always perform a pre-operation inspection.

3 Always perform function tests prior to use.

4 Inspect the workplace.

5 Only use the machine as it was intended.

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, safety, and responsibilities manuals.

Using the machine for anything other than lifting personnel, along with their tools and materials, to an aerial work site is unsafe and dangerous.

Only trained and authorized personnel should be permitted to operate a machine. If more than one operator is expected to use a machine at different times in the same work shift, they must all be qualified operators and are all expected to follow all safety rules and instructions in the operator's, safety, and responsibilities manuals. That means every new operator should perform a pre-operation inspection, function tests, and a workplace inspection before using the machine.

Operating Instructions

Emergency Stop

Push in the red Emergency Stop button to the off position at the ground controls or the platform controls to stop all functions.

Repair any function that operates when either red Emergency Stop button is pushed in.

Selecting and operating the ground controls will override the platform red Emergency Stop button.

Machine Operation

This machine can be operated with or without the engine running.

1 Turn the key switch to ground or platform control.

2 Be sure the battery pack is connected before operating the machine.

3 Be sure both ground and platform control red Emergency Stop buttons are pulled out to the on position.

Auxiliary Lowering

1 Turn the key switch to ground control.

2 Pull out the platform and ground red Emergency Stop button to the on position.

3 Move and hold the auxiliary lowering function enable toggle switch.

4 Move and hold the auxiliary lowering toggle switch.

Operation from Ground

1 Turn the key switch to ground control.

2 Press and hold the engine start button.

Note: The LCD screen will display a countdown when glow plugs are on. When the countdown finishes, the engine will start.

To Position Platform

1 At the control panel, press and hold the lift function enable button.

2 Press the platform up or down button.

Drive and steer functions are not available from the ground controls.

Operating Instructions

Operation from Platform

1 When the engine start button indicator light flashes, start the engine.

2 Press and hold the engine start button.

⊙ Result: After a few seconds, the engine will start.

Note: The LCD screen will display a countdown when glow plugs are on. When the countdown finishes, the engine will start.

3 To stop the engine, press and release the engine start button.

⊙ Result: The engine will stop.

Engine Restart System

When the engine is started, the Engine Restart system is on.

When the Engine Restart system is on, the engine will start and stop to keep the batteries charged.

When the engine start button indicator light is on and the LED screen is animated, the engine may restart when a function is activated.

To turn the Engine Restart System off, press the engine start button briefly while the engine is running. The engine start button indicator light and LED animation will be off.

When the Engine Restart system is turned off, the machine will use battery power only.

When the engine start button indicator light flashes, start the engine.

To Position Platform

1 Press the lift function button. On the LCD screen, a circle below the lift function symbol will turn on.



If the control handle is not moved within seven seconds of pushing the lift function button, the circle below the lift function symbol will turn off and lift function will not operate. Press the lift function button again.

2 Press and hold the function enable switch on the control handle.

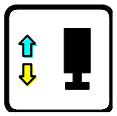
3 Move the control handle according to the markings on the control panel.

Operating Instructions

To Extend Outriggers

To Extend Outriggers:

1 Press the outrigger function button. On the LCD screen, a circle below the outrigger function symbol will turn on.



2 Press and hold the function enable switch on the control handle.

3 Move the control handle in the direction indicated by the yellow arrow.

The outriggers will begin to extend. The individual outrigger indicator light will turn solid green as the corresponding outrigger makes contact with the ground. Continue moving the control handle until the lift enable indicator light turns green and a beep is heard. The machine is now level. When the lift error indicator light turns red, the up/down and drive functions are disabled. The lift error indicator light will turn red under the following conditions:

- Not all outriggers are in contact with the ground.
- All four outriggers are in contact with the ground but the machine is not level.
- Error code.

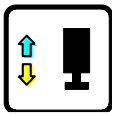
Note: If the outrigger enable and extend buttons are released too soon during extension, the outrigger indicator lights will continue to flash green, indicating the outriggers are not contacting the ground.

Note: If the outrigger lights are solid green, the machine may not be level or the outriggers may not be fully deployed if a long beep is not heard at the platform controls alarm.

To Retract Outriggers

To Retract Outriggers:

1 Press the outrigger function button.



2 Press and hold the function enable switch on the control handle.

3 Move the control handle in the direction indicated by the blue arrow.

Release the control handle once the outriggers are off the ground. The outrigger indicator lights will turn off. All functions are now restored.

Note: If the outrigger enable and retract buttons are released too soon during retraction, the outrigger indicator lights will flash green, indicating the outriggers are not fully retracted.

To Steer

1 Press the drive function button. On the LCD screen, a circle below the drive function symbol will turn on.

If the control handle is not moved within seven seconds of pushing the drive function button, the circle below the drive function symbol will turn off and drive function will not operate. Press the drive function button again.

2 Turn the steer wheels with the thumb rocker switch located on the top of the control handle.



Operating Instructions

To Drive

1 Press the drive function button. On the LCD screen, a circle below the drive function symbol will turn on.

If the control handle is not moved within seven seconds of pushing the drive function button, the circle below the drive function symbol will turn off and drive function will not operate. Press the drive function button again.

2 Press and hold the function enable switch on the control handle.

3 Increase speed: Slowly move the control handle off center.

Decrease speed: Slowly move the control handle toward center.

Stop: Return the control handle to center or release the function enable switch.

Use the color-coded direction arrows on the platform controls and on the platform to identify the direction the machine will travel.

Machine travel speed is restricted when the platform is raised.

Battery condition will affect machine performance. Machine drive speed and function speed will drop when the battery level indicator is flashing.

⚠ Driving on a slope

Determine the uphill, downhill and side slope ratings for the machine and determine the slope grade.



Maximum slope rating, extension deck uphill (gradeability): 35% (19°)



Maximum slope rating, extension deck downhill: 15% (9°)



Maximum side slope rating: 35% (19°)

Note: Slope rating is subject to ground conditions and adequate traction.

To determine the slope grade:

Measure the slope with a digital inclinometer OR use the following procedure.

You will need:

- carpenter’s level
- straight piece of wood, at least 3 feet/1 m long
- tape measure

Operating Instructions

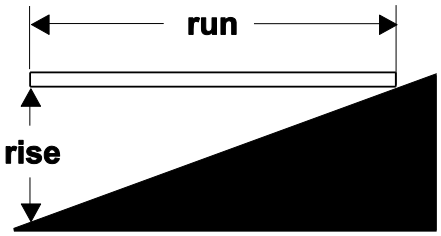
Lay the piece of wood on the slope.

At the downhill end, lay the level on the top edge of the piece of wood and lift the end until the piece of wood is level.

While holding the piece of wood level, measure the vertical distance from the bottom of the piece of wood to the ground.

Divide the tape measure distance (rise) by the length of the piece of wood (run) and multiply by 100.

Example:



Piece of wood = 144 inches (3.6 m)

Run = 144 inches (3.6 m)

Rise = 12 inches (0.3 m)

12 in ÷ 144 in = 0.083 x 100 = 8.3% grade
0.3 m ÷ 3.6 m = 0.083 x 100 = 8.3% grade

If the slope exceeds the maximum slope or side slope rating, then the machine must be winched or transported up or down the slope. See Transport and Lifting section.

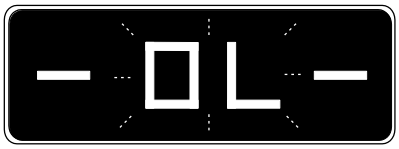
Platform Overload

If the platform controls LED diagnostic readout displays a flashing OL and the ground controls LCD diagnostic readout displays OL: Platform Overloaded, the platform is overloaded and no functions will operate. An alarm will sound.

1 Push in the Red Emergency stop button to the off position.

2 Remove weight from the platform.

3 Pull out the Red Emergency Stop button to the on position.



LED Readout

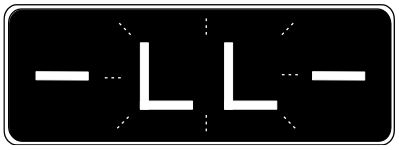


LCD Readout

Operating Instructions

Operational indicator codes

If the platform controls LED or ground controls LCD diagnostic readout displays an operational indicator code such as LL, the fault condition must be repaired or removed before resuming machine operation. Push in and pull out the red Emergency Stop button to reset the system.



LED Readout



LCD Readout

Operational Indicator Codes

Code	Condition
LL	Off-Level
OL	Platform Overloaded
CH	Chassis Mode Operation
Nd	No Drive (option)
Ld	Lifting Disabled
St	Engine Start Delay
F053	DCON RR Thermal Protection
F054	DCON LR Thermal Protection
F055	Traction Motor RR Fault: Motor Temp
F056	Traction Motor LR Fault: Motor Temp

For further information, please consult the appropriate Genie Service Manual. A code and a description of a code can also be viewed at the ground controls LCD display.

To reset thermal limit cutout

If the platform controls LED readout displays fault codes F053, F054, F055 or F056, the machine has overheated. The fault condition must be repaired or removed before resuming machine operation.

1 Push in the red Emergency Stop button to the off position.

2 Allow the machine to cool for approximately 5 minutes before resuming machine operation.

3 Pull out the red Emergency Stop button to the on position.

Operation from Ground with Controller

Maintain safe distances between the operator, machine and fixed objects.

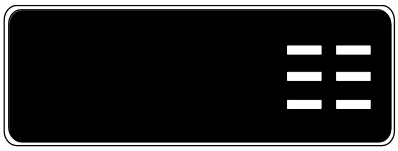
Be aware of the direction the machine will travel when using the controller.

Operating Instructions

Battery Level Indicator

Use the LED diagnostic readout to determine the battery level.

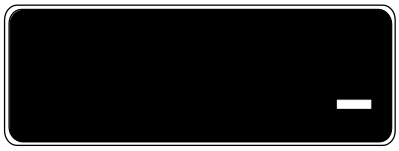
Note: When a blinking LO code appears on the platform controls LED display, the engine must be started or the machine must be taken out of service and charged. Otherwise, all machine functions will be disabled.



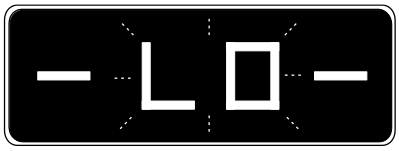
Full Charge



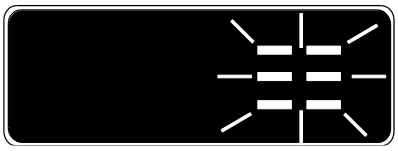
Half Charge



Low Charge



LO Flashing



Engine Restart

Using the Power Outlet

Using power from the generator may slow or stop battery charging.

Plug power to platform cable into power outlet on machine to use the generator power.

How to Use the Safety Arm

1 Raise the platform approximately 8 ft / 2.4 m from the ground.

2 Rotate the safety arm away from the machine and let it hang down.

3 Lower the platform until the safety arm rests securely on the link. Keep clear of the safety arm when lowering the platform.

To Extend and Retract Platform

1 Lift the platform extension lock handles to the horizontal position.

2 Push the platform extension lock handles to extend the platform to the desired position.

Do not stand on the platform extension while trying to extend it.

3 Lower the platform extension lock handles and make sure the extension deck is locked.

Operating Instructions

After Each Use

1 Select a safe parking location—firm level surface, clear of obstruction and traffic.

2 Lower the platform.

3 Turn the key switch to the off position and remove the key to secure from unauthorized use.

4 Charge the batteries.

Tilt Sensor Activation Settings

Chassis Angle on Wheels	
Chassis Angle (side to side)	2°
Chassis Angle (front to back)	3°
Chassis Angle on Outriggers	
Chassis Angle (side to side)	0.8°
Chassis Angle (front to back)	3°

When the machine is On Incline and elevated above the down limit height, the tilt alarm sounds and the drive and lift functions are disabled.

Lower the machine below the down limit height to restore drive and lift functionality.

Operating Instructions



Battery and Charger Instructions

Observe and Obey:

- ☑ Do not use an external charger or booster battery.
- ☑ Charge the battery in a well-ventilated area.
- ☑ Use proper AC input voltage for charging as indicated on the charger.
- ☑ Use only a Genie authorized battery and charger.

To Charge Battery

Use the engine or an external power source to recharge the batteries.

Be sure the batteries are connected before charging the batteries.

Check the battery acid level when the charging cycle is complete. Replenish with distilled water to the bottom of the fill tube. Do not overfill.

Charging Batteries with Engine

Running the engine will automatically charge the batteries.

The engine will automatically shut off when the charging cycle is complete.

Charging Batteries with External Power

1 Connect the battery charger to a grounded AC circuit.

The charger will automatically shut off when the charging cycle is complete.

Check the battery acid level when the charging cycle is complete. Replenish with distilled water to the bottom of the fill tube. Do not overfill.

Dry Battery Filling and Charging Instructions

1 Remove the battery vent caps and permanently remove the plastic seal from the battery vent openings.

2 Fill each cell with battery acid (electrolyte) until the level is sufficient to cover the plates.

Do not fill to maximum level until the battery charge cycle is complete. Overfilling can cause the battery acid to overflow during charging. Neutralize battery acid spills with baking soda and water.

3 Install the battery vent caps.

4 Charge the battery.

5 Check the battery acid level when the charging cycle is complete. Replenish with distilled water to the bottom of the fill tube. Do not overfill.

Transport and Lifting Instructions

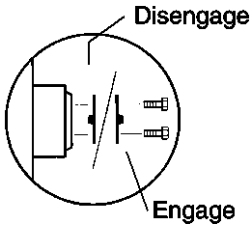
Observe and Obey:

- ☑ Genie provides this securement information as a recommendation. Drivers are solely responsible for making sure machines are properly secured and the correct trailer is selected pursuant to US Department of Transportation regulations, other localized regulations, and their company policy.
- ☑ Genie customers needing to containerize any lift or Genie product should source a qualified freight forwarder with expertise in preparing, loading and securing construction and lifting equipment for international shipment.
- ☑ Only qualified mobile elevating work platform operators should move the machine on or off the truck.
- ☑ The transport vehicle must be parked on a level surface.
- ☑ The transport vehicle must be secured to prevent rolling while the machine is being loaded.
- ☑ Be sure the vehicle capacity, loading surfaces and chains or straps are sufficient to withstand the machine weight. Genie lifts are very heavy relative to their size. See the serial label for the machine weight.
- ☑ The machine must be on a level surface or secured before releasing the brakes.
- ☑ Do not drive the machine on a slope that exceeds the uphill, downhill or side slope rating. See Driving on a Slope in the Operating Instructions section.
- ☑ If the slope of the transport vehicle bed exceeds the maximum slope rating, the machine must be loaded and unloaded using a winch as described in the brake release operation.

Free-wheel Configuration for Winching

Chock the wheels to prevent the machine from rolling.

All models: Release the wheel brakes by turning over the two rear torque hub disconnect caps.



Be sure the winch line is properly secured to the drive chassis tie points and the path is clear of all obstructions.

Reverse the procedures described to re-engage the brakes.

Chock the wheels to prevent the machine from rolling.

Transport and Lifting Instructions

Securing to Truck or Trailer for Transit

Always chock the machine wheels in preparation for transport.

Retract and secure the extension deck.

Use the tie-down points on the chassis for anchoring down to the transport surface.

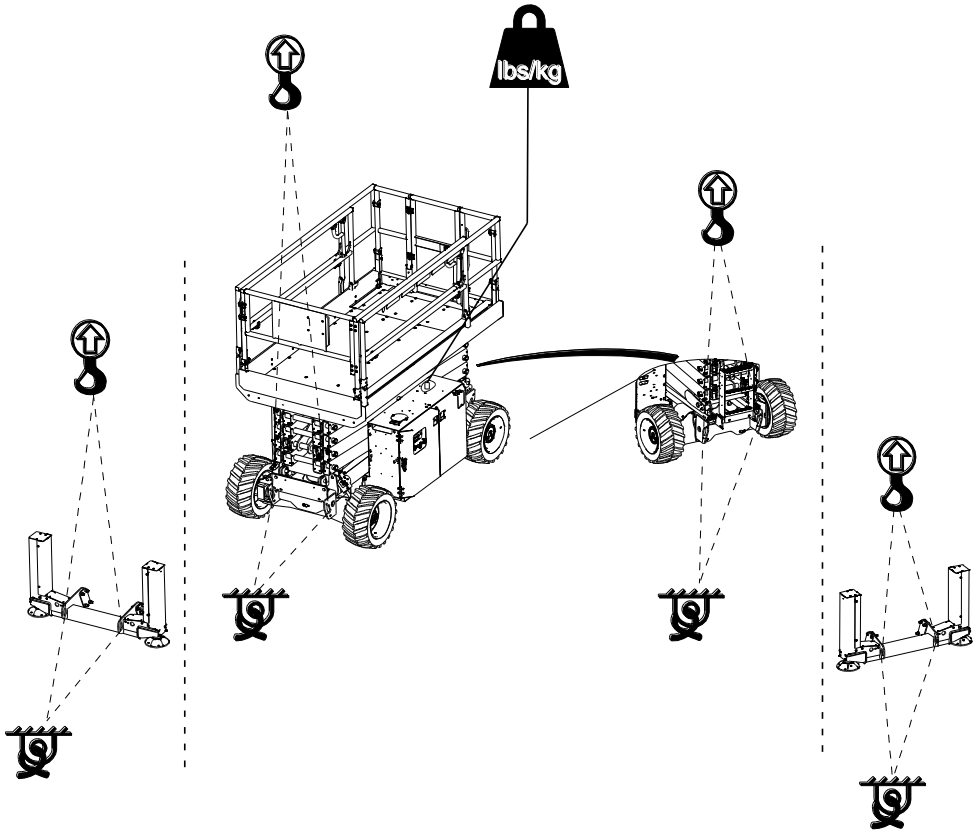
Use a minimum of 2 chains or straps.

Use chains or straps of ample load capacity.

Turn the key switch to the off position and remove the key before transporting.

Inspect the entire machine for loose or unsecured items.

If the railings have been folded down, secure them with straps before transporting.



Transport and Lifting Instructions

Observe and Obey:

☑ Only qualified riggers should rig and lift the machine.

☑ Be sure the crane capacity, loading surfaces and straps or lines are sufficient to withstand the machine weight. See the serial label for the machine weight.

Lifting Instructions

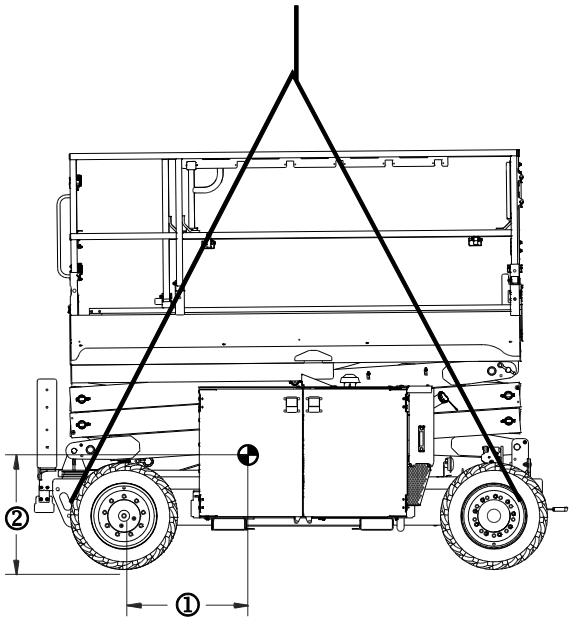
Fully lower the platform. Be sure the extension deck, controls and component trays are secure. Remove all loose items on the machine.

Determine the center of gravity of your machine using the table and the picture on this page.

Attach the rigging only to the designated lifting points on the machine.

Adjust the rigging to prevent damage to the machine and to keep the machine level.

Center of gravity	X Axis	Y Axis
GS-2669BE without outriggers	38.1 in 97.3 cm	30.1 in 76 cm
GS-3369BE without outriggers	41.8 in 106.9 cm	31.82 in 80 cm
GS-4069BE without outriggers	38.5 in 96.8 cm	30.93 in 78 in
G2-2669BE with outriggers	38.7 in 99.3 cm	29.5 in 75 cm
GS-3369BE with outriggers	42.1 in 107 cm	31 in 79 cm
GS-4069BE with outriggers	38.9 in 99 cm	30.4 in 77.2 cm



1 = X Axis

2 = Y Axis

Maintenance

Observe and Obey:

- ☑ Only routine maintenance items specified in this manual shall be performed by the operator.
- ☑ Scheduled maintenance inspections shall be completed by qualified service technicians, according to the manufacturer's specifications and the requirements specified in the responsibilities manual.
- ☑ Use only Genie approved replacement parts.

Maintenance Symbols Legend

The following symbols have been used in this manual to help communicate the intent of the instructions. When one or more of the symbols appear at the beginning of a maintenance procedure, it conveys the meaning below.

Indicates that tools will be required to perform this procedure.

Indicates that new parts will be required to perform this procedure.

Check the Engine Oil Level

Maintaining the proper engine oil level is essential to good engine performance and service life. Operating the machine with an improper oil level can damage engine components.

Note: Check the oil level with the engine off.

1 Check the oil level dipstick. Add oil as needed.

Kohler KD-350 Engine	
Oil type	SAE 15W-40

Check the Hydraulic Oil Level

Maintaining the hydraulic oil at the proper level is essential to machine operation. Improper hydraulic oil levels can damage hydraulic components. Daily checks allow the inspector to identify changes in oil level that might indicate the presence of hydraulic system problems.

1 Be sure that the platform in the stowed position.

2 Visually inspect the sight gauge located on the side of the hydraulic oil tank.

⊙ Result: The hydraulic oil level should be within the top 2 inches / 5 cm of the sight gauge.

3 Add oil as needed. Do not overfill.

Hydraulic oil specifications	
Hydraulic oil type	Chevron Rando HD equivalent

Maintenance

Check the Batteries

Proper battery condition is essential to good machine performance and operational safety. Improper fluid levels or damaged cables and connections can result in component damage and hazardous conditions.

⚠ Electrocution hazard. Contact with hot or live circuits may result in death or serious injury. Remove all rings, watches and other jewelry.

⚠ Bodily injury hazard. Batteries contain acid. Avoid spilling or contacting battery acid. Neutralize battery acid spills with baking soda and water.

Note: Perform this test after fully charging the batteries.

1 Put on protective clothing and eye wear.

2 Be sure that the battery cable connections are tight and free of corrosion.

3 Be sure that the battery hold-down brackets are in place and secure.

Note: Adding terminal protectors and a corrosion preventative sealant will help eliminate the corrosion on the battery terminals and cables.

Scheduled Maintenance

Maintenance performed quarterly, annually and every two years must be completed by a person trained and qualified to perform maintenance on this machine according to the procedures found in the service manual for this machine.

Machines that have been out of service for more than three months must receive the quarterly inspection before they are put back into service.

Specifications

GS-2669BE		
Height, working maximum	32 ft	9.8 m
Height, platform maximum	26.2 ft	8.0 m
Height, stowed maximum, rails up	102 in	259 cm
Height, stowed maximum, rails lowered	75.5 in	192 cm
Height, guard rails	58 in	147 cm
Width	69 in	175 cm
Length, platform retracted	123 in	312 cm
Length, platform retracted, models with outriggers	148 in	376 cm
Length, platform extended	177.5 in	451 cm
Length, platform extended, models with outriggers	189.5 in	481 cm
Length, outside platform extended	170 in	432 cm
Maximum load capacity	1500 lbs	680 kg
Maximum wind speed	28 mph	12.5 m/s
Wheelbase	90 in	229 cm
Turning radius (outside)	181.2 in	460 cm
Turning radius (inside)	83 in	211 cm
Ground clearance	9.5 in	24 cm
Power source, T105	8 batteries, 6V 225AH	
Power source, T145	8 batteries, 6V 260AH	
System voltage		48V
Weight	8383 lbs	3802 kg
(Machine weights vary with option configurations. See serial label for specific machine weight.)		
AC outlet in platform		Standard

Platform dimensions		
Platform length x width	110 in x 63 in	279 x 160 cm
Platform extension length	170 in	432 cm

Drive speeds		
Stowed maximum, forward	4.5 mph 40 ft/6.06 sec	7.2 km/h 12.2 m/6.06 sec
Stowed maximum, reverse	3 mph 40 ft/9.09 sec	4.8 km/h 12.2 m/9.09 sec
Platform raised, maximum	0.3 mph 40 ft/90 sec	0.5 km/h 12.2 m/90 sec

Maximum hydraulic pressure (functions)	3500 psi	241 bar
Tire size		26 x 12 x 380

Total vibration value to which the hand/arm system is subjected does not exceed 2.5 m/s^2.

Highest root mean square value of weighted acceleration to which the whole body is subjected does not exceed 1.6 ft/s^2 or 0.5 m/s^2.

Airborne noise emissions	
Sound pressure level at ground workstation	<71 dBA
Sound pressure level at platform workstation	<75 dBA

Maximum slope rating, stowed position	
Extension deck uphill	35% (19°)
Extension deck downhill	15% (9°)
Side slope	35% (19°)

Note: Slope rating is subject to ground conditions with one person in the platform and adequate traction. Additional platform weight may reduce slope rating.

Floor loading information		
Tire load maximum	3771 lbs	1710 kg
Outrigger load, maximum	3452 lbs	1566 kg
Tire contact pressure	93.6 psi	6.59 kg/cm^2 645 kPa
Outrigger contact pressure	43.6 psi	3.07 kg/cm^2 301 kPa
Occupied floor pressure	188 psf	918 kg/m^2 9.01 kPa

Note: Floor loading information is approximate and does not incorporate different option configurations. It should be used only with adequate safety factors.

Operating temperature

For ambient temperatures consistently **below** 0°F (-17°C) - use Chevron Aviation A Arctic hydraulic fluid or equivalent.

For ambient temperatures consistently **above** 0°F (-17°C) - use Chevron Rando HD MV hydraulic fluid or equivalent.

For operating temperatures consistently above 205°F (96°C) - use Shell Tellus S2 V 46.

Continuous improvement of our products is a Genie policy. Product specifications are subject to change without notice or obligation.

Specifications

GS-3369BE		
Height, working maximum	39 ft	11.9 m
Height, platform maximum	32.7 ft	10.0 m
Height, stowed maximum, rails up	102 in	259 cm
Height, stowed maximum, rails lowered	75.5 in	192 cm
Height, guard rails	58 in	147 cm
Width	69 in	175 cm
Length, platform retracted	123 in	312 cm
Length, platform retracted, models with outriggers	148 in	376 cm
Length, platform extended	177.5 in	451 cm
Length, platform extended, models with outriggers	189.5 in	481 cm
Length, outside platform extended	170 in	432 cm
Maximum load capacity	1000 lbs	454 kg
Maximum wind speed	28 mph	12.5 m/s
Wheelbase	90 in	229 cm
Turning radius (outside)	181.2 in	460 cm
Turning radius (inside)	83 in	211 cm
Ground clearance	9.5 in	24 cm
Power source, T105	8 batteries, 6V 225AH	
Power source, T145	8 batteries, 6V 260AH	
System voltage		48V
Weight	8085 lbs	3667 kg
(Machine weights vary with option configurations. See serial label for specific machine weight.)		
AC outlet in platform		Standard

Platform dimensions		
Platform length x width	110 in x 63 in	279 x 160 cm
Platform extension length	170 in	432 cm

Drive speeds		
Stowed maximum, forward	4.5 mph 40 ft/6.06 sec	7.2 km/h 12.2 m/6.06 sec
Stowed maximum, reverse	3 mph 40 ft/9.09 sec	4.8 km/h 12.2 m/9.09 sec
Platform raised, maximum	0.3 mph 40 ft/90 sec	0.5 km/h 12.2 m/90 sec

Maximum hydraulic pressure (functions)	3500 psi	241 bar
Tire size		26 x 12 x 380

Total vibration value to which the hand/arm system is subjected does not exceed 2.5 m/s^2.

Highest root mean square value of weighted acceleration to which the whole body is subjected does not exceed 1.6 ft/s^2 or 0.5 m/s^2.

Airborne noise emissions	
Sound pressure level at ground workstation	<71 dBA
Sound pressure level at platform workstation	<75 dBA

Maximum slope rating, stowed position	
Extension deck uphill	35% (19°)
Extension deck downhill	15% (9°)
Side slope	35% (19°)

Note: Slope rating is subject to ground conditions with one person in the platform and adequate traction. Additional platform weight may reduce slope rating.

Floor loading information		
Tire load maximum	3569 lbs	1619 kg
Outrigger load, maximum	3630 lbs	1647 kg
Tire contact pressure	81.4 psi	5.73 kg/cm^2 562 kPa
Outrigger contact pressure	46 psi	3.24 kg/cm 317 kPa
Occupied floor pressure	175 psf	854 kg/m^2 8.37 kPa

Note: Floor loading information is approximate and does not incorporate different option configurations. It should be used only with adequate safety factors.

Operating temperature

For ambient temperatures consistently **below** 0°F (-17°C) - use Chevron Aviation A Arctic hydraulic fluid or equivalent.

For ambient temperatures consistently **above** 0°F (-17°C) - use Chevron Rando HD MV hydraulic fluid or equivalent.

For operating temperatures consistently above 205°F (96°C) - use Shell Tellus S2 V 46.

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Specifications

GS-4069BE		
Height, working maximum	46 ft	14 m
Height, platform maximum	40 ft	12.3 m
Height, stowed maximum, rails up	108 in	2.74 m
Height, stowed maximum, rails lowered	82 in	2.08 m
Height, guard rails	65 in	1.65 m
Width	69 in	1.75 m
Length, platform retracted	123 in	3.12 m
Length, platform retracted, models with outriggers	148 in	3.76 m
Length, platform extended	177.5 in	4.51 m
Length, platform extended, models with outriggers	189.5 in	4.81 m
Length, outside platform extended	170 in	4.32 m
Maximum load capacity	800 lbs	363 kg
Maximum wind speed	28 mph	12.5 m/s
Wheelbase	90 in	2.29 m
Turning radius (outside)	181.2 in	4.6 m
Turning radius (inside)	83 in	2.11 m
Ground clearance	9.5 in	24 cm
Power source, T145	8 batteries, 6V 260AH	
System voltage		48V
Weight	12,016 lbs	5,450 kg
(Machine weights vary with option configurations. See serial label for specific machine weight.)		
AC outlet in platform		Standard
Platform dimensions		
Platform length x width	110 in x 63 in	2.79 x 1.6 m
Platform extension length	170 in	4.32 m
Drive speeds		
Stowed maximum, forward	4.5 mph 40 ft/6.06 sec	7.2 km/h 12.2 m/6.06 sec
Stowed maximum, reverse	3 mph 40 ft/9.09 sec	4.8 km/h 12.2 m/9.09 sec
Platform raised, maximum	0.3 mph 40 ft/90 sec	0.5 km/h 12.2 m/90 sec
Maximum hydraulic pressure (functions)	3500 psi	241 bar
Tire size		26 x 12 x 380
Total vibration value to which the hand/arm system is subjected does not exceed 2.5 m/s^2.		
Highest root mean square value of weighted acceleration to which the whole body is subjected does not exceed 1.6 ft/s^2 or 0.5 m/s^2.		
Airborne noise emissions		
Sound pressure level at ground workstation		<71 dBA
Sound pressure level at platform workstation		<74 dBA
Maximum slope rating, stowed position		
Extension deck uphill		35% (19°)
Extension deck downhill		15% (9°)
Side slope		35% (19°)
Note: Slope rating is subject to ground conditions with one person in the platform and adequate traction. Additional platform weight may reduce slope rating.		
Floor loading information		
Tire load maximum	3993 lbs	1811 kg
Outrigger load, maximum	3729 lbs	1692 kg
Tire contact pressure	99.8 psi	7.02 kg/cm^2 688 kPa
Outrigger contact pressure	47.5psi	3.34 kg/cm^2 326 kPa
Occupied floor pressure	225 psf	1099 kg/m^2 10.77 kPa
Note: Floor loading information is approximate and does not incorporate different option configurations. It should be used only with adequate safety factors.		
Operating temperature		
For ambient temperatures consistently **below** 0°F (-17°C) - use Chevron Aviation A Arctic hydraulic fluid or equivalent.		
For ambient temperatures consistently **above** 0°F (-17°C) - use Chevron Rando HD MV hydraulic fluid or equivalent.		
For operating temperatures consistently above 205°F (96°C) - use Shell Tellus S2 V 46.		
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California Proposition 65

WARNING

Operating, servicing and maintaining this equipment can expose you to chemicals including engine exhaust, carbon monoxide, phthalates, and lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. These chemicals can be emitted from or contained in other various parts and systems, fluids and some component wear by-products. To minimize exposure, avoid breathing exhaust, do not idle the engine except as necessary, service your equipment and vehicle in a well-ventilated area and wear gloves or wash your hands frequently when servicing your equipment or vehicle and after operation. For more information go to www.P65Warnings.ca.gov/passenger-vehicle.

Breathing diesel engine exhaust exposes you to chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

- Always start and operate the engine in a well-ventilated area.
- If in an enclosed area, vent the exhaust to the outside.
- Do not modify or tamper with the exhaust system.
- Do not idle the engine except as necessary.

For more information go to www.P65warnings.ca.gov/diesel.

www.genielift.com

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