Genie®
A TEREX BRAND

Operator's Manual

Serial Number Range

GS-2646 AV
GS-2646 AV35

From GS4612A-110000

ANSI/CSA
North America

with
Maintenance
Information

First Edition
Third Printing
Part No. 214727

Important

Read, understand and obey these safety rules and operating instructions before operating this machine. Only trained and authorized personnel shall be permitted to operate this 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 us.

Contact Us:

Internet: www.genielift.com

E-mail: awp.techpub@terex.com

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These machines comply with
ANSI/SIA A92.6
CAN B.354.2

Introduction

Owners, Users and Operators:

Thank you for choosing our machine for your application. Our number one priority is user safety, which is best achieved by our joint efforts. We feel that you make a major contribution to safety if you, as the equipment users and operators:

1 **Comply** with employer, job site and governmental rules.

2 **Read, understand and follow** the instructions in this and other manuals supplied with this machine.

3 **Use good safe work practices** in a commonsense way.

4 **Only have trained/certified operators**, directed by informed and knowledgeable supervision, running the machine.



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.

Introduction

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.

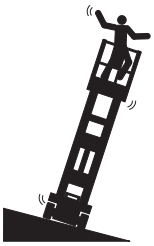
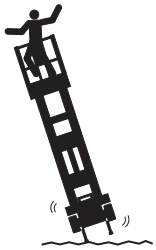
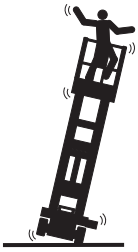
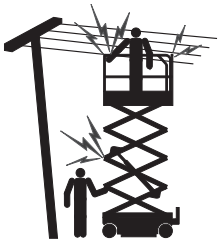
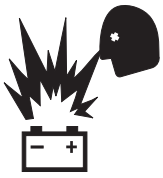
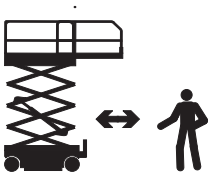
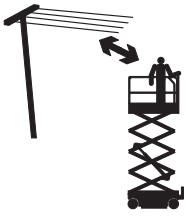
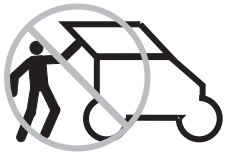
Intended Use

This machine is intended to be used only to lift personnel, along with their tools and materials to an aerial work site.

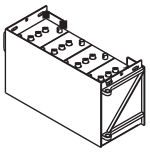
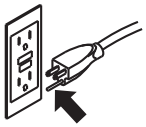
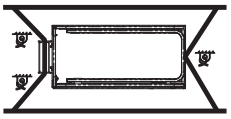
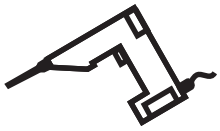
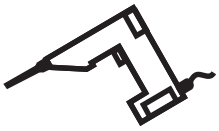
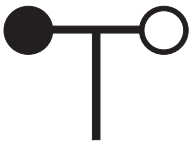
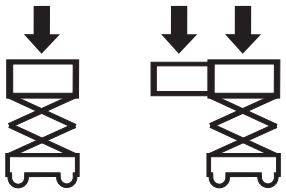
Safety Sign Maintenance

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.

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
 Lower the platform	 Do not set up where it cannot be leveled with outriggers	 Maintain required clearance	 Only trained maintenance personnel should access compartments	 Use a piece of cardboard or paper to search for leaks

Symbol and Hazard Pictorials Definitions

 Batteries used as counterweights	 Chock the wheels	 Release brakes	 Release brakesGrounded AC 3-wire only	 Replace damaged wires and cords
 Wheel load	 Transport diagram	 Tiedown	 Lanyard anchorage point	 No smoking
 Voltage rating for power to platform	 Pressure rating for air line to platform	 Side force	 Wind speed	
 Maximum capacity	 Fall hazard	 100% Restraint		

General Safety

133234 **OR** 114386

⚠ DANGER

Failure to read, understand and obey the operator's manual and the following safety rules will result in death or serious injury.

Improper Use Hazard

The operator is responsible for safe machine operation. This includes:

1 Avoid hazardous situations.
2 Always perform a pre-operation inspection.
3 Always perform function tests prior to use.
4 Inspect work place.
5 Only use the machine as it was intended.

Do not operate unless:
You read, understand and obey:
- manufacturer's instructions and safety rules— safety and operator's manuals and decals
- employer's safety rules
- applicable governmental regulations

You are properly trained to safely operate this machine

Electrocution Hazards

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

Maintain required clearance.

Line voltage	Required clearance
0 to 50KV	10 ft 3,05 m
50KV to 200KV	15 ft 4,60 m
200KV to 350KV	20 ft 6,10 m
350KV to 500KV	25 ft 7,62 m
500KV to 750KV	35 ft 10,67 m
750KV to 1000KV	45 ft 13,72 m

Explosion Hazards

Do not start engine if you smell or detect liquid petroleum gas (LPG), gasoline, diesel fuel or other explosive substances.

Do not refuel the machine with the engine running.

Tip-over Hazards

Do not exceed rated load capacity.

Do not raise platform unless machine is on a firm surface. Avoid drop-offs, holes and unstable or slippery surfaces.

Do not drive machine on a slope that exceeds the maximum slope or side slope rating for the machine.

Models without outriggers: Do not raise platform unless machine is on a level surface.

Models with outriggers: Do not raise platform unless machine is level.

Do not raise platform when wind speeds may exceed 35 mph / 15.6 m/s. Do not operate machine in strong or gusty winds. Do not increase surface area of platform or load. Increasing area exposed to wind will decrease machine stability.

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

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

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

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

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

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

Do not use 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.

Fall Hazards

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.

Attach platform entry chain and close entry gate before operating.

Crushing Hazards

Keep hands and limbs out of scissors.

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

Collision Hazards

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

Check work area for overhead obstructions or other possible hazards.

Be aware of crushing hazard when grasping platform guard rail.

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

Damaged Machine Hazards

Do not use a damaged or malfunctioning machine.

Be sure all maintenance has been performed as specified in the appropriate operator's and service manuals

Be sure all decals are in place and legible.

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

133234 B

⚠ DANGER

Failure to read, understand and obey the operator's manual and the following safety rules will result in death or serious injury.

Improper Use Hazard

The operator is responsible for safe machine operation. This includes:

1 Avoid hazardous situations.
2 Always perform a pre-operation inspection.
3 Always perform function tests prior to use.
4 Inspect work place.
5 Only use the machine as it was intended.

Do not operate unless:
You read, understand and obey:
- manufacturer's instructions and safety rules— safety and operator's manuals and decals
- employer's safety rules
- applicable governmental regulations

You are properly trained to safely operate this machine

Electrocution Hazards

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

Maintain required clearance.

Line voltage	Required clearance
0 to 50KV	10 ft 3,05 m
50KV to 200KV	15 ft 4,60 m
200KV to 350KV	20 ft 6,10 m
350KV to 500KV	25 ft 7,62 m
500KV to 750KV	35 ft 10,67 m
750KV to 1000KV	45 ft 13,72 m

Explosion Hazards

Do not start engine if you smell or detect liquid petroleum gas (LPG), gasoline, diesel fuel or other explosive substances.

Do not refuel the machine with the engine running.

Tip-over Hazards

Do not exceed rated load capacity.

Do not raise platform unless machine is on a firm surface. Avoid drop-offs, holes and unstable or slippery surfaces.

Do not drive machine on a slope that exceeds the maximum slope or side slope rating for the machine.

Models without outriggers: Do not raise platform unless machine is on a level surface.

Models with outriggers: Do not raise platform unless machine is level.

Do not raise platform when wind speeds may exceed 28 mph / 12.5 m/s. Do not operate machine in strong or gusty winds. Do not increase surface area of platform or load. Increasing area exposed to wind will decrease machine stability.

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

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

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

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

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

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

Do not use 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.

Fall Hazards

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.

Attach platform entry chain and close entry gate before operating.

Crushing Hazards

Keep hands and limbs out of scissors.

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

Collision Hazards

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

Check work area for overhead obstructions or other possible hazards.

Be aware of crushing hazard when grasping platform guard rail.

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

Damaged Machine Hazards

Do not use a damaged or malfunctioning machine.

Be sure all maintenance has been performed as specified in the appropriate operator's and service manuals

Be sure all decals are in place and legible.

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

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⚠ DANGER

Tip-over Hazard

If tilt-alarm sounds, unit is on a severe slope. Death or serious injury could occur.

1 Lower the platform.

2 Move the machine to level surface.

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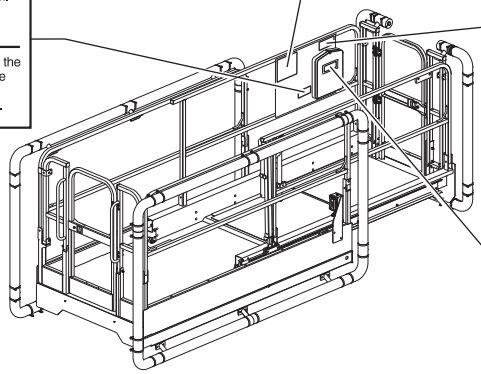
⚠ WARNING

Fall Hazard

Falling can result in death or serious injury.

Wear approved personal fall protection equipment and achieve 100% tie-off when exiting and entering an elevated platform.
Read and understand the Operator's Manual

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⚠ WARNING

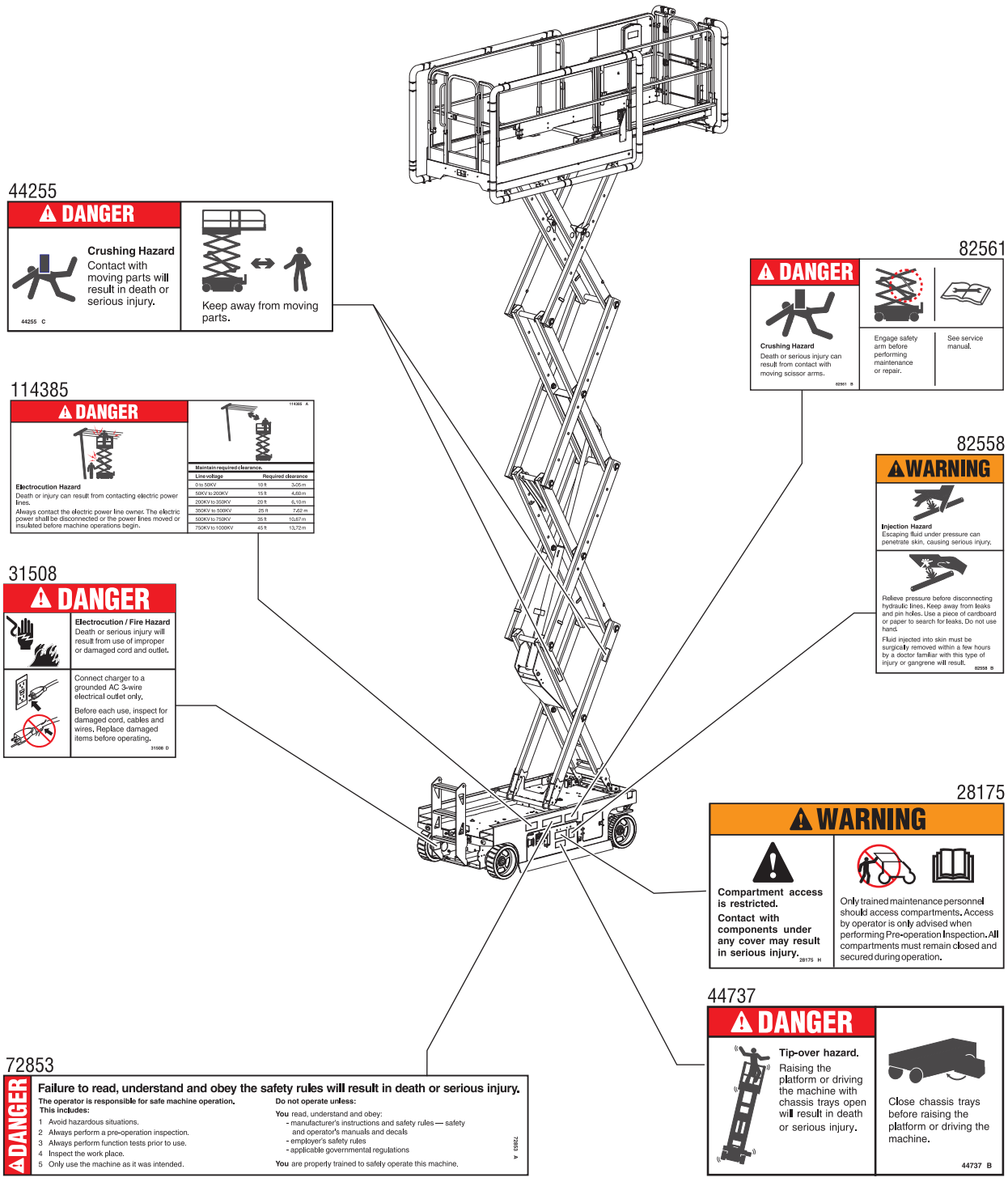
Improper operation or maintenance can result in serious injury or death.

Read and understand Operator's Manual, Responsibilities Manual and Safety Manual and all safety signs before using or maintaining machine.

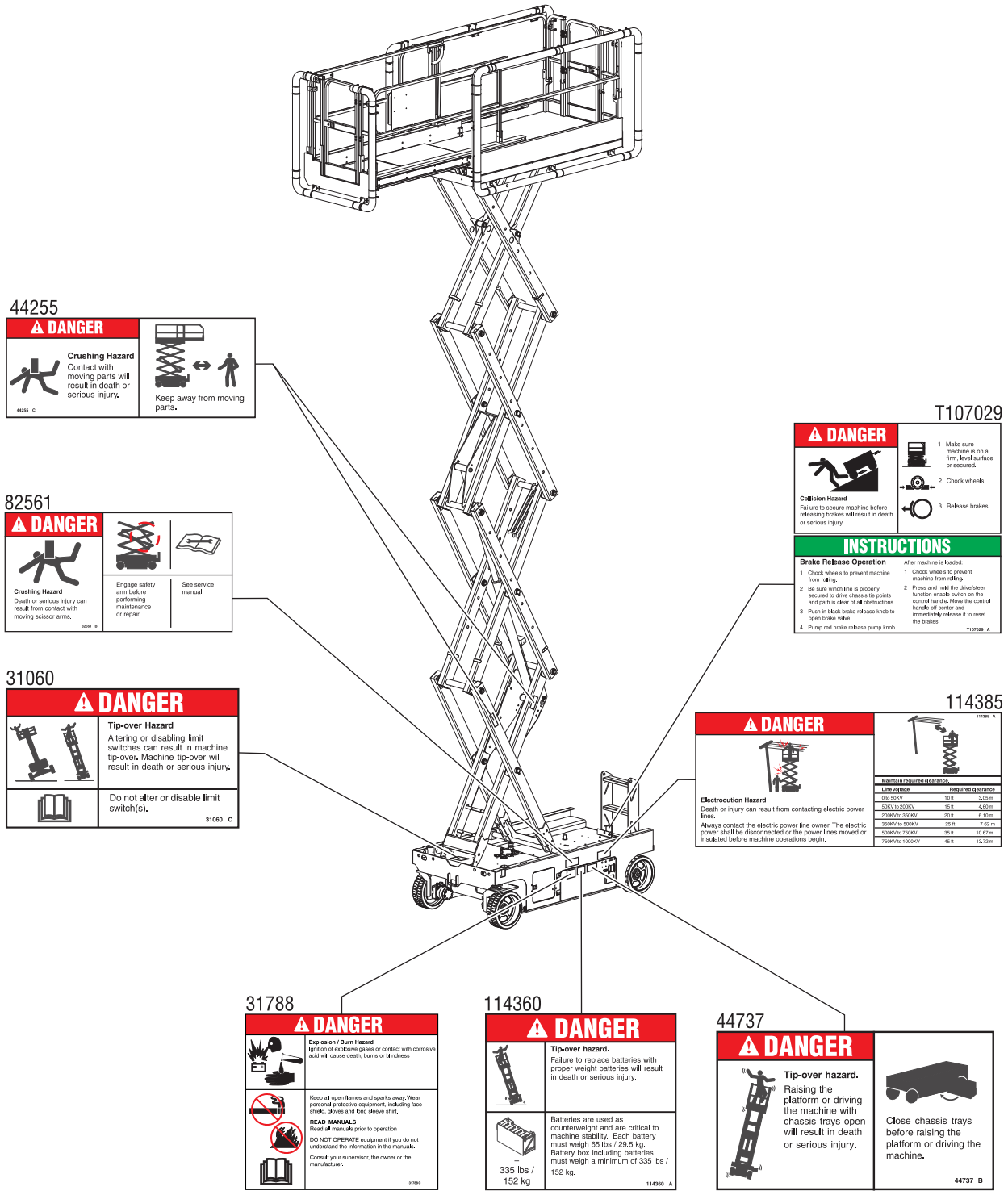
If you do not understand the information in the manuals, consult your supervisor, the owner or the manufacturer.

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General Safety



General Safety



Personal 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 front 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 front gate, and must use a lanyard designed to allow 100% tie-off when exiting and entering an elevated platform through the front gate.

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

Exiting an Elevated Platform Through the Front 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 Front Gate

4 Attach primary lanyard to a platform anchor point.

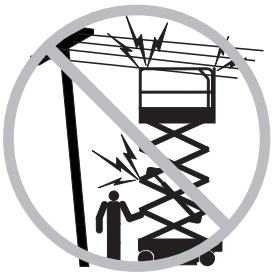
5 Detach secondary lanyard from the adjacent anchor point.

6 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-264 AV **GS-264 AV35**	900 lbs 408 kg	600 lbs 272 kg	300 lbs 136 kg	3

Platform retracted



Platform extended



Extension only Platform only

Work Area Safety



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



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 drive over 0.5 mph / 0.8 km/h with the platform raised.

GS-2646 AV

Do not raise the platform when wind speeds may exceed 28 mph / 12.5 m/sec. If wind speeds exceed 28 mph / 12.5 m/sec when the platform is raised, lower the platform and do not continue to operate the machine. Refer to instructional decal and serial label for specific wind speed rating.

GS-2646 AV35

Do not raise the platform when wind speeds may exceed 35 mph / 15.6 m/sec. If wind speeds exceed 35 mph / 15.6 m/sec when the platform is raised, lower the platform and do not continue to operate the machine. Refer to instructional decal and serial label for specific wind speed rating.



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 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 operate the machine with the chassis trays open.

Work Area Safety



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

Model	Maximum allowable side force	Maximum occupants
GS-2646 AV **GS-2646 AV35**	150 lbs / 667 N	3

Do not alter or disable the limit switches or proximity switches.

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 use batteries that weigh less than the original equipment. Batteries are used as counterweight and are critical to machine stability. Each battery must weigh 65 lbs / 29.5 kg. Battery tray including batteries must weigh a minimum of 335 lbs / 152 kg.

Do not modify or alter an aerial 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.

Work Area Safety

⚠ 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.

⚠ Operation on Slopes Hazards

Do not drive the machine on a slope that exceeds the slope and side slope rating of the machine. Slope rating applies to machines in the stowed position.

Model	Maximum slope rating, stowed position	Maximum side slope rating, stowed position
GS-2646 AV	25% (14°)	25% (14°)
GS-2646 AV35	20% (11°)	20% (11°)

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

⚠ 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.

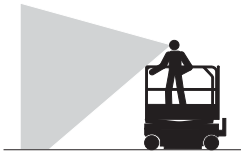
Do not enter or exit the platform through the rear gate, unless the machine is in the stowed position. Follow the procedure on page 8 to exit or enter an elevated platform through the front gate.

Close the entry gates before operating.

Do not operate the machine unless the guard rails are properly installed and the entries are 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.

⚠ 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.

Work Area Safety

⚠ Explosion and Fire Hazards

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.

⚠ 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 any battery charger greater than 24V to charge the batteries.

Do not use the machine as a ground for welding.

⚠ Battery Safety

Burn Hazards

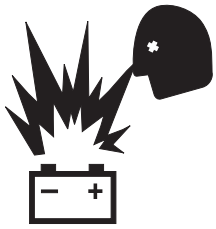


Batteries contain acid. Always wear protective clothing and eye wear when working with batteries.

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.



Work Area Safety

Component Damage Hazard

Do not use any battery charger greater than 24V 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.

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. Each battery must weigh 65 lbs / 29.5 kg. Battery tray including batteries must weigh a minimum of 335 lbs / 152 kg.

Lifting Hazard

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

Lockout After Each Use

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

2 Lower the platform.

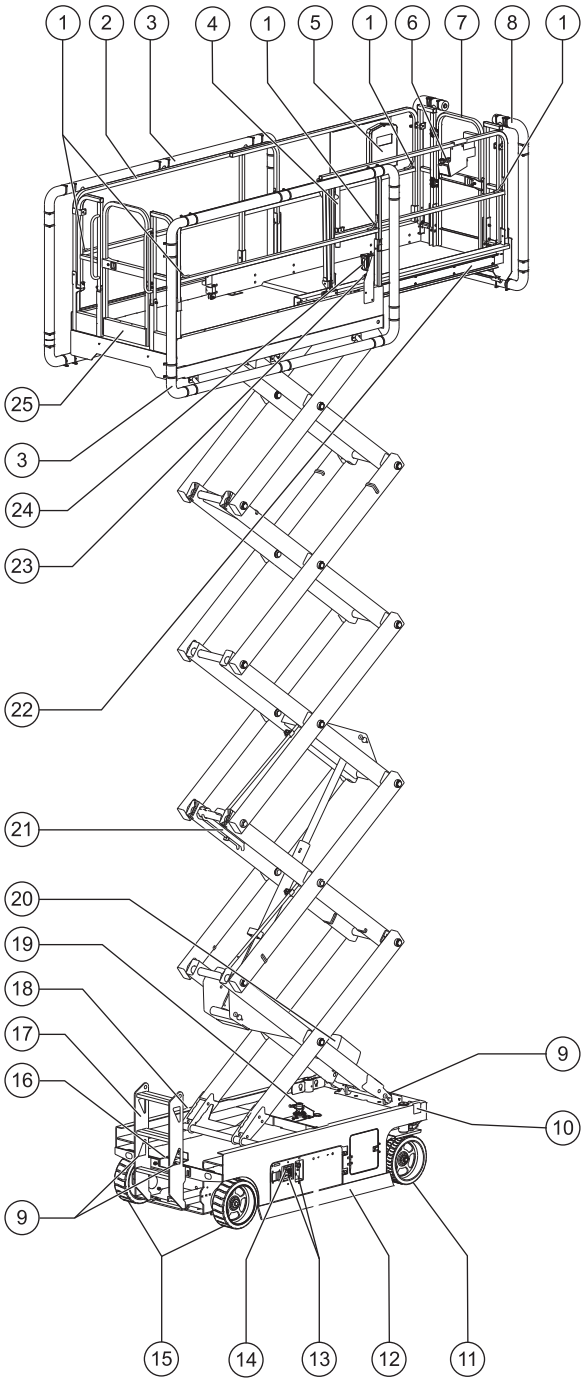
3 Turn the selector switch to the off position. If equipped, remove the key.

4 Disconnect the battery pack and lock the battery tray to secure from unauthorized use.

5 Charge the batteries.

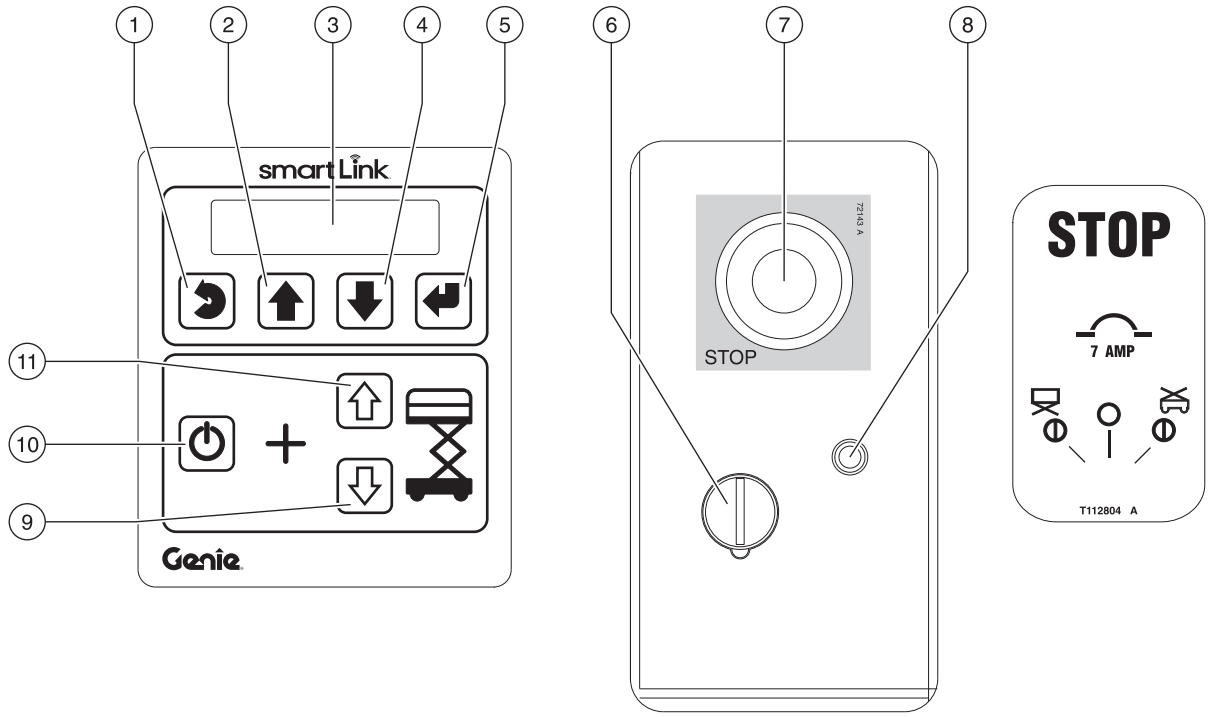
Legend

GS-2646 AV and GS-2646 AV35



1 Lanyard anchorage point
2 Platform guard rails
3 Main deck bumper
4 Platform extension lock handle
5 Manual storage container
6 Platform controls
7 Front entry gate
8 Extension deck bumper
9 Transport tie-down
10 Emergency lowering knob
11 Steer tire
12 Pothole guard
13 Ground controls
14 LCD readout
15 Non-steer tire
16 Brake release pump
17 Entry ladder / transport tie-down
18 Battery charger (on battery side of machine)
19 Tilt alarm
20 Inverter (optional)
21 Safety arm
22 Platform extension
23 Air line to platform (optional)
24 GFCI outlet
25 Rear entry gate

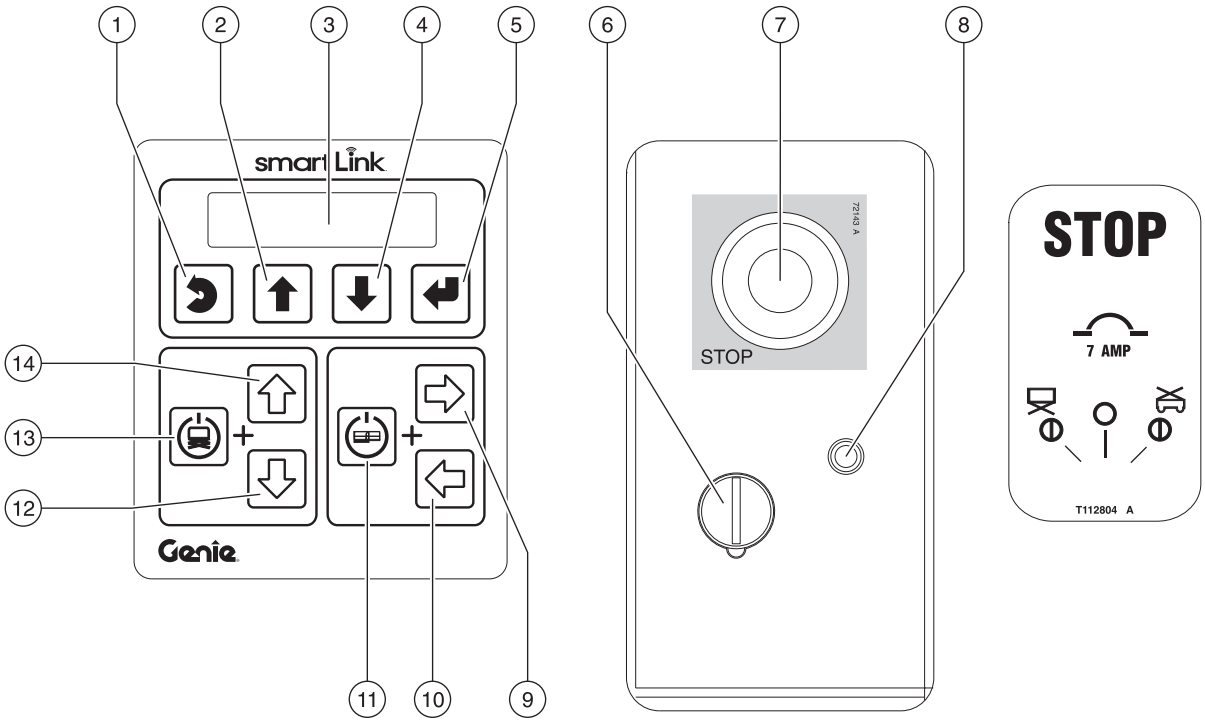
Controls



Ground Control Panel without Powered Extension Deck

1 Menu escape button
2 Menu up button
3 LCD diagnostic readout
4 Menu down button
5 Menu enter button
6 Selector switch for platform/off/ground selection
Turn the selector switch to the platform position and the platform controls will operate. Turn the selector switch to the off position and the machine will be off. Turn the selector switch to the ground position and the ground controls will operate.
7 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.
8 7A breaker for electrical circuits
9 Platform down button
10 Lift function enable button
Press and hold this button to activate the lift function.
11 Platform up button

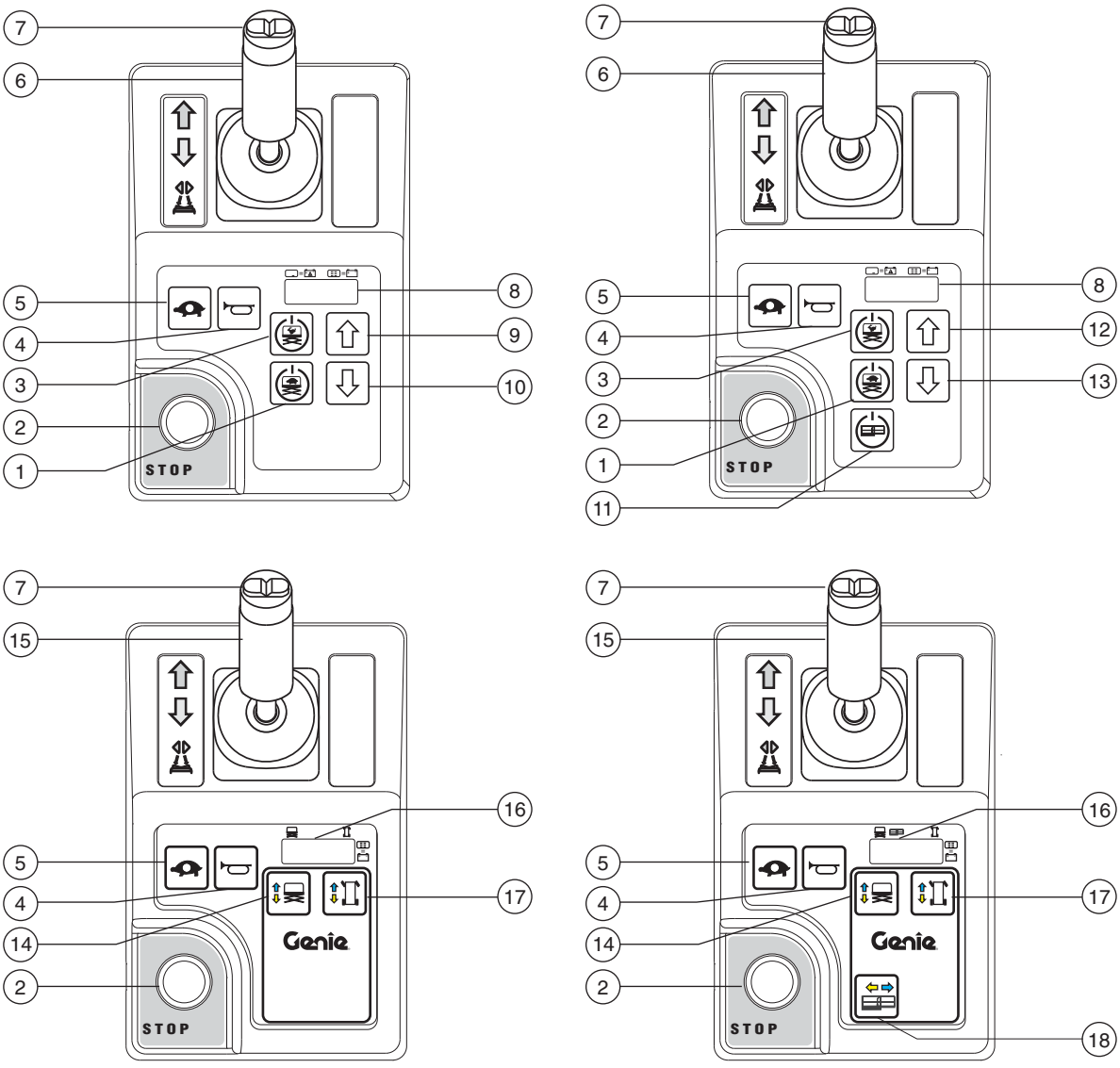
Controls



Ground Control Panel with Powered Extension Deck

1 Menu escape button
2 Menu up button
3 LCD diagnostic readout
4 Menu down button
5 Menu enter button
6 Selector switch for platform/off/ground selection
Turn the selector switch to the platform position and the platform controls will operate. Turn the selector switch to the off position and the machine will be off. Turn the selector switch to the ground position and the ground controls will operate.
7 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.
8 7A breaker for electrical circuits
9 Powered extension deck extend button
10 Powered extension deck retract button
11 Powered extension deck function enable button
Press and hold this button to activate the powered extension deck function.
12 Platform down button
13 Lift function enable button
Press and hold this button to activate the lift function.
14 Platform up button

Controls



Platform Control Panel

1 Low speed lift enable button

Press and hold this button to activate the low speed platform function.



2 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.

Controls

3 High speed lift enable button

Press and hold this button to activate the high speed platform function.



4 Horn button

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



5 Drive speed select button

Press this button to activate the slow drive function. The indicator light will be on when slow drive is selected.



6 Proportional control handle and function enable switch for drive function

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.

7 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.



8 LED diagnostic readout / battery charge indicator

9 Platform up button

Press and hold the platform up button and the platform will raise.



10 Platform down button

Press and hold the platform down button and the platform will lower.



11 Powered extension deck function enable button

Press and hold this button to activate the powered extension deck function.



Controls

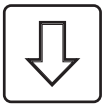
12 Platform up OR powered extension deck extend button

Press and hold this button and the platform will raise OR the powered extension deck will extend.



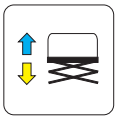
13 Platform down OR powered extension deck retract button

Press and hold this button and the platform will lower OR the powered extension deck will retract.



14 Lift function button

Push this button to activate the lift function.



15 Proportional control handle and function enable switch for drive, steer, lift and platform extend/retract 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.

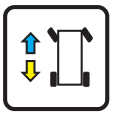
Drive function: Press and hold the function enable switch to enable the drive function on the platform control handle. Move the control handle in the direction indicated by the blue arrow on the control panel and the machine will move in the direction that the blue arrow points. Move the control handle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

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

16 LED diagnostic readout, battery charge indicator and lift/drive mode indicator

17 Drive function button

Push this button to activate the drive function.



18 Platform extend/retract function button

Press this button to activate the platform extend/retract 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 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 hoses, fittings, cylinders and manifolds
- ❑ Drive motors
- ❑ Wear pads
- ❑ Tires and wheels
- ❑ Limit switches, proximity switches, alarms and horn
- ❑ 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 chain or gate
- ❑ Pothole guards
- ❑ Lanyard anchorage point

Check entire machine for:

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

- ❑ Be sure that all structural and other critical components are present and all associated fasteners and pins are in place and properly tightened.
- ❑ Be sure side rails are installed and bolts are fastened.
- ❑ Be sure that the chassis trays are closed and latched and the batteries are properly connected.

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.

Inspections

At the Ground Controls

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

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 selector switch to ground control.

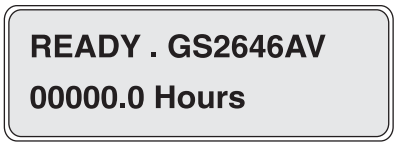
5 Observe the diagnostic LED readout on the platform controls.

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

⊙ Result: No functions should operate.

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

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 pothole guards have not deployed and when the machine is not level. An optional automotive-style horn is also available.

9 Do not press the lift function enable button.

10 Press the platform up or platform down button.

⊙ Result: The lift function should not operate.

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

12 Press the lift function enable button.

⊙ Result: The lift function should not operate.

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

⊙ Result: The platform should raise.

14 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.

Test Emergency Lowering

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

16 Pull the emergency lowering knob located on the ground controls side of the machine, at the steer end.

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

17 Turn the selector switch to platform control.

Inspections

At the Platform Controls

Test Emergency Stop

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

⊙ Result: No functions should operate.

Test the Horn

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

20 Press the horn button.

⊙ Result: The horn should sound.

Use the button pattern on the platform controls to determine which of these next two function tests to perform.

Use this function test procedure if the decal on your platform controls has these buttons.



Test the Function Enable Switch and the Up/Down Functions

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

22 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.

23 Do not press the high speed or low speed lift enable buttons.

24 Press the platform up or platform down button.

⊙ Result: The lift function should not operate.

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

26 Press the high speed or low speed lift enable button.

⊙ Result: The lift function should not operate.

27 Press and hold the high speed lift enable button.

28 Press the platform up button.

⊙ Result: The platform should raise. The pothole guards should deploy.

29 Release the high speed lift enable button or the platform up button.

⊙ Result: The platform should stop raising.

30 Press and hold the high speed lift enable button.

31 Press the platform down button.

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

32 Release the high speed lift enable button or the platform down button.

⊙ Result: The platform should stop lowering.

33 Press and hold the low speed lift enable button.

34 Press the platform up button.

⊙ Result: The platform should raise. The pothole guards should deploy.

35 Release the low speed lift enable button or the platform up button.

⊙ Result: The platform should stop raising.

36 Press and hold the low speed lift enable button.

37 Press the platform down button.

⊙ Result: The platform should lower at the same descent speed as high speed. The descent alarm should sound while the platform is lowering.

38 Release the low speed lift enable button or the platform down button.

Result: The platform should stop lowering.

Use this function test procedure if the decal on your platform controls has these buttons.



Test the Function Enable Switch and the Up/Down Functions

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

2 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.

3 Press the lift function button.

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

5 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.

6 Press the lift function button.

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

8 Result: The platform should raise. The pothole guards should deploy.

9 Release the control handle.

⊙ Result: The platform should stop raising.

10 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.

Use the button pattern on the platform controls to determine which of these next two function tests to perform.

Inspections

Use this function test procedure if the decal on your platform controls has these buttons.



Test the Powered Extension Deck Extend/Retract Functions (if equipped)

The audible warnings on this machine and the standard horn all come from the same central alarm. The horn is a constant tone and the motion alarm, if equipped, sounds at 60 beeps per minute. An optional automotive-style horn is also available.

1 Do not press the powered extension deck function enable button.

2 Press the powered extension deck extend or retract button.

⊙ Result: The powered extension deck function should not operate.

3 Do not press the powered extension deck extend or retract buttons.

4 Press the powered extension deck function enable button.

⊙ Result: The powered extension deck function should not operate.

5 Press and hold the powered extension deck function enable button, and press the powered extension deck extend button.

⊙ Result: The powered extension deck should extend. If equipped, the motion alarm should sound during extension deck movement.

6 Press and hold the high speed lift enable button.

7 Press the platform up button.

⊙ Result: The platform should not raise.

8 Press and hold the low speed lift enable button.

9 Press the platform up button.

⊙ Result: The platform should not raise.

10 Press and hold the high speed lift enable button.

11 Press the platform down button.

⊙ Result: The platform should not lower.

12 Press and hold the low speed lift enable button.

13 Press the platform down button.

⊙ Result: The platform should not lower.

14 Press and hold the powered extension deck function enable button, and press the powered extension deck retract button.

⊙ Result: The powered extension deck should retract. If equipped, the motion alarm should sound during extension deck movement.

Use this function test procedure if the decal on your platform controls has these buttons.



Test the Powered Extension Deck Extend/Retract Functions (if equipped)

1 Press the powered extension deck function button.

2 Wait seven seconds for the powered extension deck function to time out.

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

⊙ Result: The platform extension deck function should not operate.

4 Press the powered extension deck function button.

5 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 powered extension deck should extend. If equipped, the motion alarm should sound during extension deck movement.

6 Release the control handle.

⊙ Result: The powered extension deck should stop.

7 Press the lift function button.

8 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.

9 Press the powered extension deck function button.

10 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 powered extension deck should retract. If equipped, the motion alarm should sound during extension deck movement.

Test the Steering

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

1 Press the drive function button (if equipped).



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

3 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.

4 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.

Inspections

Test the Drive Function Button

Use this function test procedure if the decal on your platform controls has these buttons.



5 Press the drive function button (if equipped). 

6 Wait seven seconds for the drive function to time out.

7 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 Drive and Braking

1 Press the drive function button (if equipped). 

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

3 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.

4 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.

Test the Entry Gate Cut-out Function

1 Raise the platform approximately 4 ft / 1.2 m from the ground.

2 Extend the powered extension deck 2 ft / 0.6 m (if equipped).

3 Open the rear entry gate and prop open.

4 Press the drive function button (if equipped). 

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

6 Slowly move the drive control handle in the direction indicated by the blue arrow, and then in the direction indicated by the yellow arrow.

⊙ Result: The machine should not move in the direction indicated by the blue arrow, or the yellow arrow.

Inspections

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

8 Press the thumb rocker switch on top of the control handle in the direction indicated by the blue triangle, and then in the direction indicated by the yellow triangle.

⊙ Result: The steer wheels should not turn in the direction indicated by the blue triangle, or the yellow triangle.

9 Activate the platform up function, and the platform down function.

⊙ Result: The platform up function and the platform down function should not operate.

10 Activate the platform extend function, and the platform retract function.

⊙ Result: The platform extend function and the platform retract function should not work.

11 Close the rear entry gate.

12 Open the front entry gate and prop open.

13 Press the drive function button (if equipped).



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

15 Slowly move the drive control handle in the direction indicated by the blue arrow, and then in the direction indicated by the yellow arrow.

⊙ Result: The machine should not move in the direction indicated by the blue arrow, or the yellow arrow.

16 Press and hold the drive/steer function enable switch on the control handle.

17 Press the thumb rocker switch on top of the control handle in the direction indicated by the blue triangle, and then in the direction indicated by the yellow triangle.

⊙ Result: The steer wheels should not turn in the direction indicated by the blue triangle, or the yellow triangle.

18 Activate the platform up function, and the platform down function.

⊙ Result: The platform up function and the platform down function should not operate.

19 Activate the platform extend function, and the platform retract function.

⊙ Result: The platform extend function and the platform retract function should not work.

20 Close the front entry gate.

21 Fully retract the powered extension deck to the stowed position (if equipped).

⊙ Fully lower the platform to the stowed position.

Inspections

Test the Tilt Sensor Operation

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

22 Fully lower the platform.

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

24 Raise the platform approximately 7 ft / 2.1 m from the ground.

25 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.

26 Press the drive function button (if equipped).



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

28 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.

29 Lower the platform and remove both pieces of wood.

Test Elevated Drive Speed

30 Raise the platform approximately 4 ft / 1.2 m from the ground.

31 Press the drive function button (if equipped).



32 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 0.72 ft / 22 cm per second.

If the drive speed with the platform raised exceeds 0.72 ft / 22 cm per second, immediately tag and remove the machine from service.

Inspections

Test the Pothole Guards

Note: The pothole guards should automatically deploy when the platform is raised. The pothole guards activate limit switches that allow the machine to continue to function. If the pothole guards do not deploy, an alarm sounds and the machine will not drive or steer.

33 Raise the platform.

⊙ Result: When the platform is raised 4 ft / 1.2 m from the ground, the pothole guards should deploy.

34 Press on the pothole guards on one side, and then the other.

⊙ Result: The pothole guards should not move.

35 Lower the platform

⊙ Result: The pothole guards should return to the stowed position.

36 Place a 2x4 or similar piece of wood under a pothole guard.

37 Raise the platform.

⊙ Result: Before the platform is raised 7 ft / 2.1 m from the ground, an alarm should sound. The platform controls LED readout should display PHS and the ground controls LCD should display PHS: Pothole Guard Stuck.

38 Press the drive function button (if equipped).



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

40 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 forward or backward.

41 Press the drive function button (if equipped).



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

43 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 left or right.

44 Lower the platform.

45 Remove the 2x4 or similar piece of wood.

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.

Inspections

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

Inspections

Inspection for Decals with Words

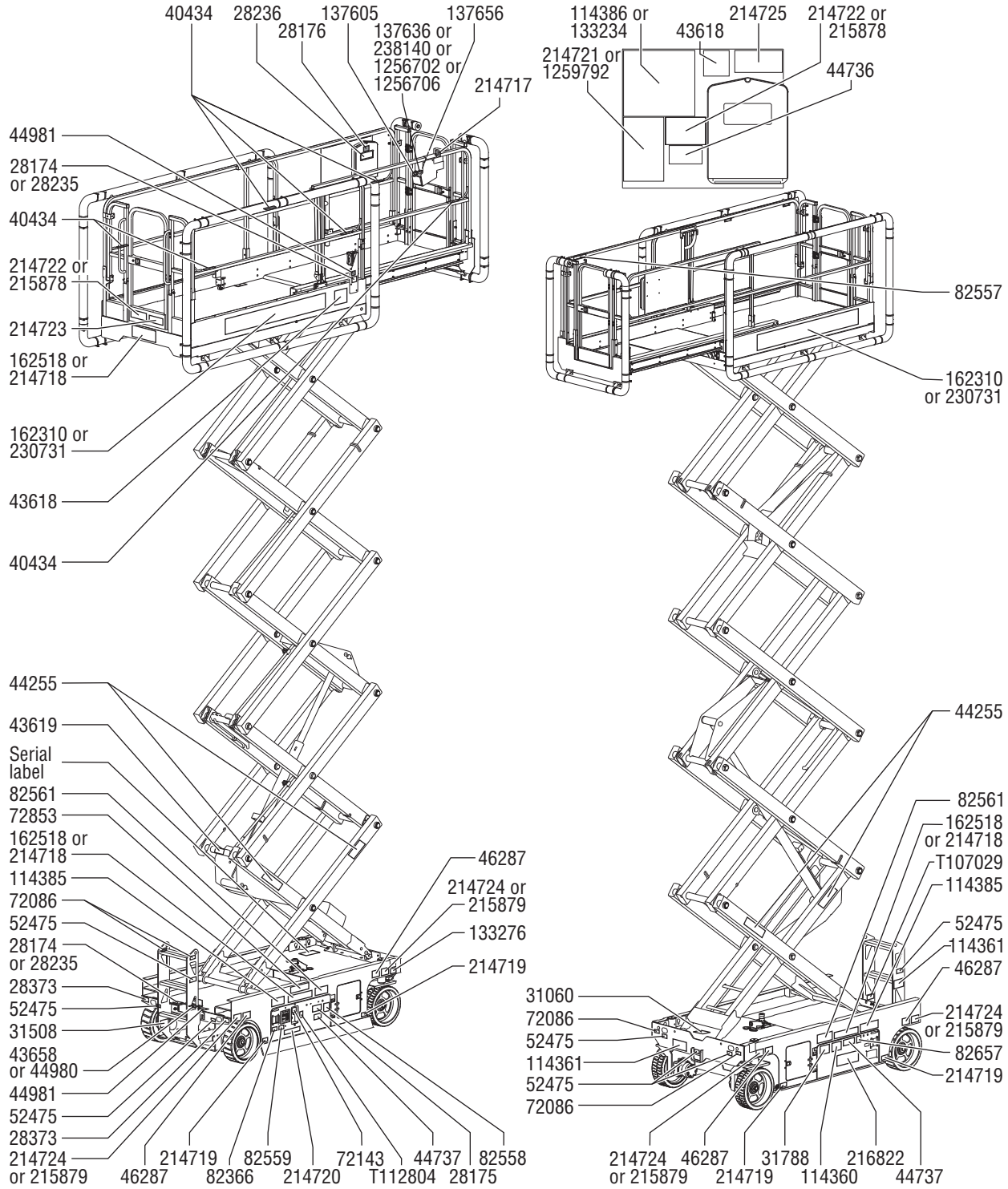
Use the pictures on the next page to verify that all decals are legible and in place.

Below is a numerical list with quantities and descriptions.

Part No.	Decal Description	Qty
28174	Label – Power to Platform, 230V	2
28175	Warning – Compartment Access	1
28176	Label – Missing Manuals	1
28235	Label – Power to Platform, 115V	2
28236	Warning – Improper Operation	1
28373	Label – Forklift Pocket	2
31060	Danger – Tip-over Hazard, Limit Switch	1
31508	Danger – Electrocution Hazard	1
31788	Danger – Explosion/Burn Hazard	1
38149	Label – Patents	1
40434	Label – Lanyard Anchorage Point	6
43618	Label – Directional Arrows	2
43619	Label – Safety Arm	1
43658	Label – Power to Charger, 230V	1
44255	Danger – Crushing Hazard	4
44736	Danger – Tip-over Hazard, Tilt Alarm	1
44737	Danger – Tip-over Hazard, Trays Open	2
44980	Label – Power to Charger, 115V	1
44981	Label – Air Line to Platform, 110 PSI	2
46287	Label – Tire Specification	4
52475	Label – Transport Tie-down	7
72086	Label – Lifting Point	4
72143	Label – Emergency Stop	1
72853	Danger – Improper Use Hazard	1
82366	Label – Chevron Rando	1
82557	Label – Platform Controls Location	1
82558	Warning – Skin Injection Hazard	1
82559	Instructions – Annual Inspection	1
82561	Danger – Crushing Hazard	2
82657	Instructions – Battery Connection Diagram	1
114360	Danger – Tip-over Hazard, Batteries	1
114361	Label – Transport Diagram	2
114385	Danger – Electrocution Hazard	2
114386	Danger – General Safety Rules, GS-2646 AV	1
133234	Danger – General Safety Rules, GS-2646 AV35	1
133276	Label – Emergency Lowering	1
137605	Label – Emergency Stop, Platform Control	1
137636	Overlay – Platform Control Panel (without Powered Extension Deck)	1
137656	Label – Drive/Steer Direction, Platform Control	1
162518	Label – Minimum Forklift Capacity, 6400 lbs / 2903 kg, GS-2646 AV35	3
162310	Cosmetic – Genie GS-2646 AV35	2
214717	Label – Operational Indicator Codes	1
214718	Label – Minimum Forklift Capacity, 5400 lbs / 2449 kg, GS-2646 AV	3
214719	Label – Forklift Point	4
214720	Instructions – Operation, Ground Control	1
214721	Instructions – Operation, Platform Control	1
214722	Instructions – Maximum Side Force GS-2646 AV35	2
214723	Instructions – Max Capacity, 900 lbs / 408 kg, GS-2646AV and GS-2646 AV35	1
214724	Label – Wheel Load, GS-2646 AV35	4
214725	Warning – Fall Hazard	1
215878	Instructions – Maximum Side Force GS-2646 AV	2
215879	Label – Wheel Load, GS-2646 AV	4
216822	Instructions – Battery Charger Operation	1
230731	Cosmetic – Genie GS-2646 AV	2
238140	Overlay – Platform Control Panel (with Powered Extension Deck)	1
1256702	Overlay – Platform Control Panel	
1256706	Overlay – Platform Control Panel (with Powered Extension Deck)	1
1257192	Instructions – Operation, Platform Control	1
1257923	Label – Smartlink	1
T107029	Danger/Instructions – Brake Release Safety and Operation	1

Inspections

T112804	Label – Ground Control Panel	1



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.

Emergency Lowering

1 Pull the emergency lowering knob to lower the platform.

Operation from Ground

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

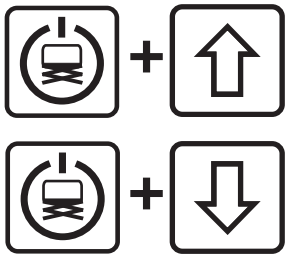
2 Turn the selector switch to ground control.

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

To Position Platform

1 Press and hold the lift enable button.

2 Press the platform up or platform down button.

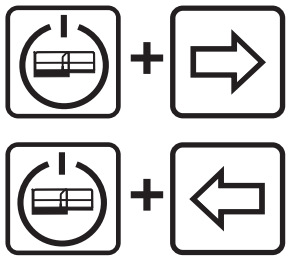


Drive and steer functions are not available from the ground controls.

To Position Powered Extension Deck (if equipped)

1 Press and hold the powered extension deck enable button.

2 Press the extend or retract button.



Note: The lift function is disabled when the extension deck is deployed.

Operating Instructions

Operation from Platform

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

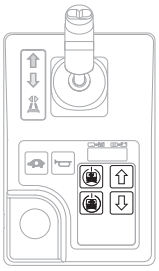
2 Turn the selector switch to platform control.

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

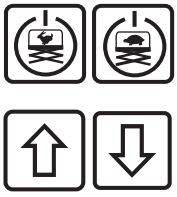
Controller Identification

These machines were produced with two different styles of platform controls. Use the button pattern on the platform controls to determine which instructions apply to your machine.

Use these instructions if the decal on your platform controls has these buttons.



To Position Platform

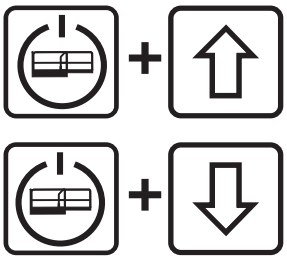


1 Press and hold the lift enable button.

2 Press the platform up or platform down button.

Note: The extension deck must be in the stowed position and the platform gates fully closed before operating the lift function.

To Position Powered Extension Deck (if equipped)



1 Press and hold the powered extension deck enable button.

2 Press the powered extension deck extend or retract button.

Note: The drive and lift function are disabled when the extension deck is deployed and/or when the platform gates are in the open position. The extension deck must be in the stowed position and the platform gates fully closed before operating the drive and lift functions.

Note: The powered extension deck extend and retract functions are disabled when the platform gates are in the open position. The platform gates must be fully closed before operating the powered extension deck extend and retract functions.

To Position Platform Extension Deck

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

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

3 Pull the platform extension lock handle to retract the platform to the desired position.

Do not stand on the platform extension deck during deployment.

4 Lower the platform extension lock handle to lock the extension platform in place.

Note: The drive and lift function are disabled when the extension deck is deployed and/or when the platform gates are in the open position. The extension deck must be in the stowed position and the platform gates fully closed before operating the drive and lift functions.

Operating Instructions

To Steer

1 Press and hold the drive/steer function enable switch on the control handle.

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



To Drive

1 Press and hold the drive/steer function enable switch on the control handle.

2 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.

Note: The drive function is disabled when the extension deck is deployed and/or when the platform gates are in the open position. The extension deck must be in the stowed position and the platform gates fully closed before operating the drive function.

To select drive speed

The drive controls can operate in two different drive speed modes while in the stowed position. When the drive speed button light is on, slow drive speed mode is active. When the drive speed button light is off, fast drive speed mode is active.

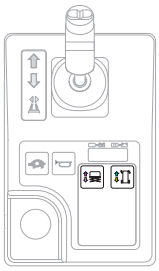
Press the drive speed button to select the desired drive speed.



Note: When the platform is elevated, the drive speed button light is always on, indicating elevated drive speed.

Controller Identification

Use these instructions if the decal on your platform controls has these buttons.



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.

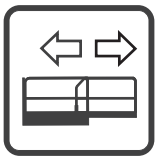
3 Machines equipped with foot switch: Press and hold the foot switch and press and hold the function enable switch on the control handle at the same time.

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

Operating Instructions

To Position Powered Extension Deck (if equipped)

1 Press the powered extension deck function button.



2 Move the control handle in the direction indicated on the control panel.

Note: The drive and lift function are disabled when the extension deck is deployed and/or when the platform gates are in the open position. The extension deck must be in the stowed position and the platform gates fully closed before operating the drive and lift functions.

Note: The powered extension deck extend and retract functions are disabled when the platform gates are in the open position. The platform gates must be fully closed before operating the powered extension deck extend and retract functions.

To Position Platform Extension Deck

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

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

3 Pull the platform extension lock handle to retract the platform to the desired position.

Do not stand on the platform extension deck during deployment.

4 Lower the platform extension lock handle to lock the extension platform in place.

Note: The drive and lift function are disabled when the extension deck is deployed and/or when the platform gates are in the open position. The extension deck must be in the stowed position and the platform gates fully closed before operating the drive and lift functions.

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 Press and hold the foot switch (if equipped).

3 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 Machines equipped with foot switch: Press and hold the foot switch and press and hold the function enable switch on the control handle at the same time.

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.

To select drive speed

The drive controls can operate in two different drive speed modes while in the stowed position. When the drive speed button light is on, slow drive speed mode is active. When the drive speed button light is off, fast drive speed mode is active.

Press the drive speed button to select the desired drive speed.



Note: When the platform is elevated, the drive speed button light is always on, indicating elevated drive speed.

⚠ Driving on a slope

Determine the slope and side slope ratings for the machine and determine the slope grade.

Maximum slope rating, stowed position:		
GS-2646 AV	25%	14°
GS-2646 AV35	20%	11°

Maximum side slope rating, stowed position:		
GS-2646 AV	25%	14°
GS-2646 AV35	20%	11°

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

Press the drive speed button to the fast drive speed mode.

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

Lay the piece of wood on the slope.

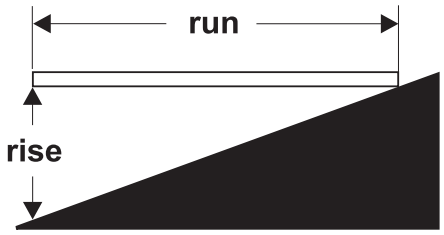
At the downhill end, lay the level on the top edge of the piece of wood and lift the end until the piece of wood is level.

Operating Instructions

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)

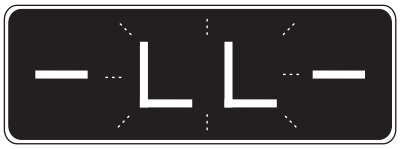
Rise = 12 inches (0.3 m)

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

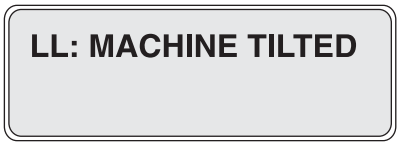
If the slope exceeds the maximum slope or side slope rating, then the machine must be winched or transported up or down the slope. See Transport and Lifting section.

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 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
PHS	Pothole Guard Stuck
nd	No Drive (option)
dE	Deck Extended (PED only) (lift and drive disabled)
Fd	Function Disabled (all functions)

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.

Operating Instructions

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.

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 machine must be taken out of service and charged, otherwise all machine functions will be disabled.



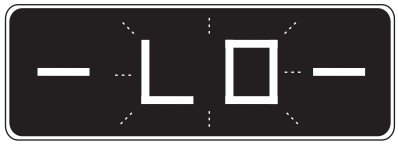
Full Charge



Half Charge



Low Charge



LO Flashing

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.

Operating Instructions



Battery and Charger Instructions

Observe and Obey:

- ☑ Do not use an external charger or booster battery if machine is equipped with a Genie charger.
- ☑ Charge the battery in a well-ventilated area.
- ☑ Use proper AC input voltage for charging as indicated on the onboard charger.
- ☑ If replacing onboard charger or batteries, use only Genie authorized components.
- ☑ Remote chargers must be compatible with Genie batteries.

To Charge Battery

1 Be sure the batteries are connected before charging the batteries.

2 Open the battery compartment. The compartment should remain open for the entire charging cycle.

Maintenance-free batteries

1 Connect the battery charger to a grounded AC circuit.

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

Standard Batteries

1 Remove the battery vent caps and check the battery acid level. If necessary, add only enough distilled water to cover the plates. Do not overfill prior to the charge cycle.

2 Replace the battery vent caps.

3 Connect the battery charger to a grounded AC circuit.

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

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.

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 aerial lift 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 allow the rails to fall when the snap pins are removed. Maintain a firm grasp on the rails when the rails are lowered.
- ☑ 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.

Transport and Lifting Instructions

Brake Release Operation

1 Chock the wheels to prevent the machine from rolling.



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

3 Push in the black brake release knob to open the brake valve.



4 Pump the red brake release pump knob.

After the machine is loaded:

1 Chock the wheels to prevent the machine from rolling.

2 Pull out the red Emergency Stop button at both the ground and platform controls to the on position, and turn the key switch to the platform position.

3 Press the drive function button (if equipped).



4 Press and hold the function enable switch on the control handle. Move the control handle off center and immediately release it to reset the brakes.

5 Push the red Emergency stop button at both the ground and platform controls to the off position.

Towing the Genie GS-2646 AV and GS-2646 AV35 is not recommended. If the machine must be towed, do not exceed 2 mph / 3.2 km/h.

Transport and Lifting Instructions

Securing to Truck or Trailer for Transit

Always use the extension deck lock when the machine is transported.

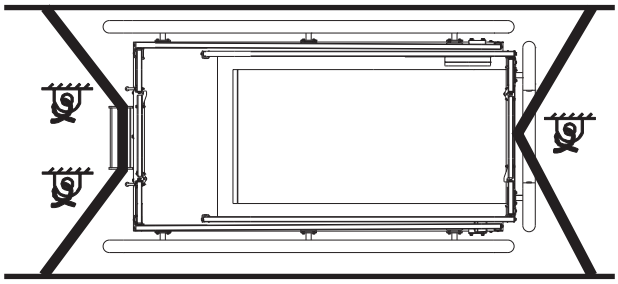
Turn the selector switch to the off position before transporting.

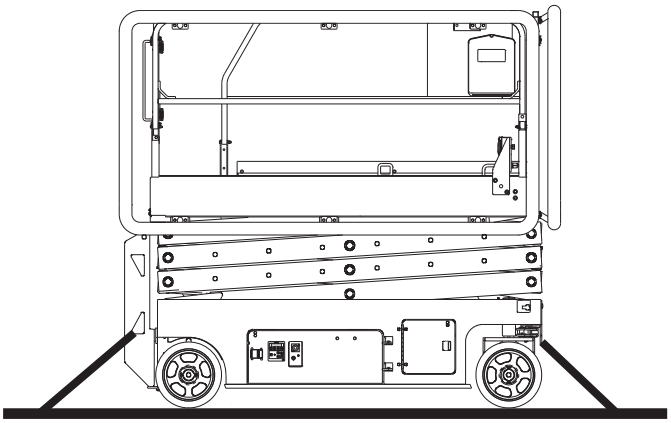
Inspect the entire machine for loose or unsecured items.

Use chains or straps of ample load capacity.

Use a minimum of 2 chains or straps.

Adjust the rigging to prevent damage to the chains.





GS-2646 AV
GS-2646 AV35

Transport and Lifting Instructions

Observe and Obey:

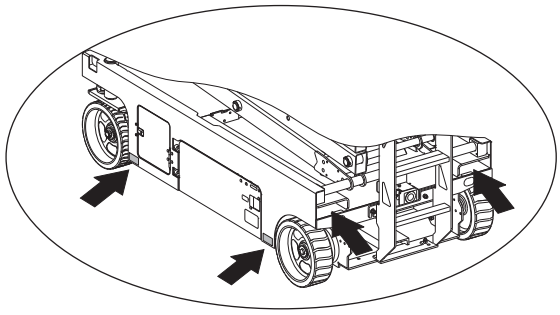
- ☑ Only qualified riggers should rig and lift the machine.
- ☑ Only qualified forklift operators should lift the machine with a forklift rated to lift the machine weight.
- ☑ Be sure the crane capacity, loading surfaces and straps or lines are sufficient to withstand the machine weight. See the serial label for the machine weight.

Lifting the Machine with a Forklift

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

Fully lower the platform. The platform must remain lowered during all loading and transport procedures.

Use the forklift pockets located on both sides of the ladder.



Align the forklift forks with the forklift pockets.

Drive forward to the full extent of the forks.

Raise the machine 16 in / 0.4 m and then tilt the forks back slightly to keep the machine secure.

Be sure the machine is level when lowering the forks.

NOTICE Lifting the machine at the designated points at the battery side or the ground control side of the machine can be performed, but is not recommended. Lifting the machine from the the battery side or ground control side can result in component damage.

Transport and Lifting Instructions

Lifting Instructions

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

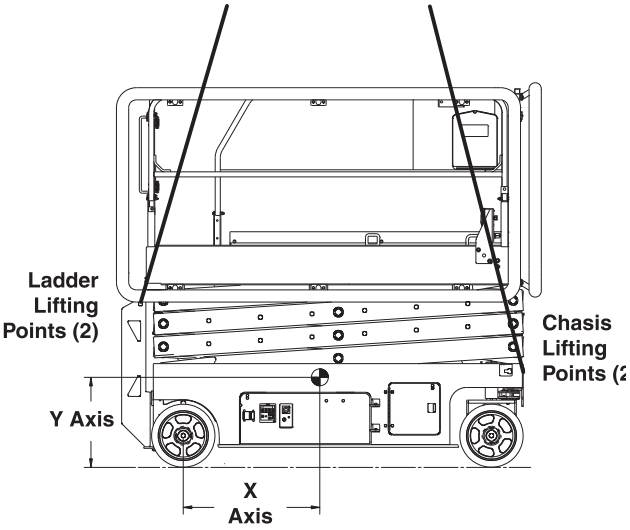
Determine the center of gravity of your machine using the table and the picture on this page.

Attach the rigging only to the designated lifting points on the machine. There are two 1 inch / 2.5 cm holes on the front of the machine and two holes in the ladder for lifting.

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

Center of Gravity Table

Model	X Axis	Y Axis
GS-2646 AV	33.5 in 85.1 cm	28.2 in 71.6 cm
GS-2646 AV35	33.6 in 85.3 cm	25.1 in 63.7 cm



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 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 machine is on a firm, level surface, free of obstructions, with the platform in the stowed position.

2 Visually inspect the oil level in the hydraulic oil tank.

⊙ Result: The hydraulic oil level should be between the ADD and FULL marks on the tank.

3 Add oil as needed. Do not overfill.

Hydraulic oil specifications	
Hydraulic oil type	Chevron Rando HD equivalent

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.

Note: This procedure does not need to be performed on machines with sealed or maintenance-free batteries.

- ⚠ 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

Model		GS-2646 AV
Height, working maximum	32 ft	9.8 m
Height, platform maximum	26 ft	7.9 m
Platform height, stowed maximum	49 in	124 cm
Height, guard rails	43 in	109 cm
Width	56 in	142 cm
Length, stowed	105 in	267 cm
Length, platform extended	165 in	419 cm
Platform extension length	60 in	152 cm
Platform dimensions, (length x width)	93 x 56 in	235 x 142 cm
Maximum load capacity	900 lbs	408 kg
Maximum wind speed	28 mph	12.5 m/sec
Wheelbase	73 in	185 cm
Turning radius (outside)	90 in	229 cm
Turning radius (inside)	0 in	0 cm
Ground clearance	4 in	10.2 cm
Ground clearance Pothole guards deployed	0.75 in	1.9 cm
Weight	5225 lbs	2370 kg

(Machine weights vary with option configurations. See serial label for specific machine weight.)

Power source	4 Batteries, 6V 225AH	
System voltage	24V	
AC outlet in platform	Standard	
Maximum hydraulic pressure (functions)	3500 psi	241 bar
Tire size	15 x 5 x 11.25 in	
Vibration value does not exceed 2.5 m/s^2		
Operating Temperature		
Minimum	-20°F	-29°C
Maximum	150°F	66°C

Airborne noise emissions	
Sound pressure level at ground workstation	<70 dBA
Sound pressure level at platform workstation	<70 dBA
Maximum slope rating, stowed position	25% (14°)
Maximum side slope rating, stowed position	25% (14°)

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

Drive speeds		
Stowed, maximum	2.2 mph	3.5 km/h
Platform raised, maximum	0.5 mph 40 ft/54 sec	0.8 km/h 12.2 m/54 sec

Floor loading information		
Tire load maximum	2535 lbs	1150 kg
Tire contact pressure	169 psi	11.89 kg / cm^2 1165 kPa
Occupied floor pressure	218 psf	1063 kg / m^2 10.43 kPa

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

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Specifications

Model		GS-2646 AV35
Height, working maximum	32 ft	9.8 m
Height, platform maximum	26 ft	7.9 m
Platform height, stowed maximum	49 in	124 cm
Height, guard rails	43 in	109 cm
Width	56 in	142 cm
Length, stowed	105 in	267 cm
Length, platform extended	165 in	419 cm
Platform extension length	60 in	152 cm
Platform dimensions, (length x width)	93 x 56 in	235 x 142 cm
Maximum load capacity	900 lbs	408 kg
Maximum wind speed	35 mph	15.6 m/sec
Wheelbase	73 in	185 cm
Turning radius (outside)	90 in	229 cm
Turning radius (inside)	0 in	0 cm
Ground clearance	4 in	10.2 cm
Ground clearance Pothole guards deployed	0.75 in	1.9 cm
Weight	6234 lbs	2828 kg

(Machine weights vary with option configurations. See serial label for specific machine weight.)

Power source	4 Batteries, 6V 225AH	
System voltage		24V
AC outlet in platform		Standard
Maximum hydraulic pressure (functions)	3500 psi	241 bar
Tire size		15 x 5 x 11.25 in
Vibration value does not exceed 2.5 m/s^2		
Operating Temperature		
Minimum	-20°F	-29°C
Maximum	150°F	66°C

Airborne noise emissions		
Sound pressure level at ground workstation		<70 dBA
Sound pressure level at platform workstation		<70 dBA
Maximum slope rating, stowed position		20% (11°)
Maximum side slope rating, stowed position		20% (11°)

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

Drive speeds		
Stowed, maximum	2.2 mph	3.5 km/h
Platform raised, maximum	0.5 mph 40 ft/54 sec	0.8 km/h 12.2 m/54 sec
Floor loading information		
Tire load maximum	2760 lbs	1252 kg
Tire contact pressure	184 psi	12.94 kg / cm^2 1269 kPa
Occupied floor pressure	254 psf	1239 kg / m^2 12.15 kPa

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

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